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**Protection and Maintenance of Healthcare Services for Civilians'
Well-Being in Conflict Affected Areas: Comparative Analysis of
The African Situation**

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Protection and Maintenance of Healthcare Services for Civilians' Well-Being in Conflict Affected Areas: Comparative Analysis of The African Situation

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Abstract

Purpose: Medical neutrality refers to a globally accepted principle derived from International humanitarian law (IHL), International Human Rights Law and Medical Ethics. It is based on the principles of non-interference with medical services in times of armed conflict and civil unrest. It promotes the freedom for physicians and aid personnel to care for the sick and wounded, and to receive care regardless of political affiliation. The purpose of this study was to examine comparatively, the extent in which humanitarian aid access, healthcare facilities and healthcare professionals are protected in conflict affected areas in Africa. The protection of health personnel, health services and humanitarian workers is no longer respected. This compromises the achievement of the United Nations Sustainable Development Goals 3 – towards health for all, and 16 – towards justice and peace.

Methodology: The study was guided by Andersen's Behavioral Model of health service of 1995. Methodological wise, the study was depended on desktop review of empirical research including the works of Ramadan (2020) on availability of primary healthcare services in conflict affected areas as well as the works of Altare et al (2020) on the experience of women, children and adolescents in conflicts affected areas among others.

Findings: The findings show that, limited infrastructure, lack of skilled personnel, and shortages of essential medical supplies hinder access to healthcare services, creating a significant gap in humanitarian aid for civilians in these areas. The study also reveals the vulnerability of health facilities and healthcare workers to attacks during conflicts, emphasizing the need for enhanced protection measures. Destruction of communication infrastructure and disrupted transportation further impede the functioning of health facilities and the delivery of critical services. The study underscores the limited access to humanitarian aid, the need for greater protection of health facilities, and the challenges in safeguarding healthcare professionals in conflict affected areas in Africa.

Recommendations: The study recommends prioritization of the protection of health facilities and healthcare professionals, enhanced security measures, advocacy for International Humanitarian Law (IHL), support for healthcare infrastructure, improved access to healthcare, facilitation of humanitarian aid, support for peacebuilding initiatives and strengthening of monitoring and accountability by African Nations.

Keywords: *Healthcare Services, Conflict Affected Zones, Protection, War, Armed Conflict*

1.0 INTRODUCTION

Medical neutrality refers to a globally accepted principle derived from International humanitarian law (IHL), International Human Rights Law and Medical Ethics. It is based on principles of non-interference with medical services in times of armed conflict and civil unrest. It promotes the freedom for physicians and aid personnel to care for the sick and wounded, and to receive care regardless of political affiliations. Healthcare systems play a very important role in providing care in areas of conflict. In the recent times, some of those involved in the conflict have not realized fully the role of health care systems including the personnel, patients, transport and infrastructure, facilities, supplies and other related humanitarian services (Druce, Bogatyreva and Siem, 2019). Healthcare systems have not been safe as far as their commitment to ensuring human welfare especially in conflict prone areas is concerned. The World Health Organization (WHO) through Surveillance System for Attacks on Health Care (SSA) defines an attack as “any act of verbal or physical violence, threat of violence or other psychological violence, or obstruction that interferes with the availability, access and delivery of curative and/or preventive health services” (WHO,2019). According to OECD (2023), conflict affected and high-risk areas are identified by the presence of armed conflict, widespread violence or other risks of harm to people. Armed conflict may take a variety of forms, such as a conflict of international or non-international character, which may involve two or more states, or may consist of wars of liberation, or insurgencies, civil wars, etc. High-risk areas may include areas of political instability or repression, institutional weakness, insecurity, collapse of civil infrastructure and widespread violence. Such areas are often characterised by widespread human rights abuses and violations of national or international law.

The 21st century has seen an increase in the number and severity of conflicts across Africa, resulting in the displacement of millions of people and the destruction of vital infrastructure, including healthcare services. In conflict settings, civilians are often the most affected, facing challenges such as lack of access to healthcare, food insecurity, and displacement. Healthcare services are critical in maintaining civilians' health and well-being, particularly in conflict affected areas. Such services are necessary for diagnosing and treating diseases, injuries, and other health conditions that arise during conflicts. Despite the crucial role of healthcare services in conflict settings, they are often the target of attacks by warring factions, leading to their complete destruction or incapacitation. The destruction of healthcare services has dire consequences for civilians in conflict settings, as they are left with no access to healthcare, leading to untold deaths and suffering. Conflicts in Africa have particularly affected healthcare services in the conflict affected areas, leading to a lack of access to healthcare for millions of people. Such conflicts include those in Somalia, the Democratic Republic of Congo, Sudan, and South Sudan, among others. For instance, in Somalia, the ongoing conflict since 1991 has led to the virtual collapse of the country's healthcare system, leaving millions of people without access to basic healthcare. Similarly, in the Democratic Republic of Congo, decades of conflict have led to a severe shortage of healthcare workers and medical supplies, leaving civilians at the mercy of preventable diseases and injuries. The importance of protecting and maintaining healthcare services in conflict affected areas cannot be overstated. Maintaining healthcare services helps prevent unnecessary deaths and ensures that civilians have access to critical medical care. Additionally, healthcare services can act as a stabilizing factor in conflict settings, fostering trust between warring factions and communities (UNHCR, 2022).

Between 1st of January and 31st March 2017, the World Health Organization (WHO) recorded 88 attacks against health care systems in 14 countries and territories, leading to 80 deaths and 81 injuries. In 2016, the WHO recorded 302 attacks against health care systems in 20 countries and territories, leading to 372 deaths and 491 injuries. In 2015, *Médecins Sans Frontières* (MSF) reported 94 aerial and shelling attacks on 63 MSF-supported facilities, causing the total destruction of 12 facilities, and injuring 81 MSF-supported medical staff. From 2012 to 2014, the International Committee of the Red Cross (ICRC) recorded 2,398 incidents of violence against health care systems in 11 countries facing armed conflict or another emergency (WHO, 2017; WHO, 2016; MSF, 2015; ICRC, 2015). According to the Safeguarding Health in Conflict Coalition (SHCC), there were 4,094 reported attacks and threats against health care in areas of conflict from 2016 through 2020. The report stated that 1,524 HCWs were injured, 681 were killed, and 401 were kidnapped. Moreover, 978 incidents were reported where health facilities were either destroyed or damaged (SHCC, 2021). Such attacks deprive people of urgently needed care, put the lives of health care providers at risk, undermine health systems and long term public health goals, and contribute to the deterioration in the health and well-being of affected populations. These attacks represent a gross violation of human rights for both health care workers and patients, affecting the rights to life, liberty, and health. The right to equitable access of health care outlined in the International Covenant on Economic, Social Cultural Rights has been signed and ratified by 164 countries, and the right to health is enshrined in the WHO constitution (WHO, 2019).

Study Objectives

Generally, this paper investigates the extent of protecting healthcare services for the well-being of civilians in conflict affected areas in African Countries.

Specific Objectives

1. To determine the extent of humanitarian aid access among civilians in conflict affected areas in African Countries
2. To examine the extent of protecting health facilities in conflict affected areas in African Countries
3. To assess the extent in which healthcare professionals are protected in conflict affected areas in Africa

2.0 LITERATURE REVIEW

Theoretical Review

This study was guided by and adapted from Andersen's Behavioral Model of health service use which argues healthcare service use as a ramification of three important component functions. The HBM model attempted to explain the reason (why and how) of healthcare service use, the predisposing factors that influence acute healthcare service use, enabling factors that facilitate or barriers use, and the subsequent perceived needs to use healthcare. The model enables to appraise measures of healthcare access, equitability, effectivity, and efficiency and understand the environmental influence on it. The model argues certain external environmental and individual characteristics (predisposition, enabling, and need element) may guide the disposition of health behavior to use health service, which later influences health outcomes. The predisposing factors, which include socio-demographic characteristics, socio-structural and behavioral factors, may facilitate by enabling personal/family/community resources, and the perceived and evaluated need

of healthcare influences access and healthcare service use decision (Andersen, 1995). In conflict affected zones, there are many induced socio-structural barriers in relation to healthcare service utilization due to destruction of healthcare services and facilities, wounding and killing of healthcare professionals, destruction of infrastructure and destabilization of humanitarian aid access among civilians.

As claimed by the International Committee of the Red Cross (2019), Chapter four of the International Humanitarian Law presents the treatment of the wounded, the sick and medical missions in armed conflicts. The wounded and sick must receive, to the fullest extent practicable and with the least possible delay, the medical care and attention required by their condition. The wounded, the sick and the shipwrecked, medical and religious personnel, and medical units and medical transports must be protected and respected in all circumstances. Medical personnel must treat patients impartially, regardless of sex, race, nationality, religion, political opinion or any other similar criteria. No one may be compelled to perform medical activities contrary to the rules of medical ethics, or punished for carrying out medical activities compatible with medical ethics, regardless of the beneficiary. Medical personnel may not be compelled to give any information that would prove harmful to the wounded and the sick, or to their families, except as required by law. The dead must be treated with respect and protected against mutilation and pillage. Whenever circumstances permit, and particularly after an engagement, each party to a conflict must, without delay, take all possible measures to search for, collect and evacuate the wounded, the sick, the shipwrecked and the dead. Belligerent parties must take all feasible measures to account for persons reported missing as a result of an armed conflict and provide their family members with any information they have on their fate (International Committee of the Red Cross, 2019).

Empirical Literature Review

Ramadan et al. (2020) examined the availability of primary healthcare services in fragile states affected by conflict. The study focused on subnational regions in Cameroon, the Democratic Republic of Congo, Mali, and Nigeria, and employed a descriptive analysis to investigate educational and wealth disparities in access to care. The researchers compared the discrepancies in geographic and financial access to healthcare among different education and wealth groups in areas with varying levels of conflict intensity. The study utilized the Demographic Health Survey (DHS) as the primary source of information on access to primary healthcare (PHC) services, while the Uppsala Conflict Data Program provided data on conflict events. To determine conflict intensity, the researchers linked household clusters to conflict events occurring within a 50-kilometre radius. They used a threshold of more than two conflict-related deaths per 100,000 population to differentiate between medium or high intensity conflict and no or low intensity conflict. The researchers employed three measures to assess inequalities: the absolute difference, concentration index, and multivariate logistic regression coefficient. Each disparity measure was analyzed in relation to the intensity of conflict during the year when the DHS data was collected. The findings of the study revealed variations in access to PHC across different subnational regions in the four countries under investigation, with financial barriers being more prevalent than geographic barriers to care. The magnitude of both educational and wealth disparities in access to care was greater in areas closer to regions experiencing medium or high intensity conflict. Additionally, the study observed a higher magnitude of wealth disparities compared to educational disparities in all four contexts. However, only Nigeria demonstrated a statistically significant interaction between conflict intensity and educational disparities in access to care.

Altare et al. (2020) conducted a study focusing on health services for women, children, and adolescents in conflict affected areas, specifically in the North and South Kivu provinces of the Democratic Republic of Congo (DRC). The study employed a mixed-methods case study approach, utilizing a combination of a desk review of existing literature, primary qualitative data, and secondary quantitative data. NVivo was used for data management and coding. Regression analysis was performed using health facility data from the District Health Information System 2 (DHIS2), aggregated at the territory level and linked with conflict events. The study revealed significant challenges related to physical access to healthcare in the DRC. Issues such as distance, poor road conditions, insecurity, and the rainy season hindered access to certain areas. Some locations could only be reached by motorbike or helicopter, which posed logistical and financial constraints on the delivery of healthcare services. Additionally, the availability of essential medications was affected by the presence of a single certified distribution centre, leading to frequent stockouts. The study highlighted the limited presence of a referral transport system, particularly in North Kivu, and emphasized the adverse impact of poor road conditions on its effectiveness. Furthermore, armed groups often protected their own or controlled villages, allowing health activities to take place but sometimes extorting illegal taxes from healthcare providers. Health facilities in zones controlled by opposing groups were at higher risk of attacks, looting, or threats, although the unpredictability of such events was prevalent. One of the major barriers to service provision identified by the study participants was the lack of regular payment for health workers in non-supported facilities. Low and irregular salaries, coupled with dependence on user fees, resulted in healthcare providers feeling unrecognized and demotivated, ultimately impacting the quality of care provided. High turnover rates were observed as health workers sought better-paid positions in NGOs or at the provincial level. Insecurity also contributed to significant gaps in human resources in areas with the greatest healthcare needs.

Zhang et al. (2021) conducted a study investigating the impact of conflicts and self-reported insecurity on maternal healthcare utilization and children's health outcomes in the Democratic Republic of Congo (DRC). The researchers utilized data from the Multiple Indicators Cluster Survey (MICS) conducted by the National Institute of Statistics in collaboration with the United Nations Children's Fund (UNICEF) in 2017-2018. The survey included 8,144 mothers and 14,403 children as participants. The severity of conflicts in different provinces was measured using reports from the Uppsala Conflict Data Program (UCDP). The researchers employed multivariate logistic regression and stratified analysis. The findings revealed that high self-reported insecurity was positively correlated with skilled antenatal care, skilled attendants at delivery, and early initiation of breastfeeding. These associations were particularly significant in regions experiencing higher levels of armed conflict. Additionally, the study found that children of mothers with high self-reported insecurity had a higher likelihood of suffering from diarrhoea, fever, cough, and dyspnea compared to children of mothers with low self-reported insecurity.

Gesesew et al. (2021) conducted an assessment of the impact of war on the health system of the Tigray region in Ethiopia. The analysis focused on evaluating the state of the health system both before and during the war. To gather evidence of damage, the researchers compiled information from various reports by the interim government of Tigray and international non-governmental organizations. They compared this data with information from the prewar period. The findings revealed a significant deterioration in the functionality of the health system in Tigray since the onset of the war. Six months into the conflict, only 27.5% of hospitals, 17.5% of health centres,

11% of ambulances, and none of the 712 health posts were operational. This suggests a substantial reduction in the capacity of the health system to provide essential services to the population. Furthermore, the study found a sharp increase in the population requiring emergency food assistance in Tigray. The number of individuals in need rose from less than one million to over 5.2 million by June 2021. This highlights the severe humanitarian crisis that emerged as a result of the war, exacerbating food insecurity and placing additional strain on the already strained health system. Before the war, the health system in Tigray performed reasonably well in providing antenatal care, supervised delivery, postnatal care, and children's vaccinations. The respective percentages for these services were 94%, 73%, 63%, and 73%. However, the study indicated that none of these services was likely to be delivered during the first 90 days of the war, further compromising the healthcare access and delivery for the affected population.

Based on the 2018 Safeguarding Health in Conflict report, health workers faced violence and attacks in at least 23 countries during that year. These countries include Burkina Faso, Cameroon, the Central African Republic, the Democratic Republic of the Congo, Egypt, Ethiopia, Libya, Mali, Nigeria, Somalia, South Sudan, and Sudan. Additionally, in 2017, polio vaccinators were targeted and abducted in Nigeria and Somalia. Health workers are often taken hostage while traveling, at healthcare facilities, and even from their own residences (American Public Health Association, 2019).

Interpeace (2021) conducted an extensive investigation into the health gaps and needs in the Mandera Triangle. The study took place between February and March 2021, covering Mandera County in Kenya, the Dollo Ado and Mubarak zones in Ethiopia, and the Belet Hawa and Elwak Districts in Somalia. Various methods were employed during the study, including a review of secondary data on the region and the relationship between peace and health. Primary data was collected through semi-structured interviews with stakeholders and key informants, focus group discussions, visits, and interviews. Additionally, 28 health facilities in the Triangle were observed, and case studies from the three countries were compiled. The findings of the study indicate that the population in the Mandera Triangle faces significant challenges in accessing health services. The conflicts in the region have resulted in fatalities, injuries, displacement, the blockage of vital supply routes, and the destruction of livelihoods. These ongoing conflicts have long-term consequences, including increased rates of physical and mental disabilities. Furthermore, they heighten the risk of disease, disrupt healthcare systems and the medical supply chain, undermine social norms, and hinder the free movement of health workers.

According to Amaniafrica (2021) on the insights on the Peace and Security Council (PSC) in the Democratic Republic of Congo (DRC), there were 434 recorded incidents of violence and obstruction against healthcare in just one year, 2019. This, combined with the Ebola outbreak in various regions of the country, had devastating consequences. Similarly, in Libya, 77 cases of attacks and obstruction against healthcare were documented in 2020. These incidents not only resulted in injuries and deaths of healthcare workers but also led to the closure of several hospitals, creating significant gaps and limitations in healthcare provision, especially during the Covid-19 pandemic.

Ojeleke et al. (2022) conducted a study to examine the impact of armed conflicts on healthcare utilization in Northern Nigeria using a difference-in-differences analysis. The study findings indicate that armed conflicts have a negative effect on healthcare utilization in the region. Pregnant women living in areas affected by conflict-related attacks are 0.6 times less likely to meet the

recommended number of antenatal care visits compared to women residing in non-conflict areas. This finding is not surprising and can be attributed to the fact that violent attacks restrict physical movement in the region, thereby preventing access to healthcare facilities. The study also found that exposure to conflict significantly reduces the likelihood of women giving birth at a healthcare facility, and conflict events impede child immunization within conflict affected clusters. These findings are not unexpected, as armed conflicts have been shown to disrupt healthcare activities, exacerbate the shortage of skilled healthcare workers, and damage healthcare facilities. Furthermore, the study highlights that the need to travel long distances to reach a healthcare facility increases the risk of being targeted for attack, abduction, or even violence by armed groups such as the Boko Haram Insurgency (BHI) rebels. This poses additional challenges to accessing healthcare services in conflict affected areas.

Chi et al. (2015) conducted a qualitative study to assess the perceptions of armed conflict on maternal and reproductive health (MRH) services and outcomes in Burundi and Northern Uganda. The study utilized in-depth interviews and focus group discussions with women, healthcare providers, and NGO staff. A total of 63 interviews and 8 group discussions involving 115 participants were conducted. The study identified three main themes: armed conflict as a cause of limited access to and poor quality of MRH services, armed conflict as a cause of poor MRH outcomes, and armed conflict as a catalyst for improved access to healthcare. The impact of armed conflict on access and quality of MRH services varied across the study sites. Both Burundi and Northern Uganda experienced attacks on health facilities and looting of medical supplies. In Burundi, health personnel were targeted for killings, and favouritism in healthcare provision was reported. In Northern Uganda, health providers were abducted. These mechanisms resulted in limited access to and poor quality of MRH services. The perceived effects of armed conflict on MRH outcomes were significant. They included increased maternal and newborn morbidity and mortality, a high prevalence of HIV/AIDS and sexual and gender-based violence (SGBV), increased levels of prostitution, teenage pregnancy, and clandestine abortion, as well as high fertility rates. The relocation of individuals to government-recognized internally displaced persons (IDP) camps was seen as a potential improvement in access to health services.

Pu et al. (2020) conducted a study aiming to enhance the accessibility of healthcare services in North Kivu, Democratic Republic of Congo (DRC). In their study, the researchers proposed a systematic approach to assess spatial accessibility to healthcare and identify optimal locations for additional healthcare facilities based on accessibility measures. The results obtained using a raster-based accessibility measurement revealed that the majority of the population in the study area could not reach the nearest hospitals within a two-hour travel time. Specifically, only 25% of the population could reach the nearest hospital within two hours when walking, while 50% and 44% could do so using motor and bus travel scenarios, respectively. Furthermore, the study employed a location-allocation model to determine the optimal locations for five newly proposed hospitals. The results indicated that these strategically located hospitals could potentially increase the coverage of an additional 11.41%, 8.29%, and 8.95% of the population for the three travel scenarios mentioned earlier.

3.0 METHODOLOGY

This study was basically a desktop based research. A review of the literature concerning utilization and access to healthcare services by civilians in conflict affected areas in Africa was conducted using PubMed, Web of Science, PsycINFO via Ovid, ProQuest Nursing & Allied Health,

CINAHL, Google Scholar, the Cochrane Library among others with restrictions placed in African countries and data not more than eight years after publication date. Relevant articles were also found by scanning the references of found articles (backward search) and locating newer articles that included the original cited paper (forward search). Findings were summarized and recommendations drawn from analysis done on the collected data related to the study variables.

4.0 FINDINGS

The findings of Ramadan et al (2020) study provide valuable insights into the extent of humanitarian aid access among civilians in conflict affected areas in African countries. The study reveals important patterns and disparities in accessing primary healthcare (PHC) services, shedding light on the challenges faced by affected populations and potential implications for humanitarian aid efforts. Firstly, the study highlights that access to PHC services varied across subnational regions within the four countries studied (Cameroon, the Democratic Republic of Congo, Mali, and Nigeria). This variation indicates that the availability and reach of humanitarian aid may not be consistent across conflict affected areas. Some regions may have better access to healthcare services, while others face greater difficulties in obtaining the necessary assistance. Such disparities in healthcare access can undermine the overall effectiveness and impact of humanitarian aid efforts. The study also identifies that financial barriers to care were more prevalent than geographic barriers. This finding implies that the cost of healthcare services and associated expenses pose significant challenges for affected populations. Furthermore, the study highlights the role of conflict intensity in exacerbating disparities in access to care. It indicates that regions closer to areas experiencing medium or high-intensity conflict tended to have larger education and wealth disparities in accessing healthcare. This suggests that the impact of conflict extends beyond direct violence, influencing access to essential services like healthcare. In such conflict affected areas, humanitarian aid organizations may face increased challenges in reaching and providing assistance to vulnerable populations.

Consistently, in DRC Altare et al.(2020) reveals several significant challenges that impact the delivery of humanitarian aid in the region. Physical access to healthcare services is a major hurdle due to factors such as distance, poor road conditions, insecurity, and the rainy season. These challenges restrict access to certain areas and make it difficult for humanitarian organizations to reach affected populations. The limited accessibility of certain locations by motorbike or helicopter further complicates aid delivery, primarily due to logistical and financial constraints. The availability of essential medications is also a concern. The presence of only one certified distribution centre, coupled with frequent stockouts, hampers the provision of necessary medicines to conflict affected regions. This shortage of medications further undermines the effectiveness of humanitarian aid in addressing health needs in these areas. The study highlights the adverse impact of armed groups on healthcare activities. While some armed groups may allow health services to operate in villages they originate from or control, they often resort to extorting illegal taxes from healthcare providers. This situation poses challenges for humanitarian organizations, as they must navigate complex dynamics and potential exploitation by armed groups in order to deliver aid effectively. Furthermore, attacks, looting, and threats primarily target health facilities located in zones controlled by adverse groups. This unpredictability and insecurity further hinder the delivery of humanitarian aid and jeopardize the accessibility of healthcare services for civilians in conflict affected areas. The findings also shed light on the critical role of health workers and the barriers they face in providing services. The lack of regular payment, low salaries, and dependence on user

fees contribute to demotivation among health workers. This impacts the quality of care provided and leads to high turnover rates as health workers seek better-paid opportunities elsewhere. The resulting gaps in human resources exacerbate the challenges faced by affected populations and limit the reach of humanitarian aid efforts.

The findings of Zhang et al.(2021) highlight that high self-reported insecurity, particularly in regions experiencing armed conflict, is associated with improved maternal health-seeking behaviors, including skilled antenatal care, skilled attendants at delivery, and early initiation of breastfeeding. This suggests that in conflict affected areas, where access to healthcare services may be limited or disrupted, maternal health-seeking behaviors may be influenced by the perception of insecurity. Furthermore, the study reveals that children of mothers with high self-reported insecurity are more likely to suffer from common illnesses such as diarrhea, fever, cough, and dyspnea. This highlights the vulnerability of children in conflict affected areas and the potential impact of limited access to healthcare services on their health outcomes.

The findings of Gesesew et al.(2021) assessment on the impact of war on the health system in the Tigray region of Ethiopia shed light on the extent to which health facilities and healthcare professionals are protected in conflict affected areas in African countries. The study reveals a stark deterioration in the functionality of health facilities during the war in Tigray. Only a small fraction of hospitals, health centres, ambulances, and health posts remained operational, indicating a significant impact on the availability of healthcare services for the affected population. This suggests that health facilities in conflict affected areas are vulnerable to damage and disruption, which can severely hinder the delivery of essential healthcare. Furthermore, the research highlights the increased need for emergency food assistance in Tigray, reflecting the dire humanitarian situation. The escalation of the conflict and resulting instability can further compromise the protection of health facilities and healthcare professionals. In such volatile environments, health facilities and personnel may become targets, leading to attacks, plundering, or intimidation. This puts healthcare professionals at risk and can disrupt healthcare services, exacerbating the challenges faced by the affected population. The study also indicates a significant decline in the provision of essential healthcare services during the early phase of the war. Antenatal care, supervised delivery, postnatal care, and children's vaccinations, which were previously provided at relatively high percentages, were unable to be delivered in the first 90 days of the conflict. This disruption in healthcare services demonstrates the impact of the conflict on the ability to protect health facilities and ensure the safety of healthcare professionals in conflict affected areas.

In the same vein, the information provided in the 2018 Safeguarding Health in Conflict report sheds light on the extent to which health facilities and healthcare professionals are protected in conflict affected areas in African countries. The report highlights that health workers were subjected to attacks and violence in numerous African countries, including Burkina Faso, Cameroon, the Central African Republic, the Democratic Republic of the Congo, Egypt, Ethiopia, Libya, Mali, Nigeria, Somalia, South Sudan, and Sudan. These attacks not only jeopardize the lives and well-being of healthcare professionals but also disrupt the functioning of health facilities, making it challenging to provide essential healthcare services to the affected populations. Furthermore, specific incidents such as the abduction and targeting of polio vaccinators in Nigeria and Somalia demonstrate the risks and dangers faced by healthcare workers while carrying out critical public health initiatives. Such incidents not only undermine efforts to control and prevent diseases but also create a climate of fear and insecurity, further compromising the protection of

health facilities and healthcare professionals in conflict-afflicted areas. The abduction of health workers from their homes, health centres, and during travel highlights the vulnerability and lack of security faced by healthcare professionals in these settings. The risks they encounter hinder their ability to provide essential care to those in need, exacerbating the already challenging healthcare situation in conflict affected areas.

Interpeace (2021) in the Mandera Triangle provide further insights into the extent of humanitarian aid access among civilians, the protection of health facilities, and the level of protection afforded to healthcare professionals in conflict affected areas in Africa. The study reveals that the population in the Mandera Triangle faces significant challenges in accessing health services due to ongoing conflicts. This indicates a limited extent of humanitarian aid access among civilians in these conflict affected areas. The conflicts have resulted in deaths, injuries, displacement, and the destruction of vital infrastructure, including health facilities. This highlights the vulnerability of health facilities in conflict zones and the need to strengthen efforts to protect and maintain their functionality. Moreover, the study points out that conflicts in the region have long-term consequences, increasing the rates of physical and mental disabilities. This highlights the importance of protecting the well-being and safety of healthcare professionals who play a crucial role in addressing the healthcare needs of the affected population. However, the study suggests that conflicts disrupt healthcare systems, obstruct the movement of health workers, and undermine social norms. These factors contribute to the challenges faced by healthcare professionals in conflict affected areas, indicating a limited extent of protection for these essential personnel. The findings also concur with Ojeleke et al. (2022) whose study reveals that armed conflicts adversely affect healthcare utilization, particularly for expectant mothers residing in conflict affected areas. This suggests that the protection and maintenance of healthcare services in these regions are compromised, leading to reduced access to essential maternal healthcare, such as antenatal care visits. The physical movement limitations caused by violent attacks create barriers to reaching healthcare facilities, highlighting the urgent need for protecting and ensuring safe access to these services for the well-being of civilians in conflict zones.

Additionally, the study identifies the negative impact of conflicts on facility-based deliveries and child immunization. The disruption of healthcare activities, shortage of skilled healthcare workers, and destruction of healthcare facilities due to armed conflicts contribute to the challenges in protecting and providing essential healthcare services. These findings emphasize the critical importance of safeguarding healthcare facilities and healthcare professionals in conflict affected areas to ensure the well-being and health of civilians, particularly vulnerable populations such as pregnant women and children. Moreover, the study highlights the risks faced by individuals who must travel long distances to access healthcare facilities in conflict zones. The increased likelihood of being targeted for attack, abduction, or violence by armed groups underscores the urgent need to enhance the protection and security measures for healthcare services and individuals seeking healthcare. Creating a safe environment for healthcare delivery is crucial to ensure the well-being and safety of civilians in conflict affected areas in African countries. In the same vein, the International Peace Institute (2019) concurs that the conflict in northeastern Nigeria has resulted in the deterioration and complete collapse of health facilities, exacerbating the already existing neglect and underinvestment in the region. Specifically, in Borno State, only approximately 30 percent of health facilities are operating at full capacity. The primary healthcare facilities in most local government areas have suffered partial or total destruction due to the activities of Boko

Haram. With the displacement of people to urban areas, health facilities in cities like Maiduguri are facing overwhelming demand and struggling to cope. Additionally, the remaining hospitals are grappling with unreliable electricity supply, further hindering their ability to provide adequate healthcare services. Even in areas of Adamawa and Yobe States where some health facilities still stand, they often lack proper infrastructure and resources, compromising the quality of care available. These findings highlight the critical need for enhanced protection of health facilities in conflict zones across Africa.

Chi et al. (2015) study on the effects of armed conflict on maternal and reproductive health (MRH) services and outcomes in Burundi and Northern Uganda have important implications for the extent of humanitarian aid access, the extent of protection of health facilities, and the extent to which healthcare professionals are protected in conflict affected areas in Africa. The study reveals that armed conflict hinders access to and quality of MRH services. Attacks on health facilities, looting of medical supplies, and the abduction of health providers contribute to the limited availability and poor quality of healthcare in conflict affected areas. This highlights the need for improved humanitarian aid access to ensure the delivery of essential medical supplies, equipment, and personnel to these regions. Secondly, the findings emphasize that protecting health facilities is crucial. The study documents the attacks on health facilities and the targeted killing of health personnel, which further exacerbate the challenges in accessing healthcare services. To safeguard the well-being of civilians, it is imperative to implement measures to protect health facilities and healthcare professionals, including strengthening security arrangements, establishing safe zones for healthcare facilities, and ensuring the safety of healthcare personnel. The study underscores the importance of protecting healthcare professionals in conflict zones. The abduction of health providers not only disrupts healthcare services but also puts the lives of these professionals at risk. Ensuring the safety and protection of healthcare workers is essential to maintain the continuity of care and sustain healthcare services in conflict affected areas. Adequate security measures, training on self-protection, and provisions for psychological support should be prioritized to mitigate the risks faced by healthcare professionals in these contexts.

The findings of the study conducted by Pu et al. (2020) on improving the spatial accessibility of healthcare in North Kivu, DRC have several implications for the extent of humanitarian aid access, the extent of protecting health facilities, and the extent to which healthcare professionals are protected in conflict affected areas in Africa. Firstly, the study highlights the poor access to healthcare services in the region, which is a common issue in conflict affected areas. Limited accessibility to healthcare has significant consequences for the affected population, exacerbating their vulnerability and hindering their access to essential medical assistance. This emphasizes the urgent need for humanitarian aid to improve healthcare access and bridge the gaps in service provision. Secondly, the study reveals the challenges in maintaining and protecting health facilities in conflict zones. The breakdown and destruction of health facilities due to armed conflicts result in a severe shortage of functional healthcare infrastructure. This situation severely limits the availability and quality of healthcare services, making it even more difficult for affected populations to receive adequate medical attention. It underscores the importance of protecting health facilities from attacks and ensuring their continuity to provide essential healthcare during conflicts. Lastly, the findings indirectly touch upon the protection of healthcare professionals in conflict-afflicted areas. The study identifies the limitations and constraints faced by healthcare workers due to the lack of accessible healthcare facilities. Healthcare professionals operating in

conflict zones often face increased risks to their personal safety and well-being. Adequate protection measures, including ensuring their safety and security, are crucial for them to continue delivering healthcare services to the affected population.

5.0 CONCLUSION AND RECOMMENDATIONS

Conclusion

The study highlights significant insights on the extent of humanitarian aid access, protecting health facilities and the extent to which healthcare professionals are protected in conflict affected areas in Africa. Various challenges with direct implications for the extent of humanitarian aid access among civilians, the extent of protecting health facilities, and the extent to which healthcare professionals are protected in these regions have been identified. The limited infrastructure, inadequate skilled personnel, and shortages of essential medicines and supplies hinder access to healthcare services, indicating a substantial gap in humanitarian aid access for civilians in conflict affected areas. The lack of adequate resources and facilities restricts the availability and quality of healthcare, exacerbating the already challenging situation faced by the affected populations.

The study has revealed the vulnerability of health facilities and healthcare professionals in conflict affected areas in African countries. The direct impact of conflicts on health services, including attacks on health workers and facilities, further underscores the need for enhanced protection of health facilities. The destruction of communication infrastructure, disruption of mobile coverage, and the inability to respond to health emergencies due to blocked or dangerous roads impede the functioning of health facilities and the delivery of critical services. The study indicates a limited extent of humanitarian aid access among civilians, a need for greater protection of health facilities, and challenges in protecting healthcare professionals in conflict affected areas in Africa.

Recommendations

To ensure the well-being and safety of healthcare professionals and the effective functioning of health facilities in conflict affected areas in African countries, it is crucial to prioritize the protection of these key actors. Efforts should be made to establish and enforce measures that safeguard health facilities and healthcare professionals from attacks, abductions, and violence. This includes enhancing security measures, providing training on self-protection and conflict resolution, and establishing mechanisms for reporting and responding to incidents of violence. Security around healthcare facilities should be enhanced by increasing the presence of security personnel or establishing secure perimeters. In addition, there is a need for the provision of personal protective equipment, establishing secure transportation for staff, and facilitating access to counseling and support services.

Moreover, it is essential to advocate for the respect of international humanitarian law, which stipulates the protection of healthcare workers, facilities, and patients during armed conflicts. The international community, governments, and humanitarian organizations should collaborate to raise awareness, strengthen legal frameworks, and implement measures to ensure the protection of health facilities and healthcare professionals in conflict affected areas. The local communities, armed groups, and other stakeholders should be engaged to foster understanding and respect for the neutrality and sanctity of healthcare.

The study underscores the need for healthcare infrastructure support. There is a need to invest in the construction, renovation, and reinforcement of healthcare infrastructure in conflict affected

areas. This includes ensuring the availability of essential medical equipment, supplies, and medicines. Strengthen the resilience of healthcare facilities to withstand attacks and minimize disruptions to services.

There is a need to develop strategies to improve access to healthcare services, especially in remote and conflict affected areas. This can include mobile clinics, outreach programs, and community health workers to provide essential healthcare services to populations in need.

There is a need for unimpeded and timely access to humanitarian aid, including medical supplies and personnel, in conflict affected areas. Facilitate the provision of essential healthcare services by removing bureaucratic barriers and ensuring the safe passage of humanitarian convoys.

Peacebuilding initiatives, dialogue, and conflict resolution processes should be supported and promoted to address the root causes of conflicts. Working towards sustainable peace can contribute to the protection of healthcare services and the overall well-being of civilians.

Moreso, there is a need to strengthen monitoring and accountability. Mechanisms to monitor and document attacks on healthcare facilities and healthcare professionals should be established in addition to promoting accountability for perpetrators of such attacks through legal frameworks and international mechanisms. On this note, there is a need to collaborate with researchers carryout more empirical research on the protection and maintenance of healthcare services for Civilians' well-being in conflict affected areas in Africa.

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