

ADVERSE EFFECTS OF WAR ON HEALTHCARE SYSTEM: CASE STUDY OF SOUTH SUDAN

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ABSTRACT

Adverse effects of war can be viewed from different perspectives. It has a long history and several forms; war does not only cause physical damages and trauma; it also involves psychological damages. Healthcare systems concerns are broad and include both trauma and psychological effects of war. War impacts healthcare and the vulnerable population, and ultimately have a grave impact on all areas of human life. In the case of refugees, altered environment brings about altered opportunities and access to healthcare and maternal care necessary for social, economic, and psychological wellbeing of the population. This study is qualitative cross sectional study bothering on how war limits effective healthcare delivery. Most wars arise as a result of economic deprivation, oppression or suppression, as well as an instinctive attempt to dominate others. Wars are estimated to have taken up to 3.6billion lives since mankind came into existence. The effect of war on healthcare systems can have irreversible consequences e.g destruction of health database and health infrastructure.

KEYWORDS: War, Healthcare systems, Comprehensive peace agreement, gross domestic product.

INTRODUCTION

War is a state of armed conflict between nations or states or different groups within a nation or state. The scholarly study of war is called Polemology.

Most wars are usually accompanied by economic disasters and health infrastructural breakdown. Wars has in addition to loss of lives, effects on the psychological and behavioral responses in humans.eg are physical trauma and mental trauma.

In some parts of the world today such as Yemen, Ukraine, Iraq and South Sudan etc.^[1] all aspects of their lives have been affected including the decline in population of these countries. As a consequence of this, men, women and children have lost their lives or suffered physical, mental or social trauma which have affected their daily lives and personality irreversibly.

It is well known, that in war, the most vulnerable people are children, the elderly and women, hence the need for humanitarian assistance. Furthermore, hospitalized

victims will need assistance from care givers; while those that are incarcerated will be at special risk in a natural risk or man-made disaster.^[2]

In armed conflict from 1945, 90% of the casualties have been civilians compared with 50% in the World War 2 and 10 % in world war 1. Government and national leaders are the greatest horrendous perpetrator of violence, torturing citizens who are opposed to their views.^[3]

The United States is the world's largest warmonger, with arms export of 40% of all arms used in wars in the developing countries of the world. The so –called developed nations fuel wars in the so; called under-developed or developing nations of the world, so as to make money from arms trade. The global arms sales are as follows: U.S 49%; Britain 25%, USSR 10%, France 7% and others 6%, invariably these nations are the beneficiaries of the wars all around the globe. This therefore implies that the adverse effects of wars on the

healthcare of the developing economies is the real fortune of the wealthier nations above mentioned.^[4]

OBJECTIVE

The objective of this research is to delineate the adverse effects of war on the healthcare system of a developing economy using South Sudan as a case study. Also, this study seeks to show the contribution of the humanitarian NGO and the UN in helping the ailing healthcare system of South Sudan.

METHODOLOGY

A rapid examination was conducted applying qualitative and cross sectional study.

Means of collection of information was through:

- Secondary data (documentation and observation from IDP camps)
- Rapid assessment with Internally Displaced Persons camps in South Sudan.

Ethical Consideration

Ethical clearance was obtained from United Nations Missions in South Sudan.

Definition Of concepts

War is a state of armed conflicts between different nations or state or different groups within a nation or states .War can be multifaceted ranging from nuclear, biological, chemical or physical war. War and healthcare are always in contrast phenomenally, as focus on one usually drowns the other. Hence the negative effects of war on healthcare.^[2]

Healthcare is the maintenance and improvement of physical of physical, social and mental wellbeing of an individual, usually by the provision of medical services.

War has the negative effect of directing scarce resources away from healthcare and other human services, and often destroying already built infrastructure for these services.^[5]

It facilitates disease spread and general ill health conditions.

WHAT IS WAR

Defining war requires determining the entities which are allowed to start and engage in the war. War can be viewed from political or philosophically angles. From political perspectives, war is a conflict between nations, states .In philosophy war is conflicts between schools of thought or ideologies.

In the U.S., article1, section 8, clause 11 of the U.S. constitution, gives their congress alone the power to declare war. War is usually undertaken to compel an enemy to succumb to our will. War is a continuation of politics by other means other than dialogue.^[6]

Since the early 1970,a major threat emerged for healthcare system and that is military attacks on medical personnel's and medical facilities, even though it is prohibited in the international humanitarian law. Attacks on medical facilities are prohibited under the Geneva Conventions of 1947 and the 1977 additional provisions.^[7]

Brief History of Origin of War

War is as Old as man's history on the earth planet.it has claimed up to 4billion lives since mankind came into existence. The invention and spread of agriculture coupled with domestication of animals 5000B.C are acknowledged as the developments that set the world's stage for the emergence of large scale urban societies.^[8]

As the resources expanded, the quest for resources increased and instinctive greed in man began to trigger violence between individuals, then families, villages, nations and then countries.

The societies that emerged simultaneously around 4000BC in both Egypt and Mesopotamia, used tools, but within 500 years stone tools and weapon gave way to bronze. With the manufacture of bronze came a revolution in warfare.^[9] It is important to remember that the period from 4000BC to 2000BC was truly a seminal period in the development of institutions and intrumentalists.of war. At this period of human history warfare had not been enshrined in the social structure of man as legitimate and permanent functions of a developed society. The present day Iraq is the site of Sumer and Akkad, two city states that produced the most sophisticated military of the Bronze Age. The Greeks called the area Mesopotamia, literally "the land between two rivers", a reference to the Tigris and Euphrates basins.^[9]

The History Of South Sudan War

The first civil war from 1955 to 1972 was between the Sudanese government and Southern Sudan rebels who requested a greater autonomy for Southern Sudan. The war ended in in 1972 by Addis Agreement which granted regional autonomy to a Southern Sudan, on internal issues.^[10]

Another civil war erupted in 1983 as a result of long standing issue heightened by the then President Jafar Nimeri decision to introduce sharia law .There was a latter negotiations between the government and SPLA/SPLM of the Southern Sudan in 1988 and 1989,but was abandoned when Omar Al-Bashar took power in 1989 coup. Fighting over resources the South Sudan self-determination and the role of religion in Sudan raged between the Sudan government and the SPLA/SPLM for more than 20 years.^[11]

The war has claimed more than 2 million lives and displaced over 4 million people. In 2005 the U.S, Inter-Governmental Agency on Development (IGAD) and

other international mediators helped broker a peace deal between SPLA and Sudan government.^[12]

In January 2005, the National Congress Party (NCP) and SPLM signed a comprehensive peace agreement or CPA establishing a 6 year interim period, while provisions were made to test the viability of a unified Sudan. In 2010 Sudan held elections meant to pave way toward democratic transformation. However, there was electoral frauds on both sides of NCP and SPLA/SPLM.^[11]

As the CPA six year interlude elapsed South Sudan voted for their independence in July 9, 2011. The six year interim period came to an end, resulting in a new country called South Sudan.

The CPA also allowed Abiyei residents to choose by vote in a separate referendum to join either Sudan or South Sudan. The South Kordofan and Blue Nile –many of whom fought with SPLM against the Sudanese government in the secessive wars were to participate in a popular consultation process, which was to determine how states would be autonomous within Sudan.^[13]

In December 15, 2013 another civil war ensued in South Sudan as a result of the rift between the sitting president of South Sudan, Mr. Salva Kiir and the former vice president of South Sudan, Mr. Riek Machar.^[12]

Mr. Salva Kiir is from the Dinka tribe, while Riek Machar is from the Nuer tribe: these are the two dominant tribes in South Sudan.

In fact, tribal factionalism is the reason for the sustained South Sudan war. While her leaders fight over power sharing and the spoils of office, the world's newest country teeters on the edge of widespread hunger. This is aggravated by the collapse in the oil price, which means that they cannot continue squandering oil resources. With a population of 11.7million and a GDP of \$11.9 billion, South Sudan still has a lot of needs to address instead of continuing in to struggle amongst themselves.^[14]

War and Psychology

There is a large sense in which psychological forces play a great role in all wars. It is psychology that cause wars, carry it on, make or break morale amongst armies, home and fuels the determination to victory or defeat in the field, and that are chief heirs of all natures of war (Stanley G, 1918).^[15]

Our mastery of human psychology is key to solving all war problems amongst the human race. War is a kind of general madness; it is a kind of mass psychosis. Man's attempt to domesticate himself has been an age long task and is the crux of all kind of civilization ever seen.

Sometimes ago, it was a reproach to apply psychology even to education; however now, it is happily applicable

in business, love, religion, mental hygiene and rest and there is no concession of culture to Kultur in so doing for in all these fields we have found vastly more facts than we can explain. Our psycho-somatic response is key to all our actions, and these are controlled by our secretions, hormones, excretions, assimilations and dissimilation as well as other physiological processes.^[16]

Beyond psychological health and medical fitness lies even broader dimension of psychological aspects of war. (Dennis J, 2010). There is always a massive side effect for war. Post war and operational stress is a description for all the possible description of all the possible outcome along a continuum of stress reaction that may be experienced weeks or even years after war and operational exposures to war.^[8]

Post-traumatic stress disorder (PTSD) is a common experience in war for both civilians and combatants. Recognising and managing the effects of PTSD is great way to heal the negative impacts of war on victims and veteran; hence paving way for a progressive society.^[17]

The most common stress reaction include

Fatigue
Slow reaction time
Difficulty sorting out priorities
Difficulty starting routine tasks
Excessive concern over seemingly minor issues
Indecision
Belligerence
Hallucinations etc

In South Sudan, this fugitive or wandering experience is so common; as a result of the long years of war. Other stress reactions are: muscular tension digestive and urinary problems, circulatory problems and respiratory problems. The list is endless.

Adverse Effects of War on Children



Children Rendered Homeless (Unmiss Photos)

Millions of children and young people globally are affected by armed conflict. They are usually confronted with physical harm, violence, danger, exploitation, fear and loss. So many children are forced to flee while some witness the death of loved ones. A good number of the

children are forced to pull the trigger themselves. Communities are ripped apart and can no longer provide a secure environment for their children. Adults are busy trying to survive; parents have little time for their children. Buildings for Schools and playgrounds are damaged or taken over by armed groups.^[17]

During conflict, children and young people's rights are violated on a massive scale; their rights to be protected from violence, abuse, neglect or to live in dignity and be supported to develop to their full potential.

It usually has grave side effects on the innocent children namely

Loss of trust in themselves and adults population

Due to experience from conflicts, children and young people can lose their confidence, their trust in the adults population; in themselves and their trust in the future. They often become full of anxiety, depressed and withdrawn, or rebellious and belligerent.

Loss of sense of protection

To grow up in a well-protected environment is essential for children and young people to develop to their fullest potentials. UNICEF and many NGOs programmes support children and young people to regain their confidence and build positive relationships with their peers, families and wider communities; thus integrating them into a good life once again. With a positive outlook, children and young people can shape their own futures and contribute to a peaceful future for their communities. This is because no child should be part of war and its ugly experiences.

Loss of lives and disability

A lot of children are killed or permanently disabled during war times and this lead to a lifelong suffering which they were unprepared to take. It dashes the hope of the young child while becoming a great burden for the parents or care givers. A lot of preventable disease easily spread during war affecting or killing a lot of children eg is Polio, Measles, etc.

United Nations Perspective on War

The UN perspective on war is zero war for all mankind if possible, but whereas this may seem farfetched, the UN introduced peace keeping alleviating the sufferings encountered during wars while negotiating with warring parties for a peaceful agreement and return of peace.^[19]

Hereunder are the UN efforts to bringing peace to different parts of Africa and the globe, generally:

In July 1, 2011, the United Nations welcomed her newest member, South Sudan. The new country's January referendum on independence and subsequent peaceful separation from Sudan after years of violence marked a high point for U.N. peacekeeping, which had maintained the armistice between Sudan and South Sudan since 2005.^[18]

However, even as this tenuous victory was being celebrated, Côte d'Ivoire's descended into renewed violence reminding the world of U.N. peacekeeping's inconsistencies, shortcomings, and mounting challenges. In spite of the presence of more than 9,000 U.N. peacekeepers, an estimated 1million refugees were displaced by escalating violence in the wake of the country's contested November 2010 presidential elections. Even though the U.N. and French forces eventually restored order in April, the peace remains fragile.^[20]

Also informing is the catastrophe unfolding in Somalia, where the UN has peacekeeping mission. For 20 years, two U.N. peacekeeping missions, and a laborious African Union peacekeeping mission have done all they could to restore peace and stability to the Horn of Africa or to alleviate humanitarian crises there. Years of anxiety over Somali pirates has shifted to a potent concern over a devastating famine exacerbated by decades of civil war.

Undoubtedly, U.N. peacekeeping has restored peace and brought prosperity to millions of inhabitants in conflict zones around the globe.^[21]

Moreover, the expanding expectations for peacekeeping have strained the resources and mechanisms of the United Nations. Operational overstretch, shifting definitions of what peacekeeping should entail, and diminishing contributions (which is linked to a weakened global economy) are only the most recent obstacles to a function that has long tested the limits of the United Nations. The UN also has its peace keeping missions in Syria, Lebanon, Iraq etc, not minding the logistics demands of those missions.^[22]

The UN is still untiring in her effort to make the world a war free world.

Definition of Healthcare

Healthcare is the maintenance and improvement of physical and mental health, especially through the provision of medical services especially through the healthcare workers. (*medical-dictionary.thefreedictionary.com/healthcare*)

A **health system** can also be referred to as **health care system** or **healthcare system**, which is the organization of people, institutions, and resources that **deliver health care** services to meet the **health** needs of target populations.^[23]

The United States is the only industrialized nation that doesn't provide health care for all its citizens. Of course, the plan is to cover all of the fifty million uninsured, but funds remains the problem-just like in most developing economies and war affected countries. The consensus view among health policy experts is that Americans pour enough money into health care — a \$2.6 trillion industry — to have universal coverage.^[24]

The grave concern is that most countries are so impoverished that they cannot provide adequate healthcare for their citizens, let alone joining the cost of war to their national budget.^[25]

Dr. Elliott Fisher, of the Dartmouth Institute for Health Policy, says that about 30 percent of what we spend on health care is unnecessary; this is also an axiom in the US. Eliminating the unneeded care, there would be more than enough resources in our system to cover everybody.^[25]

In most developing economies and especially in Nigeria, corrupt politicians are the greatest impediment to healthcare. They usually embezzle or divert the funds made for healthcare into their pockets and for other reasons. If these can be addressed, good healthcare can be attained by all.

South Sudan Healthcare System

Having faced massive displacement that has resulted from war, health services in South Sudan are working under enormous pressure. Since the outbreak of violence in December 15, 2014 the WHO, MSF, UN, ICRC and other NGOs (INGOS) has worked together with the South Sudan healthcare systems and NGOs to save lives and perform more than 5000 surgical operations.^[26]

The recent fighting in South Sudan has resulted in large numbers of people being wounded," said Franz Rauchenstein, head of the ICRC delegation in the country. A lot of medical staff are being sent to several places and are working round the clock to treat the injured and the diseased.

Starting from December, 2013, health services in the country have been overstretched. Lack of security has caused many health workers to flee for their lives, thereby putting pressure on the remaining health personnel. There have also been reports of health workers being sporadically attacked or killed," said Kerry Page, an ICRC health programme coordinator in South Sudan. In addition, several care facilities have been damaged or looted, and since it is extremely difficult to bring in medical supplies to the places that need them the most, the basic health needs of many people simply cannot be met.^[27]

From the very beginning of the current armed conflict, MSF, the UN and the ICRC has been sending in specialized medical personnel to perform life-saving operations. Many surgical teams, each consisting of an anesthetist and nurses as well as surgeons, have performed more than 5000 surgical procedures on weapon-wounded patients in several health facilities across the country; while treating other illnesses. In parallel with these efforts, South Sudan health volunteers have delivered medical supplies, dressed wounds, served as interpreters for the surgical teams, moved patients and

performed many other essential tasks relating to patient care.^[28]

Local nurses, doctors and laboratory scientists supported by their international counterparts, attend to a children and adults alike in the hospitals in South Sudan

Due to lack of well-equipped medical facilities or damaged health facilities, MSF, ICRC surgical teams are working in basic care facilities or in vacant buildings with simple rooms converted into operating theatres. The medical teams are rapidly flown in, even to remote locations, when there are confirmed reports of large numbers of casualties. "It is rather difficult, but there's no other way to provide care in most instances" said Ms Page of ICRC.

During the rainy season, the staff has an additional burden to contend with as most of the roads are not tarred nor graded for easy vehicle movements.

The health-care system is trying to cope with not only with large numbers of casualties, but also with the displacement of the local population, who also have various health challenges. In a bid to avoid danger, many people, women and children, travel long distances in search of the closest safe haven. Their health needs are considerably large, and local services are usually not able to meet them on their own. In many places affected by violence, small towns and villages have turned into new population centers overnight.^[29]

The pressure that this inflow of people has put on already weak health-care infrastructure has been enormous. In the Upper Nile state, the population in and around Kodok tripled in a matter of days. Some one hundred thousand civilians have taken refuge there, and because the security situation remains unpredictable, they are not likely to leave soonest.

Efforts are made at minimizing the disruption of health services for displaced people and local residents alike. INGOs have also started to scale up support to some primary health-care facilities in conflict-stricken areas, with a focus on resuming routine immunizations and ante-natal care, and on making sure that an adequate supply of medicines and other medical items is available.

From December, 2013 in addition to the surgical work and pediatric care INGOs have provided in health-care centers, they have.^[30]

- Assisted nearly 4000 people with disabilities in many physical rehabilitation centres, all around South Sudan that they run or supports;
- Delivered first-aid and surgical supplies to many first-aid and other health-care facilities.

In addition, INGOs medical personnel have dressed wounds for patients over thousands of patients.

Adverse Effects of War on South Sudan Burden to the international community

South Sudan is presently one of the largest recipients of humanitarian assistance from the international community. The Global Humanitarian Assistance initiative reported that in 2013, South Sudan received US\$ 903 million in humanitarian assistance, thereby making it the second largest recipient of such assistance besides Syria.^[31]

Nearly two-thirds of the populations were classified as being in need of assistance.

In early 2014, the United Nations declared that South Sudan is at level 3- emergency, making it a country with – the highest emergency classification.

Estimated humanitarian needs for 2014 have is valued at US\$ 1.4 billion and now stand at \$1.8billions.^[32]

In 2013, the UN Security Council approved an increase in the number of peacekeeping troops and police to 12,500 and 1,323 respectively (compared to 7,000 and 900). The total approved budget for United Nations Mission in South Sudan for the period from July 2014 to December 2015 will be US\$ 580 million.^[33]

The peacekeeping budget to December 2015 took into account the likelihood of conflict occurring in that year. The budgeted humanitarian costs of US\$ 1.3 billion represent a 15% increase relative to the US\$ 1.1 billion foreseen at the end of 2013.^[30,34]

Global Humanitarian Assistance highlighted that the budget was likely to increase.

Burden To South Sudan Internal Finances

The conflict has a two –faceted effect on South Sudan's public finances. On the side of the expenditure, the conflict has increased spending on defense and security relative to a peace scenario.^[35]

There are also likely to be opportunity costs relating to humanitarian needs and rebuilding infrastructure post-conflict, though these are likely to be borne to a large extent by the International community.



(PHOTO:UNMISS)

Effect on Informal Economy and Regional Ties

With 76% of South Sudan's households surviving on subsistence activities, informal trade dominate and large amounts of economic activity goes unrecorded.

Recorded data indicates that trades between South Sudan and its four most important regional trading partners – Ethiopia, Kenya, Sudan and Uganda – has grown significantly in recent years, with exports from Uganda to South Sudan alone estimated to have increased from \$60million to \$ 635 million between 2005 and 2008.^[36]

A central finding of this report is the need for early action. The costs of conflict to South Sudan, its neighbors and the international community are likely to increase at an accelerated rate the longer the conflict persists.

If the fighting continues for another 1 to 5 years, it will cost South Sudan between US\$22.3 billion and \$28 billion. If the conflict's effect lingers over 20 years to allow for flow-on effects, the loss will be greater: between \$122 billion and \$158 billion.^[37]

Human Cost of South Sudan War

The human costs of South Sudan war – death, displacement from homes, hunger and disease – also have significant long term economic impacts. Taking the effects of hunger on labour productivity could mean a further \$6 billion is lost in the GDP, if the conflict were to continue another 5 years.

South Sudan's spending on security will likely increase by a further \$2.2 billion were the conflict to last another year.^[38]

The savings for military spending that will be used in conflict within a year from now cannot allow South Sudan to meet the internationally recommended target of allocating 20% of its budget to education, hence creating more loophole for entrenched poverty in the country.^[39]



Communicable Diseases and War

When there is peace in a country the Public Health administration are enlightened and vigilant; the production and distribution of milk, food and water are effectively safeguarded; quarantine and isolation are adequately enforced to affect a significant reduction of

contact with infection. But this is not the case when there is war.^[40]

In contrast, during war poverty, filth and congestion of population are, in general, constituted problems and very adverse circumstance faced during war. It is almost certain that the problems engendered by war time should disturb any existing feeling of complacency regarding the many problems of infectious disease as they affect the public health and the responsibility of private practitioners of medicine. During conflicts personnel shortages may conceivably threaten the effective inspection of foods and drinks, as well as the enforcement of quarantine measures. Importation of civilian workers, many of whom are from less-favored countries, has always introduced large numbers of children and adults who are unprotected by specific immunization, to infections. The abrupt increase in population as a result of war also introduces the important factors of crowding and faulty housing which would be expected to accentuate certain of these disease problems.^[41]

In South Sudan, Many IDP camps are made with tents, and usually small, while the family size is up to 6 averagely. The hot air and unhygienic environment quickly helps diseases to spread fast. Cholera outbreak in the IDP camps in Juba in 2014 claimed many lives as a result of poor living condition. Moreover, increased incidence of communicable disease from different sources, should it develop, would constitute a much more critical test of the effectiveness of artificial immunization among the population, and of the protective function of control measures heretofore effective, than would be anticipated if we had remained without this adventitious sources of infection.^[42]

War and Famine in South Sudan

The risk that famine may take hold on some parts of South Sudan by March 2015 is very high. According to the United Nations report; South Sudan is in a major malnutrition crisis. The projection is that 6.4million people will be faced with food insecurity between January and March 2015 and \$1.81 billion will be needed over the year 2015. Those willing to go to farms are unsure of their safety as most fight takes place in the bush: thus discouraging agricultural activities. Given the scale of this need and the urgency, South Sudan, donor governments and humanitarian agencies must redouble their efforts to increase humanitarian assistance.^[43] They should fund gender-based violence (GBV) and child protection programme aimed at instilling confidence in the children and women.



There must also of a necessity for the government to divert some of her funds/budget to agricultural based projects.^[43]

War and Crime Rates in South Sudan

Violent crimes such as murder, armed robbery, home invasions, cattle raidings, and kidnappings and non-violent petty theft and fraud pervade South Sudan society.

In Juba, the capital of South Sudan, the most frequently reported violent crimes are armed robbery, home invasions, and car hijackings. Armed robberies and car hijackings are commonly reported from most expatriates. Most crimes usually occur during the night times hours and often involve gang-style operations. The number of reported car hijackings has sharply increased since July 2014.^[44] These incidents have been very violent and have targeted mostly the diplomatic and international communities. Very frequently, large sports utility vehicles are targeted at or shortly after dark when arriving or departing from compounds on poorly maintained and unlit roads. Sometimes, perpetrators have reportedly worn host nation's security service uniforms and have used legitimate check points or official business pretense to stop individuals or gain access to compounds. Those traveling alone or in small groups especially those walking in a lonely road are most often the target of armed robbers; while compounds that appears to have weak security, poor exterior lightings, and bad roads are the most targeted for car hijackings. Perpetrators, generally do not kill or seriously harm their victims, but the threat or use of force is not uncommon.

Outside the capital Juba, road ambushes and banditry are fairly common and often involves violence. Road banditry is usually during hours of darkness. These types of crimes mostly affect the locals, but disproportionately large retaliatory attacks to include large scale fighting, kidnapping, and murder could have a spillover effect.

Pickpocketing, theft of items from vehicles, fraudulent currency exchanges, and drive-by muggings can also be experienced. Drive-by muggings are also common occurrences.

Internally Displaced Persons and Refugees

Refugees are people who have crossed an international frontier and are at risk or have been victims of persecution in their country of origin. Internally displaced persons (IDPs), on the other hand, have not crossed an international frontier, but have, for whatever reason, also fled their homes (ICRC, 2010).^[8]

Refugee law – mainly the 1951 Convention Relating to the Status of Refugees and the Convention Governing the Specific Aspects of Refugee Problems in Africa – and the mandate of the Office of the United Nations High Commissioner for Refugees (UNHCR) provide the main framework for protection and assistance of refugees. Refugees are also protected under general human rights law, and if they meet a State involved in armed conflict, by international humanitarian law.

The general provisions of IHL protects civilian refugees in States involved in armed conflicts, but they also receives special protections under the 4th Geneva Convention and Additional Protocol I. This additional protection recognizes the vulnerability of refugees as aliens in the hands of a party to a conflict.^[8]

Internally Displaced Persons

There are no conventions for IDPs equivalent to the 1951 Refugee Convention. Nevertheless, international laws protects persons from displacement and once they are displaced under several bodies of law:

- IDP(s) are protected by international human rights law and domestic law;
- In situations of armed conflicts, they will be protected by IHL;
- The guiding principles on Internal Displacement, which were based on these two bodies of law, provide useful guidance on displacement-specific aspects.

Under IHL, people are protected from and during displacement as civilians, as long as they do not take a direct part in the conflicts.



IHL plays an important role in preventing displacement in the first place. It precludes the displacement of people except when necessary for imperative military reasons or for the purpose of protection of the civilians themselves.

A general or systematic policy of displacement of individuals without such justification is a crime against humanity.^[43]

Several rules of IHL protect the civilian's populations and their violation often constitutes a root cause of most displacements. For instance, attacks by warring parties on civilians and civilian objects are forbidden, same also are indiscriminate methods of warfare that may have an adverse impact on civilians. The other rules whose respect prevents displacements include the prohibition of acts that threatens the civilian's population's ability to survive such as destruction, without valid military reason, of crops, health facilities, water and power supplies or dwellings.^[43]

Collective punishment for civilian populations is also outlawed under IHL.

Effects of War on South Sudan Demography

It was estimated that the 2013 population of South Sudan was 11,090,104 with the following age structure.

Age	Percent	Male	Female
0–14 years	46.2%	2,613,697	2,505,795
15–24 years	19.7%	1,148,968	1,030,597
25–54 years	29%	1,547,553	1,666,244
55–64 years	3.1%	186,461	154,925
65 plus years	2.1%	133,301	102,604

South Sudan is home to about 62 indigenous ethnic groups and 81 linguistic partitions among a 2011 population of around 11.2 million.^[46] From history, most of the ethnic groups are lacking in formal Western political institutions, with their lands held by the community and elders acting as problem solvers and adjudicators. Nowadays, most ethnic groups still embrace a *cattle culture* in which livestock are the main measure of wealth and used for bride price (payment of dowry).^[45]

The majority of the tribes in South Sudan are of African heritage that practices either Christianity or syncretism of Christian and Traditional African Religion. There is however a significant minority of people, primarily tribes of Arab heritage, who practice Islam. Most tribes of African heritage have at least one clan that has embraced Islam, and some clans of tribes of Arab heritage have embraced Christianity.^[47]

Linguistic diversities is much greater in the southern half of South Sudan, a significant majority of the people belongs to either the Dinka people or the Nuer people. Both of the tribes speak one of the Nilo-saharan languages and are closely related linguistically. Dinka is a standard language used in South Sudan; moreover, its dialects are not all mutually intelligible.^[47]



(PHOTO: UNMISS)

From history, both the Dinka and Nuer have no tradition of centralized political authority and embraced a cattle culture where land is held by the communities and livestock is the main measure of wealth. Cattles are raided against neighbors commonly. Processes of urbanization are a source of significant cultural change and societal conflicts.

Upon the outbreak of the civil war, the two predominant tribes created an interesting demography, the most prominent of it the creation of two IDP camps in all UN camps just to ensure that there is no mix up of the two tribes thereby leading to fighting between them.^[43]

Adverse Effects of War on South Sudan Environmental Health.

As a result of war, organization of the society is very difficult due to lack loyalty to a single leadership. The multiplicity of armed elements throughout South Sudan greatly exacerbated the challenge of re-establishing the civilian character in refugee camps both in the north and north-east of the country. This also has affected the protection of environment with the erosion of law and order in refugee settlements and camps, as well as in surrounding communities. In most IDP camps, toilets and ablutions are on a shared basis, but due to poor maintenance of the toilets some resort to the natural way of defecating in the bush.

The spillover of this unhygienic ablution is that there is high incidence of sexually transmitted diseases, avoidable intestinal worms like *Ascaris lumbricoides* and helminthes. It usually worsens during rainy seasons as the muddy environment and the puddles which are both defecated and urinated into turns to bathing water and in extreme cases drinking water.^[48]

The putrefying human excrements usually makes the IDP camps very unwelcoming.

In Juba city, the city environmental system is still under developed as such individuals who cannot afford the taxes for environmental services disposes garbage's anywhere they find making the city one of the dirtiest capital city in the world.^[49]

In oil spillages have not been commonly reported but gas flaring in the oil fields of South Sudan remains a major threat to the environmental health of the country. This also goes together with unregulated deforestation and bush burnings while in search of timber or wild life.

In South Sudan, there is a deplorable insensitivity to preservation of the earth planet by regulating Carbon dioxide emissions which lead to global warming and its side effects.

Generally environmental laws have been put in place by the regulatory body but the will to enforce the laws remains the challenge.^[50]

Healthcare System and Socio-Dynamics of South Sudan

Social dynamics can refer to the behavior of groups that results from the interactions of individual group members as well to the study of the relationship between individual interactions and group level behaviors (en.wikipedia.org/wiki/Social_dynamics, 2015).^[37] As earlier stated, *healthcare is the maintenance and improvement of physical of physical, social and mental wellbeing of an individual, usually by the provision of medical services.*

A good population of the victims of the crisis usually has little or no money to afford adequate healthcare, the pervasive belief that good medical care is very expensive keep many of the indigent South Sudanese suffering even when there is available medical care matching their problems. However, the basic care provided by UN and other NGOs are for those in the IDP camps scattered all over the country of South Sudan.^[37]

Among medical and health workers, many of which attained only middle level trainings or no formal trainings (traditional healers), the empathy required to make patient have confidence in the healthcare system is lacking.

Unfortunately, most politicians in South Sudan who should help to build the health infrastructure scarcely treat the lightest ailment in their country; instead they run to neighboring Uganda or Ethiopia. As a result they, have no connection with the realities of their healthcare.^[22]

Healthcare Delivery during War Times

Violence against health-care workers and facilities, medical vehicles and patients during armed conflict and other emergencies is one of the key challenges of humanitarian concern in the world today. Violent acts, which limit access to health-care services for those most in need and disrupt health-care systems, have grave immediate and long-term consequences.

Peter Maurer, president of the International Committee of the Red Cross (ICRC), has highlighted the alarming scale of the problem.^[51]

About 1,800 incidents involving serious acts or threats of violence, recorded in 23 countries or regions between January 2012 and December 2013. More than ninety per cent of these of these incidents involve local health-care providers.^[43]

Another concern is that many incidents go unreported, for when acts or threats of violence prevent health workers, governments and international organizations from reaching them, thereby causing large numbers of people continue to suffer illness or injury without recourse to medical care. Furthermore, statistics do not reflect the indirect and multiplier effects of violence on a health system. These include the resignation of medical personnel and the destruction or closure of health-care facilities, depriving whole communities of access to essential services.^[51]

Health care in Danger Initiative (HCDI).

This innovation has identified a number of key actions that can be taken by States to ensure safer access to health care. These include adopting strong national legislation, sharing good practices, and supporting the work of the World Health Organization (WHO) to make national health systems more resilient.^[52]

Raising awareness

These issues of health care and violence has been broadly recognized as a matter of significant worldwide concern. At the 67th World Health Assembly in May 2014, WHO Director-General Dr Margaret Chan stated that health workers are under attack as never before. Health care.^[33] and violence also have a bearing on the current efforts to develop a post-2015 development agenda, and on the consultations leading up to the World Humanitarian Summit, to be held in 2016.^[30] Working in strong partnerships with significant and experienced stakeholders, also including the International Committee of Military Medicine, the World Medical Association, the International Council of Nurses, and Médecins Sans Frontières (MSF), the ICRC tries to raise awareness and gather expertise on this topic. Many States and regional organizations have held thematic workshops to discuss different aspects of the same problem. These include military practices, ambulance services in high-risk zones, the safety of health facilities, national legislation and justice.^[1]

United Nations Support to South Sudan Healthcare

Besides creating a peaceful atmosphere for smooth delivery of quality and affordable healthcare to the nations of South Sudan. The UN ensures a safe environment for other humanitarian actors like WFP, UNFPA, IOM, Concern Worldwide, MSF etc to deliver their services to the internally displaced persons. Under

the UN agency, UNHCR, adequate shelters, mosquitoes nets and clothing are provided to the IDPs.^[1]

Also, capacity building of the South Sudanese health care work force has also been a major support services rendered by the WHO in South Sudan. A rare occasion occurred in Dec2013 when the other health care workers from the other humanitarian organisations were overburdened that UN clinic helped to treat internally displaced persons. Apart from this the UN provide medical insurance for the national staff members and their dependants.^[1]

3.3 Humanitarian Organisations and South Sudan

Humanitarian actors in South Sudan very numerous beginning from the national to international NGOs.^[1] Their services range from providing good water supply to different human services as well as capacity building of the South Sudan nationals.



USAID officials assisting in South Sudan (photos by UNMISS)^[53]

Maternal and Child Health in South Sudan

Even before the current civil war in South Sudan, estimates shows that almost 300 women died daily in childbirth. One year and half into this conflict, even more women are dying from child birth and as a result of the secondary consequences of the conflict that shows little sign of ending.^[1]

Humanitarian agencies, including, have been working hard to save thousands of lives by responding to high levels of food demands for women and children hence reducing malnutrition, preventing and responding to diseases such as cholera, vaccinating children and ensuring that people have clean water.(UNFPA,2018).^[1] However, the crisis has weakened an already challenged local health system, with infrastructure destroyed by the fighting, staff and humanitarian workers targeted or displaced, and parallel and separate delivery of basic services not making the best use of limited resources. Below is a summary of the current MCH indices:

INDICATOR	ESTIMATED RATES
Able to access healthcare within 5 km	40%
Maternal mortality	1,989 per 100,000 live births ¹²
Infant mortality	75 per 1000 live births ¹³
Under 5 childhood mortality	121 per 1000 live births ¹⁴
Deliveries at home	80%
Percentage of children who are underweight, stunted and wasted	28%
Severely undernourished (children under 5)	122 per 1000 ¹⁸

Table Culled from care Publications (2018).

HEALTHCARE PROMOTION IN WAR TIMES

In country that illiteracy rate is very high the health concerns that give rise to the greatest mortality and morbidity generally and in crisis are preventable illnesses exacerbated by food insecurity. These are conditions that has been identified by outreach workers who visit individuals otherwise less likely to consult a provider.^[51] Behavioral interventions, radio campaigns, bulk text messages, preventative care, such as Vitamin A,C supplementation, and minor curative interventions, such as deworming, can also be conducted for those with less access to clinics. Furthermore, patients are also more likely to proactively visit health care facilities if providers cultivate relationships, ensuring cultural appropriateness of care, and sensitivity to gender. Trained outreach workers should be often drawn from the communities they to serve and are more likely to be able to identify needs and foster trust.^[52]

Additionally, they are able to reach out to patients to monitor their progress, a significant service in environments of food insecurity where recurrent illness becomes more prevalent. Unfortunately, following the outbreak of violence in South Sudan, when facility visits have declined and more outreach is needed, respondents note a decrease in outreach services due to funding constraints, the inoperability in some areas of healthcare administration, the loss of healthcare workers, and the redirection of efforts thought more “emergency” in nature.^[51]

In fact, education should take his place in South Sudan if health promotion efforts are to yield results.

War and the Elderly

The elderly just like women are children are vulnerable to most adverse circumstances that arise due to war. Being usually weak and unable to support themselves (in most developing countries);hunger, protein energy malnutrition and a lot of other preventable diseases find their way to our seniors during war.

The UN through her agencies and other NGO usually support any identified person; however many suffer and die unnoticed.^[4]

DISCUSSION

The conflict in South Sudan since December 2013.^[12] has devastated and health infrastructure of the majority of South Sudan's people. Tens of thousands of people have been killed, and about the same number permanently disfigured while placing nearly a third of the population at risk of famine and ravaged key parts of the country. The conflict has been characterized by brutal: killings, rape, forced recruitment of children, mass displacement and the destruction of livelihoods. Post traumatic disorder are common among both the victims and the fighting parties.

The economic costs of the conflict to date are quite substantial, with a projected drop of 15% in South Sudan's GDP for 2015.^[22]

The full effects of the conflict, such as environmental degradation, the break-down of social cohesion, health infrastructural destruction and the psycho-social trauma generated by sexual violence and child exploitation, are difficult to capture in their entirety in an health economic cost benefit analysis. South Sudan can ill-afford the health economic costs of its war, but after decades fighting for independence from its northern neighbor, it is even less equipped to bear the heavy social costs of another generation growing up in a violently divided society.^[16] The longer the violence stays, the further it spreads, and the more insidious it can become, the more difficult the task will be for South Sudan to undergo the kind of psycho-socio economic transformations needed to achieve lasting peace and revive its health sector.

Key Observations

A central finding of work is the need for early action by the UN to save the remaining health infrastructure. The effect of the conflict to South Sudan, its neighbors and the international community are likely to increase at an accelerating rate the longer the crisis persists.

Key Observation for South Sudan:

- If the civil war continues for another 1 to 6 years, it will cost South Sudan between US\$22.3 billion
- The human costs of conflict – death, hunger,non communicable and communicable disease also have significant longer term economic Just taking the effects of hunger on labour productivity could mean a further \$6 billion in lost GDP2if the conflict were to last another 6 years.

- South Sudan's spending on defense could increase by a further \$2.2 billion were the conflict to last another 6 years. The savings in military spending that would result from resolving the conflict within a year from now would allow South Sudan to meet the internationally recommended target of allocating 20% of spending to education.

Key Observation for the East African region

- The five countries considered in this work – Ethiopia, Kenya, Sudan, Tanzania, and Uganda – could between them save up to \$53 billion if the conflict were resolved within 1 year, rather than allowed to last for 5 years.
- Countries in the region, most notably Uganda and Kenya, may incur substantial financial costs relating to defense needs. Figures reported for Uganda suggest that defense expenditure incurred as a result of the crisis is around double the government's projected capital investment budget for the health sector for the coming financial year, and close to the capital investment budget for education.

Key Observation for the international community

- If the civil war stopped in a years time rather five an estimated 30,000 lives would have been saved
- If the civil war ended within one year rather than 5, the international community could save nearly an estimated US\$ 30 billion by reducing expenditure on peacekeeping and humanitarian assistance programmes.

CONCLUSION

War has a grave effect on healthcare systems; and the specific case of South Sudan is a proof of this. The high cost of the civil war on healthcare system has claimed innocent lives usually not the ones of the warring elites but the supposed cheap lives of the indigent South Sudanese whom they are supposed to protect. Health care concerns are enormous with respect to the South Sudan conflict and only a sustained peace can bring a restored hope to South Sudan's healthcare.

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