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Human Security, Conflicts and Human Development in South Sudan

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DECLARATION

I, Tolulope Abiodun Shokunbi, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature……..

Date……

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DEDICATION

To my darling wife Oluwayemisi Shokunbi and our three lovely children Simileoluwa, Oluwasemiloremoyo and Oluwaseyifunmi for bearing with me whilst struggling to reach this feat and trying to be a caring husband and responsible father at the same time.

ABSTRACT

The essence of security is the protection of life and property both of which are important to human beings. However, without life or well-being of humans, property is useless. Human security involves the protection of human lives to enable people to enjoy freedom and fulfil their dreams. This study attempts to ascertain the dimensions of the socio-economic and political marginalisation experienced by different regions in South Sudan thereby explaining how this could have increased the threats to human security and reduced human development of the country. The study employs quantitative research methods by engaging in the analysis of two secondary datasets collected during the South Sudan household health survey in 2006 and 2010 in order to find out if the people of South Sudan are marginalized across regions/states/ethnic groups through the distribution of socio-economic welfare services like education and healthcare services. In addition, the study seeks to identify the dimensions of the threat to human security experienced by South Sudanese due to violent conflicts and the sources of threats to food security experienced by the people. Having agreed with the commission on human security's idea that human security is the protection of the vital core of all human lives, the study explains marginalisation through the theoretical framework of marginality. Thus, it establishes that South Sudanese, since their days with their Northern counterparts have been experiencing systemic marginality which thrived on positional polarity created by the British colonialists. More so, the study finds that despite their independence, South Sudanese continuously suffer systemic marginality as well as constant threat to their human (in the dimension of economic, food, health, personal and political) security caused by unequal distribution of socio-economic welfare services and continuous violent conflict.

LIST OF ABBREVIATIONS

ANC	Antenatal Care
BCG	Bacillus of Calmette and Guerin
ECMR	Early Childhood Mortality Rate
IMF	International Monetary Fund
ITN	Insecticide Treated Nets
MICS	Multiple Indicator Cluster Survey
NIR	Net Intake Rate
PAPFAM	Pan Arab Project for Family
PDF	Portable Document Format
SHHS1	South Sudan Household Health Survey 1
SHHS2	South Sudan Household Health Survey 2
SSCCSE	Southern Sudan commission for Census, statistics and evaluation
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
UNAID	United Nations Programme on HIV/ Acquired Immune Deficiency Syndrome

Table of Contents

CHAPTER 1 - INTRODUCTION

1.0 Introduction

The people of South Sudan have known little peace since they gained independence from Sudan in July 2011 due to multiple internal civil conflicts that started shortly after their country became the world's youngest sovereign state. The conflict 'officially' began in December 2013 when President Salva Kiir accused his deputy - Vice-President Riek Machar of leading a coup against him (Pinaud, 2014). Although the international community and a host of supporters of the South Sudanese government looked on with keen interest, there are few actors who believe that the country was set up for failure. For example, the country is described as having a kleptocracy -a militarized, corrupt neo-patrimonial system of government that ran into crises when it became insolvent (De Waal, 2014). However, at the heart of the conflict lies deep-rooted existence of ethnic socio-economic and political marginalization traceable to the British colonial era and perpetuated by the government of Sudan with education as tool for social and political exclusion (Pemunta & Rene Nkongho, 2014).

The 'inevitable' conflict that ensued the government of South Sudan cabinet crisis in December 2013 rendered millions of people homeless and sent a few thousands to their early graves. The same socio-political and economic marginalization which the South Sudanese militia -Sudan People's Liberation Movement/Army (SPLM/A) fought the republic of Sudan against was at the centre of the fresh crises experienced in the new country with the Dinka people allegedly dominating majority of ministerial positions as well as occupying the civil service (Pemunta & Rene Nkongho, 2014). Mainstream and alternative media reports reveal graphic images of the affected people by the multi-faceted conflict among the 11.17 million South Sudanese who were both old and young especially children and women. Meanwhile, like many other crises around the world, it is these same class of people that are claimed to be protected and for whom the government and or its opposition are fighting. As shown in figures 1 and 2 below, the people suffer from poverty manifested in forms of hunger, malnutrition, lack of access to healthcare, education and so on thereby revealing the features of human insecurity in the country.

Figure 1: Emaciated victims of the South Sudanese conflict *Source*: Makuach (2015)

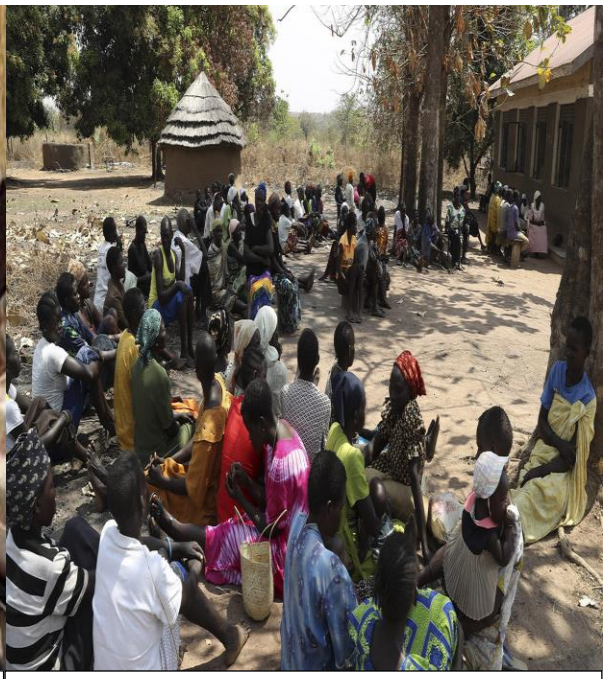


Figure 2: Lost lives and opportunities for children in remote conflict- ridden South Sudan. *Source*: United Nations (2018)

The concept of human security was extended by the United Nations Development Programme (UNDP) beyond military capabilities to include safety 'from the threats of diseases, hunger, unemployment, crime, social conflict, political repression and environmental hazards' (UNDP, 1994). Thus, whether the pursuits of the ruling class and opposition in South Sudan is genuine or not, the on-going crises depict an obvious threat to human security which translated into the suffering of the vulnerable population. Pemunta and Rene Nkongho (2014) reveal in their study that restricted access to formal education as well as impracticable approaches to peacebuilding limit the effective and equal participation of South Sudanese in socio-economic and political activities leading to increased fragility of the state.

1.1 Significance of Study

For better understanding and to properly contextualize the concept, human security will be reexamined using South Sudan as a case study with an attempt to explain the types of security challenges faced by South Sudanese people during the civil war which account for the present level of their human development. More so, the study shall shed light on the claims of majority of the warmongers about socio-economic and political marginalization by employing available

relevant data on indicators pointing to areas of acclaimed marginalization like education and health to analyse and validate these claims. In addition, to identifying the relevant types of formal/information and or vocational education that the people desire along with those that can help transform the war-torn society as soon as possible. Findings from this study and derived recommendations shall be useful for identifying the appropriate intervention efforts needed in the process of rebuilding the nation. These ideas are urgently required by both national government and international actors who must ensure all hands are on deck to support the struggling nation whilst she recovers from the violent destructions of the recent past.

1.2 Research Objective

Generally, this study attempts to understand the dimensions of the socio-economic and political marginalization experienced by different ethnic groups in South Sudan thereby explaining how this could have increased the threats to human security and reduced human development of the country.

Specifically, the study attempts to achieve the following objectives:

1. To find out if education and healthcare services are equally distributed across the regions/ethnic groups in South Sudan.
2. To identify the gender bias (if any) in the distribution of education and healthcare services in South Sudan.
3. To understand the dimensions of the threats to human security triggered by the violent conflicts and how they affect education in South Sudan.
4. To understand the dimensions of the threats to human security triggered by the violent conflicts and how they affect healthcare services in South Sudan.

1.3 Research Questions

1. Are the people of South Sudan marginalized across regions/ethnic groups through the distribution of socio-economic welfare services like education and healthcare?

2. Are the people of South Sudan marginalized by gender through the distribution of socio-economic welfare services like education and healthcare? OR What are the existing gender bias (if any) in the distribution of education and healthcare services in South Sudan?
3. What are the dimensions of the threats to human security experienced by South Sudanese due to the violent conflicts?

1.4 Organisation of the Thesis

The entire work is organized as follows: chapter 2 contains literature review vis-à-vis conceptual and theoretical framework on human security, conflict and human development whilst it reviews the theory of marginality; chapter 3 gives an overview of the research methodology and gives reasons for the kind of data employed; chapter 4 presents the findings and analysis of the data; chapter 5 contains the discussions of the implications of the findings; whilst chapter 6 has the conclusion of the study.

CHAPTER 2 – CONCEPTUAL AND THEORETICAL FRAMEWORK

2.0 Introduction

What might first come to mind when one hears the term human security is 'the security of human beings or humanity'. Human beings and humanity here means people as a collective and or as individuals, that is women, children and men. But what does the word security connote? According to the English Oxford living dictionaries, security means the state of being free from threat; the safety of a state or organisation against criminal acts like theft or terrorism; the state of feeling safe and free from fear or anxiety (Oxford, 2018). Suffice to say therefore that human security as a term implies the safety or freedom from threat of a group of people or an entity comprising human beings. However, as a concept, human security has been defined by many researchers and organisations since its emergence after the cold war and the breakdown of the Berlin wall when the traditional notion of security needed to be broadened, yet there is no centrally accepted definition of the term (Shahrbanou & Anuradha, 2007). To adequately explore, explain and establish the human security situation with respect to the conflict in South Sudan in this study, this chapter seeks to review what researchers have established as the relevant definition of human security on a broad level and its relationship with human development. Also included here are the conceptual frameworks of conflict and marginalization as well as theoretical framework of marginalization which understanding is central to achieving the study's objective.

2.1 Conceptualising Human Security

The concept of human security is a new paradigm established to ethically and methodologically dismantle the existing notion of state-based security in international relations by changing the focus of security from the state to human beings and achieving development and security through alliance of different countries and enabling people's capacity to act independently and freely make their choices (Shahrbanou & Anuradha, 2007). The concept came up at a point in international relations and development when the nations of the world were recovering from damage created by war. At this time, Mahbub Ul Haq thought about the need for a transition from "nuclear security to human security" in the process of reconstructing the concept of security (UNDP, 1994 P. 22). This was against the background of existing security practices in which national governments acquire and use heavy machineries, chemical and nuclear weapons to attack other nations for the

sake of securing their people and territories. In the same report he conceptualized human security as a people-centered agenda which translates to safety from enduring threats like hunger, disease and repression as well as protection from sudden and painful disruptions of livelihood especially in jobs, homes and communities (UNDP, 1994). This redirects the importance of national and international security from the classical thought of protecting the frame, that is, geographical territories over and above the content, that is the nation(s) especially the people. In line with this thought, human security prioritises the people's (human) interests, survival, welfare and choices instead of the country's interests.

The Commission on human security explains the concept under the theme "security centred on people -not States" and says human security now focuses on individual and the community rather than the state (Ogata & Sen, 2003, p. 2 & 4). This goes with the claim of the realist school of thought that substantial number of states have failed to protect or secure their citizens which is one of the duties states owe their citizens as contained in social contracts and or constitutions (Shahrbanou & Anuradha, 2007). The human security commission focus on a human security agenda that can achieve human development by ensuring that human beings, who are assumably at the centre of security efforts, thrive in every area of their lives including economic, social and political. More so, with the experiences of the cold war after the world war and civil wars in many countries, state focused security ideology led to unquantifiable level of violence against people, huge poverty, health hazards and loss of jobs to mention a few. Re-focusing on human beings as individuals and as collectives was found to be a better way forward.

Furthermore, state-centred security is rather described as a narrow focus on security which considers it as mere absence of violent conflict (Ogata & Sen, 2003).This implies a situation where no physical attack - internal or external exists within the state. One tends to understand the narrow view which might have been drawn against the background of World War II after which the UN Charter was signed in 1945. Keith Krause, Andrew Mack and Neil Macfarlane are few of the proponents of the narrow view on human security who argue for its conceptual clarity, pragmatism and analytical rigor (Owen, 2004). Restricting the concept within the view of human security as 'freedom from fear', Krause opined that the narrow concept helps to concentrate on the main issues of security which bother on controlling the institution of organised violence and removing the use

of force from political, social and economic life (Krause, 2004). In the same vein, Mack argues that because the broad definition of human security conflates the enlisted threats which are interconnected (having joint causality and being both dependent and independent variables) it becomes impossible to analyse the causal effects of these threats (Mack, 2004). Despite agreeing that human security is a useful concept, MacFarlane posits that expanding the concept makes it difficult for policy makers and other actors to prioritise on the relevant objective to achieve (MacFarlane, 2004).

Conversely, as recognized by the International Commission on Intervention and State Sovereignty, human security means people's security in terms of their physical safety; economic and social well-being; respect for their dignity and value as human beings; the protection of their human rights and fundamental freedoms (Weiss, Evans, Hubert, & Sahnoun, 2001). This was in line with the thought that issues of state intervention and control affect individual human beings primarily as well as states. In addition, several authors like Alkire, Leaning, Axworthy, Hampson and Bajpai who are supporters of the broad conceptualization propose that human security means more than safety from violent threats when there is a shift in focus from the state as the referent of security to individual human being (Owen, 2004). In fact, human security proponents like Sen and Ul Haq claim that "the best way to achieve security (both for the state and the international system) is to increase that of the people" (Shahrbanou & Anuradha, 2007, p. 21). Thus, if the people are free from threats of diseases, hunger and violence, the state will also be free and secured. And with the thought of development as freedom, this implied that achieving human security will lead to and or engender human development. The commission on human security defines human security as protecting "the vital core of all human lives in ways that enhance human freedoms and human fulfilment" (Ogata & Sen, 2003, p. 4). Alkire (2004) describes the 'vital core' as the freedoms that are the essence of life and limits the focus of human security on the critical and pervasive threats. This implies that pursing human security will engender human development and foster peace or at least help prevent violence. The UNDP displays the link between human security and human development by establishing the components of human security through a further breakdown of the two major headlines of freedom from fear and freedom from want. The following are enlisted as seven areas of threats as well as components of human security: economic security, food security, health security, environmental security, personal security, community security and political

security (UNDP, 1994). The broader concept is in essence an expansion of the narrow one as it add six new types of security to a conventional one with security from physical violence (Gasper, 2005) so rather than conflicting, it complements the older approach.

2.2 Categories of Threats to Human Security OR Components of Human Security

Economic security means protection against poverty which is the major threat here (Shahrbanou & Anuradha, 2007). It entails guaranteed subsistent income from all kinds of work/employment and or publicly funded safety nets (UNDP, 1994). This seeks to protect people against risks of different forms of unemployment, economic crises and other events that emanates from business cycles or eventualities which occur both in developed and developing economies. Most developed countries have built social security systems to prevent people from sliding into poverty and to reduce the lacuna of inequality created by the market system. So that when individuals are temporarily or permanently unemployed, homeless or suffer from other economic conditions, they receive help through the government-funded safety nets. For example, a Norwegian government institution -NAV provides social services to all residents including non-citizens. This is a form of economic security that protects individuals from threats of poverty and misery.

Food security means that people have economic and physical access to food every time either growing it themselves, buying it or obtaining it from government distribution system to avoid the threats of hunger and famine (UNDP, 1994). According to the Food and Agriculture Organization (FAO) "food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (Clay, 2002). Hunger and famine exist from lack of access to food rather than unavailability of food. Thus, food security as a component of human security tends to uphold the UN declaration of 1975 that "Every man, woman and child has the inalienable right to be free from hunger and malnutrition in order to develop fully and maintain their physical and mental faculties…"(Napoli, De Muro, & Mazziotta, 2011, p. 7). As one of the important concepts in this study, the sources of threats to food security in South Sudan shall be reviewed later.

Health security implies protection against threats like all kinds of injuries, infectious and parasitic diseases through the provision of healthcare facilities, health services, access to safe and affordable family planning as well as pre and post-natal healthcare (Shahrbanou & Anuradha, 2007).

Environmental security requires a healthy physical environment which human beings depend on but are equally the contributors to the damage with the hope that it will naturally be replenished (UNDP, 1994). Currently, threats to environmental security are found in both developing and industrial countries. They include water scarcity, deforestation, desertification, degradation of local ecosystem, salinization (threats from salt residues in land), air and water pollution (Shahrbanou & Anuradha, 2007).

Personal security means protection from physical violence which is continuously source of concern to human being both in poor and rich countries (UNDP, 1994). Threats to personal security take several forms including physical torture from state agents like police and military, civil war, terrorist activities (local and international), ethnic and religious violence, kidnapping, gang violence (like rape), child abuse, labour and prostitution, drug abuse, murder and so on (Shahrbanou & Anuradha, 2007).

Community security refers to the safety found in one's membership of a family, an organisation, community of people, ethnic or racial group which provides a cultural identity and some supportive values (UNDP, 1994). However, inherent in these groups or directed to them are certain threats to the individual human beings who are members or the group itself as a unit. These threats include oppressive traditional practices (like employing bonded labour, honour killing and slaves, treating women and girls harshly -female genital mutilation in the name of traditional practices/rites), communal violence over limited access to opportunities like social services from the state, job opportunities or natural resources, ethnic cleansing, violence against indigenous people and so on (UNDP, 1994).

Political security aims to ensure that people live in society where their fundamental human rights are respected, they are free from military dictatorship or one-party state and can choose their own leaders (UNDP, 1994). Essentially, the threat here is political repression, systemic torture, ill

treatment or disappearance due to imprisonment or political detention and so on (Shahrbanou & Anuradha, 2007).

2.3 Human Security in Africa

In the African context human security concept has much broader view. In fact, the African ministers of defence and security on the establishment of the African Standby Force and the Common African Defence and Security Policy conceptualise human security as "…the security of individual with respect to the satisfaction of the basic needs of life; it also encompasses the creation of the social, political, economic, military, environmental and cultural conditions necessary for the survival, livelihood, and dignity of the individual, including the protection of fundamental freedoms, the respect for human rights, good governance, access to education, healthcare, and ensuring that each individual has opportunities and choices to fulfil his/her own potential" (Cilliers, 2004, p. 8). This leans so much on the ideas of human security from the broad perspective and agrees with the idea of the security referent as individual human being rather than the state. More so, it focuses on using all the state apparatus for the benefit of the people rather than protecting the state at the expense of the individuals and their resources or common wealth. It also captures the UNDP's sythesised threats to human security as earlier highlighted.

A research on human security and conflict in Northern Kenya also views the concept from a broad perspective by referring to it as an intervention process to protect the vital core of all human lives which improves human freedom and fulfilment through protection of civil rights and provision of basic human needs (Kumssa, Jones, & Herbert Williams, 2009). This agrees with the foregoing definition and the thoughts of the Commission on Human Security about importance of individual human being in any security effort with regards to their wellbeing, freedom and fundamental rights rather than the mere protection of the state. The wide view on human security queries the traditional security view that hides the threats imposed by states on their citizens' safety and employs a more wholistic approach to human wellbeing (Fukuda-Parr, 2003a).

2.4 Human Development

Simply put, human development relates with the process of expanding people's choices of which the most critical include: to lead a long and healthy life, to be educated and to enjoy a decent standard of living (U. UNDP, 1990). However, people's choices are varied and highly dynamic, so the foregoing might not be a comprehensive description of the concept as there are more critical choices which relate with political, economic and social freedom as well as opportunities to express oneself in more creative ways. In any case, the concept has evolved overtime as scholars and proponents of development keep exploring it. Central to the theme of human development are the expansion of people's choices and enhancing capabilities which implies the variety of things people can be and do, having access to knowledge, health and a decent standard of living, and contributing to their community and making life's choices (Fukuda-Parr, 2003b).

2.5 Human Security and Human Development

There appears to be some connections between human security and human development, so much that it is tempting to take one of the concepts for the other. However, according to Mahbub, whereas human development is a process of widening people's choices, human security guarantees people's opportunity to exercise the available choices with assurances that there will always be such opportunities and or better ones over time (UNDP, 1994). Thus, while development addresses providing or increasing people's opportunities and choices, human security aims at protecting people against threats to the opportunities and or choices. More so, both themes share fundamental connections in that they bother on human lives with respect to longevity, education and opportunities for participation (Ogata & Sen, 2003). For example, one of the factors for assessing human development is long and healthy life with an indicator like life expectancy at birth; health security -one of the components of human security, focuses on protecting the people against factors that increases child and maternal mortality like exposure to diseases, lack of access to safe water, lack of access to healthcare facilities and ante-natal care and so on. Thus, human security ensures that people access or attain human development today and always.

The whole idea of human security in contrast with state security is for people to be safe in addition to communities within the borders against threats and external aggression (Ogata & Sen, 2003).

Although different from human development agenda but serves as a complement. Human security is concerned with both security related issues and development matters but references individual human being as the nucleus of its efforts. On its agenda are issues related with violent conflict (crime, terrorism, war etc.), deprivation (extreme poverty, pollution, health hazards, illiteracy and so on). But what really is conflict and how does it relate with human security and human development.

2.6 Conflict and Violent Conflict

There are several definitions of conflict and it is difficult to find an overarching definition of the term (O'Connell, 2013). However, Coser Lewis says that conflicts involve struggles between two or more people over values, or competition for status, power, or scarce resources (Coser, 1967). Coser considers conflict behaviourally as it occurs in a social arrangement in which two or more social entities are involved in one form of antagonistic activity or another due to opposing interests (Fink, 1968). Other scholars like MacIver (1937), Simmel (1955), Van Doorn (1966), Beals and Siegel (1966) and Nicholson (1967) define conflict as action-centred, involving one form of contention or the other between incompatible parties within same entity or organisation but do not explicitly include competition since they mostly perceive that competition is regulated. Therefore, the term conflict simply describes contention between parties with dissimilar ideas and interests.

"A Violent conflict involves at least two parties using physical force to resolve competing claims or interests" (Frère & Wilen, 2015, p. 2). One glossary on violent conflict used by the USAID says the term connotes the use of armed force by two parties, where at least one of them is the government of a state and such results in at least 25 battle-related deaths per year (Payson Conflict Study Group, 2001). At the centre of these definitions are the facts that violent conflicts involve at least two parties and the use of physical force or combat. However, Wallensteen and Axell (1994) also refer to violent conflicts as armed conflicts and explained the different ones in existence by categories especially based on number of battle-related deaths that occurred in the course of the conflicts. Thus, according to them armed conflicts are grouped into three categories: minor, intermediate armed conflicts and wars. While minor armed conflicts involve battle-related death of less than 1000 persons, intermediate types involve more than 1000 deaths and in which between 25 and 1000 people die within one year; in a war situation, over 1000 people die within one year

(Wallensteen & Axell, 1994). Since the conflict in South Sudan has resulted in battle-related death of hundreds of thousands of people, it is safe to describe it as a war situation.

2.7 Marginalisation

Although the English Oxford living Dictionaries describes marginalization as treatment of a person or group as insignificant (Oxford, 2018), a more relevant definition to this study is that marginalization is a process of making a group or class of people less important or relegated to a secondary position (LoveToKnow, 2018). Also, marginalization is viewed as the process of pushing a group or groups of people to the edge of society by not allowing them an active voice, identity, or place in it (Syracuse University Counseling Center, 2018). Thus, if in a community with many families only a few families have access to some resources like the forest or the river, the members of the remaining group(s) who are denied access are marginalized with respect to the sharing of those resources.

While marginalization as a social phenomenon exists in different forms, this study is particularly interested in understanding the concept with respect to socio-economic and political marginalization, hence previous works in this regard shall be further reviewed. Marginalisation is generally a process or set of processes whereby sections of society are relatively excluded from certain economic or social benefits or rights to which the majority of the population have access which culminates in pushing away the excluded people from the centre towards the edge of the society and into a state of marginality (Andrews-Speed & Ma, 2008). Meanwhile, marginality is employed to describe and analyse socio-cultural, political and economic spheres in which disadvantaged people strive to gain access to resources and participate in social life (Gurung & Kollmair, 2005). The notion of marginality emerges as a useful term to discuss the socio-economic disparities caused by unhealthy industrialization within the region of Latin America (Hernández, 2018). Used by Mehretu, Pigozzi, and Sommers (2000) as an operational concept to imply unequal development, marginality implies a complex condition of disadvantage experienced by a group or an individual due to vulnerabilities arising from unequal circumstances which may be environmental, ethnic, cultural, social, political and economic in nature. In fact, they further describe socio-economic marginality as a condition of socio-spatial structure and process in which components of society and space in a territorial unit lag behind an expected level of performance

in economic, political and social well-being compared with average condition in the same territory (Mehretu et al., 2000). Thus, while marginality is a position where a people find themselves or a condition they face, marginalization is the process which the group passes through to become marginalized. These two terms will be used interchangeably as they fit into the discussion during this study.

Two types of marginalization may be useful for further analysis in study namely: spatial and societal marginalization. Spatial marginalization is caused by physical location and distance from the centre of development while societal marginalization emanates from human factors such as population distribution, religion, culture, social structure (e.g., caste/hierarchy/ class/ethnicity/gender), economics and politics (Andrews-Speed & Ma, 2008; Gurung & Kollmair, 2005). In other words, when a people or group are excluded from social and economic benefits due to their physical location within the geographical region, they are said to be spatially marginalized. Whereas, they suffer societal marginalization when the benefits do not reach them because they were distributed according to social arrangements as mentioned above. The indicators of societal marginality may be economic, social or legal in nature. Specifically, they include poor options for increasing wealth and quality of life; lack of access to welfare services such as education and health care; vulnerability to disease and to the effects of pollution; lack of protection by the law; poor ties with community or society; active discrimination; and a loss of identity and feelings of rejection (Andrews-Speed & Ma, 2008). The concept of social and spatial marginality shall be further explored in the next section as they form the theoretical basis of the analysis in this study.

2.8 Theoretical Framework

There is an extended explanation of the socio-spatial marginality in the study conducted by Mehretu et al. (2000) which presents, among other valuable contributions, a theory of marginality based on a 'typology' of marginality. An abridged form of this theory is presented here to serve as a theoretical basis of this study. This will help to understand the theoretical underpinnings that surrounds the dimensions of the socio-economic and political marginalization that exist or can exist in any society. Thus, the following is mainly based on Mehretu et al. (2000).

The types of marginality are classified into two groups namely: primary and derivative. The primary includes contingent and systemic marginality while the derivative includes collateral and leverage. For brevity sake, only the relevant types will be extensively reviewed in this study.

Contingent marginality emanates due to the uncertainties and adverse effect of the free market system on members of a community. Exposure to contingent marginality may be motivated by social, cultural, locational and ecological constraints in interacting with the market. For example, where the forces of demand and supply regulate healthcare services in a free market system, people in rural areas might obtain very limited services. In fact, due to their characteristic economic conditions there may not be enough hospital facilities located in their area and where they exist, they may not have enough manpower with needed specialization. Thus, the people will experience contingent or conditional marginalization which will further impact their health outcomes.

Systemic marginality derives from the difficulties experienced by people and communities based on a deliberately constructed hegemonic social arrangement (such as class, ethnicity, age, gender and so on) which allows one group to have and exercise power and control over another. This marginality is consciously created in the society by a dominant group to achieve certain preconceived desired outcomes of political control, social exclusion and economic exploitation. Examples include, the genocide that occurred in Rwanda where a certain group was named, objectified and consequently subjected to gruesome killing; the apartheid system that existed in South Africa; the Almajiri system instituted and practiced in northern Nigeria; the marginalization cases in Ethiopia and Sudan. In this type of marginality, exposure is not by choice but based on social construction of patterns with enduring indicators like culture, ethnicity, immigration status, gender and age.

In developing countries, ethnicity and cultural factors that expose people or groups to systemic marginality thrive on two grounds namely: positional polarity and internal tribal cleavage sometimes marked by religious affiliation. Positional polarity is an historic dimension of systemic marginality that exist between indigenous population and colonial settlers, who exercise political and economic control over the local people. They also establish a system where some ethnic groups are given priority and better positioned than others in certain areas like military, education and

leadership. In the case of Sudan, the British imperial government and later the northern elites used education as a tool for socio-economic and political marginalization of rural communities and particularly South Sudan (Pemunta & Rene Nkongho, 2014). The divide and rule policy of the British authorities slowed down socio-economic development in South Sudan while they heavily invested in political and economic institutions and improved social, educational, and health services in the north (Heleta, 2008). These institutions and approach to development are observed factors that enabled systematic marginality to thrive in Sudan and by extension South Sudan. "Tensions resulting from such polarities sometimes explode into violence, as in the deadly riots against Chinese businesses and shopkeepers in Indonesia in 1999, or the pressure on European large landowners in Zimbabwe and South Africa to give up real estate for distribution among smallholder African farmers" (Mehretu et al., 2000, p. 92). Similar claims are made by Pemunta and Rene Nkongho (2014) that the socio-economic and political marginalization experienced in Sudan trickled to South Sudan and spiked further conflicts in terms of civil wars which potentially exist until now. However, there are other claims that the existing civil war in South Sudan was bred by other factors including the kleptocratic foundation of the political system (De Waal, 2014). Empirical data analysis will be helpful to verify whether there has been marginalization in South Sudan and establish links (if any) with previous or existing conflicts.

According to Mehretu et al. (2000) internal tribal cleavage being the second plane upon which systematic marginality operates worsen by religious affiliation of the people. They further claim that tribal sentiments remain dominant in African and Asian countries after independence. For example, the Sudan conflict was characterized by religious and cultural divisions between the north and the south as well as tribal and regional cleavages throughout the country (Fosu, 2005).

CHAPTER 3 – RESEARCH METHODOLOGY

This chapter discusses the approaches adopted by the study to find out whether there are socio-economic and political marginalization in South Sudan. Essentially, it discusses the research techniques that are used for collecting, analyzing and interpreting relevant data to answer the research questions earlier posed thereby achieving the research objective(s) of the study. Thus, this chapter begins by describing quantitative research method which encapsulates the design used in the study. Followed by the description of the data to be subsequently presented and analysed. It closes with a section on the reliability and validity as well as the limitations of the data.

3.1 Quantitative Research Method

From a pragmatic worldview on research, this study shall adopt the quantitative research method. Pragmatism as a research philosophy arises out of actions, situations and consequences as it is concerned with what works at a given point in time and what provides solutions to specific problems (Creswell, 2014). This study adopts a quantitative research method for many reasons, top among which are; the nature of the research questions and variables being studied. Education and health outcomes can be measured and quantified easily. More so, the current security situation of South Sudan which brings along many uncertainties makes it a better alternative to collect and analyse secondary data to avoid risks of involving in the violence in South Sudan. Also, the limited amount of time for the study makes it impossible to speculate on possibility of experimenting with other means of data collection like making virtual contact with other researchers, institutions and organisations within the country or neighbouring countries.

Quantitative research method as a strategy emphasizes measurement and expression of concept(s) numerically so that data are collected and analysed on such concept(s) in the process of establishing or refuting a theory and or hypothesis (Bryman, 2016). Although this research approach is commonly used in studies related to natural sciences, it is also used in social sciences. The quantitative research design makes it possible for outcomes or occurrence of events to be numerically expressed as well as analysed in a bid to generate further discussions. Here, the nonexperimental quantitative design which uses secondary data is found suitable to achieve the objectives of this study.

3.2 Sampling

A population is a pool from which a sample is selected and a sample is the part of the population that is selected for the survey (Bryman, 2016). Thus, sampling is the process of establishing a segment of the population from which data can be collected for research purposes (Fowler Jr, 2013). Since this study used secondary datasets from the South Sudan Household Health Survey 1 (SHHS1) and South Sudan Household Health Survey 2 (SHHS2), the sampling design used in these surveys will be described briefly. However, the surveys were conducted jointly by the ministry of health, government of South Sudan and the Southern Sudan commission for Census, statistics and evaluation (SSCCSE) for the sole aim of gathering information that could be used for policy formulation and planning (Ministry of Health, 2006). So, the intention of collecting these data was for development planning purpose and towards building the young country.

The sampling design used in the SHHS1 and SHHS2 is known as a stratified multi-stage sampling. This is a probabilistic sampling design that combines the techniques of both stratified sampling and multi-stage sampling (Jain & Hausman, 2014). Stratified sampling, or stratified random sampling, involves grouping members of a population using a criterion and then selecting a simple random sample (where every individual in the population has an equal chance of being included (Creswell, 2014)) from each resulting strata (Bryman, 2016). The stratification allows for specific characteristics of individuals to be represented in the subpopulation. In fact, it could be considered as a tool used for ensuring that every unit in the larger population is represented. After these subpopulations/strata have been created, a hierarchical structure of units within each stratum is used (Jain & Hausman, 2014). For example, during the SHHS1 exercise, the sampling frame was stratified into homogeneous areas and sample selection was done independently in each stratum whilst looking out for specific characteristics measured in the survey. Thus, the first stage of stratification involved the 25 states in Sudan after which they were further divided into different categories using specific characteristics such as geographical location and so on (Ministry of Health, 2006).

The main population for the SHHS1 and SHHS2 included population living in households and the nomadic population camping at a location as at the time of the survey which makes the unit of analysis both individual households and persons within the households (Ministry of Health, 2006).

It is however noteworthy that the SHHS1 was conducted in 2006 after the signing of the comprehensive peace agreement thus it involved the entire 25 states of Sudan, that is, both Northern and Southern parts. Whereas the SHHS2 was carried out in 2010, shortly before South Sudan was officially created and the survey was restricted to only the initial 10 states in the Southern part of Sudan. It is rather instructive to discuss briefly the sampling frames and units of analysis in the two surveys since they are not the same.

3.3 Sampling frames and units of analysis

A sampling frame is the list of potential respondents in the population (Creswell, 2014) or listing of all units in the population where the sample will be selected (Bryman, 2016). This implies that the sample frame consists of units that have a chance of being included in the study. It was reported that organizing a sampling frame for the SHHS1 was difficult because there was no reliable published list of people of Sudan since the most recent census did not capture every parts of the country and this was a major challenge for only South Sudan (Ministry of Health, 2006). However, World Health Organisation's database was used as it provided the list of villages and estimated population previously developed for a different purpose. Meanwhile, the 2008 Sudan Population and Housing Census served as the sampling frame for SHHS2 and this survey was conducted in South Sudan alone. The sample size was 25,000 households for SHHS1 and 9,950 households for SHHS2 (because Unity and Jonglei states included 975 households each) or about 1,000 households per state.

3.4 Data collection and analysis

For both SHHS1 and SHHS2, different sets of questionnaires were used to collect data on household; women -aged 15-49 years; under-five children (children under 5 years of age living in the household); community leaders (only for SHHS1 and the findings from this questionnaire were not included in the final report); food security (only for SHHS1 findings from this questionnaire were not included in the final report); and men -aged 15-49 years.

Summarily, the data analysed in this study originates from South Sudan national statistics bureau, Southern Sudan Centre for Census, Statistics and Evaluation, UNHCR, UNDP, UNICEF and other

reliable surveys collected by individuals and organisations. For example, micro data on South Sudan household health survey jointly conducted by the country's ministry of health and central bureau of statistics, with financial and technical support from the United Nations Children's Fund (UNICEF), United Nations Population Fund, World Bank, UNDP, World Food Program, USAID, WHO and UNAIDS (Ministry of Health & National Bureau of Statistics, 2013). The dataset covers key social development indicators like child mortality, nutrition and reproductive health as well as basic social services such as education and sanitation (World Bank, 2016). The methodologies employed were Multiple Indicator Cluster Surveys (MICS) and Pan Arab Project for Family (PAPFAM).

Subsequently, I collected the data from online reports in PDF format and inputted them into excel spreadsheet to create similar tables found in the original document online but with some adjustments in terms of placing the data from the two different years side by side for easy analysis. Thereafter, I used same excel program to create different types of graph to enable me engage in further analysis.

CHAPTER 4 – FINDINGS

4.0 Introduction

To answer the research questions in the study, this chapter presents relevant and available data on the distribution of socio-economic welfare services such as healthcare and education in South Sudan. The chapter is divided into four parts with each part attempting to answer each of the research questions. Suffice to say however that the analyses carried out in this chapter are based on the data collected before and after South Sudan's independence through secondary sources especially the Sudan Household Health Survey (SHHS).

For better understanding of the data and context of study, it is important to highlight some important parts of the country's demography. The people of South Sudan are distributed across 10 regions as at 2011 when the state gained independence. However, over time the geographical area was redistributed to 32 regions for socio-political and economic reasons. Table 4.1 below summarizes the distribution of the region. To get a clear perspective of distribution of socio-economic welfare services across the regions of South Sudan, it is important to have an overview of what the same distribution was like before the independence of the country.

However, for the purpose of this study, the data are presented in the first structure of 10 states as shown in the first column of table 4.1 below. The reference dates are 2006 and 2010 which are the periods when different international and global organisations in conjunction with the governments of Sudan and South Sudan collected data through surveys for different purposes.

In 2006, the population of South Sudan was 7,907,406 comprising of 50.1% women and 49.9% of men (Alldatanow, 2018) whilst in 2010 there were 9,508,364 with almost the same ratio of women and men as it was in 2006 (World population review, 2019). Although the demography of the country shows that there were more men than women in 2008 with more than 86% being 35 year and below (Southern Sudan Centre for Census, 2010). Thus, the data presented in this study involves a teeming population of the youngest country in the world which unfortunately has been in civil war for most of its years of existence.

The data presented in the Sudan and South Sudan surveys respectively collected in 2006 and 2010 embody a broad set of variables useful for answering the research questions posed. Albeit, not all the research questions can be answered by the dataset other secondary sources were used to complement this data.

Table 4.1: List of states in South Sudan from 2011 to date

	2011-2015 (10 States)		2015-2017 (28 States)		2017-Present (32 States)
1	Northern Bahr el Ghazal	1	Aweil	1	Aweil East State
2	Western Bahr el Ghazal	2	Aweil East	2	Aweil State
3	Lakes	3	Eastern Lakes	3	Eastern Lake State
4	Warrap	4	Gogrial	4	Gogrial State
5	Western Equatoria	5	Gok	5	Gok State
6	Central Equatoria	6	Lol	6	Lol State
7	Eastern Equatoria	7	Tonj	7	Tonj State
8	Jonglei	8	Twic	8	Twic State
9	Unity	9	Wau	9	Wau State
10	Upper Nile	10	Western Lakes	10	Western Lake State
		11	Amadi	11	Amadi State
		12	Gbudwe	12	Gbudwe State
		13	Imatong	13	Imatong State
		14	Jubek1	14	Jubek State
		15	Maridi	15	Kapoeta State
		16	Namorunyang	16	Maridi State
		17	Terekeka	17	Tambura State
		18	Yei River	18	Terekeka State
		19	Boma	19	Yei River State
		20	Bieh	20	Akobo State
		21	Eastern Nile	21	Bieh State
		22	Fangak	22	Boma State
		23	Fashoda	23	Central Upper Nile State
		24	Jonglei	24	Fangak State
		25	Latjoor	25	Fashoda State
		26	Northern Liech	26	Jonglei
		27	Ruweng	27	Latjor State
		28	Southern Liech	28	Maiwut State
				29	Northern Liech State
				30	Northern Upper Nile State
				31	Ruweng State
				32	Southern Liech State

Source: Author

4.1 Distribution of Socio-economic welfare services across the 10 states of South Sudan

Data from the surveys of 2006 and 2010 contain some variables on health and education like early childhood mortality rate, nutrition, immunization, school entry, attendance and so on. These are some of the variables that will be reviewed know whether the people of South Sudan are marginalized across states through the distribution of socio-economic welfare services.

4.2 Healthcare Indicators/outcomes

4.2.1 Early Childhood Mortality Rate (ECMR)

Here, ECMR encapsulates five different indicators that represent the health outcomes of children from 0 – 5 years. These indicators include neonatal, post neonatal, infant, child and under-five mortality rates. Currently, these are regarded as one of the leading health indicators (Health & Services, 2011) and infant mortality rate is noted not only as one of the crucial measure of child health but also overall measure of the development in countries (Miller & Goldman, 2011). Table 4.2 below presents the data on ECMR for South Sudan in 2006 and 2010.

The neonatal period is the first 28 days of life for the new-born, when the child is most vulnerable (UNICEF, 2019). Neonatal mortality rate is the probability of an infant dying during the first 28 days of life, often expressed per 1000 live birth (Ministry of Health and National Bureau of Statistics, 2010). Based on the result of the surveys presented in table 4.2 the neonatal mortality rate was higher in 2006 across the ten states compared to its rate in 2010. This is revealed in the country's average as well as state by state except for Northern Bahr El Ghazal and Central Equatoria where the rates increased between 2006 and 2010. In fact, these are the two states that experienced the highest rate of neonatal mortality nation-wide. See figure 4.1 for a graphical representation of same data.

Post neonatal mortality is the death of newborns between 28 and 364 days of age in a specified geographic area -country, state, county, etc. (Monnier, 2001). Based on the surveys presented here, post neonatal mortality rate is the number of newborns that died divided by the number of live births for the same geographic area (for a specified time period, usually a calendar year) and

multiplied by 1,000. From the data collected during the survey, the post neonatal mortality rate was highest in Western Equatoria (82%) followed by Warrap (72%) in 2006.

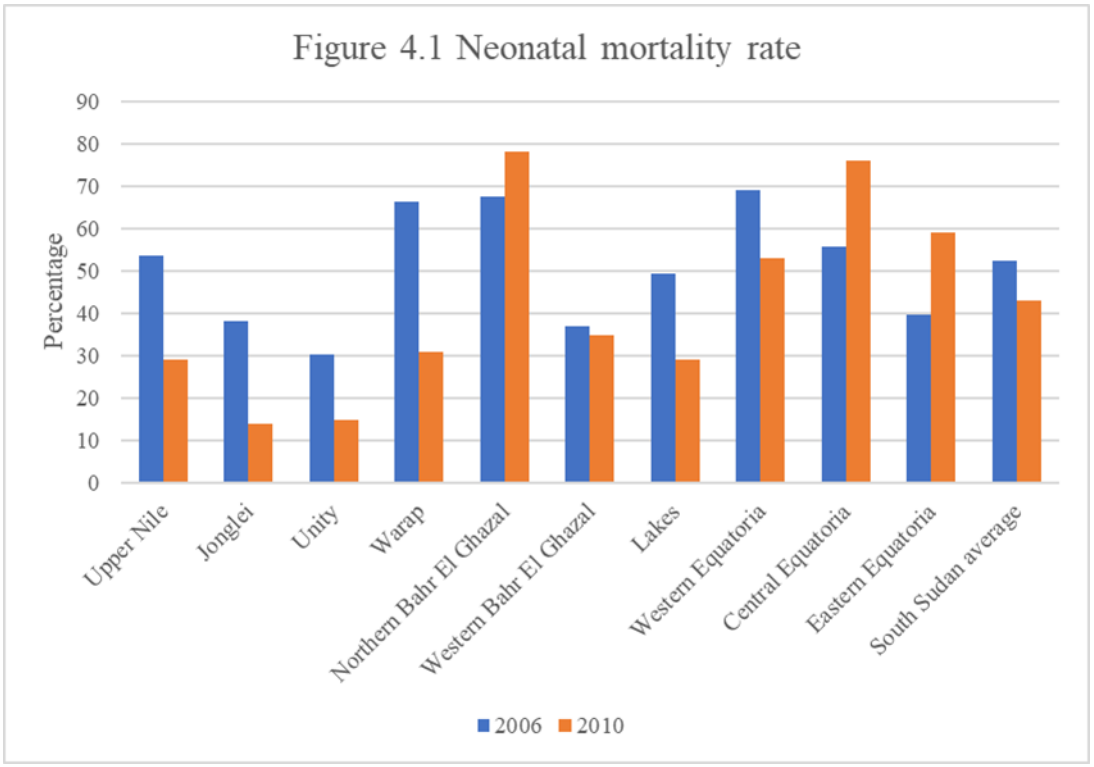
Table 4.2: Early childhood mortality rates by background characteristics
Neonatal, Post neonatal, Infant, Child and Under-five mortality rates for the 5-year period preceding the surveys by socioeconomic characteristics, South Sudan, 2006 & 2010

	Neonatal mortality rate [1]		Post neonatal mortality rate [2]		Infant mortality rate [3]		Child mortality rate [4]		Under five mortality rate [5]	
State	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010
Upper Nile	53.7	29	28.7	44	82.4	74	30.2	26	110.1	98
Jonglei	38.3	14	35.5	17	73.8	31	36.7	17	107.8	48
Unity	30.2	15	33.8	16	63.9	31	19.6	20	82.2	51
Warap	66.3	31	71.6	40	137.9	71	43.8	50	175.6	117
Northern Bahr El Ghazal	67.4	78	61.8	42	129.2	120	41.1	42	165	157
Western Bahr El Ghazal	37.1	35	59.8	56	96.9	91	41	27	134	115
Lakes	49.3	29	40.2	23	89.5	52	27.1	22	114.1	73
Western Equatoria	69	53	81.7	43	150.7	95	48.8	38	192.1	130
Central Equatoria	55.6	76	51.4	39	107	115	38.6	42	141.4	152
Eastern Equatoria	39.6	59	43.1	47	82.7	106	38.1	35	117.6	137
South Sudan average	52.4	43	50	36	102.4	79	36.6	32	135.3	108
Mother's Education										
None	N/A	42	N/A	36	N/A	78	N/A	31	N/A	107
Primary	N/A	47	N/A	35	N/A	82	N/A	39	N/A	118
Secondary+	N/A	(43)	N/A	(40)	N/A	(83)	N/A	(35)	N/A	(115)
Wealth Index										
Poor	N/A	48	N/A	31	N/A	79	N/A	31	N/A	108
Second	N/A	43	N/A	37	N/A	80	N/A	35	N/A	112
Middle	N/A	40	N/A	31	N/A	71	N/A	30	N/A	99
Fourth	N/A	38	N/A	35	N/A	73	N/A	35	N/A	106
Richest	N/A	44	N/A	46	N/A	90	N/A	29	N/A	117
Total Mean		43		36		79		32		108

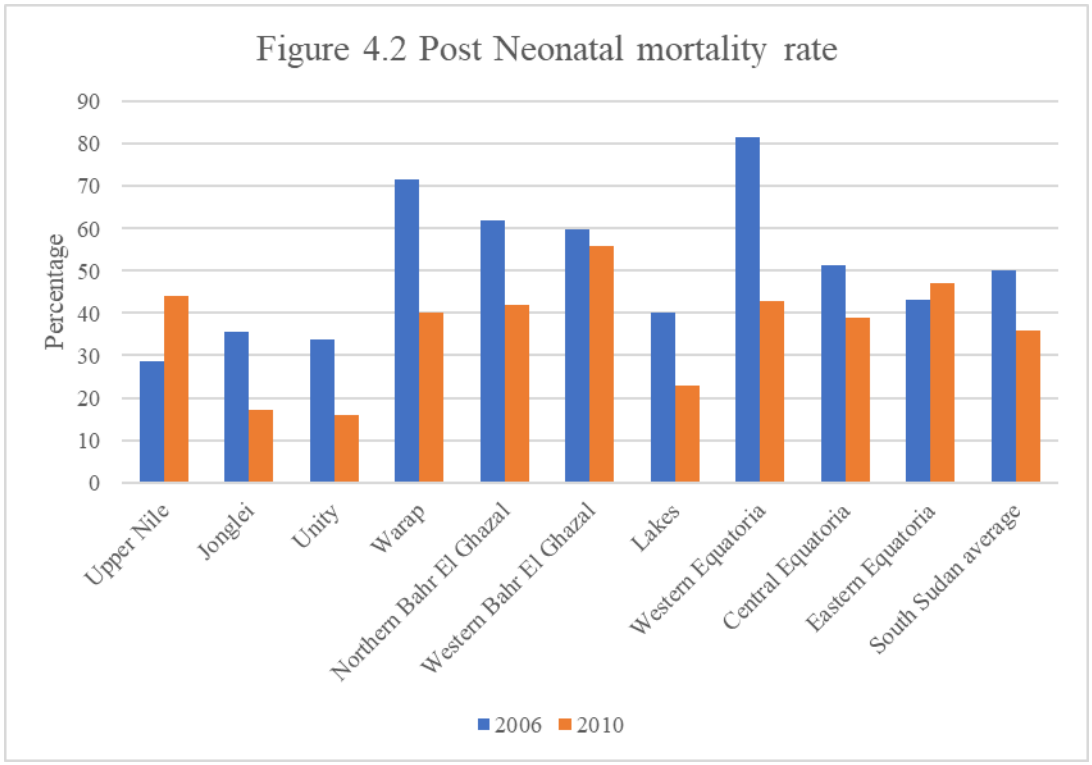
[1] Neonatal mortality rate (probability of infants dying during the first 28 completed days of life, per 1000 live births during the 5-year period preceding the survey
[2] Post neo-natal mortality rate (probability of infants dying between one month and exactly one year of age, per 1000 live births) during the 5-year period preceding the survey
[3] Infant mortality rate (probability of dying between birth and exactly one year of age, per 1000 live births)
[4] Child mortality rate Probability of dying between exact ages one andfive, during the 5-year period preceding the survey
[5] Under-five mortality rate (probability of dying between birth and exactly five years of age, per 1000 live births)
N/A = Not available
Figure in parentheses '()' is based on 250-499 unweighted exposed persons

Source: Ministry of Health and National Bureau of Statistics (2010)
Ministry of Health (2006)

However, in 2010 the mortality rate had generally reduced such that the state (Western Bahr El Ghazal) with the highest rate had 56%. See figure 4.2 below for further comparison.



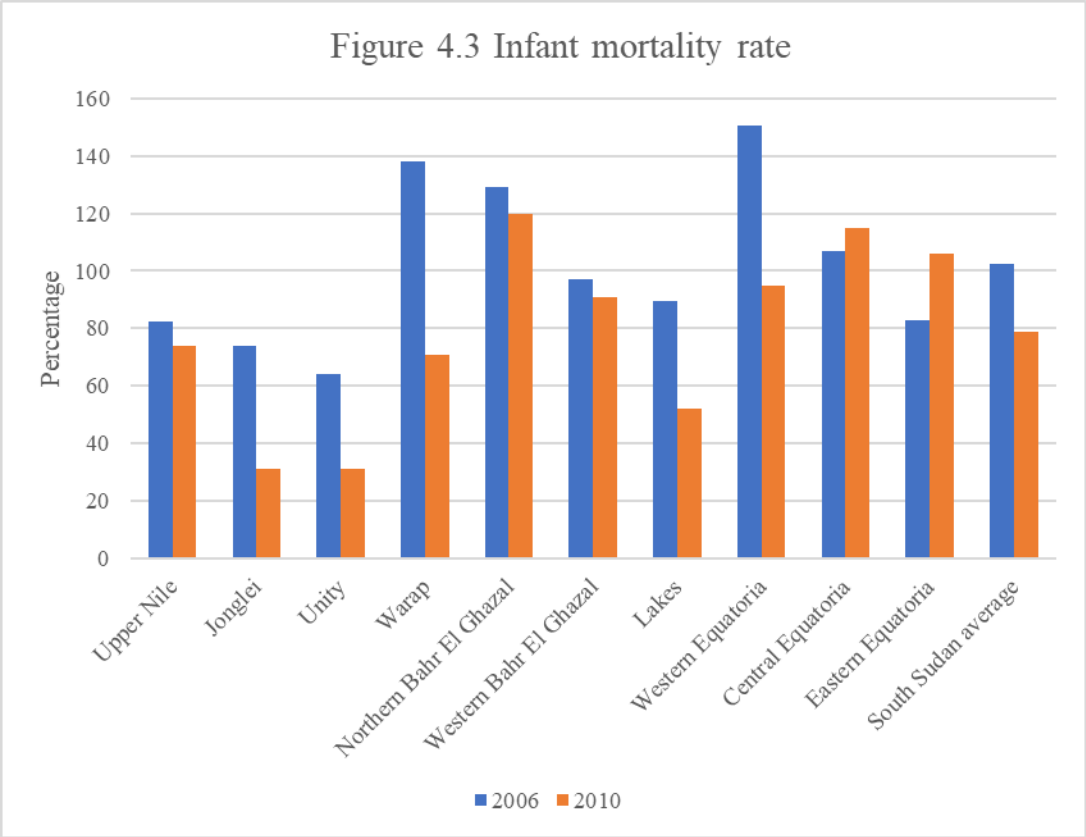
Source: Author



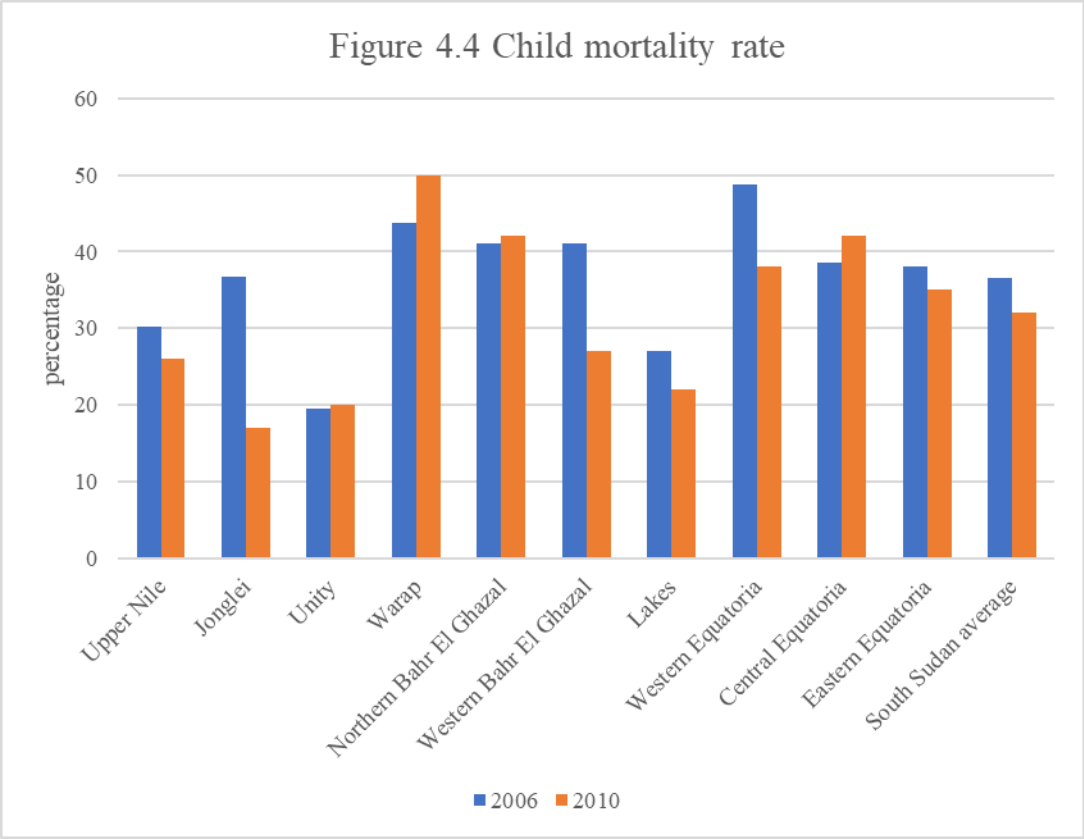
Source: Author

Whilst infant mortality rate is closely knitted with neonatal and post neonatal mortality rate conceptually, the data collected through the surveys in South Sudan also show the relationship. In fact, Monnier (2001) described neonatal and post neonatal mortality as components of infant mortality. Suffice to say that infant mortality rate was highest in Western Equatoria and Warrap in 2006 but in 2010 it was highest in Northern Bahr El Ghazel and Central Equatoria. See figure 4.3 below for more details.

The same states mentioned above also recorded higher rates of child mortality and under-five mortality rates between 2006 and 2010 as shown in figures 4.4 and 4.5 below. Although, ECMRs were prevalent in all the states of South Sudan within the periods surveyed, some states -like Upper Nile, Jonglei, Unity and so on experienced the incidents at rates below the national average consistently.



Source: Author



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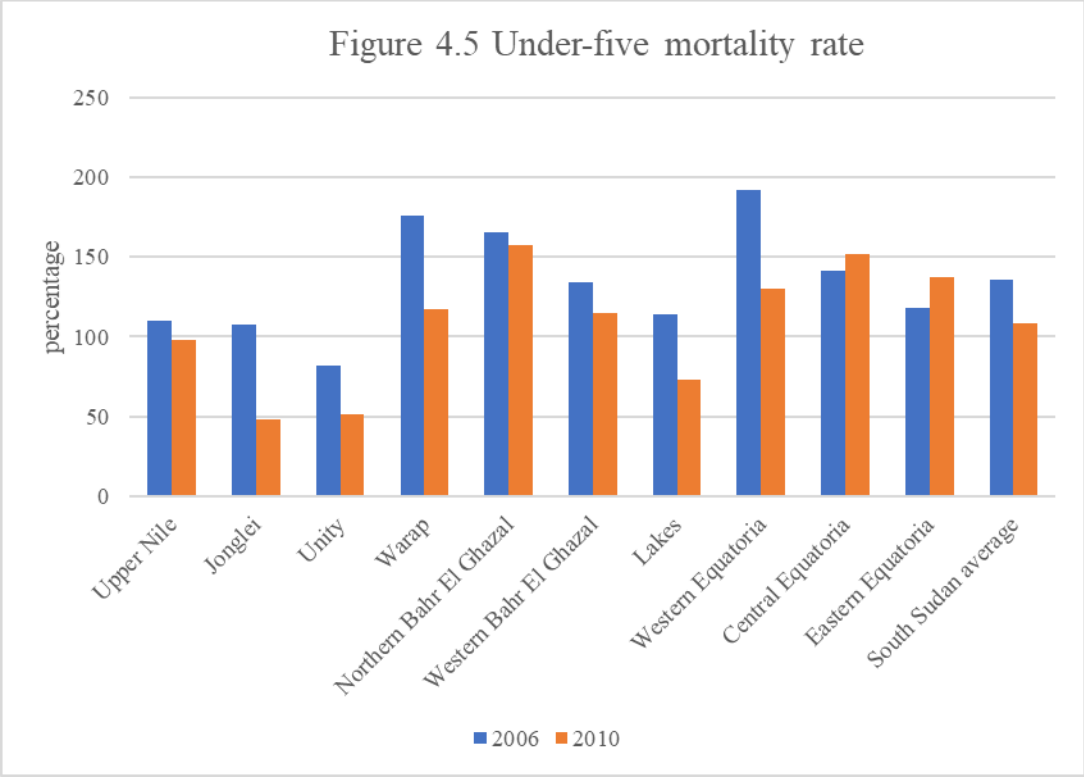


Source: Author

4.2.2 Nutritional Status of Children

Table 4.3 below presents the nutritional status of children in South Sudan. This is based on the percentage of children below age five by nutritional status according to three indicators that measure body size such as weight for age, height for age and weight for height.

Table 4.3: Nutritional status of children

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height in South Sudan, 2006 & 2010

	Weight-for-age (Underweight)				Height-for-age (Stunted)				Weight-for-height (Wasted)						Average Number of children***
	% below - 2 SD*		% below - 3 SD*		% below - 2 SD**		% below - 3 SD**		% below - 2 SD***		% below - 3 SD***		Over weight prevalence (% below + 2 SD)		
State	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	
Upper Nile	35.6	24.2	16.6	10.2	31.1	27.1	16.9	14.3	30.3	21.5	9	8.7	8.4	5.7	788
Jonglei	39.5	29.3	16.9	14.3	32.5	27.8	17.8	17.1	28	31.2	9.5	17.4	4.5	7.6	958
Unity	42.9	46.1	22.1	23	38.6	40.4	26.8	24.1	30.9	35.4	12.2	16.5	5.6	3.7	355
Warap	33.6	35	14.1	13.7	28.9	29.4	17.1	17.1	24.6	31.9	8.4	12.4	10.2	3.4	729
Northern Bahr El Ghazal	41.6	29.7	18.7	12.1	37.8	27.6	21.8	14.1	30.9	26.7	8.4	10.4	5.3	2.6	710
Western Bahr El Ghazal	37.2	22.3	18.4	9.7	41.3	26.9	21.7	14.1	23.7	16.4	9.4	5.3	6.4	4	281
Lakes	19	29.9	6.4	15.3	29.8	35.4	13.8	20.3	13	27.9	3.5	15.3	9.4	11.6	401
Western Equatoria	21.6	18.2	10.7	5.9	38	34.5	20.2	19.1	10.4	11.8	4	4.8	9.1	7.5	504
Central Equatoria	25.2	17	5.3	6.7	32.8	31.1	13.1	13.3	9.8	11	1.4	3.4	3.9	9	775
Eastern Equatoria	33.6	29.2	12.4	14.2	33.6	37.2	18.9	21.6	18.7	13.7	6.6	4.6	5.1	5.2	710
South Sudan Average	33	28.1	14.2	12.5	34.4	31.7	18.8	17.5	22	22.8	7.2	9.9	6.8	6.03	621
Age-group															
< 6 months	N/A	16.7	N/A	6.8	N/A	11.8	N/A	7.1	N/A	19.6	N/A	8.6	N/A	9.6	370
6-11 months	N/A	24.6	N/A	10.4	N/A	17.4	N/A	8.6	N/A	27.1	N/A	11.5	N/A	5.8	626
12-23 months	N/A	27.1	N/A	11.9	N/A	30.9	N/A	15.5	N/A	22.9	N/A	10.1	N/A	5.4	1,342
24-35 months	N/A	31.7	N/A	15.2	N/A	36.7	N/A	20	N/A	25	N/A	11.4	N/A	5.3	1,567
36-47 months	N/A	27.4	N/A	12.4	N/A	34.8	N/A	19.7	N/A	19.2	N/A	8	N/A	7.5	1,415
48-59 months	N/A	29.8	N/A	11.4	N/A	30.8	N/A	18.8	N/A	22.2	N/A	9.5	N/A	4.8	891
Mother's education															
None	N/A	29	N/A	13	N/A	31.7	N/A	17.9	N/A	24.1	N/A	10.7	N/A	6	5,144
Primary	N/A	22	N/A	8.7	N/A	29.8	N/A	13.7	N/A	17.3	N/A	6.5	N/A	7	850
Secondary+	N/A	15	N/A	6.5	N/A	21.9	N/A	11	N/A	13	N/A	4	N/A	3.1	216
Missing/DK	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	1
Wealth index quintile															
Poorest	N/A	32.1	N/A	15	N/A	31.3	N/A	18.2	N/A	28.5	N/A	13.8	N/A	4.7	1,238
Second	N/A	35	N/A	15.4	N/A	34.1	N/A	20.2	N/A	27.9	N/A	13.8	N/A	6.3	1,191
Middle	N/A	26.8	N/A	12.5	N/A	32	N/A	17	N/A	21.6	N/A	8.6	N/A	6.9	1,204
Fourth	N/A	23.9	N/A	10.7	N/A	31.7	N/A	18	N/A	20.3	N/A	7.9	N/A	7.1	1,285
Richest	N/A	20.5	N/A	7.6	N/A	26.5	N/A	12.2	N/A	16.1	N/A	5.9	N/A	5.1	1,291
Total mean	N/A	27.6	N/A	12.2	N/A	31.1	N/A	17.1	N/A	22.7	N/A	9.9	N/A	6	6,211

*** SHHS indicator 6: Underweight prevalence [Proportion of children under age five who fall below minus 2 (moderate and severe) and below minus 3 (severe) standard deviations from median weight for age of the reference population]; MDG indicator 4**

**** SHHS indicator 7: Stunting prevalence [Proportion of children underage five who fall below minus 2 (moderate and severe) and below minus 3 (severe) standard deviations from median height for age of the reference population]**

***** SHHS indicator 8: Wasting prevalence [Proportion of children under age five who fall below minus 2 (moderate and severe) and below minus 3 (severe) standard deviations from median weight for height of the reference population]**

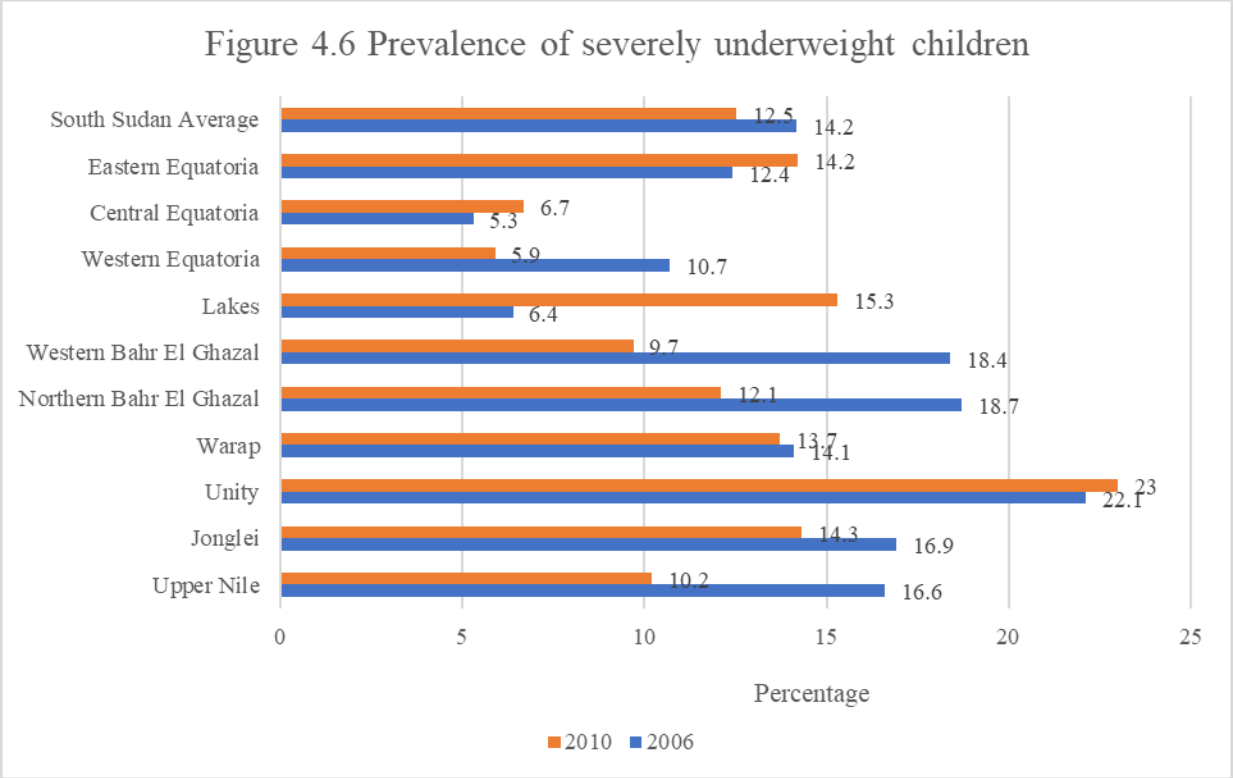
****** For 2010 survey only, based on Author's computation**

N/A = Not available

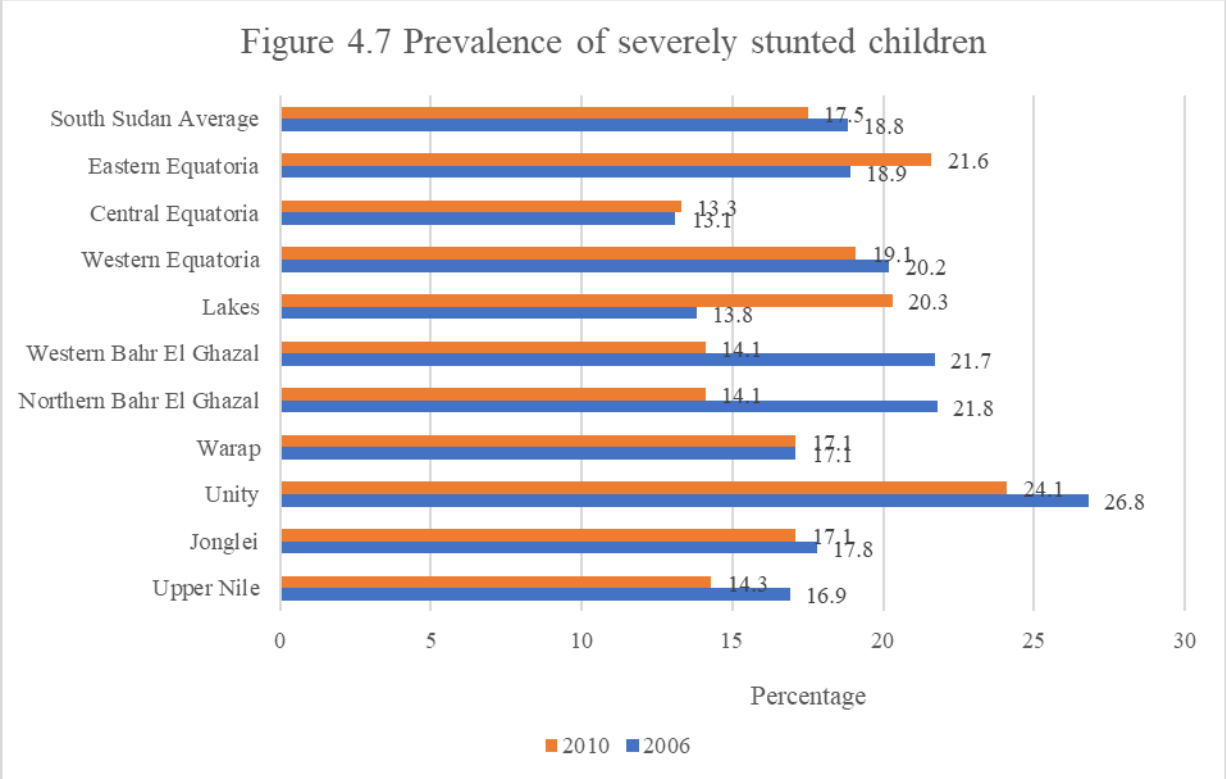
Source: Ministry of Health and National Bureau of Statistics (2010)

Ministry of Health (2006)

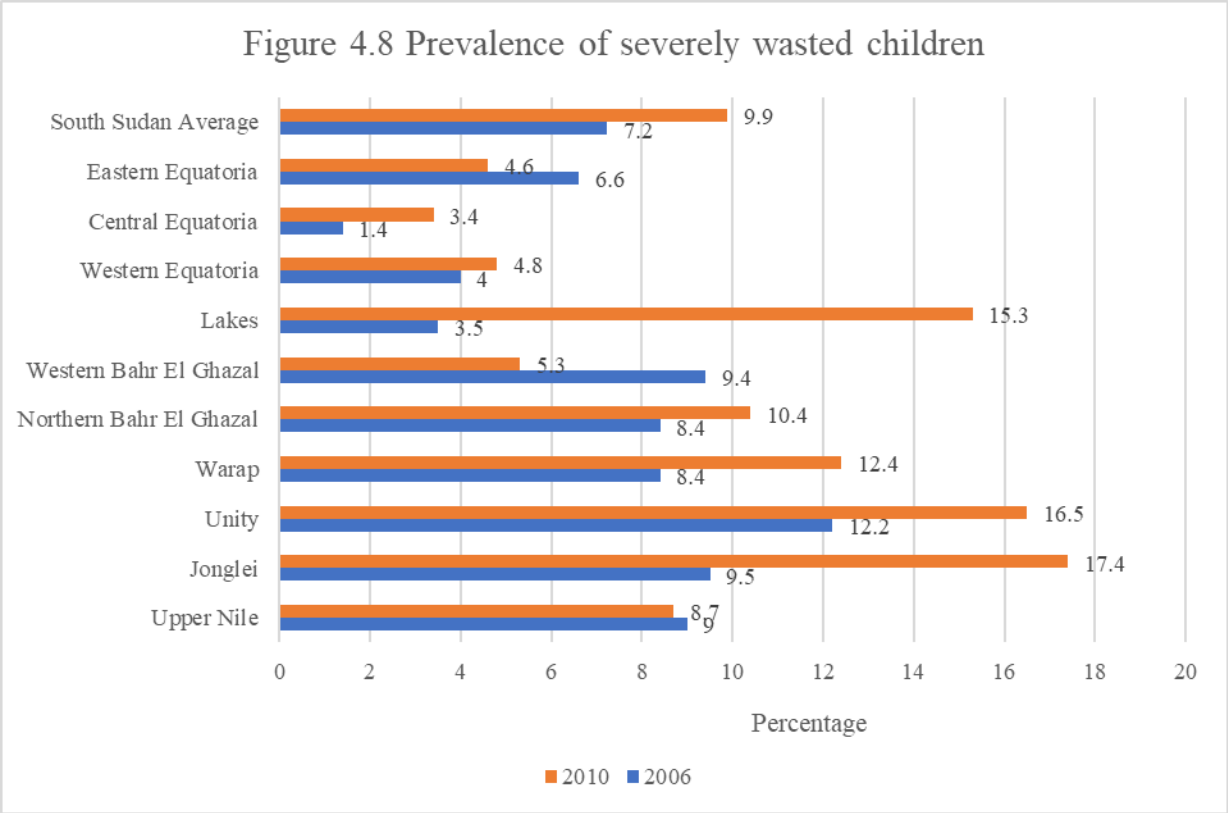
For a better observation of the nutritional status, the same data is presented in bar charts as shown in figures 4.6, 4.7 and 4.8.



Source: Author



Source: Author



Source: Author

Good nutrition plays an important role in children's health and when combined with less frequency of illness and adequate care, children are well nourished as they reach their growth potentials (Ministry of Health and National Bureau of Statistics, 2010). In fact, life expectancy can be improved by ensuring good nutritional status of young children and their mothers (Michaelsen, Weaver, Branca, & Robertson, 2000). This makes nutritional status as a health indicator very crucial in this study. Thus, data on the nutritional status of children is presented here to see how healthcare is distributed among children across the nation by observing the results of food intake through the anthropometric indices.

Simply put, weight-for-age measures a person's weight vis-à-vis their age, weight-for-height measures their fatness or thinness while height-for-age measures the growth and development of their skeleton (Michaelsen et al., 2000). According to the surveys, underweight occurs when children under age five measures two standard deviations below the median weight-for-age of the

reference population, thus, weight-for-age measures severe malnutrition. Also, stunting occurs when the height children under age five falls below minus two of the median height-for-age of the reference population. More so, wasting is prevalent when children under age five measure below minus two standard deviations of the median weight-for-height of the reference population.

It is noteworthy that children in Unity state are more severely underweight in both 2006 and 2010 based on the survey results with 22.1% and 23% severely underweight in the respective years. Children from most other states measure within the national average of this indicator. This same argument holds with respect to stunting as children in Unity state experience more stunting than any other. Meanwhile, 17.4% of the children in Jonglei state suffered from severe weight loss followed by those in Unity and Lakes states with 16.5% and 15.3% respectively in 2010 even though the national average stood at 9.9% in the same year.

4.2.3 Immunisation

Table 4.4 below presents the percentage of children who received vaccinations against various childhood diseases in South Sudan in 2006 and 2010.

Table 4.4: Vaccinations by background characteristics
Percentage of children aged 12-23 months currently vaccinated against childhood diseases, South Sudan, 2006 & 2010

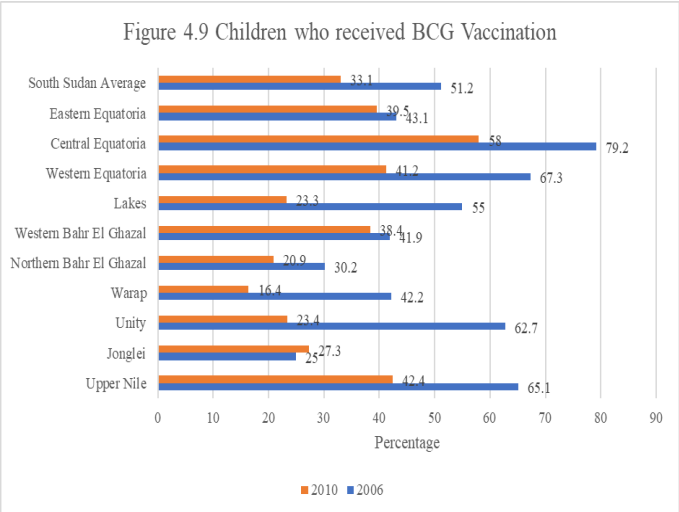
	Percentage of children who received																						Percentage with vaccination card seen		Number of children aged 12-23 months	
	BCG		DPT1		DPT2		DPT3		Polio at Birth		Polio1		Polio2		Polio3		Measles		None		All					
State	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**
Upper Nile	65.1	42.4	60.8	21.3	48.8	42.8	36.6	35	29.1	21	68.3	29.7	60.2	20.7	40.7	14.9	54.6	32.8	29.1	41.6	28.5	6.7	17.3	8.6	36,222	242
Jonglei	25	27.3	19.8	11.8	17.6	32.4	16	15	17.2	7.1	30.2	22	26.4	18.4	17.6	14.9	19.7	22.3	65.4	53.5	11.8	1.8	10.9	2.3	41,426	248
Unity	62.7	23.4	61.5	12	45.5	22.5	35.9	11.5	23	7	66.1	17.3	55.5	13.9	36.6	9.7	58.1	19.8	30.3	61.7	23.5	3.5	12.6	7.8	25,712	107
Warap	42.2	16.4	36.6	6.9	30.1	24.1	16.3	9.8	21.2	5.9	44.2	9.3	35.1	4.9	19.5	3.2	39.7	11.1	53.2	62.8	12.2	1.4	8.9	4.2	44,412	208
Northern Bahr El Ghazal	30.2	20.9	26.2	13	21.6	30.7	12.7	9.9	18.7	6.1	41.5	13.9	35	6.9	24.3	2.5	24	16.4	56.5	55.8	5.9	1.3	3.7	4.3	42,579	136
Western Bahr El Ghazal	41.9	38.4	36.4	23.1	29.1	41.6	16.4	31.5	17.1	18.6	52.3	33.7	44	26.4	19.3	19.6	32.4	33.3	43.2	41.1	5.5	7.5	2.7	12	13,911	72
Lakes	55	23.3	41.7	13.9	22	25.5	11.9	12	17.1	7.3	55.9	20.6	38.8	16	21.2	8.1	47.6	17.1	37.3	58.3	7.1	2.9	10	5.6	29,941	132
Western Equatoria	67.3	41.2	43.5	27.1	27.8	42.9	15.7	29	10.8	16.9	71.2	31.9	67	27.6	41.3	18.1	59.4	32.6	20.7	41	8.2	8.7	21.6	9.3	15,877	118
Central Equatoria	79.2	58	74.5	28.9	63.6	55.6	54.5	43.3	29.9	33.1	80.1	56.2	72.5	47.8	55.5	31.9	67.5	45.1	16.6	14.8	43.6	19.2	25.9	26	40,020	258
Eastern Equatoria	43.1	39.5	36.2	28.6	26.2	34.4	14.6	17.2	23.3	13.2	45.9	33.2	34.6	29	22.6	19.2	41.4	24.7	51.9	46	13.8	5.5	15	13.9	25,203	182
South Sudan Average	51.2	33.1	43.7	18.7	33.2	35.3	23.1	21.4	20.7	13.6	55.6	26.8	46.9	21.2	29.9	14.2	44.4	25.5	40.4	47.7	16.0	5.9	12.9	9.4	31,530	170.3
Residence																										
Urban	N/A	45.2	N/A	22.5	N/A	45.8	N/A	32.4	N/A	23.8	N/A	36.5	N/A	28.6	N/A	23.3	N/A	35.5	N/A	33.9	N/A	10.1	N/A	13.9	N/A	431
Rural	N/A	30.8	N/A	17.5	N/A	33.3	N/A	19.6	N/A	11.8	N/A	25.4	N/A	20.3	N/A	12.4	N/A	23.2	N/A	50.1	N/A	5.1	N/A	8.6	N/A	1,273
Mother's education																										
None	N/A	28.6	N/A	15.3	N/A	31.9	N/A	18.4	N/A	11.3	N/A	22.7	N/A	18	N/A	12.1	N/A	21.1	N/A	51.7	N/A	4.5	N/A	7.8	N/A	1,374
Primary	N/A	57.9	N/A	33.8	N/A	54.9	N/A	40.2	N/A	28.5	N/A	50.1	N/A	40	N/A	27.2	N/A	46.8	N/A	24.7	N/A	13.6	N/A	17.8	N/A	260
Secondary+	N/A	61.6	N/A	30	N/A	58.1	N/A	47.7	N/A	34.5	N/A	53.2	N/A	43.3	N/A	30.8	N/A	55	N/A	21.9	N/A	15.7	N/A	22.1	N/A	69
Missing/DK	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	*	N/A	1
Wealth index quintiles																										
Poorest	N/A	20.4	N/A	10.3	N/A	22	N/A	11.2	N/A	7.9	N/A	15.4	N/A	12.3	N/A	6.3	N/A	16.5	N/A	64.1	N/A	2.3	N/A	3	N/A	332
Second	N/A	23.9	N/A	15.1	N/A	29.3	N/A	14.2	N/A	9	N/A	19.3	N/A	13.6	N/A	10	N/A	16.6	N/A	56.3	N/A	3.2	N/A	5.7	N/A	310
Middle	N/A	32.7	N/A	16.8	N/A	35.8	N/A	19.3	N/A	9.7	N/A	27.2	N/A	20.8	N/A	13.7	N/A	21.6	N/A	46.5	N/A	5.1	N/A	9.7	N/A	330
Fourth	N/A	34.6	N/A	22.1	N/A	38.2	N/A	24	N/A	14.3	N/A	28.3	N/A	22.6	N/A	14.5	N/A	30.1	N/A	43.1	N/A	6.2	N/A	9.7	N/A	379
Richest	N/A	58.5	N/A	28.2	N/A	55.2	N/A	44.5	N/A	32.5	N/A	49.1	N/A	41.1	N/A	30.3	N/A	44.5	N/A	24.4	N/A	14.6	N/A	20.6	N/A	354
Total	N/A	34.4	N/A	18.7	N/A	36.4	N/A	22.8	N/A	14.8	N/A	28.1	N/A	22.3	N/A	15.1	N/A	26.3	N/A	45.9	N/A	6.3	N/A	9.9	N/A	1,704

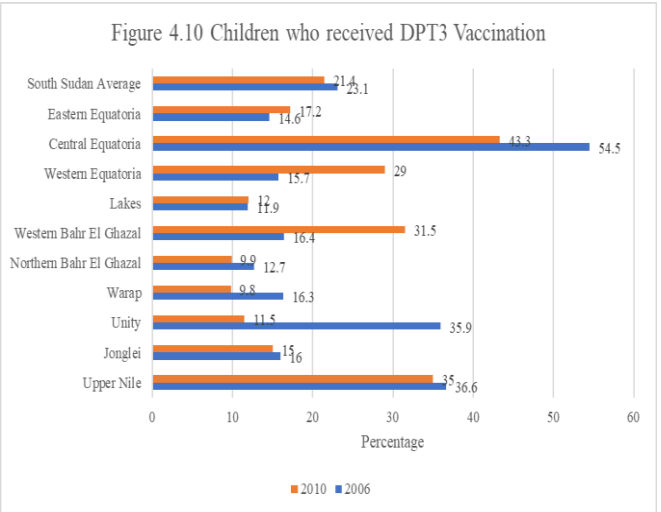
SHHS indicator 23 : Tuberculosis immunisation coverage (Proportion of children 12-23 months of age who received BCG vaccination at any time up to the date of the survey)
SHHS indicator 24: DPT3 immunisation coverage (Proportion of children 12-23 months of age received DPT3 vaccination at any time up to the date of the survey)
SHHS indicator 25: Polio immunisation coverage ((Proportion of children 12-23 months of age who received OPV3 vaccination at any time up to the date of the survey)
SHHS indicator 26: Measles immunisation coverage (Proportion of children 12-23 months of age who received measles vaccination at any time up to the date of the survey)
SHHS indicator 27: Fully immunised children ((Proportion of children 12-23 months of age who received BCG, DPT1-3, OPV1-3, and measles vaccinations at any time up to the date of the survey)

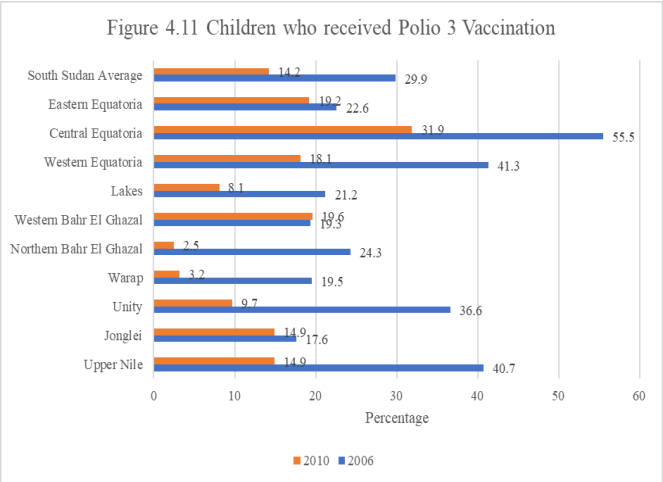
Source: Ministry of Health and National Bureau of Statistics (2010)

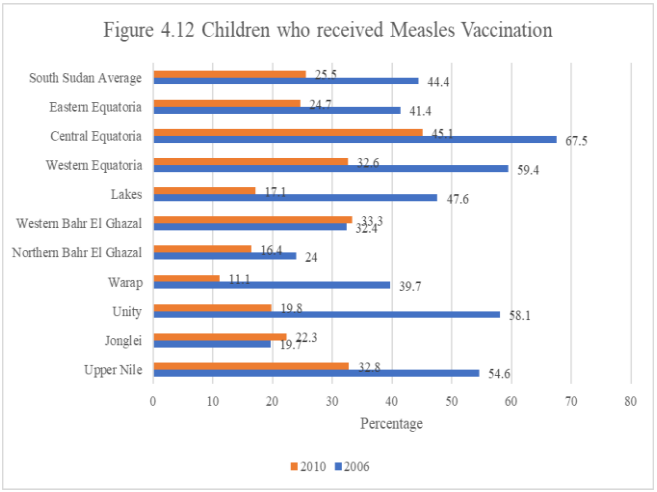
Ministry of Health (2006)

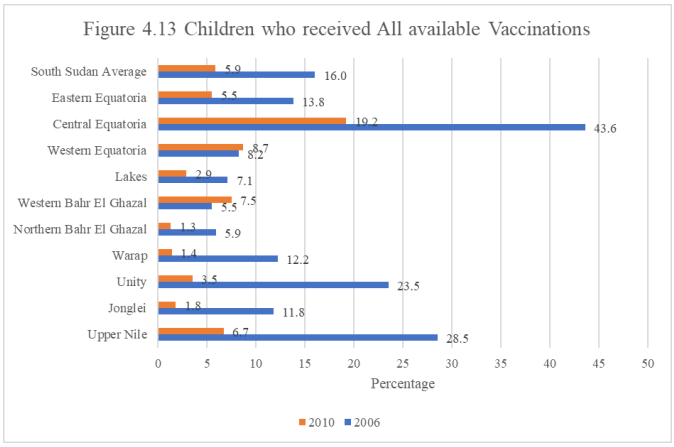
Figures 4.9-14 below represent the data on immunization in bar charts for easy analysis.

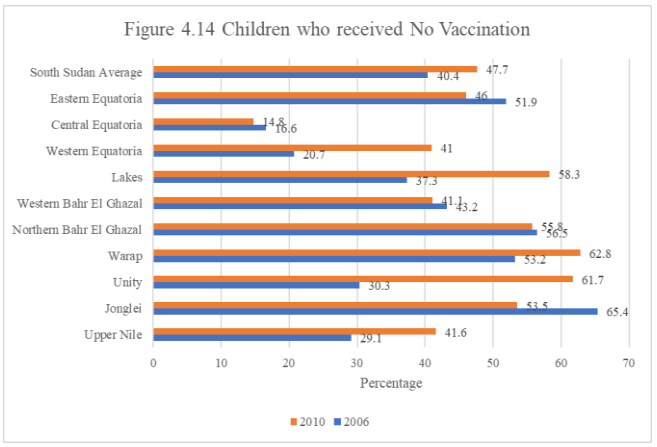












Source: Author

Figures 4.9-14 above show percentage of children who received some of the various vaccinations presented in table 4.4 above across the 10 states of South Sudan in 2006 and 2010. Generally, it can be observed that majority of the children in different states did not receive the vaccinations. More so, the proportions at which the children get vaccinated was highly varied. For instance, 79% of the children observed in Central Equatoria received the vaccination followed by Western Equatoria where 67% of the children were vaccinated in 2006. In fact, the same states were observed with high percentage of vaccinated children in 2010 when Central Equatoria still recorded the highest percentage of vaccinated (58%) and Western Equatoria recorded the second highest with 41% of vaccinated children with BCG. This was not the same experience in other states as the vaccination was not evenly distributed across states. For example, in 2006 25% of the children in Jonglei were vaccinated and only 30% in Northern Bahr El Ghazal. Also, in 2010 the lowest number of vaccinated children were found in Warrap and Northern Bahr El Ghazal states.

The percentage of vaccinated children with BCG in these states were far below the national averages in the two years.

Considering the data on children who received all vaccinations, Central Equatoria, Upper Nile and Unity states recorded the highest percentages of children with 44%, 29% and 24% respectively in 2006 which are higher than the national average. Whereas, in the same year Western Bahr El Ghazal, Northern Bahr El Ghazal and Jonglei states had lowest percentage of immunised children with 6%, 6% and 12% respectively which are far below the national average. The same trend is observable in 2010 on the percentage of children who received all vaccinations. Moreover, the data on percentage of children who received no vaccination also revealed unequal distribution of all the vaccines among the children across the states in the country where Jonglei, Northern Bahr El Ghazal and Warrap have the highest percentage of children with no vaccination in 2006 and 2010.

4.2.4 Malaria -Insecticide Treated Net (ITN)

Table 4.5 below presents the data on households with insecticide treated net which is widely used for malaria prevention in most sub-Saharan African countries. One of the leading causes of death among children under the age of five in South Sudan is malaria which also contributes to anemia in children - a common cause of school absenteeism (Ministry of Health and National Bureau of Statistics, 2010). Thus, the data is represented in terms of percentage of households with at least one mosquito net and percentage of households with at least one long-lasting treated net in South Sudan in 2006 and 2010.

Table 4.5: Household availability of treated nets

Percentage of households with at least one mosquito net and percentage of households with at least one long-lasting treated net, South Sudan, 2006 & 2010

	Percentage of households with at least one mosquito net		Percentage of households with at least one long-lasting treated net		Number of households	
State	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**
Upper Nile	68.5	47.3	33.3	21.7	188,215	998
Jonglei	38.8	43.9	4.8	32.8	216,875	1,432
Unity	78.5	38	19.7	20	89,366	608
Warap	24.9	27.9	7.5	16.8	241,439	1,205
Northern Bahr El Ghazal	26.2	56.9	3.7	42.6	211,241	930
Western Bahr El Ghazal	39.9	45.3	3.7	34.4	64,565	387
Lakes	60.1	54.5	23.3	30.9	131,682	676
Western Equatoria	29.3	71.3	10.9	57.5	110,127	770
Central Equatoria	29.8	64.7	9.4	38.4	161,701	1,249
Eastern Equatoria	16.1	71.7	3.9	48	173,175	1,114
South Sudan Average	41.2	52.2	12	34.3	158,839	937
Residence						
Urban	N/A	64	N/A	43.6	N/A	2,161
Rural	N/A	48.7	N/A	31.4	N/A	7,208
Education of household head						
None	N/A	48.4	N/A	31.3	N/A	7,446
Primary	N/A	65.2	N/A	45	N/A	1,120
Secondary+	N/A	70	N/A	46.3	N/A	797
Missing/DK	N/A	*	N/A	*	N/A	6
Wealth index quintiles						
Poorest	N/A	45.9	N/A	27.1	N/A	1,879
Second	N/A	41.7	N/A	26.6	N/A	1,995
Middle	N/A	47.2	N/A	31.3	N/A	2,004
Fourth	N/A	61.4	N/A	43.3	N/A	1,913
Richest	N/A	68.6	N/A	45	N/A	1,578
Total		52.3		34.2		9,369

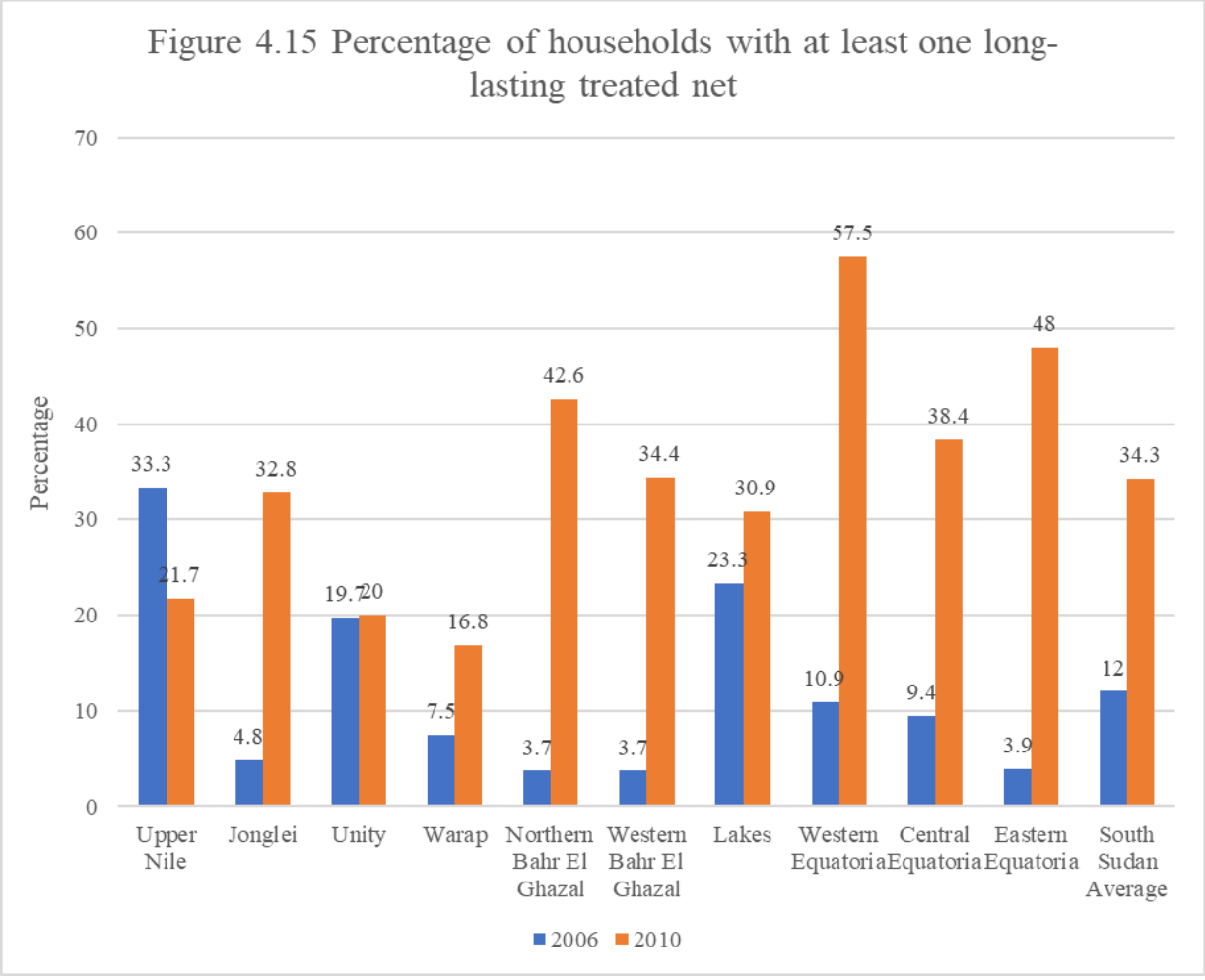
Country specific question

(*): Figures based on unweighted cases < 25

Source: Ministry of Health and National Bureau of Statistics (2010)

Ministry of Health (2006)

Insecticide-treated mosquito nets are not only recommended by WHO but are also found to be the only feasible alternative for preventing malaria transmission in most parts of Africa especially the long-lasting insecticide-treated mosquito nets (Guillet et al., 2001). So, the government of South Sudan had a central objective, within the same period of the survey that generated above data, through the Malaria Control Programme within the Ministry of Health of the Government of South Sudan to reduce malaria related morbidity and mortality by rapidly increasing the coverage of cost-effective malaria prevention and curative interventions at least 60 percent of the target populations (Ministry of Health and National Bureau of Statistics, 2010). The above table thus shows how the intervention programme has been effective in addition to the percentage of households that were reached. In addition, figure 4.15 below is a bar chart showing the percentage of households with at least one long-lasting mosquito net.



Source: Author

The figure 4.1o above shows that the long-lasting treated net did not get to all the households across the 10 states. As a matter of fact, in 2006 seven states did not get up the national average of 12% (which is below the government's 41% target). Even though the distribution improved in 2010, however, only 16.8%, 20% and 21.7% of households in Warrap, Unity and Upper Nile states respectively received at least one long-lasting treated net.

4.2.5 Antenatal Care Provider

Antenatal care (ANC) is a useful health intervention program for preventing maternal morbidity and mortality through the provision of information and health education to mothers (Mustafa & Mukhtar, 2015). Therefore, women receive many information regarding the fetus development, child spacing, parenting and they even get relevant vaccines through the ANC provider (Ministry of Health and National Bureau of Statistics, 2010). Knowing the importance of ANC, a presentation of the data on the percentage distribution of women from across the states of South Sudan who gave birth in the two years preceding 2006 and 2010 is found in table 4.6 below for further analysis. The survey question was related to who provided ANC to the responded when she was pregnant.

Based on the data below, only 23% and 41% of women in the country saw a skilled ANC provider once during their pregnancy in 2006 and 2010 respectively. This is quite pathetic considering the established importance of engaging in this intervention program. Sadly, in Unity state none of the almost 25,000 women surveyed visited any skilled personnel -which is either a medical doctor, Nurse, midwife or any associated health worker in 2006. Rather, only about 47% might have seen a traditional birth attendant and the percentage was not better in 2010. This informs a little more about why there is high occurrence of maternal and child mortality across the 10 states. More so, women in urban areas as well as those with higher education had more chance to get ANC than their counterparts in rural areas and or with lower education.

In addition to table 4.6, also find figures 4.16-19 showing a graphic representation of data women who gave birth in the two years preceding the surveys of 2006 and 2010 and were provided ANC by medical doctor (fig. 4.16), nurse/midwife (fig. 4.17), at least one skilled person (fig. 4.18) and those who did not receive any ANC (fig. 4.19).

Table 4.6: Antenatal care provider
Percent distribution of women aged 15-49 who gave birth in the two years preceding the survey by type of personnel providing antenatal care, South Sudan, 2006 & 2010

	Person providing antenatal care (%)																
	Doctor		Nurse/ midwife		Health visitor		Midwife		Traditional birth attendant, Other/ Missing		No antenatal care received		Total	At least once by skilled personnel [1]		Number of women who gave birth in the preceding two years	
State	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**		**2006**	**2010**	**2006**	**2010**
Upper Nile	10.8	19.2	21.6	9.3	0	3	0	9.3	37	0	30.7	59.2	100	32.4	37.8	66,975	436
Jonglei	13.5	5.5	0	11.4	0	2.4	0	4.9	22.8	0	63.7	75.7	100	13.5	21.8	71,870	459
Unity	0	15.7	0	9.7	0	0.7	0	6.1	46.6	0	53.4	67.8	100	0	31.5	24,656	215
Warrap	0	5.7	16.8	9.6	0	1.1	0	2.9	45.8	0	37.4	80.7	100	16.8	18.1	41,531	485
Northern Bahr El Ghazal	16.8	18	7.2	17.5	0	0.3	0	5.5	33.6	0.3	42.5	58.5	100	24	41	70,702	299
Western Bahr El Ghazal	12.5	9.6	17	21.3	0	0.8	0	19.5	31.6	0	38.9	48.8	100	29.5	50.4	41,208	139
Lakes	12	9.2	35.3	16.7	0	0.5	0	12.7	6.9	0	45.7	61	100	47.3	38.5	96,107	275
Western Equatoria	5.4	12.8	15.4	29.6	0	3	0	19.2	62.1	0	17.1	35.4	100	20.8	61.6	42,633	270
Central Equatoria	8.4	16.4	19.1	38.2	0	0.5	0	17.1	50.2	0	22.4	27.8	100	27.5	71.7	72,909	503
Eastern Equatoria	5.5	7.1	13.8	19.9	0	1.3	0	12.5	27	0	53.7	59.2	100	19.3	39.6	45,144	398
South Sudan Average	8.49	11.92	14.62	18.32	0	1.36	0	10.97	36.36	0.03	40.55	57.41	100	23.11	41.2	57,374	348
Residence																	
Urban	N/A	17.6	N/A	24.7	N/A	1.7	N/A	15.3	N/A	0	N/A	40.7	100	N/A	57.6	N/A	913
Rural	N/A	9.6	N/A	16.1	N/A	1.4	N/A	8.4	N/A	0	N/A	64.4	100	N/A	34.2	N/A	2,566
Mother's age at birth																	
Less than 20	N/A	12.4	N/A	18.9	N/A	1.4	N/A	14.4	N/A	0	N/A	52.9	100	N/A	45.7	N/A	420
20-34	N/A	12.9	N/A	19	N/A	1.3	N/A	10.2	N/A	0	N/A	56.7	100	N/A	42	N/A	2,198
35-49	N/A	7.6	N/A	16.4	N/A	2.5	N/A	8.5	N/A	0.2	N/A	64.8	100	N/A	32.5	N/A	446
Missing	N/A	9.4	N/A	16.9	N/A	1	N/A	8.2	N/A	0	N/A	64.5	100	N/A	34.5	N/A	415
Education																	
None	N/A	10.7	N/A	14.6	N/A	1.3	N/A	7.7	N/A	0	N/A	65.6	100	N/A	33	N/A	2,778
Primary	N/A	14	N/A	34.5	N/A	2.2	N/A	20.6	N/A	0	N/A	28.6	100	N/A	69.1	N/A	569
Secondary+	N/A	25	N/A	27	N/A	0.3	N/A	20.3	N/A	0	N/A	27.4	100	N/A	72	N/A	122
Wealth index quintile																	
Poorest	N/A	6.4	N/A	10.4	N/A	0.7	N/A	4.6	N/A	0	N/A	78	100	N/A	21	N/A	666
Second	N/A	11	N/A	11	N/A	1.3	N/A	7.2	N/A	0	N/A	69.5	100	N/A	29	N/A	679
Middle	N/A	9.1	N/A	16.6	N/A	1.4	N/A	8	N/A	0.1	N/A	64.8	100	N/A	34	N/A	686
Fourth	N/A	11.4	N/A	22.5	N/A	2.1	N/A	12.8	N/A	0	N/A	51.1	100	N/A	47	N/A	726
Richest	N/A	20.1	N/A	30.1	N/A	1.7	N/A	17.9	N/A	0	N/A	30.1	100	N/A	68	N/A	722
Total		11.7		18.4		1.5		10.2		0		58.2	100		40.3		3,479

[1] MICS indicator 5.5a; MDG indicator 5.5
(*): Figures based on unweighted cases < 25

Source: Ministry of Health and National Bureau of Statistics (2010)

Ministry of Health (2006)

Figure 4.16 Provision of antenatal care by medical doctor

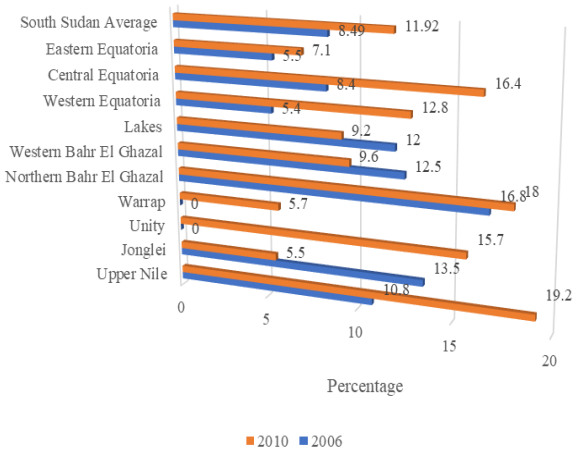


Figure 4.17 Provision of antenatal care by Nurse or Midwife

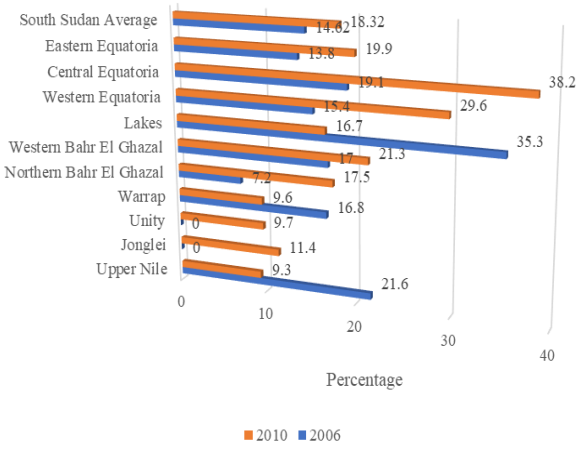


Figure 4.18 Provision of antenatal care by at least one skilled person

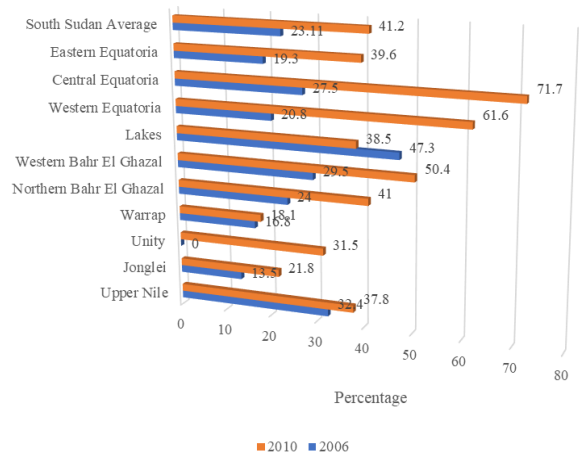
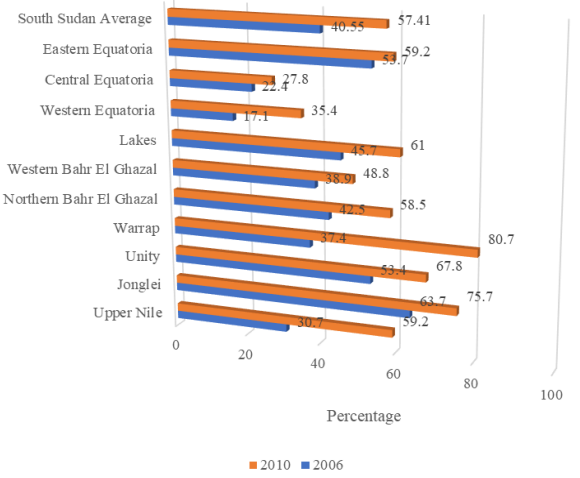


Figure 4.19 Women who did not receive antenatalcare



Source: Author

From the charts above, it is observed that no one saw a doctor or a nurse/midwife for ANC in Warrap and Unity states in 2006 and less than 6% and 16% saw doctors in Warrap and Unity states respectively in 2010. As previously stated, the provision of was generally poor during the two periods surveyed. However, the situation in better in some regions than the other in 2010 whereas it was completely chaotic in 2006. For example, most women in Central and Western Equatoria states got ANC from at least one skilled provider within the two years preceding 2010 whilst

Jonglei, Warrap, Unity, Lakes and few other states recorded very low percentages of women who got the attention of any skilled worker for ANC within the same period. In fact, the same states with poor results recorded the highest percentages of women who never received any ANC within the two years preceding 2006 and 2010.

4.3 Education

4.3.1 Primary School Entry

Table 4.7 below contains data on percentage of children of primary school entry age who were entering grade 1 – net intake rate (NIR). The NIR refers children who are new entrants to grade 1 of primary school education who are of the statutory primary school entrance age, stated as a percentage of the population of the children of the same age (UNESCO Institute for statistics, 2019c). This is computed by simply dividing the number of children of official primary school entrance age who enter grade 1 of primary education for the first time by the population of the same age and expressed in percentage. This indicator reveals how children access education when they are of age. More so, "a high NIR indicates a high degree of access to primary education for the official primary school entrance age children. NIR of 100% is a necessary condition for the policy goal of universal primary education" (UNESCO Institute for statistics, 2019c).

Based on this survey data in table 4.7 below, majority of the children of primary school entering age in South Sudan are not in school. The situation was however worse in 2006 than in 2010 because the country's average NIR in 2006 was 7% compared to 12% in 2010. Nonetheless, these rates were still at mediocre levels because a state by state analysis reveals further that 8 out of 10 states have NIR of less than 10%. In addition, Northern Bahr El Ghazal, Unity and Warrap almost do not have any intake since they recorded NIR of 1%, 1.9% and 2% respectively. Also observed is a higher NIR in urban areas than rural as well as in female children compared to their male counterparts. It is noteworthy that higher education of mothers in the households seems to positively impact the rate of NIR as 61% of entrants into primary schools have mothers with primary education.

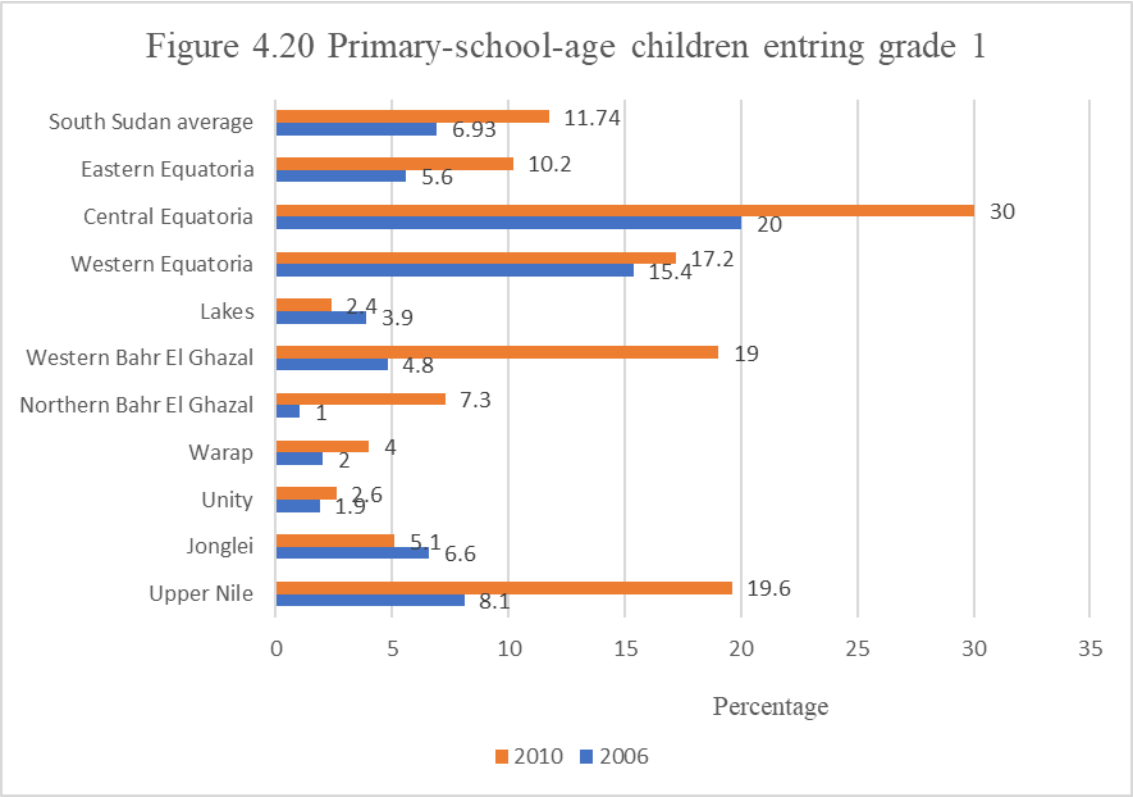
Table 4.7: Primary school entry
Percentage of children of primary school entry age entering grade 1 (net intake rate), South Sudan, 2006 & 2010

	Percentage of children of primary school entry age entering grade 1 [1]		Number of children of primary school entry age	
State	2006	2010	2006	2010
Upper Nile	8.1	19.6	30,271	282
Jonglei	6.6	5.1	54,672	347
Unity	1.9	2.6	14,815	186
Warap	2	4	49,607	219
Northern Bahr El Ghazal	1	7.3	45,181	197
Western Bahr El Ghazal	4.8	19	11,645	75
Lakes	3.9	2.4	38,161	194
Western Equatoria	15.4	17.2	22,320	153
Central Equatoria	20	30	34,439	223
Eastern Equatoria	5.6	10.2	30,713	242
South Sudan average	6.93	11.74	33,182	212
Residence				
Urban	N/A	19.8	N/A	468
Rural	N/A	8.8	N/A	1,650
Sex				
Male	N/A	10.9	N/A	1,078
Female	N/A	11.5	N/A	1,040
Mother's education				
None	N/A	0.2	N/A	1,428
Primary	N/A	61	N/A	296
Secondary+	N/A	*	N/A	9
Mother not in household	N/A	13	N/A	385
Wealth index quintiles				
Poorest	N/A	2.9	N/A	439
Second	N/A	5.3	N/A	447
Middle	N/A	7.6	N/A	431
Fourth	N/A	14.9	N/A	409
Richest	N/A	27.3	N/A	392
Total		11.2		2,118

[1] MICS indicator 7.3
(*): Figures based on unweighted cases < 25

Source: Ministry of Health and National Bureau of Statistics (2010)
Ministry of Health (2006)

Figure 4.2a below further reveals the variation in the NIR across the states as well as improvement in same indicator between 2006 and 2010 across the states. Although it was not a huge improvement when the national average is considered but individual states comparison reveals relative improvements. For example, Western Bahr El Ghazal state increased its NIR 4.8% in 2006 to 19% in 2010. Also, Upper Nile and Central Equitoria states increased their NIR by about 10% each between the two reference years. It can therefore be inferred that the state the children lived determines to some extent their chance of attending school at the entering age.



Source: Author

4.3.2 Primary School Attendance

On table 4.8 below are data on primary school attendance captured through the percentage of children of primary school age attending primary or secondary school referred to as net attendance rate (NAR) for 2006 and 2010. According to UNESCO, NAR for both male and female is the total number of students/pupils within the primary school age group who are attending (attendance means that the pupil/student was in school at least once during the school year) primary school

divided by the total number of peop5le in the group usually expressed in percentage (World Bank Group, 2019).

Table 4.8: Primary School Attendance

Percentage of children of primary school age attending primary or secondary school (Net attendance rate), South Sudan, 2006 &2010

	Male			Female			Total			
	Net attendance rate (adjusted) [1]		Number of children	Net attendance rate (adjusted) [1]		Number of children	Net attendance rate (adjusted) [1]		Number of children	
State	2006	2010	2010	2006	2010	2010	2006	2010	2006	2010
Upper Nile	24.2	40	960	20.9	34.4	864	22.8	37.3	236,063	1,824
Jonglei	10.8	16.7	1,207	8.6	12.1	1,067	9.7	14.6	406,753	2,274
Unity	4.5	9.3	559	4	5.8	580	4.3	7.5	146,426	1,140
Warap	9.2	19.4	936	6.1	8.4	921	7.7	13.9	407,123	1,857
Northern Bahr El Ghazal	7.8	22.5	681	3.4	11.7	703	5.7	17.1	367,838	1,383
Western Bahr El Ghazal	10.5	37.6	265	6.4	33.5	251	8.7	35.6	100,848	515
Lakes	14.2	17.2	665	8.6	10.6	604	11.3	14.1	262,827	1,269
Western Equatoria	47.2	50.1	490	42.9	45.4	497	44.9	47.7	158,936	987
Central Equatoria	44.2	55.3	806	41.7	55.8	822	43	55.5	269,775	1,627
Eastern Equatoria	14.6	31	855	13.2	26.2	805	13.9	28.6	245,360	1,661
South Sudan average	18.72	29.91	742	15.58	24.39	711	17.2	27.19	260,195	1,454
Residence										
Urban	N/A	45.2	1,741	N/A	41	1,688	N/A	43.1	N/A	3,429
Rural	N/A	23.9	5,682	N/A	18	5,425	N/A	20.9	N/A	11,108
Age at the beginning of school year										
6	N/A	13.3	1,078	N/A	14.5	1,040	N/A	13.9	N/A	2,118
7	N/A	20.1	1,223	N/A	14.1	1,235	N/A	17.1	N/A	2,457
8	N/A	24.8	865	N/A	22.7	820	N/A	23.8	N/A	1,685
9	N/A	30.9	1,267	N/A	21.6	1,272	N/A	26.2	N/A	2,539
10	N/A	38.5	530	N/A	29.2	511	N/A	33.9	N/A	1,042
11	N/A	33.8	941	N/A	32.1	840	N/A	33	N/A	1,780
12	N/A	40.5	603	N/A	33	588	N/A	37	N/A	1,191
13	N/A	41.5	917	N/A	32	807	N/A	37	N/A	1,724
Mother's Education										
None	N/A	0.2	3,851	N/A	0.1	4,036	N/A	0.1	N/A	7,887
Primary	N/A	81.5	1,938	N/A	79.8	1,495	N/A	80.7	N/A	3,433
Secondary	N/A	79.9	87	N/A	75.4	52	N/A	78.2	N/A	139
Mother not in household	N/A	31.3	1,544	N/A	28	1,530	N/A	30	N/A	3,074
Missing/DK	N/A	*	4	N/A	*	-	N/A	*	N/A	4
Wealth index quintiles										
Poorest	N/A	14.9	1,574	N/A	6.5	1,556	N/A	10.7	N/A	3,131
Second	N/A	19.7	1,534	N/A	11.2	1,495	N/A	15.5	N/A	3,030
Middle	N/A	23.5	1,495	N/A	19.9	1,392	N/A	21.8	N/A	2,887
Fourth	N/A	34.6	1,487	N/A	33	1,383	N/A	34	N/A	2,870
Richest	N/A	55.6	1,332	N/A	52	1,287	N/A	54	N/A	2,619
Total	N/A	28.9	7,423	N/A	23	7,113	N/A	26.2	N/A	14,537

[1] MICS indicator 7.4; MDG indicator 2.1
(*): Figures based on unweighted cases < 25
N/A: Not available

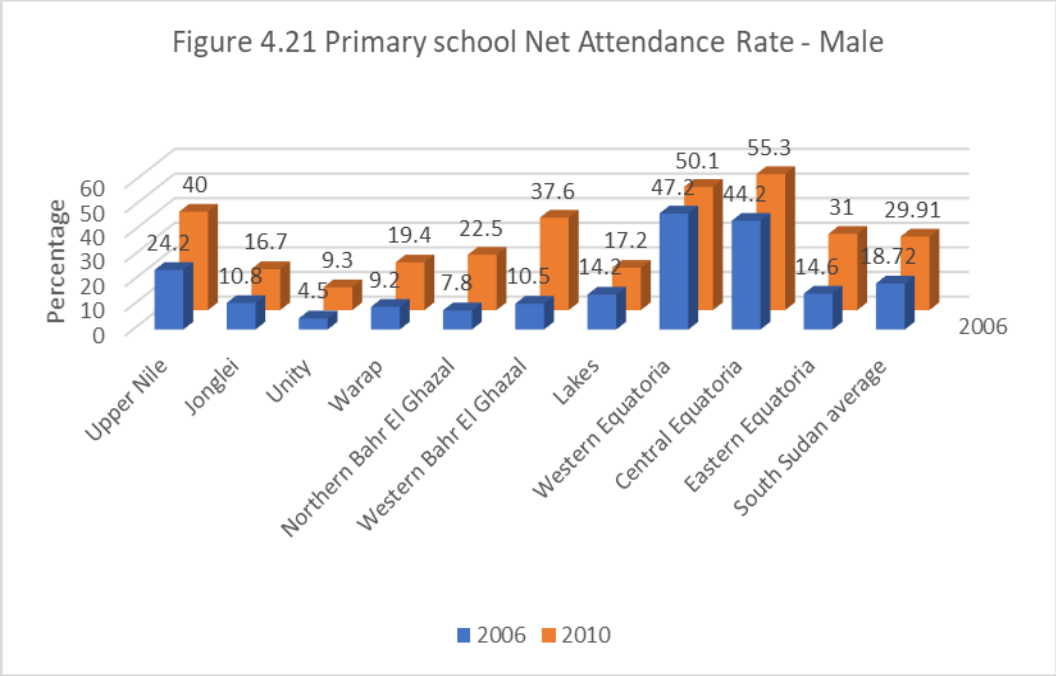
Source: Ministry of Health and National Bureau of Statistics (2010)

Ministry of Health (2006)

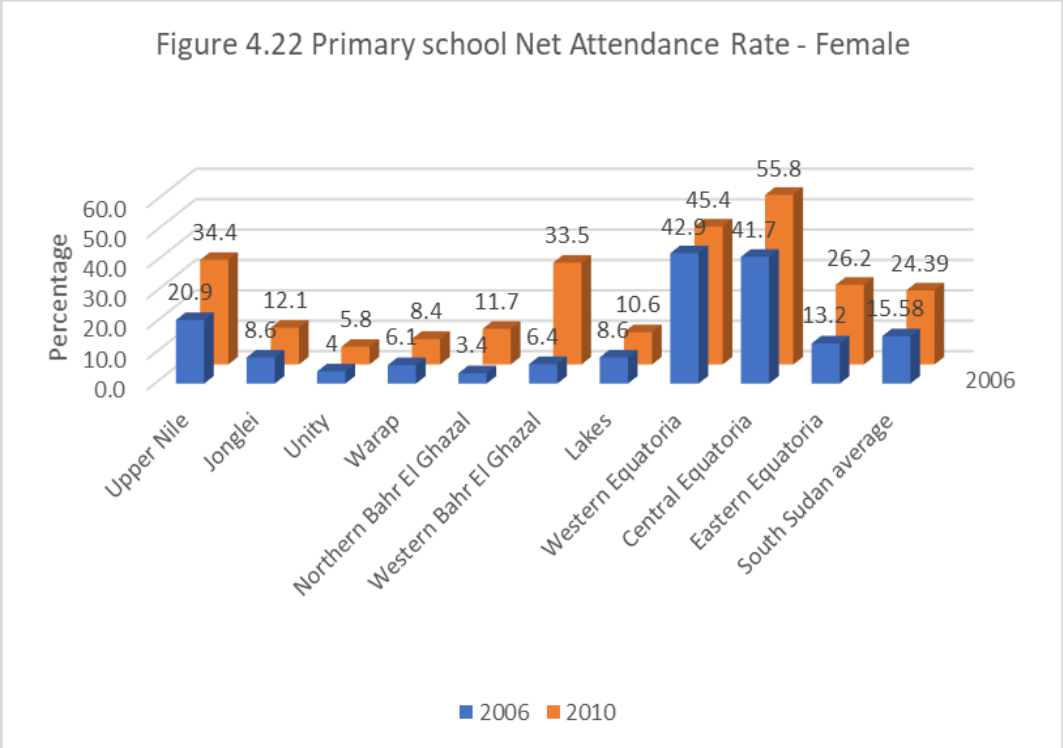
From the data above, total NAR for the entire South Sudan being 26% in 2010 is very poor as it shows that maximum of 3 out of 10 pupils qualified to attend primary school went and 2006 figures, though unclear, shows that 2 pupils or less out of 10 attended primary school at the national level. Although with a slight difference, male children attended school more than their female counterparts in both 2006 and 2010 because the data shows that at the national level NAR was 19% in 2006 whilst it was 16% for female children and the difference was a little higher in 2010 with NAR of 30% for male pupils and 24% for the females based on the computed averages. Interestingly, it seems the amount of wealth possessed by families contributes to the primary school attendance of their wards since 6 out of every 10 pupils from the richest 20% in the society attended school in 2010.

For further analysis, see figures 4.21-26 which represent in bar charts the primary school NAR for male, female and all the pupils. In 2006, Unity, Northern Bahr El Ghazal and Warrap states have the lowest NAR in general with 4%, 6% and 8% attendance rates respectively. Whereas, Western and Central Equatoria states recorded higher NAR of 45% and 43% respectively in the same year. The 2010 survey reveal that there were also improvements on the school attendance of children on state levels as majority of the children in Central Equatoria attended schools, since the state has a NAR of 56% showing that almost 6 out of 10 eligible children attended primary school. However, no other state recorded that attendance rate, in fact, out of the remaining 9 states 5 of them recorded less than 20% attendance rate.

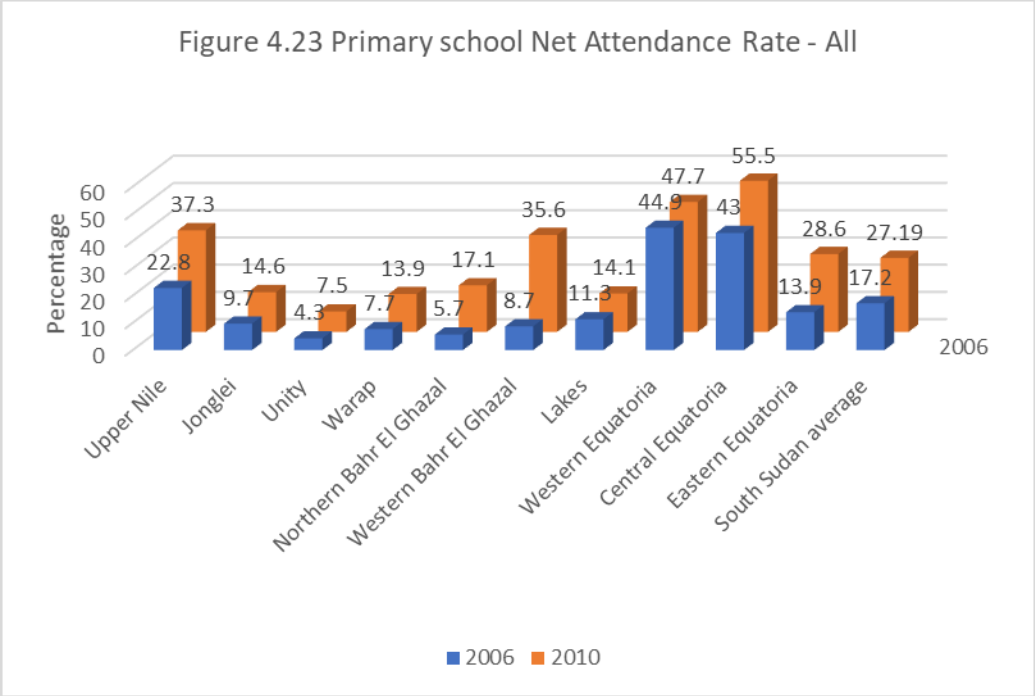
From figure 4.25 & 26, it is possible to see that there exists some observable gender bias in the NAR in all the states as boys have more attendance rates than girls in every state of South Sudan in 2006. In Northern Bahr El Ghazal, boys have more than twice the rate of attendance of girls and there is also a 5%+ margin in the NAR of boys to girls in Lakes state. The trend continues in 2010 where Northern Bahr El Ghazal maintained same difference in NAR between boys and girls and in all the remaining 9 states boys have more attendance rate than girls except in Central Equatoria where girls have 0.05% higher NAR than boys.



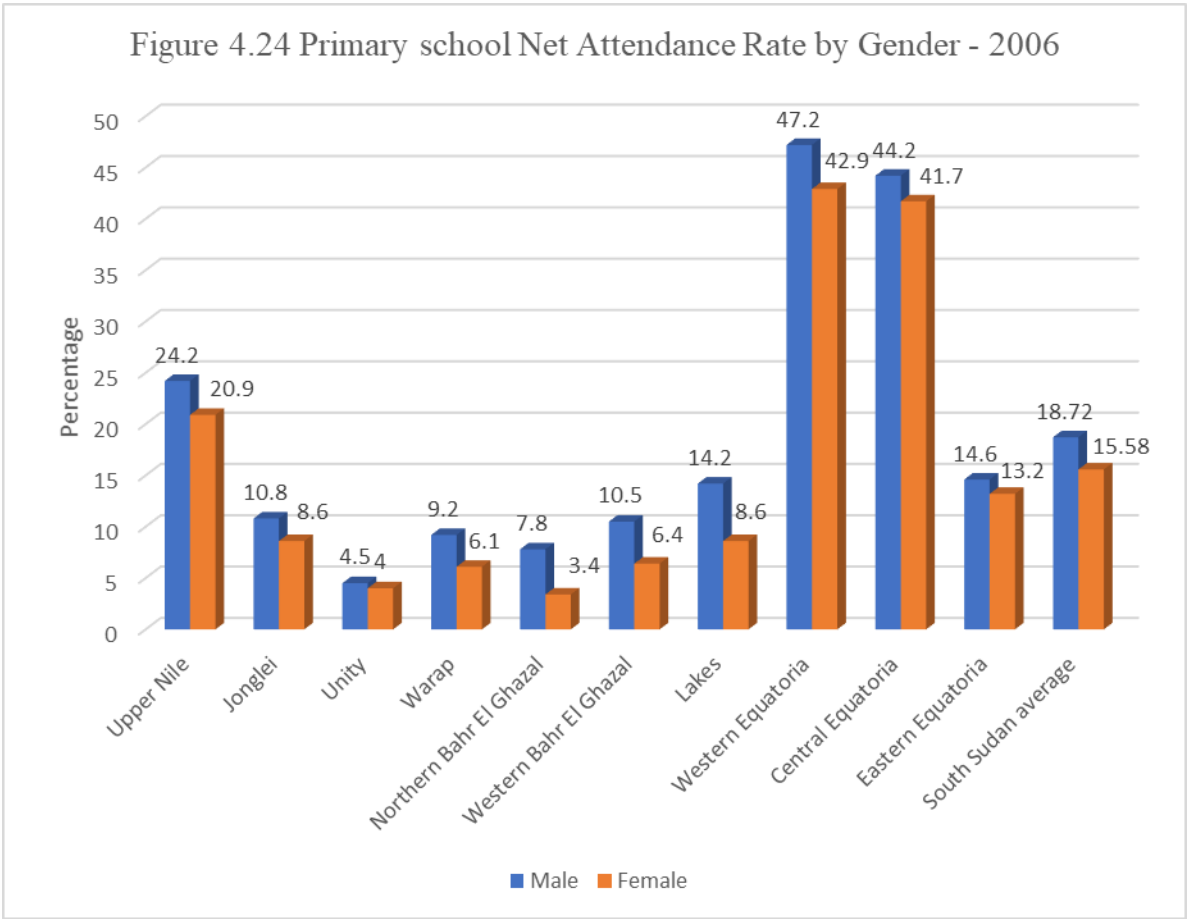
Source: Author



Source: Author



Source: Author



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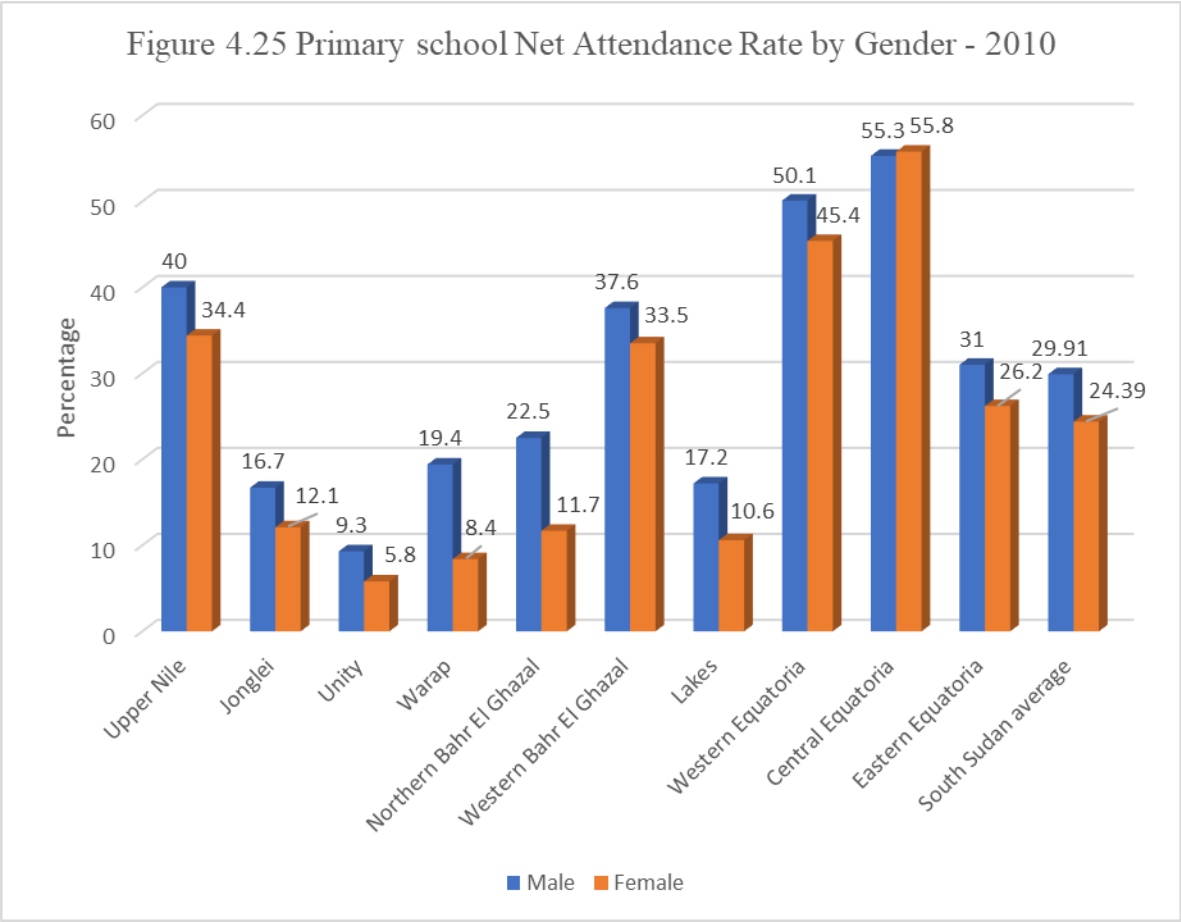


Source: Author

4.3.3 Secondary School Attendance

Table 4.9 below shows data on secondary school attendance captured through the percentage of children of secondary school age attending secondary school or higher – adjusted net attendance rate (ANAR). Like the primary school attendance, the ANAR is the total number of students within the secondary school age group who attended secondary school at least once within the year divided by the population of children who are of secondary school age (UNESCO Institute for statistics, 2019a).

Although there is no data on ANAR for entire South Sudan in 2006, I have estimated the average ANAR based on the states' data to be less than 3% and the 2010 survey data revealed that just 4% of the children of secondary school age attended secondary school in South Sudan. However,

35.8% of the children in this category were in primary school and the rest were out of school. In addition, the nation-wide secondary school attendance was not evenly distributed across the 10 states in 2006 and 2010. Whereas Central Equatoria state recorded attendance o 12% in 2006, 6 states did not have up to 1% attendance. In fact, the attendance in all the other 9 states put together was barely 10%. Unity for example did not record any attendance.

Table 4.9: Secondary School Attendance

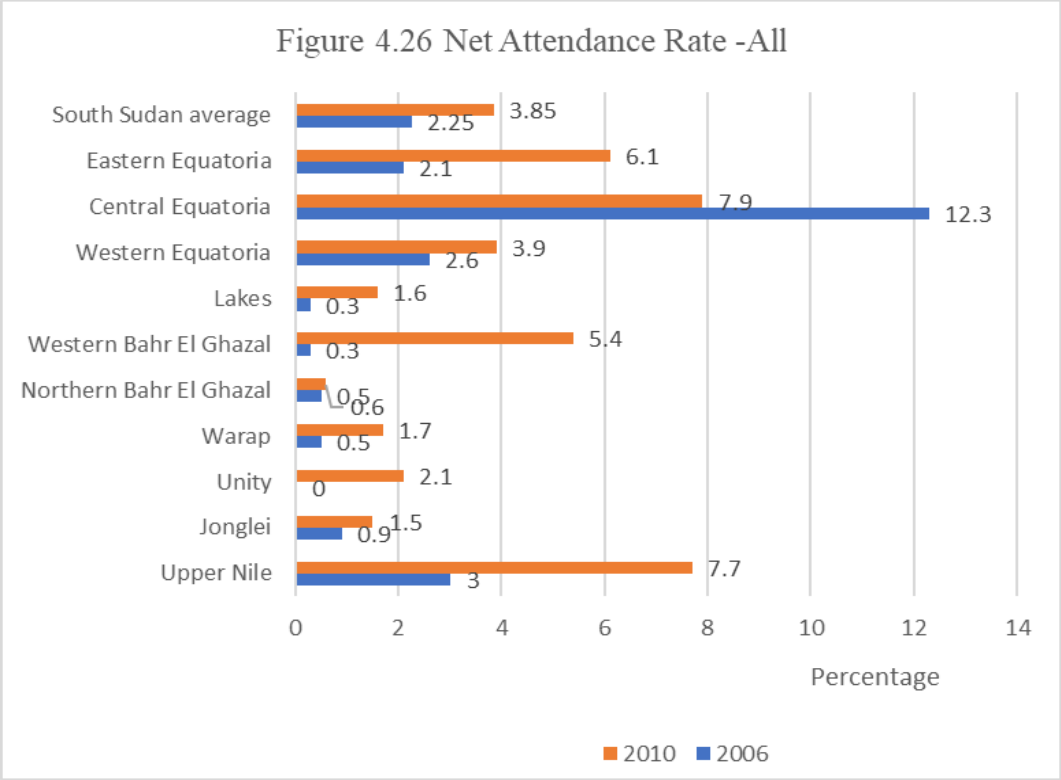
Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance rate), and percentage of children attending primary school, South Sudan, 2006 & 2010

	Male					Female					Total				
	Net attendance rate (adjusted) [1]		Percent attending primary school	Number of children		Net attendance rate (adjusted) [1]		Percent attending primary school	Number of children		Net attendance rate (adjusted) [1]		Percent attending primary school	Number of children	
State	2006	2010	2010	2006	2010	2006	2010	2010	2006	2010	2006	2010	2010	2006	2010
Upper Nile	4.8	8.8	45.2	25,388	142	0	6.7	35.5	14,647	160	3	7.7	40.1	40,035	302
Jonglei	0.5	2.9	33.8	50,135	102	1.7	0	18.6	27,223	100	0.9	1.5	26.3	77,358	202
Unity	0	4.2	22.2	17,395	80	0	0	14.1	11,278	80	0	2.1	18.1	28,674	161
Warap	0.9	4.4	36.7	54,495	123	0	0	14.7	36,900	187	0.5	1.7	23.4	91,395	309
Northern Bahr El Ghazal	0.4	1.4	30.4	52,751	68	0.6	0	17.7	42,343	101	0.5	0.6	22.8	95,094	170
Western Bahr El Ghazal	0.5	3.4	50.5	15,131	35	0	7	34	10,457	40	0.3	5.4	41.7	25,588	75
Lakes	0.6	4.2	37.3	24,187	56	0	0	20.3	16,796	93	0.3	1.6	26.6	40,983	149
Western Equatoria	2.4	4.7	61.3	25,876	89	2.9	3.2	44	16,924	89	2.6	3.9	52.6	42,800	178
Central Equatoria	16.1	10.4	57.2	39,687	233	6.6	4.5	54.3	27,223	171	12.3	7.9	55.9	66,911	404
Eastern Equatoria	1.4	7.3	34.5	24,814	140	2.9	5	32.7	23,772	148	2.1	6.1	33.6	48,586	288
South Sudan average	2.76	5.17	40.91	32,986	107	1.47	2.64	28.59	22,756	117	2.25	3.85	34.11	55,742	224
Residence															
Urban	N/A	10.7	51.9	N/A	310	N/A	5	46	N/A	307	N/A	7.7	48.9	N/A	617
Rural	N/A	4.5	39	N/A	757	N/A	2	24	N/A	863	N/A	3.2	30.8	N/A	1,620
Age at the beginning of															
14	N/A	3	43.5	N/A	404	N/A	1	32.3	N/A	467	N/A	1.9	37.5	N/A	871
15	N/A	4.8	43.3	N/A	365	N/A	2.7	29	N/A	384	N/A	3.7	35.9	N/A	749
16	N/A	12.7	41.1	N/A	298	N/A	5.1	26.1	N/A	319	N/A	8.8	33.3	N/A	617
Mother's Education															
None	N/A	0.3	0.3	N/A	306	N/A	0.3	0.1	N/A	413	N/A	0.3	0.2	N/A	719
Primary	N/A	0.3	78.8	N/A	393	N/A	0	72.1	N/A	332	N/A	0.2	75.7	N/A	724
Secondary	N/A	65.6	14.4	N/A	73	N/A	-52.1	-22.3	N/A	36	N/A	61.1	17.1	N/A	109
Mother not in household	N/A	5.9	45.9	N/A	296	N/A	2.9	25	N/A	389	N/A	4.2	34.1	N/A	685
Wealth index quintiles															
Poorest	N/A	3.3	20.1	N/A	188	N/A	0	13	N/A	198	N/A	1.6	16.4	N/A	386
Second	N/A	0.5	26.1	N/A	159	N/A	0.9	19.9	N/A	224	N/A	0.7	22.5	N/A	384
Middle	N/A	3.8	40.2	N/A	189	N/A	1.9	22.4	N/A	237	N/A	2.7	30.3	N/A	426
Fourth	N/A	5.4	57.3	N/A	244	N/A	2	36	N/A	212	N/A	4	47	N/A	456
Richest	N/A	13.9	56.1	N/A	288	N/A	7	49	N/A	298	N/A	10	52	N/A	586
Total	N/A	6.3	42.7	N/A	1,068	N/A	3	30	N/A	####	N/A	4.4	35.8	N/A	2,237

[1] MICS indicator 7.4; MDG indicator 2.1
(*): Figures based on unweighted cases < 25
N/A: Not available

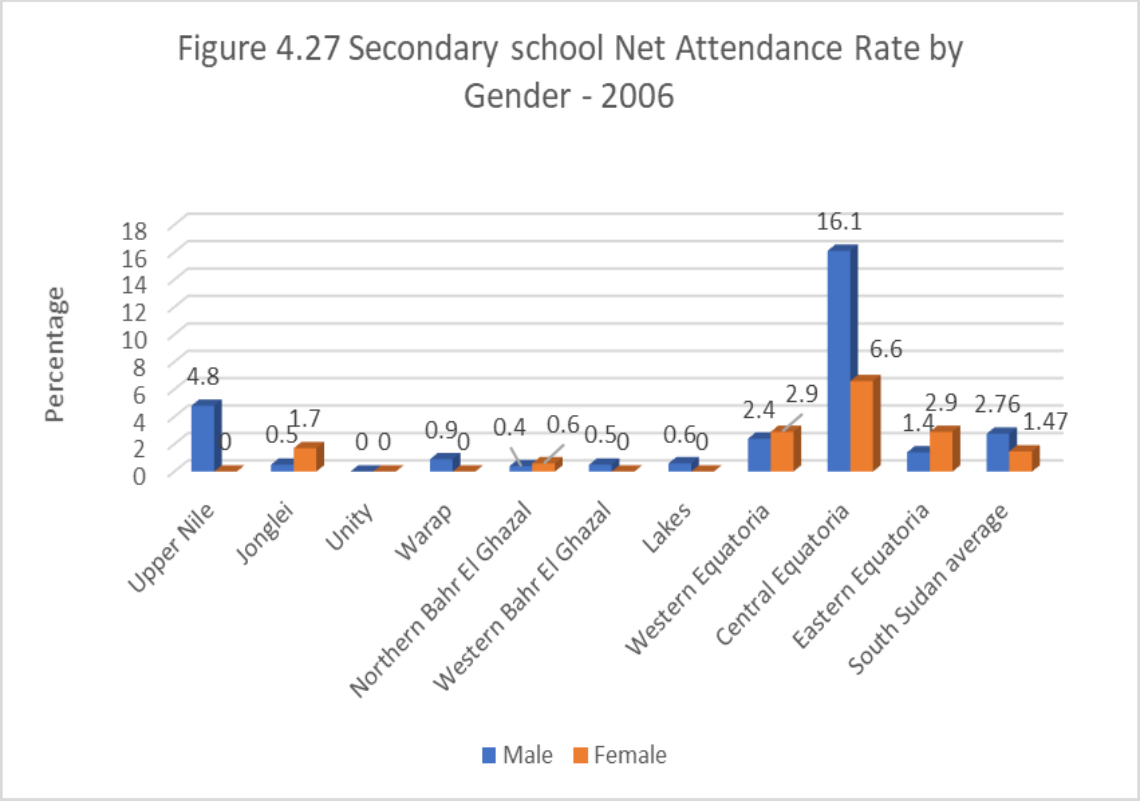
Source: Ministry of Health and National Bureau of Statistics (2010)
Ministry of Health (2006)

Other variations in school attendance exist across the categories of residence, gender and wealth class. Figures 4.26-28 are bar charts that help to analyse the data further. From figure 4.26 Northern Bahr El Ghazal (0.6%), Jonglei (1.5%), Lakes (1.6%), Warrap (1.7%), Unity (2.1%) and Western Equatoria (3.9%) had the lowest secondary school attendance in 2010.

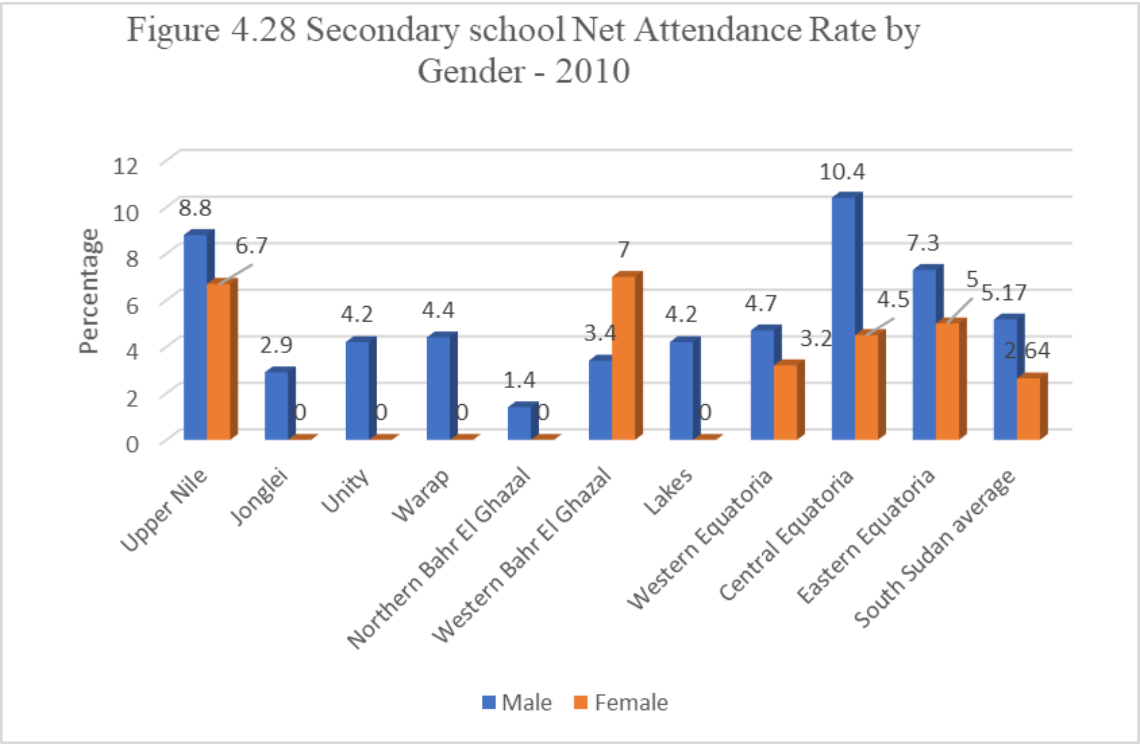


Source: Author

With respect to gender, figure 4.27 reveals that in 2006 16% of the boys in Central Equatoria attended school compared to 7% of their female counterpart. Albeit, this is the best school attendance result in 2006 across the 10 states in South Sudan. Girls in Upper Nile, Unity, Warrap, Western Bahr El Ghazal and Lakes states did not attend school in 2006. In the same year, it appears that more girls attended secondary schools in Jonglei, Northern Bahr El Ghazal, and Western Equatoria, but when the absolute figures in terms of number of girls that attended secondary schools in those three states and their male counterparts in Central Equatoria, one can clearly see the difference. This is a typical example of unequal distribution of opportunities across the country with a huge gender bias. Also, from figure 4.28, secondary school net attendance rate was highest among the boys in Central Equatoria (10%), followed by Upper Nile (9%) but the girls in same states recorded 4.5% and 6.7% respectively in 2010. Meanwhile, the girls in Jonglei, Unity, Warrap, Northern Bahr El Ghazal and Lakes states did not attend school at all but at least 1 out of 10 of their male counterparts were in school.



Source: Author



Source: Author

4.3.4 Education Gender Parity

Table 4.10 below shows data on ratio of adjusted net attendance ratios of girls to boys in primary and secondary schools throughout South Sudan in 2006 and 2010. Education gender parity measures the proportion of girls to boys attending primary school and this also known as the Gender Parity Index (GPI) (Ministry of Health, 2006).

Table 4.10: Education Gender Parity
Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary schools, South Sudan, 2006 & 2010

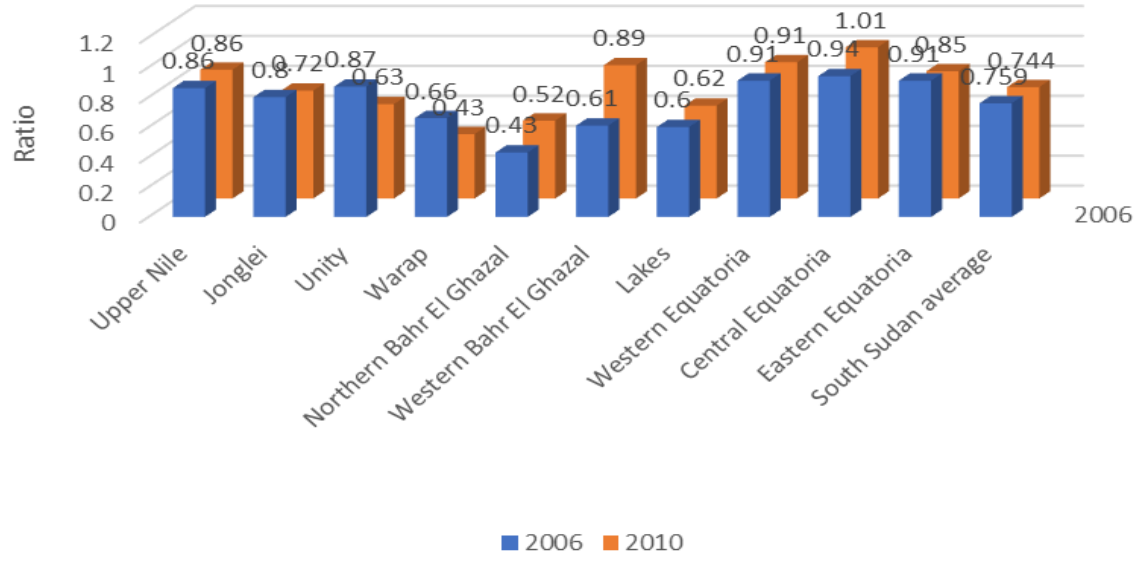
	Primary school adjusted net attendance rate (NAR), girls		Primary school adjusted net attendance rate (NAR), boys		Gender parity index (GPI) for primary school adjusted NAR [1]		Secondary school adjusted net attendance rate (NAR), girls	Secondary school adjusted net attendance rate (NAR), boys	Gender parity index (GPI) for secondary school adjusted NAR [2]
State	2006	2010	2006	2010	2006	2010	2010	2010	2010
Upper Nile	20.9	34.4	24.2	40	0.86	0.86	6.7	8.8	0.77
Jonglei	8.6	12.1	10.8	16.7	0.8	0.72	0	2.9	0
Unity	4	5.8	4.5	9.3	0.87	0.63	0	4.2	0
Warap	6.1	8.4	9.2	19.4	0.66	0.43	0	4.4	0
Northern Bahr El Ghazal	3.4	11.7	7.8	22.5	0.43	0.52	0	1.4	0
Western Bahr El Ghazal	6.4	33.5	10.5	37.6	0.61	0.89	7	3.4	2.05
Lakes	8.6	10.6	14.2	17.2	0.6	0.62	0	4.2	0
Western Equatoria	42.9	45.4	47.2	50.1	0.91	0.91	3.2	4.7	0.68
Central Equatoria	41.7	55.8	44.2	55.3	0.94	1.01	4.5	10.4	0.43
Eastern Equatoria	13.2	26.2	14.6	31	0.91	0.85	5	7.3	0.69
South Sudan average	15.58	24.39	18.72	29.91	0.759	0.744	2.64	5.17	0.462
Residence									
Urban	N/A	41	N/A	45.2	N/A	0.91	4.7	10.7	0.44
Rural	N/A	17.9	N/A	23.9	N/A	0.75	2	4.5	0.44
Mother's Education									
None	N/A	0.1	N/A	0.2	N/A	0.33	0.3	0.3	1.27
Primary	N/A	79.8	N/A	81.5	N/A	0.98	0	0.3	0
Secondary	N/A	75.4	N/A	79.9	N/A	0.94	(52.1)	65.6	(0.8)
Mother not in household	N/A	28	N/A	31.3	N/A	0.89	2.9	5.9	0.49
Wealth index quintiles									
Poorest	N/A	6.5	N/A	14.9	N/A	0.44	0	3.3	0
Second	N/A	11.2	N/A	19.7	N/A	0.57	0.9	0.5	1.87
Middle	N/A	19.9	N/A	23.5	N/A	0.85	1.9	3.8	0.49
Fourth	N/A	32.6	N/A	34.6	N/A	0.94	2.40	5.40	0.44
Richest	N/A	51.7	N/A	55.6	N/A	0.93	6.70	13.90	0.48
Total	N/A	23.4	N/A	28.9	N/A	0.81	2.7	6.3	0.43

[1] MICS indicator 7.9; MDG indicator 3.1
[2] MICS indicator 7.10; MDG indicator 3.1
( ): Based on 25-49 unweighted cases
N/A: Not available

Source: Ministry of Health and National Bureau of Statistics (2010)
Ministry of Health (2006)

Primary school related GPI for South Sudan in 2010 is 0.81 but the 2006 ratio is not available. This shows that girls were disadvantaged compared to boys in terms of access to primary school. Although the Equatoria states were quite close, none of the 10 states achieved gender parity in 2006. However, with GPI of 1.01 in 2010, Central Equatoria is the only state that has achieved gender parity in access to primary school. As at 2010, gender disparity for primary school adjusted NAR is more obvious in Warrap and Northern Bahr El Ghazal where GPI is 0.43 and 0.52, respectively. Also, there is more primary school attendance gender disparity in rural areas than found in urban areas. And girls are more disadvantaged when their mothers/caretakers have no education compared to when they have at least primary education. Gender parity also increases with household wealth as it is observed that GPI increased from 0.44 in the poorest households to 0.93 in the richest households. See figure 4.29 below for more pictorial analysis.

Figure 4.29 Gender Parity Index for Primary School Adjusted Net Attendance Rate



Source: Author

With regards to the same index in secondary schools, the study generally shows that the country-wide GPI for secondary schools is 0.43 which is significantly lower than observed in primary

schools. There is no difference in the index for both urban and rural areas as it stands at 0.44. However, there are observable differences across states, mother's educational levels and wealth index quintiles. The GPI is 0.00 in Jonglei, Unity, Warrap, Northern Bahr El Ghazal and Lakes states whereas it 2.05 in Western Bahr El Ghazal and 0.43 in Central Equatoria.

4.3.5 Adult Literacy

Table 4.11 below shows results from the surveys on percentage of literate women in South Sudan who are within the age bracket of 15 – 24. Adult literacy is the proportion of the population aged 15 years or more who can read and write with understanding a short simple statement in their daily life (UNESCO Institute for Statistics, 2019b). The results of this part of the surveys are based only on females aged 15-24 because only the women's questionnaires were administered (Ministry of Health & National Bureau of Statistics, 2010).

For the entire South Sudan, the percentage of women aged 15-24 who are literate is 13.2. the indicator is worse in 2006 than 2010 because more illiterate women were found in 2006. For example, there were no literate women in Warrap, Northern Bahr El Ghazal, and Lakes in the first survey but subsequent one in 2010 revealed 4%, 5% and 8% literacy among women in the respective states. Central Equatoria and Upper Nile states had the highest percentage of literate women between the ages of 15 – 24 years in 2010 having recorded 28% and 22% in the respective states. Women in urban areas have relatively higher literacy rate than those in the rural areas. Whilst all the women with secondary and higher education could read and write short sentences on their regular days, only 24% of women with primary education had this capacity. Finally, the 2010 survey finds that the higher the family wealth, the higher a woman's literacy in South Sudan. See figure 4.30 for a pictorial analysis.

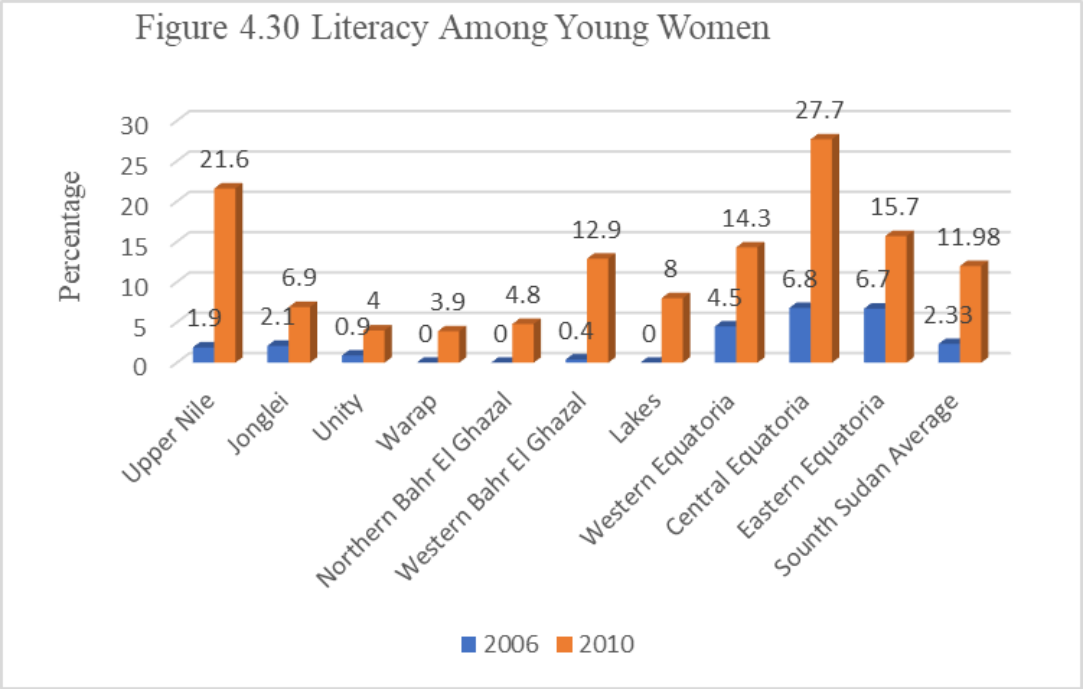
Table 4.11: Literacy Among Young Women
Percentage of women age 15-24 years who are literate, South Sudan, 2006 & 2010

	Percentage literate [1]		Percentage not known		Number of women age 15-24 years	
State	2006	2010	2006	2010	2006	2010
Upper Nile	1.9	21.6	0.0	0	59,744	357
Jonglei	2.1	6.9	0.0	0	88,627	305
Unity	0.9	4	0.0	0.8	30,058	196
Warap	0	3.9	0.0	0.3	111,911	417
Northern Bahr El Ghazal	0	4.8	0.0	0	69,008	256
Western Bahr El Ghazal	0.4	12.9	0.0	2.8	31,907	112
Lakes	0	8	0.0	0.3	48,387	221
Western Equatoria	4.5	14.3	0.0	0.4	58,975	266
Central Equatoria	6.8	27.7	0.0	0.8	82,920	469
Eastern Equatoria	6.7	15.7	0.0	0	61,504	335
Sounth Sudan Average	2.33	11.98	0	0.54	64,304	293
Residence						
Urban	N/A	24.4	N/A	0.9	N/A	824
Rural	N/A	8.9	N/A	0.2	N/A	2,109
Education						
None	N/A	0.2	N/A	0.2	N/A	1,893
Primary	N/A	24.3	N/A	0.8	N/A	862
Secondary+	N/A	100	N/A	0	N/A	173
Adult Education / Khalwa / Sunday Education	N/A	*	N/A	*	N/A	5
Age group						
15-19	N/A	15.8	N/A	0.6	N/A	1,344
20-24	N/A	11	N/A	0.2	N/A	1,589
Wealth index quintiles						
Poorest	N/A	4.3	N/A	0.4	N/A	460
Second	N/A	4.9	N/A	0	N/A	502
Middle	N/A	7.2	N/A	0.1	N/A	581
Fourth	N/A	12.2	N/A	0	N/A	604
Richest	N/A	29	N/A	1	N/A	786
Total	N/A	13.2	N/A	0.4	N/A	2,933

[1] MICS indicator 7.1; MDG indicator 2.3
(*): Figures based on unweighted cases < 25
N/A: Not available

Source: Ministry of Health and National Bureau of Statistics (2010)

Ministry of Health (2006)



Source: Author

CHAPTER 5 – DISCUSSIONS

5.0 Introduction

This chapter looks at the pattern of distribution of healthcare and educational services in South Sudan to establish the dimensions of socio-economic and political marginalization experienced by different ethnic groups across the ten states of South Sudan. This will help to explain how the distribution pattern could have increased the threats to human security and reduced human development of the country. Further discussion and analyses on the distribution of education and healthcare services across the states of South Sudan reveals whether there are possible gender bias as well. The background of the discussions here is the findings earlier reported in the previous section.

5.1 Distribution of Socio-economic Welfare services in South Sudan

For the purpose of this paper and due to limitation posed by data availability, healthcare and education are the possible socio-economic welfare services that shall be discussed. More so, to answer the research questions, especially those bothering on marginalisation, there is a need for some robust dataset that contains country-wide assessment on relevant indicators. To this end, I shall further highlight the implications of the data presented so far.

5.2 Distribution of Healthcare services in South Sudan

Rather than counting the number and locations of healthcare facilities as a measure of the distribution of healthcare service, for the purpose of this study, health outcomes and or indicators are chosen as measure of the distribution of healthcare services in South Sudan. These healthcare outcomes/indicators include: Early childhood mortality rate; nutrition status of children; immunization; malaria -insecticide treated net and; antenatal care provider. These will further be discussed in subsequent sub-sections.

5.2.1 Early Childhood Mortality Rate (ECMR)

From the results of the surveys of 2006 and 2010, I find that healthcare services were not evenly distributed among the children in South Sudan across the 10 states. Although the ECMR indicators

show a very poor state of health services to the children generally, but children in some states enjoyed better health than others. For example, neonatal mortality rate is highest in Northern Bahr El Ghazal at 78% in 2010 followed by Central Equatoria where 76% neonatal mortality rate was recorded. Bashir, Ibrahim, Bashier, and Adam (2013) find that neonatal mortality correlates with male babies, family wealth index, pattern of child delivery (whether naturally or through Caesarean session) and advanced maternal age after analyzing the SHHS2 data. And neonatal mortality shows poor living conditions and poor nutrition as chances of dying is increased with even mild malnutrition in children within their first 30 days of life (Michaelsen et al., 2000). Recall that the livelihood of the South Sudanese was at this time affected greatly by the civil war despite the comprehensive peace agreement signed in 2005. This explains why under-five children born in such a time had a narrow chance of survival. In fact, Mugo, Agho, Zwi, Damundu, and Dibley (2018) find that beside high risk of death faced by the under-five children living in war-torn countries, unavailability of healthcare facilities and economic situation of the family reduces the survival of under-five children.

In addition, the analysis of SHHS2 indicates that infant and under-five mortality rates in 2010 was very high in Northern Bahr El Ghazal, Central and Eastern Equatoria states which reveals that children who lived in these states faced harsh health conditions in their first 365 days in life. According to Mahfouz, Surur, Ajak, and Eldawi (2009) immunisation is crucial to the health of children under the age of five but SHHS2 reveals that 56% of the children in Northern Bahr El Ghazal and 46% of those in Eastern Equatoria states received no vaccination against childhood diseases in 2010 and higher percentage of them did not receive also in 2006 according to the SHHS1. Then, it is not strange that infant and under-five mortality rates are higher in these states relative to others.

5.2.2 Nutrition

According to the findings in SHHS1 and SHHS2 on nutrition, children in Unity and Eastern Equatoria states were severely underweight and more stunted in 2006 and 2010 compared to others in the remaining 8 states of the country. Generally, it is observed that the incidence of malnutrition is disproportionately experienced according to state, wealth of family and education of the mother. So, children from the poorest groups as well as those whose mothers have only primary or no

education suffer more from malnutrition than others. The spate of malnutrition prevalent in South Sudan, albeit disproportionately across the 10 states, was compounded by the decades of civil war which engendered food insecurity in the country (Paul, Doocy, Tappis, & Evelyn, 2014). Of course, with the incidents of civil crises, it is impossible for anyone to cultivate crops and crops that survived until the time of harvest might be insufficient for available mouths to satisfy. Women and children are mostly at the receiving ends of this problems especially pregnant and nursing mothers. The crises create scarcity of traditional biomass such as fuelwood, charcoal and so on which are sort after by women for the preparation of food (Thulstrup & Henry, 2015). Without adequate supply women are exposed to more danger of molestation and sexual abuse when they go into deeper parts of the forest in search for the fuelwood. Alternatively, they use available resources thereby undercooking the food which result into poor diet for the family mostly affecting the children. Thus, malnutrition, whether mild or moderate, combined with some diseases like pneumonia, malaria, diarrheal and other preventable diseases are easily traceable to child mortality (Michaelsen et al., 2000; Rai, Ramadhan, & Tulchinsky, 2012). However, the unevenness of spread of malnutrition across the 10 states shows that effect of the crises on the states and the people therein was equally skewed. In fact, food insecurity is inevitable in areas severely affected by violence and or those places that experience influx of refugees because of scarcity of farm produce, inability to grow crops and inadequate supply of ready-to-eat food materials often supplied by aid agencies (Thulstrup & Henry, 2015). These factors coupled with environmental issues due to the geographical location of South Sudan and the constituent states contribute immensely as sources of threats to food security experienced by the people. For example, African Development Bank Group (AfDB) claims that the state of Western Equatoria and the highland parts of Eastern Equatoria experience the greatest amount of rainfall, while the lowland areas of Eastern Equatoria, Jonglei, Upper Nile and Bahr el Ghazal experience relatively lower amount and the south-eastern tip of Eastern Equatoria receives the least rainfall (AfDB, 2013). This has grave implications on food production and availability of biomass for food processing and supports in other areas of livelihood. As Paul et al. (2014) suggest, the distribution of supplementary household rations through food assistance programme is not enough to effectively supplement the diets of young children and pregnant women in particular.

Based on IPC (2019) acute malnutrition projection, there is likely going to be acute food crisis in South Sudan which will be affecting about 6.9 million people (the number of people in need after considering the effects of planned, funded and likely to be delivered humanitarian food assistance) out of which an estimated 1.82 million people will face emergency acute food insecurity and 21,000 are likely to be in Catastrophe. According to this report, majority of the people who are food insecure are found in the former Jonglei state followed by Unity state then some counties in few other states. This is the extent to which the food insecurity enhanced by multiple conflicts - past and present -have grown.

5.2.3 Immunisation and Malaria -Insecticide Treated Nets (ITN)

Again, the findings show that majority of the children in all the states did not receive any vaccine in 2006 and 2010 except few of those in Central Equatoria state.

5.2.4 Antenatal Care Provider

Majority of the women in all the states of South Sudan except Central and Western Equatoria states did not receive any antenatal care during their pregnancy period in the last two years preceding 2006 and 2010 according to the SHHS1 and SHHS2.

5.3 Distribution of Education in South Sudan

Even though education is free at primary and secondary school levels in South Sudan, majority of adults and children have not had any opportunity to attend school due to decades of civil war (Ministry of general education andinstruction, 2019). Not only is this currently true but also part of the findings in this study is that school entrance and attendance at both primary and secondary levels are very poor and unequally distributed in 2006 and 2010 for the entire country as well as across the states. For instance, only 7% and 12% of the primary school age children were able to enrol for primary education in the whole country in 2006 and 2010 respectively. And whereas, there is up to 30% enrolment in Central Equatoria state, the states of Lakes, Unity and Warrap recorded primary school attendance of only 2.4%, 2.6% and 4% respectively showing inequality in school participation. In addition, there is disparity in school primary and secondary school attendance across states and gender. In fact, more boys went to primary and secondary schools in

all states and it is more obvious in Northern Bahr El Ghazal and Warrap states. This is corroborated by similar findings by Novelli et al. (2016) that there exist evident patterns of inequality in educational access, resources, and outcomes in South Sudan.

There are some empirical evidences that countries with little education and by extension reduced economic opportunities especially those with higher concentration of young people (like South Sudan) are breeding grounds for conflict (Collier, 2000). More so, Breidlid (2013) concluded that provision of unequal access to education was one of the major factors that resulted into the conflict in Sudan as well as provision of education that was inconsiderate of the difference in cultural and religious backgrounds. This partly explains the ideology upon which warring parties in the new country of South Sudan base their grievances especially amidst inequality or a mere perception of it. They are either less informed or completely ignorant of how a society should operate since the civil war has been ongoing for many years and for some people, the war has been on for as long as they are alive. As Collier and Hoeffler (2004) posit, severe grievances such as high inequality, lack of political rights, or ethnic and religious divisions in society degenerates into rebellion. In fact, some South Sudanese may never know or understand what peace feels like or how a normal society operates. Thus, rebuilding schools, recruiting teachers and enrolling pupils have been found helpful in reducing the causes of conflict (Collier, 2006). More so, Aladeokin (2016) finds that the traditional roles of children and youth in post-conflict peacebuilding has to be re-interpreted such that there is some innovation in engaging young people to play more active roles in peacebuilding. I perceive that the best starting point is by enrolling young people in school activities and ensuring these opportunities are evenly available across all states in the country. Unfortunately, this has not been the case in South Sudan as some states have low secondary school attendance whilst states like Jonglei, Unity, Warrap, Northern Bahr El Ghazal and Lakes do not have any female secondary school student. Having only boys in school, could, on its own, be a problem as some individuals find schools as a means of indoctrinating students and or disseminating military trainings to young minds (Sommers, 2002; Vriens, 2003). Thus, not only should equal distribution of education opportunities be made available across the states but also providers of this social service, like the South Sudan ministry of general education and instruction, must ensure equal distribution/participation across gender. If possible, legislation can be used for ensuring this objective is achieved such that parents/guardians are compelled to ensure their wards attend school.

5.4 Violent Conflicts and Marginalisation in South Sudan

Borrowing from the thoughts of Wallensteen and Axell (1994), I earlier established that there has been war in South Sudan even though it is the newest country in the world. In this paper, I refer to this war as violent conflict. Also, based on the findings in this study, there has been a noticeable level of unequal development across the states of South Sudan which is also observed across gender, class and ethnicity. This is what (Mehretu et al., 2000) described as socio-economic marginality. It is noteworthy however, that whilst some counties, ethnic groups and or states suffer spatial marginalisation due to their physical location, others may have simply suffered societal marginalisation. For example, South Sudan as a country has suffered from many years of socio-economic and political marginalisation from the hands of its previous administrators in Khartoum, Northern Sudan when they provided minimal and "unwanted" education to the people of the South (Deng, 2003). According to the theory of marginality earlier reviewed and as found in Mehretu et al. (2000), the South Sudan-Sudan experience is a typical example of systemic marginality which operated on the plane of positional polarity. In fact, Deng (2003) and Novelli et al. (2016) further revealed that the Sudanese government simply follow the pathway created by the British colonialists who favoured the northern people over the southerners by subjecting them to socio-economic exclusion and marginalisation in pursuit of their divide-and-rule strategy of breaking the people in their colonies. So, the British polarised the country by placing the Northern Sudanese on a higher playing field by giving them more access to socio-economic and political power. Recent data also reveals that there has been spatial marginalisation which can also be dubbed educational inequality within South Sudan even after the CPA has been signed. This spatial marginalisation is noticed in states with the highest occurrence of conflict events like Unity, Lakes, Northern Bahr El Ghazal, Warrap and Jonglei as they have the lowest provision of educational resources and the lowest percentage of students in primary school, which shows the relationship between the occurrence of conflict and inequalities in educational resources and outcomes (Ministry of general education and instruction, 2017).

5.5 Dimensions of the Threats to Human Security Triggered by Violent Conflicts

So far, the discussion has hovered around the distribution of healthcare services and education in South Sudan based on the findings in the previous section. Suffice to say that healthcare services and education are typical socio-economic welfare services through which people's choices and freedom can be widened based on the argument put forward by Mahbub ul Haq (UNDP, 1994). One of Mahbub's favourite quotes says "The real wealth of a nation is its people. And the purpose of development is to create an enabling environment for people to enjoy long, healthy, and creative lives…"(AZquotes, 2019). This means that investment in healthcare services and education is both relevant and sufficient conditions for human development and building the capacity of the people in a country. It is then not a surprise that countries that heavily invest in providing education and healthcare services for their citizens are continuously prosperous and regarded as developed whilst those that do otherwise are not only referred to as developing but also poor and crises ridden countries. However, ensuring human security in addition to targeting human development became important at some point to protect people against the threat to the opportunities created through human development efforts. This is one of the reasons why it was not enough for the government of South Sudan to merely create development plans, programmes and policies in order to achieve human development in the country. In addition to these programmes, there should be a deliberate people-centered agenda which translates to safety from enduring threats like hunger, disease and repression as well as protection from sudden and painful disruptions of livelihood especially in jobs, homes and communities. In this sense, the government of South Sudan would put the interest and security of its people above any personal interest of the leadership. In fact, this is why the human security commission focus on a human security agenda that can achieve human development by ensuring that human beings, who are assumably at the centre of security efforts, thrive in every area of their lives including economic, social and political (Ogata & Sen, 2003).

It proven beyond doubt therefore that the people of South Sudan have suffered different dimensions of threats and violation of their human security including economic, food, health, personal, community, environmental and political. This is evident in the abject poverty that is prevalent in the land from the very beginning of the existence of the country. In recognition of the threat to South Sudan's economic insecurity, the Secretary General of The United Nations, Ban Ki-moon said penultimate to the inauguration of the country's independence "On the day of its

birth, South Sudan will rank near the bottom of all recognized human development indices. The statistics are truly humbling. It has the world's highest maternal mortality rate. Estimates of illiteracy among the female population exceed 80 percent. More than half of its people must feed, clothe and shelter themselves on less than a dollar a day" (Ki-moon, 2011). Unfortunately, the young country's celebration of independence was short-lived as conflict erupted on December 2013 at the state capital and until today the country has not truly known peace despite several intervention by global organisations and neighbouring countries to broker peace among aggrieved parties.

CHAPTER 6 – CONCLUSION

This study attempts to ascertain the dimensions of the socio-economic and political marginalisation experienced by different ethnic groups in South Sudan thereby explaining how this could have increased the threats to human security and reduced human development of the country. Human security within the framework of this study is viewed as any security agenda that is people-oriented and geared towards ascertaining human development. In this study, there is a complete departure from the common state-focused security which used to be centred on acquisition of weapons and hardware for fighting or "protecting" the people or the country's territory. Also established in this study is the idea that violent conflicts are mostly capable of undoing every achievement towards ensuring people's freedom and capacity to do more with their lives. More so, pursing human security will engender human development and foster peace or at least help prevent violence.

Through its findings, this study establishes that socio-economic and welfare service like education and healthcare services were not equally distributed across the states of South Sudan in 2006 and 2010. Rather, most of the people were deprived of primary and secondary education. Although, for few individuals from wealthy households, education is not a problem. The study also finds that none of the girls who live in states like Warrap, Unity, Jonglei and Northern Bahr El Ghazal attended secondary school education in 2006 and only a few attended in 2010. Thus, it is safe to conclude that there is gender bias in the distribution of educational services to the people in those states. More so, the girls and women experience gender-based violence due to food insecurity prevalent in some most parts of the country in addition to the deprivation they suffer.

Based on the findings and discussions in this study, there has been a noticeable level of unequal development across the states of South Sudan in terms of educational services and health outcomes which is referred to as socio-economic marginality. In addition, there are various threats to human security that the people of South Sudan have suffered which include economic, food, health, personal, community, environmental and political. One of the major sources of these levels of human insecurity is the violent conflict experienced by the people before and after the independence of their country. These violent conflicts lead to the destruction of social amenities like schools and hospital facilities which results in poor educational and health outcomes.

Therefore, it is safe to conclude that violent conflicts in South Sudan unleashes endemic threats on human security of South Sudanese thereby reducing their human development drastically in terms of poor health outcome, almost non-existent educational services and massive food insecurity.

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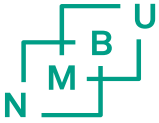

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