

Women's Experiences with Abortion Complications in the Post War Context of South Sudan

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Boston College

William F. Connell School of Nursing

WOMEN'S EXPERIENCES WITH ABORTION COMPLICATIONS IN THE POST WAR
CONTEXT OF SOUTH SUDAN

A dissertation

by

MONICA ADHIAMBO ONYANGO

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2010

Women's experiences with abortion complications in the post war context of South Sudan

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Abstract

For 21 years (1983-2004), the civil war in Sudan concentrated in the South resulting in massive population displacements and human suffering. Following the comprehensive peace agreement in 2005, the government of South Sudan is rebuilding the country's infrastructure. However, the post war South Sudan has some of the worst health indicators, lack of basic services, poor health infrastructure and severe shortage of skilled labor. The maternal mortality ratio for example is 2,054/100,000 live births, currently the highest in the world. Abortion complication leads among causes of admission at the gynecology units.

This research contributes nursing knowledge on reproductive health among populations affected by war. The purpose was to explore the experiences of women with abortion complications in the post war South Sudan. Using qualitative descriptive methodology, in-depth interviews were conducted with 26 women following treatment for abortion complications at the gynecology unit of a county hospital. Data was collected from March 2nd to April 26th, 2008.

Spontaneous abortion was the most common among study participants. Post abortion care was nonexistent at the community level health facilities, but present at the hospital. The women interviewed were reluctant to reflect in-depth about their experiences with abortion complications. They described the process, signs, symptoms and the events that led to the pregnancy loss, and were more concerned about regaining their reproductive function, a societal expectation of a married woman in South Sudan. A female child in South Sudan is assigned a

‘special’ role in the family and community - that of getting married, attracting a high bride wealth paid as dowry to her parents and delivering children for the husband. Arranged and/or forced early marriage is common. A woman’s world view about reproductive health and experiences with abortion complications is therefore influenced by this cultural context.

Implications of these findings include the need to develop the nurse midwifery profession in South Sudan. Nurse midwives can lead in providing gender and culturally sensitive reproductive health services including post abortion care. Plans for care must include opportunities to listen to women’s perspectives.

Dedication

I dedicate this work to my mother Katherine Okungu who loves me unconditionally and to my late uncle Dr. Raphael Onyango who believed in me and gave me a chance by providing for my education.

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CHAPTER 1

Introduction

My first experience with populations affected by armed conflict was in early 1990s while working in South Sudan as a nurse midwife. The poverty levels and human suffering I saw at that time were beyond belief. While practicing in this environment where there had been no health services for several years, what was evident were the large numbers of people with various illnesses, the severity of their illnesses and the lack of medical and public health infrastructure to address the health problems. This is the background for my current work and interest in helping communities that are affected by armed conflict and its consequences.

Populations living in situations of armed conflict are not able to cope with the prevailing conditions and often need outside help provided by various relief agencies. During armed conflict, women and children are significantly at risk of all sorts of exploitation including gender- based violence which in turn places them at risk of various reproductive health morbidities including abortion complications. Moreover, in modern day conflicts, civilians who are not armed combatants are often targets of aggression and as a result bear the greatest burden of war. The factions fighting each other are poorly disciplined and have little or no respect for human rights or associated laws meant to protect rights. Their aim is to perpetuate extreme violence and, intimidation of populations through abductions, torture, mass killings, forced deportation, detention camps and mass rapes (Leaning, Briggs & Chen, 2000). Reasons for these sorts of conflicts and the undue burdens on women and civilians are complex and beyond the scope of this work to address. The nursing profession however, does share interests with other health care professions in seeking to meet the needs of populations who suffer the sequelae of armed conflicts.

Because of our philosophy of caring for individuals, families and communities in need, I believe that nurses are in a good position to be involved with populations affected by armed conflict such as those in South Sudan. Furthermore, nurses are already among interdisciplinary teams providing health care and other basic needs (e.g. water, sanitation, food) among these populations. The plight of populations affected by armed conflict should be of concern to nurses not only at the implementation level but also the policy level. Developing nursing knowledge in various aspects of health among populations in South Sudan for example, is a nursing imperative.

The International Council of Nurses Code of Ethics, which represents nurses from more than 128 countries states that the need for nursing is universal. As nurses we advocate respect for human dignity and the delivery of dignified and humane care. Nurses have the moral responsibility not only to individuals but to address and improve societal contexts that present barriers to good care. Respect for dignity is expected of nurses in their relationships with any human beings and that is why our involvement with these populations is fundamental (International Council of Nurses (ICN), 2005; American Nurses Association (ANA), 2001). This chapter provides the background and discusses the consequences and significance of armed conflict and the situation of South Sudan as a nursing and global health problem.

Background and Significance

By the end of 2008, about 42 million people around the world had fled their homes to escape persecution, armed conflict and violence. Some crossed international borders as refugees and most were internally displaced within the boundaries of their countries (United Nations High Commissioner for Refugees (UNHCR), 2009; Internal Displacement Monitoring Centre (IDMC), 2009). A refugee is defined as “any person who is outside his/her country of origin and

who is unwilling or unable to return there owing to: a well founded fear of being persecuted for reasons of race, religion, nationality, membership in a particular social group, or political opinion; or serious indiscriminate threats to life, physical integrity or freedom resulting from generalized violence or events seriously disturbing public order” (UNHCR, 2007, p.17).

Internally displaced persons (IDPs) are those who have been forced to flee their homes suddenly or unexpectedly in large numbers because of armed conflict, internal strife, generalized violations of human rights or natural disasters, and who are *within* the territory of their own country (Office of the United Nations High Commissioner for Human Rights (OHCHR), 2006; IDMC, 2009).

The majority of recent armed conflicts have occurred within rather than between countries. This change came about most notably at the end of the Cold War when the economic and/or military support which had previously been enjoyed by some developing countries allied to the United States (U.S.) and former Soviet Union (then superpowers), was no longer readily available (Brennan & Nandy, 2001; Leaning, 1999). The situation gave rise to economic and political uncertainties in these countries. Previously held tensions between tribes, religious groups and ethnicities were reignited causing instability, civil strife, violent conflicts and forced population movements (Leaning, Briggs & Chen, 1999). The highest numbers of internal conflicts were recorded between 1991 and 1992 when 49 out of 51 wars occurred within countries (Harbom & Walensteen, 2005).

Some of the countries which have experienced violent conflicts and prominent humanitarian interventions within the last two decades include Liberia, Angola, Sierra Leone, Rwanda, Sudan, Chechnya, Bosnia and Herzegovina (formerly Yugoslavia), Somalia, Sri Lanka, Azerbidjan, Armenia, Democratic Republic of Congo (DRC), Kosovo, East Timor, Afghanistan

and Iraq (Harbom and Walensteen, 2005; Geiger, 2000; Spiegel & Salama, 2000; Leaning, Briggs & Chen, 1999).

In some of the countries including Somalia, Iraq, the DRC, Afghanistan and Chechnya, instability continues to date. In others including Liberia, Rwanda, Sierra Leone, Former Yugoslavia and Sudan, relative peace has been realized, ending years of armed conflict. In South Sudan for example, where the infrastructure was completely destroyed, post war rebuilding has been painfully slow and threatens the already fragile peace agreements. The impact of conflict in such a country affects populations for years after the war ends, making them vulnerable and at risk for many calamities and health problems.

Impact of Armed Conflict on Health

The health consequences experienced by populations affected by armed conflict are generally similar in nature. War-induced displacement is psychologically and physically traumatizing to everyone affected. Populations are rarely prepared for flight and have no time to carry clothes, food or anything which can sustain their lives during displacement. Their search for safety can last for long durations, depending on the nature of war, prevailing geographical conditions and whether the host communities are willing to welcome them. Relatives and family members are separated and some are lost to capture, displacement, and/or death (Toole & Waldman, 1993; Toole, Waldman & Zwi, 2000)

The health effects of armed conflict are described as direct or indirect. The direct effects include injuries (due to landmines, weapons, etc), sexual violence, human rights violations, psychological trauma and death. Indirect effects include food scarcity, population displacement, high levels of morbidity and mortality, infectious disease, complications of chronic disease, reproductive health morbidities, malnutrition and disruption of health services (Toole &

Waldman, 1997; Toole et al., 2000). Populations in South Sudan endured most of the direct and indirect consequences during the 21 years of war. Furthermore, in South Sudan, nurses are not adequately trained and lack most skills necessary to deal with the direct and indirect health consequences of war. In view of this, global nurses have a social responsibility during this post war context to assist in building the capacity of the nursing profession in South Sudan so as to alleviate some of the existing and new health problems.

Sudan

A Brief History

Sudan is the largest country in Africa, bordering Libya and Egypt to the north, Eritrea, Ethiopia, Kenya and Uganda to the east, the DRC in the south, and Central African Republic and Chad in the west. Sudan experienced civil war that lasted for almost 40 years (1956 to 1972; 1983 to 2004). There was a 10 year respite in 1972 after the signing of a peace accord, but the war resumed again in 1983. Sudan was a British colony from 1899 to 1956 when the country achieved independence (IDMC, 2009; Machar, 1995; Jok, 2007). Due to the geographical, historical, and cultural differences between the North and South Sudan, the colonizers devised separate administrative systems and treated the two regions as separate countries. However, the British rulers favored northern Sudan and helped to make the region politically and economically stronger than the Southern part (Machar, 1995; Jok, 2007).

When colonial rule ended in 1956, the political power of the country was handed over to Northern Arab rulers based in Khartoum (Jok, 2007; Machar, 1995). After taking over power, the northern Arab rulers did not seek to redress the inequalities and disparities between regions. They maintained the status quo. The country plunged into a state of political, constitutional, economic and

military crisis which persists to this day. Different rebel groups have taken up arms against the central government based in Khartoum (IDMC, 2009; Machar, 1995). South Sudanese People's Liberation Army/Movement (SPLA/M), led by Dr. John Garang was the main armed opposition group fighting the northern government for 21 years (United States Department of State (USDS), 2007). From 1983-2004, SPLA/M fought what they saw as political marginalization, deliberate regional retardation, lack of socio-economic development, cultural subjugation, imposition of Arabic culture and Islamic values, and abuse of fundamental human rights of South Sudanese people (Jok, 2007; Machar, 1995; USDS, 2007; IDMC, 2009).

After almost four decades of war, peace finally came to South Sudan on January 9th 2005 when a Comprehensive Peace Agreement (CPA) between the central government and the SPLA/M was signed (Government of the Republic of Sudan (GOS) and SPLA/M, 2005). The CPA provided for an autonomous south with its own constitution, government and armed forces. In 2011, a referendum will be held on the final status of the South. The agreement also provided for the inclusion of the SPLM/A in a Government of National Unity. The countries oil wealth is to be shared 50:50 between Khartoum government and GOSS. Each territory has its own flag (GOS and SPLA/M, 2005)

While this CPA created opportunities for the Southerners to secure ministries in the new government, the National Congress Party representing the former Arab-dominated government still controls power structures at the central level. For instance, administrative positions in the central government are to be shared 70:30 in favor of the government in Khartoum (GOS and SPLA/M, 2005)

The Structure of Interim Government of South Sudan.

Following the CPA, the Interim Constitution of South Sudan allows for a decentralized system with four levels of government-State, County, Payams and Bomas (GOS and SPLA/M,

2005, 2005). The Government of National Unity (GONU) is responsible for the administration of northern Sudan states and states of Southern Khordofan (Nuba Mountains), Southern Blue Nile and Abyei. The GOSS is responsible for the administration of an area that covers approximately 640,000 square kilometers of land, ten states and over 90 payams. The ten states include: Western Equatoria, Central Equatoria, Eastern Equatoria, Northern Bahr el Ghazal, Western Bahr el Ghazal, Lakes, Warrap, Jonglei, Unity and Upper Nile (GOS & SPLA/M, 2005).

The On-Going War in Darfur.

As peace negotiations and agreements were being reached between the northern Sudan government and the representatives of SPLA/M, another civil war was raging in the western part of the Country. This started in 2003 when two rebel movements, the Sudanese Liberation Army/Movement (SLA/SLM) and the Justice and Equality Movement (JEM), started an uprising against the Khartoum-led government of Sudan. The rebels claim that the government should address under-development and the political marginalization of their region (Slim, 2004; Gingerich & Leaning, 2004).

In response, the military and the Khartoum government backed tribal militias known as the '*Janjaweed*' started to systematically assault civilians in Darfur. These include the indiscriminate killings, ethnic cleansing, and massacre of males, rape of women and girls, abductions, cattle and property looting (Slim, 2004; Gingerich & Leaning, 2004).

It is estimated that over 400,000 people from Darfur have been killed. More than two million civilians have been forced to flee their homes and are IDPs in camps inside Darfur. Thousands have crossed the border to Chad as refugees (Grandeso, Sanderson, Kruijt, Koene & Brown, 2005; Human Rights Watch (HRW), 2004). Although the Darfur conflict has gained

much attention, international response to stop the violence has been slow. Lack of access and insecurity also hinder effective humanitarian response.

The Darfur conflict has obvious implications for the Southern part of Sudan. Some of the IDPs moved into the Southern region looking for refuge. This has placed additional pressure on the meager resources in the South. The result has been more populations at increased risk of hunger, disease and other calamities

Impacts of War on Population Health in South Sudan

Emerging from decades of war, South Sudan is facing challenges which have direct bearing on health status of the populations in general, including reproductive health. During the 21 year war (1983-2004), the fighting mostly concentrated in the Southern part of the country. This resulted in massive destruction of property, infrastructure and death of an estimated two million people. The war also generated the largest population displacement crisis in the world with an estimated four million IDPs and the exodus of over 500,000 refugees to neighboring countries (South Sudan Commission for Census, Statistics and Evaluation (SSCCSE), 2004). The physical, social, political, administrative and public health infrastructures were destroyed. At present, most of the health facilities are in poor state. The roads are bad and most are not passable during rainy seasons. Other forms of transportation like air, water are also not yet fully operational (United Nations Population Fund (UNFPA & Ministry of Health (MOH)-GOSS, 2007).

The loss of experienced technical personnel during the war also left South Sudan with an acute shortage of skilled labor force in almost all sectors of the government including health. No significant development opportunities (human resource or economic) took place in South Sudan during the years of war. Southern towns which were controlled by Khartoum government received minimum maintenance and administrative services. Any pre-existing civil service policies, protocols,

guidelines and documentation were completely destroyed. During the conflict, governmental and non-governmental organizations, (NGOs), the United Nations (UN) agencies and the Red Cross and Red Crescent system provided basic short-term services including health care. These programs were geared towards emergency response and mitigation. After the war ended, populations in South Sudan inherited an empty shell of a government and infrastructure. Everything including the health sector needs to be built from ground up.

Post War Socio-economic Determinants of Health

Since the signing of the CPA, a number of assessments have been conducted in South Sudan to provide baseline estimates of social and health indicators which can be used by various government stakeholders to make decisions during the reconstruction phase. Table B1 shows selected health indicators (SSCCSE, 2004; GOSS, 2006).

The Population

South Sudan is primarily a multicultural society consisting of about 64 ethnic languages and diverse cultures. According to the 2008 census data, the total population of South Sudan is estimated to be 8.2 million (Vuni, 2009). This figure however, is being contested by the government of South Sudan because of irregularities that occurred during the census such as lack of accessibility to some areas in the South. The population figures are bound to change once most of the anticipated returnees (IDPs or refugees) arrive. It is a general belief that 90 percent of IDPs and refugees are willing to return. The natural population growth is estimated to be 3 percent per year (SSCCSE, 2004).

Life expectancy for both male and female is 42 years of age. The total fertility rate (births per women) is estimated at 6.7. South Sudan population is the youngest in the world with 21

percent of the population less than five years and up to 51 percent less than 18 years (GOSS, 2006). Women of child bearing age (15-49) are estimated to be 23 percent of the total population (SSCCSE, 2004).

Economic Context

South Sudan is one of the least developed regions in the world with almost 98 percent of its population based in rural areas; ninety percent of the populations live below US \$1 a day (SSCCSE, 2004). Levels of poverty are high and the economy is still in its rudimentary stages. Many households have no assets and no access to markets. The main source of livelihood is agriculture and livestock economy. However, veterinary services broke down during war and many animals died. Additionally, parts of some land are risky for any type of agriculture because of landmines. It is also important to note that the oil revenues promise to boost the economy in the near future. South Sudan is also potentially rich with natural resources and fertile agricultural land (GOSS, 2005).

Primary Education

South Sudan has the least access to primary education in the world with a net enrollment of 20 percent. It also has the lowest rates of primary school completion in the world at 2 percent (GOSS, 2006). Only 500 girls finish primary school compared to 2,000 of their male counterparts. In 2004, there were only 1,600 classrooms for 1.6 million school age children. Of these, only 20 percent had benches for students to sit on. Only one third of the schools had access to latrines and half had access to clean water (SSCCSE, 2004).

Health Assessment

South Sudan's population continues to suffer the negative impact of the recently ended conflict and continued lack of development, basic infrastructure and essential services. This has been compounded by periodic famines, a high prevalence of communicable diseases, and minimal opportunities for sustainable livelihoods. Many areas lack access to basic health care, education, clean water and shelter. Traditional medicine is still widely practiced especially in the absence of modern health care.

The health sector is extremely weak, characterized by sub-standard quality of services. There is limited access to health facilities in relation to the population size. For instance, in South Sudan there are less than ten major hospitals (UNFPA & MOH-GOSS, 2007). The existing hospitals and primary health facilities are grossly understaffed and under equipped (Muhondwa & Rweyemu, 2006). There is unequal distribution of health facilities with some rural areas having none. Given the limited capacity of the government, NGOs continue to provide most of the basic services at the health facilities. However, given the variation among NGOs, there are differences between the health facilities in terms of structure of buildings, numbers of skilled health personnel, mix of services, equipments and supplies (Muhondwa & Rweyemu, 2006).

Distances, bad roads and few qualified health personnel have made accessibility to health care a problem to a large proportion of the population. In most parts, there is only one physician for 100,000 people. Access to other services like potable water and sanitation is also poor (Muhondwa & Rweyemu, 2006). With hundreds of thousands of internally displaced people and refugees returning to the region, the government of South Sudan is striving to put essential services which can respond to the people's health needs. Additionally, this is an opportune time for research studies to be conducted to provide basis for health policy, interventions, monitoring

and evaluation and future research. This research is needed to underpin strategies and interventions that are most likely to address real needs.

The most recent Sudan Household Health Survey conducted in 2006 indicates that South Sudan has some of the of the worst health indicators in the world (GOSS, 2006). Mortality rates for infant and children under five years of age are estimated to be 102 and 135 per 1000 live births respectively. Routine immunization coverage (fully immunized coverage) is only 2.7 percent. Contraceptive prevalence rate is 3.5 percent (GOSS, 2006).

Malnutrition rates among children and adults remain endemic and above usual baseline for developing countries. In 2006, the prevalence of underweight (moderate and severe) was 32.8 percent; wasting (moderate and severe), 21.9 percent and stunting (moderate and severe) 33.4 percent. South Sudan has one of the highest maternal mortality ratio in the world at 2,054 per 100, 000 live births. This maternal mortality ratio is also almost three times higher than that of Sudan as a whole (GOSS, 2006)

Access to improved water sources (wells, hand pumps, etc) is estimated at 48.3 percent, appropriate water treatment (all drinking water sources) is 13.1 percent. Population per water point (wells, hand pumps, etc) range from 1,000 to 64,000. Most people walk for an average of 45 minutes to access drinking water. Only 6.4 percent use sanitary means of excreta disposal (GOSS, 2006).

Diseases believed to have been under control in most parts of the world have resurfaced and highly prevalent in South Sudan. These so called neglected diseases include leprosy, river blindness, sleeping sickness (trypanosomiasis), guinea worm (dranculiasis) and Kalazar (Visceral Leishmaniasis) (Molyneux, 2004).

Guinea worm (dracunculiasis) infects people when they drink standing water containing a tiny water flea infected with the larvae of the guinea worm. The larva grows as long as 3 feet in the human body. After a year, the worm emerges through a painful blister in the skin. The worms cause swelling and painful burning blisters in the body, mainly the lower limbs. Infected individuals can be non productive for up to three months. The only treatment for guinea worm is to remove it over many weeks by winding it around a small stick and pulling it out a bit at a time. Although guinea worm disease has no known treatment, simple measures through health education, provision of safe drinking water (bore holes, wells, filtering of drinking water) can prevent its spread (Hopkins, Ruiz-Tiben, Diallo, Withers, Jr., & Mguire, 2002).

Another neglected disease of significance is Kala-zar (Visceral Leishmaniasis). Kala-zar is essentially unknown in most western countries, but still very common in a few parts of the world. Kala-azar is a chronic multi systemic disease characterized by fever, splenomegaly, wasting, weakness and eventual death from bleeding or secondary infection. Once patients develop Kala-azar, they usually die within months unless treatment is provided (Collin, Coleman, Ritmeijer & Davidson, 2006). Sudan is one of the five countries of the world where 500,000 new cases of symptomatic disease (Kala-azar) occur each year in rural areas. The other four countries are India, Nepal, Bangladesh and Brazil. In South Sudan, Kala-azar has been known to wipe out populations in certain villages (Collin, Davidson, Ritmeije, Keus, Melaku, Kingetich, et al., 2004). Other diseases like malaria, measles, respiratory infections, diarrhea, skin diseases and measles are also still very common and contribute to a high disease burden in the region. For example, malaria accounts for 60 percent of the disease burden on adults and children (UNFPA & MOH-GOSS, 2007).

Visual loss is common and becoming a health concern. A study found that prevalence of blindness at a location in South Sudan was 4 percent, more than twice the level of blindness in

other parts of rural Africa. Cataract and trachoma each accounted for over one third of the cases (Ngondi, Ole-Sempele, Onsarigo et al., (2006) and Ngondi, Ole-Sempele, Onsarigo et al., (2006). These neglected diseases are important because they affect the poor and most vulnerable in communities, especially women, with direct or indirect implications on reproductive health outcomes.

The Basic Health Service Package for South Sudan

The Ministry of Health of South Sudan (MOH-GOSS) through assistance from the World Health Organization (WHO) has designed a basic package of health services (BPHS). The health package includes curative, preventive and health promotion (MOH-GOSS, 2006). The BPHS includes five levels of health facilities: community –based health activities, primary care unit, primary health care centers, county hospital and tertiary referral or teaching hospital. Table B2 shows the levels of government health care system in South Sudan.

Reproductive Health

South Sudan has one of the worst situations for women’s reproductive health in the world. Some of the existing cultural practices are also not favorable to women in this region (discussed more in chapter four). These cultural practices tend to marginalize women and negatively affect reproductive health outcomes. Gender based inequalities made worse by high levels of illiteracy have isolated women from opportunities to actively participate in decision making in their communities (UNFPA & MOH-GOSS, 2007). Cultural practices such as polygamy place women at risk of sexually transmitted infections (STIs) and human immune deficiency Virus (HIV). Early marriages (as early as 13 years old), and teenage pregnancies place young girls at high risk of experiencing poor reproductive health outcomes across their reproductive life. Girls

in the ten South Sudan States are more likely (17 percent) to be married before age 15 than girls in the remaining 15 States in Northern Sudan (12 percent) (GOSS, 2006). Gender based and domestic violence such as wife beating is reported by most women in the community as common causes of spontaneous abortion (UNFPA & MOH-GOSS, 2007).

The traditional courts do not favor girls in a rape situation. When a man has non consensual sex with a woman, he is required to pay cows to the parents or brothers and take the woman as his wife. He is only considered a criminal when he does not marry the woman. Moreover, a married woman cannot be raped by her husband because she is already living in a sexual relationship. Raping a girl who is 12 years old or less is considered a capital offence (UNFPA & MOH-GOSS, 2007). If a girl has an unwanted pregnancy before marriage, her parents will take the matter up with the man's parents. If the man does not marry her, a marriage will be arranged with another man. The man who impregnated her pays a fine (UNFPA & MOH-GOSS, 2007).

Access to health care for women in the region is very poor. For instance, only 10 percent of births are by skilled attendants. Antenatal care coverage is 26.2 percent of all pregnancies while contraceptive prevalence rate is less than 3.5 percent (GOSS, 2006). Most women are reportedly not interested in modern family planning methods (UNFPA & MOH-GOSS, 2007).

Some of the common reproductive health problems causing maternal morbidity and mortality can be categorized into medical and socio-economic causes (UNFPA & MOH-GOSS, 2007). The reported medical causes of maternal mortality include: prolonged labor, anemia, and hemorrhage, obstructed labor/ruptured uterus, malaria, abortions (induced and spontaneous), infections and high fever, retained placenta, pre-eclampsia, tuberculosis, STIs and HIV/AIDS (UNFPA & MOH-GOSS, 2007).

The reported socioeconomic causes of maternal mortality include: cultural delays in making appropriate health care decisions, lack of health facilities, home delivery in unclean environment, poor referral system, lack of trained staff, wife beating during pregnancy, hard labor during pregnancy, early marriage, and use of drugs and alcohol (UNFPA & MOH-GOSS, 2007).

Institutional Responses and Reproductive Health Policy

The government of South Sudan recognizes and has documented the need for strategies that will address maternal and child health and reproductive health issues in the region. It has developed the first maternal, neonatal and reproductive health (MNRH) policy with a goal of providing "...a comprehensive, integrated, equitable and sustainable maternal, neonatal and reproductive health (MNRH) care package that offers a full range of quality services towards improved reproductive health status of the population of South Sudan" (MOH-GOSS, 2006, p.12). Additionally, a maternal, neonatal and reproductive health strategy, 2009-2015, has been released. The strategy document outlines the actions to implement the objectives in the MNRH policy (GOSS, 2009).

The reproductive health policy and strategy documents build on a number of existing policies, frameworks and guidelines which include: the comprehensive peace agreement (2005); the joint assessment mission for sustained peace, development and poverty eradication (2005); the interim constitution of South Sudan (2005); the interim health policy (2006-2011); the basic health services package (BPHS) -2005; international conference in population and development program of action (ICPD) - (1994) and the united nations millennium development goals (SSCCSE, 2004).

To accelerate implementation of this strategy, the government has established a Reproductive Health Directorate and is recruiting state coordinators to facilitate, monitor and coordinate maternal and neonatal health activities in each state. UNFPA in collaboration with the MOH and partner agencies is supporting the expansion of antenatal and emergency obstetric care services in several states. In the interim constitution, issues of women are highlighted in article 20 (4 & 5):

- Article 20 (4): all level of government in South Sudan shall: promote women participation in public life and their representation in the legislative and executive organs by at least twenty-five per cent as an affirmative action to redress imbalances created by history, customs and traditions; enact laws to combat harmful customs and traditions which undermine the dignity and status of women; and provide maternity and child care and medical care for pregnant and lactating women;
- Article 20 (5): Women shall have the right to own property and share in the estate of their deceased husbands together with any surviving heirs of the deceased (GOSS, 2005, p.7)

The MNRH policy recommends the use of strategies which are comprehensive, sustainable, situation specific and addresses the root causes of the poor maternal and reproductive health among women in South Sudan (MOH-GOSS, 2006). A strategy adopted by the MNRH policy is that of providing health services along a continuum from the home, community, primary health care unit, primary health center up to the hospital (MOH-GOSS, 2006). The main aim of this strategy is to provide services to families close to where they live. The policy seeks to reduce the maternal mortality rate from 2,054 per 100,000 live births to 425 deaths per 100,000 live births by 2015. The policy also wants to increase the number of births

attended by skilled attendants from the present 5 percent to 90 percent by 2015 (MOH-GOSS, 2006).

Abortion and Post Abortion Care Situation

Abortion complications are some of the most important and significant reproductive health problems affecting women in South Sudan. Jok (1999) in his study with women in villages in south western Sudan found that both spontaneous and induced abortions were common. The UNFPA's reproductive health situation analysis revealed that each state hospital and almost every PHC admitted women suffering from abortion complications. Most abortion related admissions are a result of first trimester spontaneous abortion. On average three to five cases of abortions are admitted daily at most health facilities. At the large hospitals, five to seven women with abortion complications are admitted and treated daily (UNFPA & MOH-GOSS, 2007).

In January 2007, I visited the county hospital at the study location and reviewed the demographic and health information data from registration books in the gynecology unit. Registration books are documents where details of each in-patient are entered. These include name, age, and marital status, village of residence, date of admission, diagnosis on admission, treatment and condition on discharge. A review of three month records at the gynecology unit (October 1 to December 31, 2006) revealed that during this period, up to 50 percent of all monthly admissions in this unit were abortion related. These included cases of threatened, complete and incomplete abortions. Discussions with the health providers indicated that most women admitted suffered from spontaneous abortions; few had illegally induced abortions (see definition in chapter 2). When selected community members are asked to name a common

reproductive health problem, for example, abortion is consistently cited among the top three (personal communication with Dr. Solomon Orero, January 16, 2007)

Some of the factors believed to be responsible for the high numbers of abortions include: hard strenuous work done by women during pregnancy, trauma due to wife beating by husbands, lack of medical attention during pregnancy, sexually transmitted infections, malaria and pelvic inflammatory diseases. Unplanned pregnancies are also common among young women. Some of the women induce abortions themselves; others get help from relatives or other people from the community to assist with inducing abortion (UNFPA & MOH-GOSS, 2007; Palmer, 2007). Post abortion care (for either induced or spontaneous abortion) is inadequate or nonexistent at most health facilities in South Sudan. Where they exist, most evacuations of incomplete abortions are completed using the traditional dilatation and curettage (UNFPA & MOH-GOSS, 2007).

Overall, the health status of populations especially maternal and child health in South Sudan is in urgent need of attention. With a broken health care system after a long protracted war, a young country, thousands of displaced populations returning to their original homes and limited resources to care for them, the health risks remain high. Some cultural practices such as lack of empowerment for women and domestic violence put women at risk for various reproductive health morbidities including abortions (induced and spontaneous abortions). Thus, it is important for nurses to learn from the women who have experienced abortion by listening to their perspectives in order to design appropriate reproductive health programs.

Purpose of the Study

The purpose of this study was to explore and describe the experiences of women with abortion complications in the post- war context of South Sudan. These insights are needed to inform reproductive health initiatives for this population.

Study Rationale

Anecdotal evidence and some baseline health assessments have shown that abortion is a significant reproductive health problem in South Sudan which needs attention (Jok, 1999; Palmer, 2007; UNFPA & MOH-GOSS, 2007). Findings from this study begin to document empirical data gaps for continued research on reproductive health. In addition, findings can be used to inform policy, practice and future research. Interviews conducted with affected women illuminates the importance of establishing culturally sensitive and context- specific solutions and interventions to address the problem of abortion in the region.

The study was conducted at one site, a county hospital in Central Equatoria, which is one of only ten major hospitals in South Sudan and serves an estimated population of 328,389 (Office of the Coordination of Humanitarian Assistance (OCHA), 2005). Results from this study will be used to:

- Facilitate the design and implementation of appropriate nurse led integrated programs to manage and prevent abortions (spontaneous and induced) among women of the reproductive age;
- Contribute in shaping the reproductive health policy during this rehabilitation and reconstruction phase of South Sudan;
- Form a basis for future scientific studies on reproductive health including abortion issues in South Sudan.

Research Question

The research question posed was "What are the experiences of women who have suffered abortion complications (spontaneous or induced) in the post war context of South Sudan?"

Implications to the Field of Nursing

The ultimate goal of this research was to begin to build evidence around the phenomenon of abortion taking into consideration women's experiences. This evidence gathered is being used to inform the design of nursing led collaborative interventions. The collaborative approach includes other providers like the physicians, public health and community based health care workers in South Sudan. Findings from this study represent a foundation for further nursing specific research which is presently nonexistent in South Sudan. Currently as discussed abortion is among many other health issues afflicting populations in this region.

As noted listening to women's experiences with abortion complications provides crucial information for nursing knowledge-development and subsequent nursing and interdisciplinary interventions. Knowledge of persons is not only what defines nursing practice, but is what differentiates it from other health professions (Perry, 2004). What is unique about nursing is the caring in the human health experience as a unitary phenomenon – one of undivided wholeness and transformation (Newman, 1994). Understanding what is needed and designing interventions using insights about the experiences of women permits a strengthening not only of the nurse patient relationship but interventions tailored to the unique needs of women. Moreover, the data can be used to inform policy initiatives aimed at improving the health of women in the Sudan

Chapter Summary

This chapter discussed the importance for nursing to be engaged in research aimed at understanding the experiences of women related to spontaneous or induced abortion in the Sudan. The context and magnitude of modern conflicts and their effects on the populations' health in general were presented. An explanation of how the civil war between southern and northern Sudan disproportionately affected South Sudan was given. The resulting poor health

status and lack of infrastructure is analyzed. Examples are provided on how the government is striving to rebuild the infrastructure. This contextual background is crucial in understanding the particular contexts of the women interviewed and the difficulties faced in designing effective initiatives to promote health especially during this post-conflict situation.

I have also presented the data that supported my research question and explained the purpose of the study. In the chaotic situation of war, displacement and unchallenged cultural traditions, women's reproductive health had been neglected. Care for women with abortion complications was limited. Therefore I wanted to learn from the women their abortion related health encounters. In the following chapter, I reviewed the available literature that addressed the topic of reproductive health in general and abortion in particular during times of war and displacement.

CHAPTER 2

Review of Literature

Introduction

Chapter one provided the context and significance of the health consequences for populations affected by armed conflict in general and explored the situation of South Sudan specifically. This Chapter explores what is currently known about the phenomenon of abortion. The literature is relatively scarce with few published research studies related to abortions and post abortion care among women affected by armed conflict, highlighting the urgent need for more research. Generally, even among stable communities, abortion is not an easy topic to research because of its very nature and sensitivity. For this reason, most abortion studies conducted in developing countries have been hospital-based, with a few at the community level (Benson, Nicholson, Gaffikin & Kinoti, 1996). Hospitalized women are in a sense “captive audience”. In the community women are more likely to not want to talk about abortion because of the sensitive nature of the topic among most cultures.

The reproductive health and protection of women who are affected by armed conflict only started receiving attention in mid 1990s. The turning point came after a landmark report published in 1994 highlighted serious reproductive health problems and lack of services facing populations displaced by armed conflict (Wulf, 1994). Prior to that, the provision of services such as food, security, shelter, water, sanitation, and basic health services took priority. Mortality reduction through adequate nutrition and control of infectious diseases also took precedence (Otsea, 1999; McGinn, 2000).

Following Wulf’s report, concerted humanitarian response were made to include reproductive health in all phases of an emergency and during post-conflict situations. A number

of non-governmental organizations (NGOs) implementing health services in emergency and post emergency situations have included reproductive health in their agenda. In addition, the United Nations (UN) passed resolution 1325 on women, peace and security in October 2005 (UN Security Council, 2000). Resolution 1325 urges humanitarian players to include gender in their activities and ensure that women are represented at all decision making levels including peace negotiations and planning of refugee camps.

However, evidence from the field indicates that much more still needs to be done. In 2004, an inter-agency global evaluation of reproductive health services for refugees and IDPs was done to assess progress made since 1994. This evaluation found that women can now access family planning methods and other basic reproductive health services. However, the report indicated that huge gaps still exist in the availability of services and who can access them (Inter Agency Working Group (IAWG), 2004).

For instance, although gender-based violence (GBV) and rape have received increased attention; GBV remains the least developed program among populations affected by armed conflict. Yet, it is a very common phenomenon in modern day conflicts. Reproductive health for IDPs was also found to be inferior compared to that of refugees. Among the millions of women displaced inside Sudan, for example, less than half had accessed reproductive health services. The report also indicates that conflict-displaced women continue to die from complications of incomplete and unsafe abortions, and that post abortion care services were nonexistent in most of the situations (IAWG, 2004).

Though little research has been conducted on the topic of abortion among populations affected by armed conflict, much has been done among stable communities in developing countries and other parts of the world. Therefore, to provide a road map for this study, relevant

information and experiences from other parts of the world not necessarily affected by armed conflict have been reviewed.

Effects of Armed Conflict on Women

It is estimated that 65-80 percent of the millions of people displaced by armed conflict worldwide are women, girls and children. Furthermore, 25 percent of refugees are women of reproductive age (Vaan, 2002). Women displaced by conflict like the rest of the population find themselves living in new environments where they may not speak the language or know the culture. This situation is made worse for younger women who sometimes find themselves as heads of households, after their parents are displaced in different directions or die. Because of their young age and being vulnerable to exploitation, young women lack support and protection. They may not be able to access health facilities or other supplies distributed in the camps. Depending on the prevailing socio cultural environment, women may also lack decision making authority even if they are single heads of households. They also find themselves taking on new roles which are otherwise designated for men. All these increase stress and can affect not only their health but also their ability to access the much needed health services (Vaan, 2002; Inter-Agency Standing Committee (IASC), 2005).

Women bear the brand of war and face a number of challenges which affect their health and well being directly including their reproductive health. Lack of safe motherhood services and adequate care during pregnancy is also a factor. Febrile conditions like malaria, anemia and sexually transmitted infections in pregnancy often go untreated and may lead to spontaneous abortions.

During displacement, women are exposed to excessive physical work like carrying heavy objects, constructing family shelter, fetching firewood and carrying water from long distances.

These activities put strain (physical and psychological) on women and expose them to the risk of suffering pregnancy loss. When women experience abortion under these circumstances, they often end up being unsafe. For instance, a place like South Sudan where health services are still not developed, a woman who experiences any type of abortion is likely to suffer severe complications due to lack of timely care.

Violence is another factor that put women at risk of pregnancy loss during armed conflict. Women face threats of violence even as they engage in basic survival for daily tasks like fetching water and firewood. In a culture of violence, these threats continue for years after the conflict ends (Fitzgerald & Lowman, 1998; Krause, Otieno & Lee, 2002; Lubbock, 1998).

Gender Based Violence during Armed Conflicts

As mentioned earlier, gender based violence are common in modern armed conflicts and a significant cause of reproductive health morbidities. Gender based violence is “an umbrella term for any harmful act that is perpetrated against a person’s will and that is based on socially ascribed (gender) differences between males and females (IASC, 2005, p.7). These harmful acts include sexual violence. Sexual violence includes rape/attempted rape, sexual abuse, and sexual exploitation (IASC, 2005, p.8). In armed conflicts, rape is the most common and obvious form of sexual violence (Dahrendorf & Shifman, 2004; WHO, United Nations Population Fund (UNFPA) & UNHCR, 1999), and will be the focus of discussion in this section.

Rape and other forms of sexual violence in war are not new phenomena. They have been problems in warfare throughout history. For example, Japanese troops raped civilian women systematically in Korea, China, and the Philippines during World War II. They are reported to have abducted 100, 000 to 200,000 Korean women and forced them into sexual slavery (Jennings & Swiss, 2001; Durham & Loff, 2001). An estimated 250,000-400,000 women were raped

during the Bangladesh war for independence in 1971; and 39 percent of Vietnamese women aged 11-40 were abducted and raped while fleeing their country by sea in 1985 (Swiss & Giller, 1993).

In recent armed conflicts, rape and other forms of sexual violence have been used as weapons of war to humiliate and intimidate populations, destroy families, create mass fear and destroy cultural cohesion (Dahrendorf & Shifman, 2004; Farwell, 2000; IASC, 2005; Swiss & Giller, 1993; IAWG, 2004; Vaan, 2002). Gender based violence permeates all stages of armed conflict. Women and girls constantly face the threat of rape, sexual abuse and exploitation at all stages of their exodus (Swiss & Giller, 1993; Jennings & Swiss, 2001; Integrated Regional Information Networks (IRIN), 2004).

In addition to being under reported, case definitions for rape and other sexual violence are not necessarily standard and therefore difficult to measure (IASC, 2005). However, evidence from Kosovo, Rwanda, Liberia, Sierra Leone, Uganda, Sudan, DRC and Former Yugoslavia demonstrate how mass rapes, abductions, sexual slavery and other brutal acts of sexual violence are common during armed conflict (Dahrendorf & Shifman, 2004; IRIN, 2004; Jennings & Swiss, 2001; Olujic, 1998; Shanks, Ford, Schull & de Jong, 2001; Swiss & Giller, 1993; Swiss, et al, 1998).

Reports from the on-going war in DRC reveal that thousands of women have been raped by all warring factions. Rape is used here to sow seeds of terror and impunity (Hochschild, 2009). In Rwanda after the 1994 Genocide, 5,000 babies were born to rape victims. Some of these children were either killed or abandoned by their mothers (Shanks et al, 2001). In former Yugoslavia, it is estimated that 14,000 to 50,000 Bosnian women were rape victims. Some women who were impregnated managed to procure safe abortions. However, a majority were not

able to access safe abortion services (Olujic, 1998). In Liberia, a survey of 205 women in 1994 found that 49 percent had experienced at least one act of physical violence or sexual violence by a soldier (Swiss et al, 1998). Another study in Monrovia by WHO found similarly high cases of rape. Of the 450 women interviewed, 33 percent reported having been raped (Cain, 1999). In 1996, a population based study of 339 Burundian refugee women in Kibondo District in Tanzania found more than one in four women reported rape since the War began three years earlier (Nduna & Good year, 1997). Following these incidents and others, rape is now considered a crime against humanity by international criminal court (ICC) and is addressed in many international resolutions, protocols and declarations (Farwell, 2004; Dahrendorf & Shifman, 2004).

Reproductive ill-health resulting from sexual and gender based violence include unwanted pregnancies, unsafe abortions, injuries (e.g. fistulas), vaginal bleeding, STIs and HIV (IAWG, 2004). Safe abortion care is rarely provided in emergency situations. Hence women with unwanted pregnancies often resort to unsafe abortions. For example, a study interviewing 43 Burmese women displaced in Thailand, found that two thirds had induced their own abortions using cleaning agents, herbal medicine and inserting sticks into the uterus (Belton & Wittaker, 2007). Despite the existing evidence of the high risk of unwanted pregnancies, unsafe abortions and spontaneous abortion during armed conflict, little effort has been made to systematically understand and mitigate the situation.

Evolution of Reproductive Health Services for Women Affected by War

Until the mid 1990s, reproductive health services among conflict-affected populations tended to concentrate on prenatal and postnatal care and safe delivery (Krause, Jones & Purdin, 2000; Otsea, 1999). This limitation of services is said to have been due to a number of reasons including: some displaced populations themselves objected to the provision of reproductive

health care for cultural reasons; a host country which is not able to provide adequate reproductive health care to its own population may not offer services to refugees; and in a situation where there are competing needs, some get forgotten. Hence, provision of comprehensive reproductive health services was not considered a priority compared to the basic needs of food, shelter, security, water and sanitation (Krause et al., 2000).

In the mid-1990s, several organizations focused attention on reproductive health among conflict-affected populations. In addition to the landmark study by Wulf (1994), which illuminated the lack of reproductive health services among displaced women, both the 1994 International Conference and Development in Cairo (ICPD) and the 1995 Fourth World Conference on Women in Beijing highlighted the needs of women among displaced populations (Burns, Male & Pierotti, 2000; Falk, 2001; McGinn, 2000;).

The scope and coverage of atrocities particularly the sexual violence, committed during the wars in former Yugoslavia and in Rwanda also drew attention to the reproductive health issues of conflict- affected populations (McGinn, 2000; Scheck, 2000). In both conflicts, wide spread rape, forced pregnancies and sexual violence resulting in unwanted pregnancies were extensively reported. These reports elicited a level of international concern about sexual violence not previously seen (Schreck, 2000).

Two organizations were formed to specifically address the needs for reproductive health services for refugees and IDPs: 1) Reproductive Health Response in Conflict Consortium (RHRC); and 2) The Inter-Agency Working Group for Refugee Reproductive Health-IAWG. The consortium (as it is popularly known) is comprised of NGOs whose mission is to promote reproductive health in conflict settings. The advocacy efforts of consortium members individually and collectively, have raised awareness among donors, policy makers, relief

agencies and the public so that reproductive health needs of displaced populations do not disappear (Otsea, 1999; Schreck, 2000).

The IAWG consisting of UNHCR, UNFPA, WHO, United Nations Children's Fund (UNICEF), relief agencies, reproductive health organizations and bilateral donors identified the technical components of refugee reproductive health. These include: safe motherhood; family planning; STIs, HIV and AIDS; sexual and gender based violence and abortion services (Otsea, 1999; Schreck, 2000). The same group also spear-headed the drafting and eventual writing of a refugee-specific inter agency field manual covering the technical components mentioned above (Otsea, 1999 ; Schreck, 2000).

The interagency field manual has details on the kinds of reproductive health services to be covered at the initial stages of an emergency phase including the Minimum Initial Stage Package (MISP). The MISP concept was started to facilitate the provision of reproductive health services early in an emergency. It is a set of activities, equipment and supplies that can be implemented at the beginning of an emergency (Otsea, 1999; Schreck, 2000). To date, a number of manuals, reports and guidelines have been developed mainly through the coordination of Women's Commission for Refugee Women and Children (WCRWC) and RHRC, to address aspects of reproductive health issues among populations affected by conflict (IASC, 2005; Vaan, 2002; WCRWC, 2005; WCRWC, 2006). Also, a number of key organizations now offer support for the provision of reproductive health services for refugees, IDP and women living in post-conflict situations. These include UNHCR and UNFPA, bilateral donors and NGOs (Scheck, 2000; IAWG, 2004).

Despite these positive developments, delivery of reproductive health services remains uneven. Moreover, there is insufficient research upon which to base policy and programming

decisions (Otsea, 1999; Schreck, 2000; IASC, 2005). Yet, in a post-conflict situation like South Sudan, health services will take years to reach acceptable levels. Thus, this proposed research is timely as it will be conducted at a time when the region is struggling to reconstruct and put structures, policies and practice standards in place.

Abortion

The topic of induced abortion is one of the most divisive in the US and elsewhere and the cause of great moral debates about whether it should be permissible and under what conditions. Moreover, the term abortion has become synonymous with induced abortion, while in fact abortion is a technical term used for premature loss of fetus regardless of reason for the loss (natural or induced). Abortion is defined as the removal or expulsion of an embryo or fetus from the uterus. It can occur spontaneously (miscarriage) or be artificially induced (Faúndes & Barzelatto, 2006). Hence, it is important to briefly discuss some of the controversies around induced abortion.

Individuals on all sides of the abortion issue face polarizing, ugly and sometimes violent controversies (Kissling, 2001). This has the consequences of shifting attention away from understanding underlying reasons and circumstance leading to the seeking of an induced abortion. Yet, women have been having abortions for centuries in any society studied. So understanding the contexts and lives of women who seek abortion is crucial to the debates.

The earliest recorded reference on abortion is found in Chinese literature in 3500 BC (Lloyd, 1994 cited in Hurry, 1997). The ancient texts of Greece, Egypt and the Roman Empire indicate that abortion induced by herbs or manipulation was a form of birth control, and killing of an infant soon after birth was common in these societies (Hurry, 1997). Hurry (1997) comments that writers like Aristotle and Socrates actually thought of abortion as a method of population control. Towards the end of the third century, Christianity became a powerful force

in Rome and there was an order to punish women who deliberately obtained an abortion (Hurry, 1997). At that time, “Christians believed that sex within a marriage was only for having children and not an expression of love and pleasure” (Hurry, 1997, p.20), a view which remains among some traditions and religious beliefs.

Worldwide, the debates revolve around the issues of pregnancy termination. These debates relate to the rights of the woman vs. the rights of the fetus. Extreme opponents of abortion argue that it is equivalent to murder and that no matter how much women may suffer, they should not be allowed to kill their children (Hewson, 2001; Schenker & Eisenberg, 1997). On the other hand, proponents of women’s rights argue that women are competent, able, moral agents, who should be allowed to make decisions about abortions (Kissling, 2001). Overall, at the policy and political levels, these arguments come down to whether terminating a pregnancy should be *legal* or *illegal*. Although the most intense abortion debates are heard from countries in the developed world, incidences of abortions are higher in the developing world where they contribute significantly to maternal mortality and morbidity (WHO, 2004). Moreover, women in developing countries are exposed to many risk factors and are highly vulnerable to abortions and its complications.

Understanding Common Terms

Induced abortion.

This is the termination of pregnancy using outside intervention before the product of conception has become medically viable (Faúndes & Barzelatto, 2006; WHO, 2004; WHO, 2007). Abortion can be induced legally or illegally (WHO, 2004; WHO, 2007).

Legally induced abortion.

This is a situation where safe abortion is allowed under the laws of the country. However, in most countries even where abortion is legal, there are restrictions (or conditions) under which abortion can be provided (Center for Reproductive Rights (CRR), 2007).

Illegally induced abortion.

Women who reside in countries where abortion is not allowed by law, seek pregnancy termination outside the health system. They may consult people who are trained or not. In developing countries, most illegal abortions are performed under unsafe conditions (WHO, 2004; WHO, 2007).

Spontaneous abortion.

This is the termination of pregnancy without outside intervention (Faúndes & Barzelatto, 2006). World Health Organization describes spontaneous abortion as the loss of pregnancy without intervention at 20 to 22 weeks gestation or 500 grams of fetal body weight (WHO, 2004; WHO, 2007). The term *miscarriage* is commonly used by lay persons when referring to spontaneous abortion. This is mainly because the term ‘abortion’, is considered controversial, has negative connotation and usually understood to imply artificial or elective termination of pregnancy (Faúndes & Barzelatto, 2006; McBride, 1991). In this document, the terms spontaneous and induced abortion will be used in reference to the two types of abortion. The term *miscarriage* will be used synonymously with spontaneous abortion. Of note is that spontaneous abortions can also end up being unsafe if they occur under unsanitary conditions or in environments lacking minimal medical conditions.

Unsafe abortion vs safe abortions.

Unsafe abortion is a procedure for terminating an unwanted pregnancy either by persons lacking necessary skills or in an environment lacking the minimal medical standard, or both. *Safe*

abortion is when pregnancy termination is performed by well trained medical personnel under sanitary conditions (WHO, 2004; WHO, 2007). Unsafe abortions are more prevalent in countries where abortion laws are restrictive, leading to illegal backstreet abortions.

Post- abortion care.

This is an approach for reducing morbidity and mortality from incomplete and unsafe abortion, and its resulting complications (PAC consortium, 2002).

Induced Abortion

Although use of contraception has increased worldwide, millions of women still have an unwanted pregnancy every year. Each year, an estimated 210 million women become pregnant around the world. About 130 million of these pregnancies are carried to term, ending in live births. Nonetheless, an estimated 80 million of these pregnancies are unplanned (The Alan Guttmacher Institute, 1999; Henshaw, Singh & Haas, 1999). In 2003, approximately 42 million pregnancies were terminated voluntarily. This corresponds with an abortion rate of 29 per 1000 women aged 15-44 (Igbal & Ahman, 2009). Some of the reasons why women induce abortions are discussed later in this chapter.

Globally, complications from unsafe abortion lead to an estimated 68,000 to 100,000 deaths of women annually. Furthermore, 13 percent of all maternal deaths worldwide are caused by abortion complications (Igbal & Ahman, 2009; WHO, 2004; WHO, 2007). The unmet need for acceptable contraceptives in the developing world has led to large numbers of unintended pregnancies. Women in developing countries are disproportionately at high risk of experiencing unwanted pregnancies and unsafe abortions. For instance, of the estimated 20 million unsafe abortions taking place in the world annually, 95 percent are in developing countries: Africa (4.2 million), Asia (10.5 million), Latin America and the Caribbean (3.8 million). In Africa, 59

percent of all unsafe abortions are among young women aged 15-24 years of age. Of all abortion related deaths, over 40 percent take place in Africa alone (Igbal and Ahman, 2009; WHO, 2004; WHO, 2007).

The incidence of unsafe abortion and its complications in any country is influenced by the legal provisions for and access to safe abortions. Availability of high quality abortion care is also an important factor. Of note is that 26 percent of all people reside in countries where abortion is generally prohibited (Center for Reproductive Rights (CRR), 2007). Table B3 shows the categories of legal provisions of world's abortion laws.

Category I is the most restrictive and V the least. Most countries in the developing world are in categories I to IV and therefore, safe abortion services are out of reach to most women with unwanted pregnancies in these regions (Corbett, & Turner, 2003). In Africa for example, only South Africa, Tunisia and Zambia, permit abortion without restriction. Moreover, in most countries where there is no restriction, gestational limit for abortion is 12 weeks, unless otherwise indicated (CRR, 2007).

The variations in abortion laws and safety in the different regions account for imbalances in the outcome of unsafe abortion among women in developing countries compared to women in more developed countries (Faúndes & Barzelatto, 2006). In countries where abortion is illegal, most women (especially the poor) with unwanted pregnancies have no choice but resort to unsafe ways to induce abortions with high risks to their health and lives (Gasseer et al., 2004; WHO, 2004; WHO, 2007).

An abortion magnitude study conducted countrywide in Kenya estimated that over 20,000 cases are admitted annually at the government hospitals due to abortion complications. Abortion remains severely restricted in Kenya and only allowed to save a woman's life

(Gebreselassie, Gallo, Monyo & Johnson, 2004). In Uganda, an estimated 297,000 induced abortions are performed each year with 85,000 women treated for complications (Singh, Prada, Mirember and Kigundu, 2005). In Ghana where abortion law is also restrictive, a study found that there were 19 abortions for every 100 pregnancies (Ahiadeke, 2001). In Nigeria, a survey conducted in 2002-2003 with 2,093 women admitted with abortion complications at 33 hospitals across Nigeria revealed that 36 percent had attempted to end the pregnancy before coming to the hospital. Additionally, 33 percent obtained an induced abortion at the facility and 32 percent were treated for miscarriage complications. The researchers concluded that induced abortion is common in Nigeria despite the restrictive abortion law (Henshaw, et al., 2008)

It should also be noted that in some countries where abortion is less restrictive, *access* to safe abortion services may still not be adequate. A country like South Africa, for example, the Choice on Termination of Pregnancy law was passed in 1996 legalizing abortion. However, due to limited access to facilities and qualified health personnel, women continue to resort to illegal unsafe abortions. Additionally, in certain instances, some of the medical personnel have not been willing to participate in the provision of safe abortion services citing moral reasons and personal values (Bogaet, 2002; Gumede, 2004).

In India, although the law permits abortion for a broad range of reasons, poor women still lack resources for safe abortion. Millions of unsafe abortions occur annually accounting for about 18 percent of maternal deaths (Johnston, Ved, Lyall, & Agrwal, 2003). In Nigeria, a study conducted among private providers revealed inadequate preparation of these practitioners to provide post abortion care, and suggested the need for re-training (Okonofua, Shittu, Orosanye, Ogunsakin & Zayyan, 2005)

Apart from the legal status of abortion, if society has negative attitude towards the procedure, women tend to hide their pregnancies and resort to unsafe ways of termination. The economic status of a woman also plays a crucial role. In most countries where abortion is illegal, women with resources have access to clandestine but safe abortions. Meanwhile, poor women who cannot afford safe abortions continue to put their lives in danger by soliciting backstreet abortions (Faúndes & Barzelatto2006; WHO, 2004; WHO, 2007), Therefore, the provision of post abortion care is necessary regardless of the reason for or abortion type.

Methods of Inducing Abortions

Understanding the various methods of inducing abortions is important so as to appreciate the experiences women have gone through in this process. Historically, pregnancies were terminated through a number of methods, including the administration of abortifacient herbs, the use of sharpened implements, the application of abdominal pressure, and other techniques (Faúndes & Barzelatto, 2006). Most pregnancy terminations involve introducing an object into the uterus through the cervix. This interferes with the embryo or fetus which is subsequently rejected by the uterus thereby terminating the pregnancy (Faúndes & Barzelatto, 2006). The majority of maternal deaths related to induced abortion result from performance of abortion under primitive, unsanitary conditions by unqualified personnel.

The method used to induce an abortion determines whether it is safe or unsafe and the level of risk it poses to the woman. Most modern techniques used in health care systems and clinics are considered safe. The two modern 'safe' methods commonly used are surgical and medical. Others are partial surgical birth abortions and menstrual medical regulation. Each is discussed below.

Surgical Methods

Surgical abortion entails instrumental evacuation of the uterine contents through the cervix, either by dilation and curettage, dilatation and evacuation or by intrauterine vacuum aspiration (Faúndes & Barzelatto, 2006).

Dilatation and curettage.

In this procedure, manual dilators or a metal object is introduced in the cervix to increase its diameter so that the cervix can dilate. A curette is used to scrape the uterine walls to remove its contents. This procedure is performed under general anesthesia in a pregnancy gestation of 6 to 14 weeks (Costa, 1996; Faúndes & Barzelatto, 2006).

Dilation and evacuation.

If the pregnancy is beyond 14 weeks, dilation and evacuation (D&E) is used. This is usually a two stage process and requires greater cervical dilation. Once the cervix is dilated, the uterine contents are removed using a combination of vacuum suction, forceps and sharp curettage. This procedure has a higher risk involved and therefore requires greater skill. It is also typically performed under general anesthesia (Costa, 1996; Faúndes & Barzelatto, 2006; WHO, 2003). When the pregnancy is at a later gestation (> 14 weeks), the fetus may be crushed and dismembered before it is removed (Costa, 1996; WHO, 2003).

Vacuum aspiration.

Vacuum aspiration was introduced by the Chinese as a method of emptying the uterus around 1958 (Costa, 1996). Vacuum aspiration can either be electric or manual and is typically performed under local anesthesia. Manual vacuum aspiration (MVA) which uses a disposable

syringe and plastic tubing of different sizes has been recommend and popularized for use in developing countries (Faúndes & Barzelatto, 2006; Baird & Flinn, 2001; WHO, 2003).

Generally, the vacuum aspiration procedure consists of two steps: 1) the cervix is dilated using dilators (or cannulas), which are progressively larger in diameter. The dilators are inserted into the cervix one at a time, each time using a larger size. This is done until the cervix is dilated enough to insert the vacuum cannula. The uterine contents are then suctioned (Baird & Flinn, 2001; WHO, 2003).

MVA is a simple technology that is safe, fast and effective and practical for use in low resource settings. It can be used by a wide range of providers including nurse midwives and clinical officers (physician assistant), making it easily accessible to most women (Baird & Flinn, 2001; WHO, 2003). Although D&C and D&E are still used in many settings to treat incomplete abortions, their use is limited to trained physicians and the woman has to be under general anesthesia. On the contrary, MVA can be used in a variety of settings, from rural health facilities and outpatient departments to referral hospitals, without the need for operating room facilities. MVA does not require electricity (Baird & Flinn, 2001; WHO, 2003). Moreover, studies have found that use of MVA is less expensive and more effective than the traditional D&C (Baird & Flinn, 2001; Johnson, Benson, Bradley & Ordanez, 1993; Magotti, Munjinja, Lema & Ngwalle, 1995).

Medical Methods

Mifepristone and prostaglandins are the two main drugs which are currently used for medical abortions (WHO, 2003).

Mifepristone.

Mifepristone, a progesterone antagonist, also known as RU486 was developed by French researchers in the 1980s. The progesterone is necessary in the early stages of a pregnancy as it helps prepare the inner lining of the uterus to receive the fertilized ovum. If fertilization does not occur, the production of progesterone stops and the uterine lining and the ovum are shed during menstruation. However, if the ovum is fertilized, a blastocyst is formed which then attaches itself on the uterine wall and begins to release human chorionic gonadotrophin (hCG), which stimulates the ovaries to continue producing progesterone (Trussell & Ellertson, 1999; WHO, 2003; Spitz, Bardin, Benton & Robbins, 1998).

Progesterone works in three main ways: 1) it keeps the uterus from shedding the lining, as well as blocking ovulation and the beginning of a new cycle; 2) it relaxes the contraction of uterine muscle and tightens the cervix preventing the blastocyst from being expelled; 3) it aids in the development of the placenta and stops the production of natural prostaglandins and prevents uterine contractions (Trussell & Ellertson, 1999; WHO, 2003).

Mifepristone neutralizes the effects of progesterone by binding to the progesterone receptor sites in the uterus which facilitates the peeling off of the uterine lining as if fertilization had not taken place. In the absence of progesterone, increased prostaglandin production softens the cervix, induces uterine contractions and expels the embryo. If used alone, Mifepristone takes seven to ten days to act and is 90 percent effective. However, if used with a prostaglandin, it takes a few hours (after the administration of a prostaglandin) and is 96 percent effective (Trussell & Ellertson, 1999; Spitz et al., 1998).

Misoprostol (cytotec) is the common prostaglandin used with mifepristone. Misoprostol can be administered orally or as a vaginal suppository. It is a widely available, low dose

prostaglandin analogue (WHO, 2003; Trussell & Ellertson, 1999). The mifepristone-misoprostol regimen is found to be more effective if the pregnancy is less than seven weeks. Success rates decrease to about 80 percent in week nine (Trussell & Ellertson, 1999).

A medical abortion is not the type of procedure a woman can perform herself. It requires a number of visits to a doctor's office (minimum of two). The first visit is to take mifepristone (600 mg orally) and the second (two days later) to take two tablets (200 µg each) of misoprostol (Spitz et al., 1998). In most countries, a third visit is required for examination to be sure that there are no complications. In some countries, there is a mandatory counseling and a waiting period before initiating the mifepristone (Trussell & Ellertson, 1999; Spitz et al., 1998).

Methotrexate.

Methotrexate is a tissue growth inhibitor approved in the US for treating cancer, arthritis, psoriasis, and ectopic pregnancy. The drug is lethal to proliferating trophoblastic tissue and causes early abortion. When used with misoprostol, methotrexate is 96 percent effective in inducing abortions in pregnancies up to eight weeks. However, no single standard for use of this drug in pregnancy termination has been developed (Trussell & Ellertson, 1999).

Studies have revealed that medical abortions have higher rates of side effects compared to surgical abortion. For instance, the duration of bleeding is significantly higher in medical abortion than surgical. Nonetheless, medical abortion has also proven to be relatively safe and effective (Say, Kulier, Gülmezoglu & Campana, 2002; Winikoff et al., 1997; Ashok et al., 2002).

Studies have found that women prefer medical over surgical abortion because medical abortion can be used as soon as a woman suspects she is pregnant and is noninvasive. The side effects are moderate bleeding or cramping. It is potentially more private, and most women report feeling a greater sense of control of their bodies compared to the use of surgical methods (Spitz

et al.,1998; Winikoff et al., 1997). The disadvantages of medical abortion are: women have to report for clinic/office visits twice or thrice as compared to a single visit for surgical abortion; the effectiveness rate is lower than for vacuum aspiration. For example, 96 percent versus 99 percent and the woman is more aware of blood loss and the actual passing of the product of conception (Spitz et al.,1998).

Menstrual Regulation

Menstrual regulation is a medical procedure related to abortion that may or may not involve a very early pregnancy termination. The procedure consists of the evacuation of the uterine contents of a woman who has short delay in menstruation (no more than two weeks). This practice originated at a time when early pregnancy tests were not available and vacuum aspiration was just being introduced (Faúndes & Barzelatto, 2006). The term menstrual regulation has been used to include pregnancy termination of pregnancies up to 12 weeks as long as the procedure is carried out with vacuum aspiration under local anesthesia. This makes it amenable for use in countries where there are legal restrictions. Also, the procedure is convenient because it does not require cervical dilation. It can be performed in a physician's office without anesthesia and therefore maintains higher levels of privacy (Faúndes & Barzelatto, 2006)

Unsafe Methods of Inducing Abortion

Unsafe abortion may be induced by the woman herself, by an unskilled provider in the community (i.e. traditional birth attendants, community based distributors, herbalists); or by untrained hospital staff such as cleaners, cooks, attendants, operating room assistants or nursing assistants (WHO, 2004). Methods commonly used include taking hot baths, swallowing poison, taking large doses of chloroquin or aspirin, traditional herbs or ingesting household disinfectants

and cleaning detergents. A woman may also have someone jump on her abdomen to induce an abortion. Other methods include inserting an object (e.g. hanger, twigs, plants and cassava roots) into the uterus. Abdominal massage is also common in some Asian countries like Indonesia and Thailand (Faúndes & Barzelatto2006; Costa, 1999).

Studies conducted in Kenya found that the following methods were used to induce abortions: (a) ingesting strong Kenyan tea, herbs, chemicals, poison, drugs (chloroquin/quinine), washing detergents; (b) catheters (e.g., rubber tube, ball-point tube, or straw), through which air is blown into the uterus to induce contractions and subsequent expulsion; (c) pushing of objects into the uterus (hangers, special roots and leaves, knitting needles); and d) strong abdominal massages (Ankomah, Aloo-Abunga, Chu, & Manlagnit, 1997; Rogo, Bohmer & Ombaka, 1999).

Why Women Induce Abortion

Most often, induced abortions are due to unintended pregnancies. Unintended pregnancy encompasses two categories of pregnancy intentions: 1) *mistimed* pregnancies that would have been wanted at a later date; and 2) *unwanted* pregnancies not wanted at that time (Pallitto, Campell & O'Campo, 2005). Bankole, Singh & Haas (1998) in their study in 27 countries found that women may have more than one reason for inducing an abortion. The most common reasons provided for termination of pregnancy worldwide are unintended pregnancy and non contraceptive use or its failure. Non-availability of contraceptives, lack of contraceptive knowledge and contraceptive failure are some of the factors which lead to unwanted/unintended pregnancies.

Furthermore, contraceptive use does not always provide complete protection. Each method has a failure rate even if it is used perfectly (Bankole et al., 1998). Henshaw (1998) estimated that 48 percent of women having unplanned births and 58 percent of those having

abortions were using a contraceptive method during the month they conceived. When levels of contraceptive use increase, the incidence of abortion declines (Marston & Cleland, 2003).

In South Africa, a descriptive study exploring the personal experiences of women who induce abortions found that a host of factors were important in the circumstances leading to unwanted pregnancy and backstreet (unsafe) abortions. These included socio-economic, cultural, psychological and societal reasons. Most women who chose to terminate pregnancies were disempowered in their relationships and also had financial pressures. These women found that their perceived need for termination over-rode all other considerations, even religion (Mofora, Wood & Jewkes, 1997).

A qualitative study conducted in Dar es Salaam with 51 adolescent girls who had just had an illegal abortion found that the girls were not only the victims of, but were willing to engage in risky sexual behaviors in exchange for material benefits from older married men (Silberschmidt & Rasch, 2001). Most of the girls interviewed for the study had more than one partner and counted on illegal abortion in case they became pregnant. Most of the adolescents interviewed were not aware of the existing contraceptive services (Silberschmidt & Rasch, 2001).

Other reasons for inducing abortion include: to postpone or stop childbearing; poverty and economic reasons with women stating that they could not afford another child; partner's objection to carrying the pregnancy to term (Bankole, et al, 1998; WHO, 2004; Henshaw, 1998; Toress & Forrest, 1988).

Various types of violence against women have also been associated with induced and spontaneous abortion. A worldwide literature review outlines the various types of violence as psychological, physical, sexual and institutional. For instance, domestic abuse can lead to low self esteem and impair a woman's ability to use contraceptives consistently. Rape not only leads to

unwanted pregnancy; it has also been used to forcefully impregnate women, especially when used as a weapon of war. Rape is used to intimidate communities and also for purposes of ethnic cleansing (de Bruyn, 2003).

In certain circumstances, women have been coerced to have abortions. In China, because of the one child policy, a study found that the influence of male child preference resulted in high proportions of abortion if the fetus is suspected to be female. Also, abortions were induced if the woman had an unauthorized pregnancy (Löfstedt, Shusheng & Johansson, 2004). In other situations, a young woman may experience negative pressure from society or a social group. Her partner may threaten to abandon her or simply disappear if she becomes pregnant. Furthermore, she may be in school and her parents refuse to support her if pregnant. In the case of a working woman, her employer may force her to choose between her job and having the baby (Faúndes & Barzelatto, 2006; Pallito et al, 2005). In some societies where the concept of family *honor* is valued, when a woman becomes pregnant outside marriage she may be forced to have an abortion (de Bruyn, 2003).

Consequences of an Induced Abortion

All types of abortions whether modern, primitive, safe or unsafe, may result in complications. The risk for the severity of abortion complications increase with the duration of pregnancy, the procedure chosen and the conditions under which it is performed. Additional factors are patients' age, parity, socio-economic status and certain pre-existing conditions such sickle cell disease (Costa, 1996). The earlier an abortion is performed, the safer the procedure. The lowest risk is abortion prior to eight weeks of gestation. After eight weeks, each week of delay increases the risk 15 to 30 percent (Costa, 1996).

Complications of surgical abortion.

Following a surgical abortion, there is usually some minor cramping or soreness which may disappear within a few days. Complications which may arise include: incomplete abortion, infection, bleeding, perforation of the uterus, complications from anesthesia and even death (Costa, 1996).

Complications of medical abortions.

Fewer risks are associated with medical abortion provided the drugs are taken under close supervision. Some women experience light uterine bleeding following oral mifepristone. Other side effects include nausea, headache, weakness, and fatigue similar to the morning sickness of a normal pregnancy (Costa, 1996; Spitz et al., 1998).

Also, after taking the prostaglandin, about 80 percent of women experience cramps and abdominal pain, similar to those associated with very heavy menstrual period. Other women may experience nausea and a few have vomiting and diarrhea. Most women experience vaginal bleeding and spotting that may last one day, to over a month. Additionally, in 4 out of 100 cases, abortion may be unsuccessful (Costa, 1996; Spitz et al., 1998; Winkoff et al., 1997; Say et al., 2002; Ashok et al., 2002).

Complications of unsafe abortions.

Unsafe abortions may result in immediate complications such as severe bleeding (anemia) with or without shock, infections, intra abdominal injuries, vesici-vaginal fistula, pelvic abscesses, and even death (WHO, 2004; Benson, Nicholson, Gaffikin and Kinoti, 1996). Women who suffer severe bleeding may require blood transfusion which is risky in terms of contracting HIV from contaminated blood. Contaminated blood is a major concern in developing countries where HIV prevalence is high in the general population (WHO, 2004).

Infections may be limited to the interior of the uterus or may spread to the other reproductive organs including fallopian tubes and ovaries or into the abdominal cavity causing pelvic inflammatory disease (PIDs) and peritonitis. Moreover, the woman may develop sepsis leading to septic shock and death (Faúndes & Barzelatto, 2006; Benson et al., 1996).

Women who survive the immediate complications of unsafe abortion often suffer more long-term complications. Some of these involve removal of fallopian tubes, ovaries or uterus. Infection can also lead to blockage of the tubes for example, resulting in ectopic pregnancy or secondary infertility (Faúndes & Barzelatto2006; Benson, et al, 1996)

Social consequences.

Common ailments like chronic pelvic pains may limit lifting thereby affecting a woman's daily functions to fulfill her traditional roles in the family. Also, the pain can be made worse by certain movements and sexual intercourse. All these can have severe social consequences for women (Faúndes & Barzelatto2006). For young girls, the social consequences can include dropping out of school placing them at an economic disadvantage. The stigma society attaches to abortion may also be overwhelming for young women (Faúndes & Barzelatto, 2006) who are sometimes ridiculed following an abortion.

Economic burden of abortion complications on the health system.

The amount of resources used to treat abortion complications in the health systems causes significant drain to already burdened health systems in developing countries. Studies have shown that some countries spend up to 60 percent of their obstetrics and gynecology budgets on treating abortion complications (Jonhson et al., 1993; WHO, 2004). All of these factors provide justification for good post abortion care as well as addressing the conditions giving rise to the perceived need for abortion or underlying spontaneous abortion.

Women who suffer abortion complications require expert care to correct the damages, and use a disproportionate share of hospital resources. Most often they require hospital beds, blood supply medication, intravenous fluids, antibiotics, access to operating theatres, anaesthesia and medical specialists. In certain countries, up to 60 percent of the resources of some hospitals are used to treat patients admitted for abortion complications (WHO, 2004). An abortion patient also occupies more staff time, more surgical, medical and laboratory resources. They also generally require relatively longer hospitalization (Faúndes & Barzelatto2006). In Maputo, Mozambique, the cost of treating a patient for complications resulting from an unsafe illegal abortion in 1993 was nine times higher than the cost of performing a clean, in-hospital termination and five times the cost of delivery (Faúndes & Barzelatto, 2006). But perhaps most importantly for nursing the woman herself is susceptible to harm that is either avoidable or reducible with good interventions and care.

The severity of abortion complications can also be influenced by the length of time between the occurrence of a complication and access to a health facility and the quality of health care received (Faúndes & Barzelatto, 2006). The legal status of abortion in a country and society's attitude towards the procedure are also important. They determine not only the incidence of unsafe abortion, but types of care women seek which in turn influences the outcome and the level of risk (WHO, 2004; WHO, 2007). In countries where abortion is illegal, there are high rates of maternal mortality attributed to unsafe abortions. In Romania for example, before abortion was restricted by law, maternal mortality rate was 20 per 100,000 live births. When the law became more restrictive, maternal mortality rose to 150 per 100,000 live births (Hord, David, Donnay & Wolf, 1991; WHO, 2004). Examples from hospital-based studies conducted in Nairobi's Kenyatta (KNH) hospital in Kenya, show that abortion complications cause up to 35

percent of all maternal deaths. Additionally, the gynecology unit in KNH is the busiest in the hospital with up to 60 percent all admissions due to abortion complications (Ankomah et al., 1997).

Spontaneous Abortion

Like induced abortion, understanding spontaneous abortion as a major type of abortion gives insights into the types of post abortion care needed for specific communities and some of the preventive actions which can be taken. Of all clinically recognized pregnancies, 10- 20 percent end in spontaneous abortions (Shearer et al., 1997; Wilcox, Weinberg, Baird, 1990). This figure is thought to be conservative as there are times when many women may not even be aware that they are pregnant at the time of abortion, which is sometimes dismissed as late or heavy menstrual flow. In addition, many spontaneous abortions are managed at home or at outpatient departments and go unreported in health statistics, making exact incidence of spontaneous abortion difficult to measure (Everett, 1997). Studies have estimated that the incidence of spontaneous abortion (including unrecognized pregnancy loss) could be between 50 and 78 percent of all clinically diagnosed pregnancies. Over, 75 percent of all spontaneous abortions occur during the first trimester (Miller et al., 1980; Roberts & Lowe, 1975). Clinically, spontaneous abortion is divided into seven different categories as shown in table B4 (Griebel, Halvorsen, Golemon, 2005)

Causes and Risk Factors for Spontaneous Abortion

Factors that cause early pregnancy loss are difficult to determine. However, fetal, maternal and other outside factors have been linked to spontaneous abortion (McBride, 1991)

Fetal Causes

About 50 percent of first trimester losses are caused by some kind of chromosomal abnormality in a fetus (McBride, 1991; Curtis, 2007; Goddijn and Leschot, 2000). Most of these abnormalities are numerical (86 percent), followed by chromosomal mosaicism 8 percent and structural abnormalities 6 percent. Structural chromosomal abnormalities can be subdivided into deletions, translocations, inversions and duplications. Only translocations and inversions play a role in miscarriage and recurrent miscarriage (Goddijn & Leschot, 2000).

A hypothesized cause of spontaneous abortion is HIV infection of the fetal thymus gland. HIV infection can cause disruption to the fetal thymus leading to altered production of enzymes (cytokine). This may lead to spontaneous abortion (Shearer, et al 1997; Curtis, 2007)

Maternal Causes

Maternal and paternal age.

Maternal and paternal age have been identified as major risk factors in spontaneous abortion. Women over 45 years have a higher risk of experiencing spontaneous abortion compared to younger women, and the risk goes up as the age increases (McBride, 1999; Maconochie, Doyle, Prior & Simmons, 2006; Kleinhaus et al., 2006; Armstrong, McDonald, & Sloan, 1992). A case control study conducted in Jerusalem looking at paternal age and spontaneous abortion found that men aged 40 and above were significantly associated with spontaneous abortion compared to men 25-29 years of age (Kleinhaus et al., 2006). In a retrospective study conducted with participants in Denmark, Germany, Italy and Spain, findings indicated increased risk of spontaneous abortions if both partners are advanced in age. The risk of spontaneous abortion was greater if a woman was more than 35 and a man more than 40 years (de La Rochebrochard & Thonneau, 2002).

Maternal illness.

Any severe maternal illness resulting in high fever may lead to spontaneous abortion (McBride, 1999; Newman, Robalo & Quakyi, 2004). Conditions such as malaria, influenza, pneumonia, STIs have been implicated (McBride, 1999; WHO, 1998). Malaria is a major cause of spontaneous abortion in developing nations. Pregnant women who live in malaria endemic areas have 2-to 3-fold greater risk of developing severe malaria compared to the risk of non pregnant women living in the same area (Curtis, 2007; Newman, Robalo & Quakyi, 2004; Nosten, Rogerson, Beeson, McGreedy, Mutabingwa, Brabin, 2004).

Other infections like bacterial vaginosis, and STIs (including syphilis) and HIV types 1 and 2 have been noted as risk factors for spontaneous abortion. Several studies have observed adverse pregnancy outcomes and high rates of spontaneous abortion in maternal HIV infection (Curtis, 2007; D'Ubaldo, Pezzotti, Rezza, Branca, and Ippolito, 1998; Brocklehurst & French, 1998; Ntozi, 2002; Shearer et al, 1997; Miotti, Dallabeita, Chiphangwi, Liomba & Saah, 1992; Miotti et al., 1990). In Uganda, for example, HIV sero-positive women were over 80 percent more likely to have had a history of a previous abortion (WHO, 1998). HIV damages the placenta and interferes with normal transfer of nutrients to the fetus. This leads to abnormal development of the fetus which may result in fetal death or expulsion (Curtis, 2007). A study conducted in Tanzania which compared the HIV status of women presenting with spontaneous abortion and those presenting for ante natal care or delivery found higher rates of HIV infection among women admitted with spontaneous abortion (Urass et al., 1992). A retrospective study conducted at 16 infectious units in 12 Italian cities compared obstetric histories of a cohort of infected and uninfected women. Their findings revealed a 67 percent increased risk of spontaneous abortion among women infected with HIV-1 (D'Ubaldo, Pezzotti, Rezza, Branca & Ippolito, 1998).

Bacterial vaginosis is an extremely prevalent vaginal condition and the most common cause of vaginitis (Eckert, 2006). Although studies on its effect on pregnancy outcome and spontaneous abortion have been inconclusive, especially in early pregnancy (Larsson et al., 2005; Oakeshott et al., 2002), bacterial vaginosis has been shown to ascend to the endometrial and invade the placenta . A growing body of literature has suggested a strong association of risk of spontaneous abortion among infected women (Hay et al., 1994; Donders et al., 2000; Eckert, Moore & Patton, 2003). Other types of acute vaginitis which place women at risk of spontaneous abortion are vulvovaginitis, candidiasis and trichomoniasis (Eckert, 2006). Illnesses such as systemic rheumatism, lupus erythematosus, congenital cardiac disease, renal disease and diabetes mellitus are some of the medical diseases associated with spontaneous abortion (Curtis, 2007).

Anatomical causes.

A number of uterine and cervical abnormalities are associated with spontaneous abortion. Abnormalities of the cervix due to congenital factors can lead to incompetent cervix and typically to second trimester painless dilation followed by spontaneous delivery of a nonviable infant. A cervix that has been damaged by a previous surgery or trauma may be a risk factor for spontaneous abortion. Uterine sub-mucosal fibroids can also lead to repeated losses due to poor blood supply to the endometrial (McBride, 1999).

Behavioral causes.

Smoking, high caffeine intake and alcohol use have been shown to significantly increase the risks of spontaneous abortion (Dominguez-Rojas, de Juanes-Pardo, Astasio-Arbiza, Ortega-Molina & Gordillo-Florencio, 1994; Armstrong et al., 1992; Bech, Nohr, Vaeth, Henriksen & Olsen, 2005; Tolstrup et al., 2003) . A study conducted in New Haven Hospital in Connecticut evaluated the coffee tea, and soda drinking in the first month of pregnancy. Findings show that drinking over three cups of

coffee was associated with an elevated risk of spontaneous abortion (Dlugosz et al., 1996). A population based case control study found that increased intake of amounts of coffee increased the risk of spontaneous abortion. Compared to women who ingested less than 100mg of coffee, those who drank 100 to 299 mgs had 30 percent increased risk of spontaneous abortion; 300 to 499 mgs per day 50 percent and 500mg or more per day 40 percent risk (Cnattingius et al., et al, 2000) . Other factors which have been found to increase the risk of a spontaneous abortion include: a woman being underweight, previous miscarriage, previous termination or pregnancy and infertility problems. Others are stress, changing partners, physical injury, radiation, drugs and environmental pollutants (Maconochie, Doyle, Prior & Simmons 2006; McBride, 1999).

Estimating Incidence of Abortion

Gathering data on abortions has proven problematic especially in countries where abortion is illegal. The legal and moral arguments surrounding the issue make research on all aspects of abortion difficult. These arguments also affect the quality of data and information obtained (Bankole, Singh & Haas, 1998). Countries with less restriction on abortions have data readily available that can be obtained from hospital records, official statistics, insurance records or other national data (Chan & Sage, 2005; Henshaw, Singh, & Haas, 1999; WHO, 2004). In the United States, for example, following the legalization of abortion in 1973 (Roe V. Wade), the Alan Guttmacher Institute (AGI) has been estimating numbers of abortions performed by conducting census of all known abortion providers. The Centers for Disease Control and Prevention also tracks abortion incidence in the US from State statistical agencies (Finer & Henshaw, 2005).

Under-reporting of induced abortions especially in developing countries is a major drawback to acquiring accurate data. Women who have undergone induced abortions are usually

unwilling to admit that they have terminated a pregnancy in a survey interview. Even in countries where abortion is legal, although data is available, there are still problems with accuracy of the data collected (Huntington, Mensch & Miller, 1996).

There are a number of reasons for gathering reliable data on abortion levels: 1) the absence of reliable data undermines the ability of public health practitioners to determine the magnitude of abortion complications in terms of costs of hospital resources; 2) gathering complete data on induced and spontaneous abortions can provide supportive statistics to advocates of legislative and programmatic change. If policy makers are confronted with numbers of women who have tried or have terminated their pregnancies, and the costs associated with it, liberation of abortion laws might be pursued more aggressively; 3) clear estimates of levels of abortions is also a way of encouraging program managers to include post abortion care and family planning services; and 4) accurate abortion information will help in estimating the unmet need and demand for contraception (Huntington et al., 1996). Table B5 summarizes the various methods which have been used to estimate incidence of abortions in developing countries.

Post-Abortion Care

Generally, due to the widespread restrictive abortion policies in most developing nations, a new language and new strategies were needed to enable health ministries and other nongovernmental organizations implement programs and conduct operations research on abortion-related treatment (Corbett & Turner, 2003). International Projects Assistance Services (IPAS), an international organization that advances women's reproductive health rights, first articulated the concept of post abortion care (PAC) in 1991 (Corbett & Turner, 2003). IPAS recommended the integration of post abortion care and family planning services in the health

care systems as a strategy to break the cycle of unwanted pregnancies and improve the health status of women in developing countries (Corbett & Turner, 2003).

By 1993, a post abortion care consortium had been formed to educate the reproductive health community on the consequences of unsafe abortions and to promote PAC as an effective public health strategy (Corbett & Turner, 2003; PAC consortium, 2002). Additionally, the world community at the 1994 International Conference on Population and Development (ICPD) in Cairo called for all women to have access to treatment for abortion related complications, post abortion counseling, education and family planning services, regardless of the legal status of abortion in their countries (United Nations, 1995).

The PAC model consists of five elements: community and service provider partnerships, counseling, treatment, contraceptive and family planning services and reproductive and other health services. The model includes the partnership between the community members and health care providers in reducing maternal mortality and morbidity from complications of unsafe and incomplete abortion. The new model also highlights counseling as an essential element, in recognition that counseling should cover a full range of reproductive and general health, and women's emotional needs (PAC Consortium, 2005; Amissa-Brookman et al., 1999).

Emergency treatment for complications of spontaneous or unsafely induced abortion is a critical element of PAC. Without swift medical attention, abortion complications are potentially life threatening (McInerney, Baird, Hyman, & Huber, 2001; PAC-consortium, 2002). Integral to this element of PAC is the use of manual vacuum aspiration (MVA) procedure for treatment of first trimester incomplete abortion. World Health Organization identifies MVA as the ideal procedure for treating abortion complications at the primary care level in developing countries (WHO, 1994). In addition, WHO has guidelines to help providers in using the different methods

of uterine evacuation (WHO, 2003). Various countries have policies allowing midwives to be trained in the MVA procedure. This has made treatment of incomplete abortions relatively accessible to women, especially in the rural areas (McInerney, Baird, Hyman, & Huber, 2001).

Despite increases in modern contraceptive use, significant numbers of women of childbearing age still have unmet need for contraception (WHO, 2004). However, providing a wide range of contraceptive methods is an effective strategy for preventing future unwanted pregnancies and unsafe abortion while helping women achieve their reproductive goals. The health professional should offer post abortion contraceptives in the same facility following treatment for abortion complications (McInerney et al., 2001; PAC-consortium, 2004).

A comprehensive reproductive health program implementing PAC strives to include all the five essential elements within the service package. Operations research so far conducted have produced some promising results. In countries where PAC is implemented at certain health facilities, more women have received pre and post abortion counseling, and contraceptive methods after being treated for abortion complications (Huntington & Piet-Pelon, 1999). A study conducted in Zimbabwe demonstrated that unplanned pregnancies can be reduced through post abortion contraception when given at the same facility as abortion treatment (Johnson, Ndhlovu, Farr & Chipato, 2002). Nonetheless, an exploratory study conducted in Kenya at health facilities run by private health providers trained in PAC demonstrated that of 403 women interviewed, only 30 percent went home with a contraceptive method. One of the reasons for not going home with a contraceptive method among this group was a lack of post abortion contraceptive counseling (Onyango, Oguttu, Barger, 2009). Hence, there is a need to underscore the importance of including and implementing all the five elements of PAC. Policy makers,

governments and health care professionals in general should ensure that quality PAC is implemented in regions with high prevalence of abortion complications.

The Role of Nurse Midwives in PAC

With the advent of PAC, there was a realization that mid level health providers (nurse midwives and physician assistants) can be trained on PAC to care for women in poor urban, semi-urban and rural communities. These same communities are normally underserved by physicians in developing countries. This initiative of expanding the role of nurse midwives is supported by the WHO and International Confederation of Midwives (IPAS & Division of International Health (IHCAR), 2002).

Nurse midwives play an important role in women's access to reproductive health and abortion related care. Most nurses in Africa and other developing countries work at the periphery of the health care system (where there are no doctors). Additionally, compared to physicians, nurses are many in number and have lower training costs and salaries (IPAS & IHCAR, 2002). In Zambia, for example, in 1995, it was estimated that there were seven physicians for 100,000 people compared to 113 nurses for the same number (WHO, 1998). Moreover, most physicians choose to stay in urban areas while the peripheral health systems are managed by nurses (Oguttu, 2001). In Kenya, 70 percent of doctors live in cities while 74 percent of the population are in rural areas.

Statistics on staffing ratios from countries like Sudan which have had internal conflict for many years are simply nonexistent. What is known is that most of the qualified health personnel like doctors and nurses migrate to other countries. Also, due to the destruction of infrastructure, continuing education is almost nonexistent save for the few classes given by relief agencies and these are not standardized.

Although not all countries allow midwives to treat abortion complications, they (nurse midwives) are increasingly being trained to perform MVA procedure and implement PAC. Traditionally, abortion care was provided exclusively by physicians. Currently countries which have PAC training for midwives include: Kenya, Ghana, Uganda, Nigeria, Ethiopia, Zambia, South Africa, Mozambique, Senegal, Malawi, Peru and Vietnam. These countries have included the role of midwives in PAC in their reproductive health policies (Kenya Ministry of Health, 1997; IPAS & IHCAR, 2002; Otsea, Baird, Billings, & Taylor, 1997).

Evaluations have shown that if nurse midwives are trained, they quickly become proficient in using MVA to treat incomplete abortion and the outcomes are comparable to those of physicians (IPAS & ICHAR, 2002). In South Africa following legalization of abortion in 1997, midwives were trained in PAC. An evaluation conducted in 1999 showed that midwives provide high quality PAC services (Dickson-Tetteh & Billings, 2002). Similarly, in Ghana, access to PAC services greatly improved after trained midwives started implementing these programs (Billings, Ankrah, Taylor, Baird, Ababio & Too, 1999). In Kenya, several nurse midwives have attended PAC training and are improving access especially in the private sector (Yumkella & Githiori, 2000; Warriner et al., 2006). A recent randomized control trial compared midlevel providers (MLPs) - nurse midwives and physician assistants in the quality of post abortion care. The main outcome measures were the numbers and severity of complications at various times after receiving safe abortion via vacuum aspiration. The findings showed that MVA was done safely by physicians and MLPs equally (Warriner et al., 2006).

Where is the Gap in Literature?

Literature searches found that only one study examined the reproductive suffering among women in South Sudan and revealed that miscarriages and induced abortions were common (Jok,

1999). There is a major gap in abortion literature at present in this regard. The databases which were searched for this study include: Medline (1948 to present); cumulative index to nursing and allied health (CINAHL); Embase.com; Health reference center academic (1980-2010); academic onefile (1980-Jan 2010); Expanded academic ASAP (1980-jan 2010); and Cochrane library. The search terms used were: abortions, South Sudan; abortion complications, women's experiences; post war context. This study will begin to document some of these experiences with an attempt to fill this gap.

Chapter Summary

In this chapter I reviewed the literature on reproductive health among populations affected by war generally, effects of armed conflict on women and the evolution of reproductive health services in crisis situations. I have also discussed the relevant literature on abortions (induced and spontaneous) and post abortion care. The various methods of inducing an abortion and the consequences of induced abortion are analyzed. Post abortion care and the role of nurse midwives in the provision of PAC are also described. This literature review provided important background for the study and informed the study question and design. In the following chapter, I have explained the research design I used to answer my research question.

CHAPTER 3

Methods

This study utilized the qualitative descriptive method of inquiry to investigate women's perceptions of their experiences with abortion complications (induced or spontaneous) in the post war context of South Sudan. The research question was: What are the experiences of women who have suffered abortion complications (spontaneous or induced) within a post-war context of South Sudan? There is no empirical data in South Sudan on women's experiences with abortions during and after the protracted armed conflict. What exists is anecdotal evidence which indicates that abortion is a significant reproductive health problem in this part of Sudan.

Why Qualitative Descriptive Design?

Qualitative description (QD) is a distinct method of naturalistic inquiry that describes an event in the everyday language of those events (Sandelowski, 2000). It is intended to portray the *subjective* experience of a phenomenon (in this study, abortion and its complications) without complex descriptions or theoretical linkages made by the researcher. Also, it can achieve discovery by bringing to light fresh perspectives from participants (Kearney, 2001).

Sandelowski explains, that QD is directed towards discovering the who, what, and where of events, their experiences or their basic nature and shape (Sandelowski, 2000). Sullivan-Bolyai, Bova and Harper (2005), assert that one of the tenets of QD is that the method collects and uses data from multiple sources to describe experiences from the participants' point of view.

However, it is important to note that each particular study determines which source of data is pertinent. Qualitative description also enhances tailoring of interventions to the cultural milieu of the participants and their reality at the point where possible interventions are being considered.

As discussed in Chapters 4 and 5, understanding the cultural milieu of South Sudan is necessary to situate the study participants' perceptions of their experiences with abortion complications.

Suitability of Qualitative Description with Study Purpose

In relation to this study, and as compared to grounded theory or phenomenology, for example, QD allowed broad exploration, understanding and description of the abortion experience as narrated by the women who experienced the phenomenon in South Sudan, a region recovering from a long protracted civil war. The level of complexity associated with the focus of this study was best studied via QD since the main goal was to begin to describe the experiences of women in South Sudan who were admitted to a health care facility with abortion complications. For instance, QD permits a broader overview of an issue as experienced by a participant whereas phenomenology is aimed at achieving depth related to the meaning of a phenomenon. Because there is so little known about the phenomenon in the context of South Sudan, it is necessary to first gain a general description and understanding of the experience to learn what is similar and what is different for the women. A phenomenological study seeking to interpret the experience and learn its essence and how it affects the woman immediately and over time is more appropriate after basic information is available. The same is true for grounded theory. The goal of grounded theory is to produce theory, at least in the formative phase. Theory formation requires understanding of the phenomenon as well as how individuals experience and react to it over time and in different situations. None of which has been documented at this time. Simply stated, this phenomenon is in its infancy in South Sudan and QD is the best method by which to cast a wide net and learn as much about the experience as possible.

Both grounded theory and phenomenology methods require researchers to go back to the research participant after the initial interview (Munhall, 2003). Because of the high value placed on children in South Sudan and the legal restriction on abortion, it (abortion) is a very sensitive topic. Thus it was anticipated that the majority of study participants would not be comfortable and/or willing to be interviewed more than once. For these reasons QD design was determined to be the most suitable method for this study. Moreover, most of the women who participated had traveled a distance to the facility so follow up interviews would not have been possible and were not culturally appropriate as noted earlier.

Sampling and Recruitment

The sampling technique used was purposive in order to achieve maximum variation and learn about abortion experiences from the perspectives of the women. Use of a purposive sampling technique (PST) allowed me to ask identified women who had experienced complications from pregnancy loss if they would be willing to participate in my research. A key tenant of the qualitative paradigm is that the most valuable information is gained from those who have experienced and are willing to reflect on the phenomenon of interest and who then communicate their thoughts and perspectives during an interview (Sandelowski, 2000; Morse & Richards, 2002). For this study, these women were the ones who had been admitted to the hospital because they were experiencing complications due to an abortion.

Study Location

The study was conducted at the gynecology unit (unit) of a county hospital, Central Equatoria State in South Sudan. This hospital was administered collaboratively between the government of South Sudan and Norwegian People's Aid (NPA). Norwegian People's Aid is a

non-governmental organization which has provided health services in South Sudan for almost three decades. The hospital serves an estimated population of over 300,000. The choice of this hospital as a study location was made because it is one of the State hospitals known to admit and treat women with abortion complications during the post war period. The systems in place (e.g. a gynecology unit) made it relatively easy to identify women for interviews.

Inclusion Criteria

- Women treated for complications of spontaneous or induced abortion at the gynecology unit in the county hospital;
- Eighteen -49 years of age (In South Sudan, any individual of 18 years and above is legally considered an adult). During the interviews, I discovered that most participants did not know their exact dates of birth. Some participants who were 15 years of age were listed as adults, “A” in the in-patient registration book in the unit. During the interviews they stated that they were 15 years of age. In such a situation, the interview was continued because at the time of the interview they were already married and living with their husbands.

Exclusion Criteria

- Unable to reflect or communicate about experience of pregnancy loss because of known (obvious) sensory or cognitive limitations.
- A woman with a previous history of abortion but currently admitted to the unit with a different gynecologic problem.

Ethical Considerations

The study was approved by the Research Ethics Committee at the Ministry of Health, Government of South Sudan; State Ministry of Health Office for Central Equatoria (State), South Sudan and Boston College Institutional Review Board (IRB) (Appendix C). During the study, participants were re-assured that taking part in this study was voluntary and that their participation or non participation would not affect the care they receive that day or in the future.

Participants were asked to give consent for the study after reading the consent forms (Appendix D). If they could not read, I read the contents of the consent form for them. This study held no more than minimal risk to participants since no invasive procedure was being performed on any of the study participants. The institution review boards in South Sudan and Boston College were requested to and subsequently did waive the requirement of documentation (signature) on the consent form for all study participants. All of the participants gave verbal consent.

In South Sudan, over 90 percent of the population live in rural areas and have low literacy rates. Generally, these populations are not comfortable signing documents. Therefore asking a woman to sign a document on such a sensitive issue as abortion would have been perceived as implicating her and interpreted negatively. This in turn could cause a problem related to trust, possibly interfering with the interview process. For this reason, there was no signature line for the participant on the consent form. However, there was a signature line for the principal investigator. A copy of the investigator-signed consent form was given to those participants who wished to have a copy.

The consent forms were coded with numerical numbers and contained no information which could link the participant to the consent form. Only participants who gave their verbal

consent were to be interviewed. Confidentiality was maintained during data collection, analysis and dissemination of the data. Participants had the option to stop the interview anytime if they wished. After the interview, participants were given an opportunity to share what it was like to participate in the interview.

Three participants became upset during the interview while reflecting on their experiences. This reaction had been anticipated and arrangements had been made for counseling services by one of the nurses at the gynecology unit. The nurse had been trained on post abortion care counseling prior to the interview (training was not related to the study). Only one of them requested that the interview be stopped, and it was stopped. She was subsequently counseled by the unit nurse. After counseling she stated that she was fine. The other two wanted to continue with the interview process. The consent forms, the field notes and voice tapes have no identifiers that could be linked to a particular research participant.

Data Collection

Interview guide.

An open ended-semi structured questionnaire with suggested probes (Appendix E) was used to conduct in-depth interviews with the participants. The first part related to basic demographic information and reproductive health history. These factual questions helped to establish rapport and prepare for the more reflective questions that followed.

Selection of study participants.

Before commencing the study, meetings were held with the health coordinator of NPA to obtain permission and cooperation at the hospital level. Meetings were held with the physician in charge of the gynecology unit, all the medical officers, and nurses. Six nurses from the

gynecology unit were appointed by the medical officer in charge to assist with identifying participants for the interviews. The six nurses were appointed because they were working at the gynecology unit (study location) during various shifts--morning, afternoon and night). Due to the shortage of nursing staff at this hospital, there was no other option.

A three- hour class was provided for the nurses to learn the details of the study, the importance of maintaining confidentiality, and ways to approach the participants eligible for the study. The nurses were on rotating shifts so at any given time one of them was available during the study period.

All women who had received treatment for abortion complications and met the inclusion criteria on a day when I was present to interview were eligible for the study. The nurse on duty in the gynecology unit at the time an appropriate subject was identified introduced the idea of the study to the patient and informed her of the procedure for participating. While identifying the patients, the nurses were instructed to reassure the patients that participation in the study was voluntary and they (participants) were not obliged to take part. This helped in allaying any anxiety the woman may have had in regards to the interview process. Study participants confirmed verbally that they had been reassured that their participation was voluntary. The information about the study was given to the woman after completion of treatment and either while waiting to be discharged or following discharge and waiting for arrangements to return home. If the woman agreed to take part, I was informed by the nurse who introduced the research idea to her.

I then introduced myself to the woman and took her to one of the two private office spaces identified by the medical officer in charge and located next to the gynecology unit within the hospital. Both rooms afforded total privacy for the interview. Had a woman requested a

different setting, her request would have been granted. However, all the women were satisfied with the rooms allocated for the interviews.

Once settled at the private location, I welcomed her and made sure the seating was comfortable and checked that she neither felt nor looked anxious. I explained the purpose and details of the study to the participant and then checked that she understood what I just said. If literate, a consent form was given to the participant to read. If she could not read, then I read and explained the contents through the medium of a translator (see explanation below), who used words that the participant understood and were customarily used by her ethnic group. Among the participants interviewed, there were 10 languages represented (Table B6).

I was careful to ensure that the participant was not asked to sign or put a mark anywhere on the consent form. After verifying that the participant understood the nature, purpose and processes of the study I signed the consent form indicating that the form and purpose of the study had been explained. If after the consent process the participant agreed to take part in the study, the interview was conducted. Among those persons who were identified as appropriate participants for the study and who were approached by the study nurses, only three declined. Two came from a considerable distance and were anxious to return home and another stated that she was not feeling well enough to sit through the interview.

During the interview, participants were encouraged to answer questions spontaneously and were reassured that there was no right answer. I emphasized that I was interested in their thoughts and reflection about their experiences. On average, the interview sessions lasted about an hour. Each woman was given 5 Sudanese Pounds (~US\$2:50), remuneration for their time in the study. The money was for transportation and/or food. This amount of money is not considered coercion in South Sudan. In the African context of giving, it is viewed as a good

gesture. All interviews were tape-recorded verbatim. Also, throughout the interview, I took detailed field notes which described context and circumstances of the interviews and decision trails.

Data collection ended once saturation was reached. Interviews in qualitative research should be continued until there is saturation of data in order not to miss important themes or insights (Morse & Richards, 2002). Data saturation essentially was reached by the 15th interview for after that one, new information rarely emerged. I continued the interviews to be certain I had captured all relevant data and knew after the 26th one that I had reached saturation. Morse and Richards further explain that the situation being studied and the quality of data generated determine the sample size once research is under way. They assert that what is most important for researchers is to continuously be asking what should I be doing to create a “strong and rich data set” (2002, p.71). Fundamental in this study was the need to focus on collecting data that represented women’s perspectives on their experiences with abortion complications during the post war context of south Sudan. After no new perspectives were being reported, I interviewed a few more women. This was done to ascertain that I had reached saturation and there were no unusual cases that I missed. Finding none, I stopped the interviews.

Translation of questions and data management.

South Sudan has 64 different languages. The dominant language around the study location is called Kakwa. However, because of the internal displacements of families that took place during the war, many families speaking different languages settled in towns such as Yei where the study hospital is located. During this post war period, English is being considered as one of the official languages, and also the language of instruction in South Sudan. As shown in table B7 participants demonstrated fluency in ten different languages. It was also difficult before

the study commenced to know which languages were common. This was due to the fact that there are still no systems in place to know who is where in South Sudan. This made translation of the study tool not feasible.

Two translators who were multi lingual and knew most of the South Sudanese languages were identified and trained in the research process. One of the translators was fluent in Arabic, Dinka, Acholi and English. The other one was fluent in the remaining languages and English. The translators were midwifery students who had completed courses on research methodology in their nursing classes. Both were identified and highly recommended by the senior nurse instructor at the midwifery school. These translators had also rotated in the gynecology unit as part of their practicum experiences and demonstrated interest in getting involved with abortion care.

Before commencing interviews, the translators agreed not to have direct contact or interact in any way with the participants. Each translator was also required to recues herself as a translator if she knew one of the participants. These two translators were the only ones used throughout the study period in order to maintain continuity and high levels of confidentiality. I conducted a three-hour class with the translators on the purpose of the study, research procedures, importance of maintaining confidentiality, informed consent and maintaining a comfortable distance with the participants. I assessed their capabilities to maintain confidentiality by observing their interaction with patients (none were study participants) in the gynecology unit before the study began.

Data Analysis

Initial analysis occurred simultaneously with data collection. Early analysis is strongly recommended in qualitative research. The process assists thinking about the existing data and

generating strategies that may help in collecting new and better data in subsequent field visits (Miles & Huberman, 1994; Morse & Richards, 2002).

Data for this study were analyzed using content analysis, a technique widely used in qualitative descriptive research (Hsieh & Shanon, 2005; Milne & Oberle, 2005). It involves breaking down transcribed data into smaller units, coding or naming these units according to their content and/or concepts they represent and categorizing or grouping coded material based on shared concepts (Miles & Huberman, 1994). For this study, conventional content analysis was applied. Conventional content analysis is a technique mostly used if the aim of the study is to describe a phenomenon where the existing literature is limited (Hsieh & Hsieh, 2005).

All daily field notes were typed as soon as data collection for the day was complete. Similarly, I transcribed the audiotapes as soon as possible. Concurrent with typing field notes and transcribing audiotapes, expanded interview notes (EIN) were written for each interview.

Expanded interview notes included my thoughts during interview and decisions made as to what probes to use to gain a better understanding of the experience or what line of questioning to follow to tease out what was the woman's thinking and what belonged to her culture or tribe. By recording my thoughts and decisions, I created a decision trail. A contact summary sheet was also kept for each interview which helped with reflection after each field work. A contact summary sheet is a single sheet with some focusing or summarizing questions about a particular field contact. I used the sample provided by Miles & Huberman (p.53) (Appendix F).

I then immersed myself into the data reading and re-reading allowing it to speak to me and offer new insights. I read the typed notes word by word thoroughly and repeatedly to obtain a sense of the whole. While reading the data, I began the coding process. The first codes were in vivo codes. These are codes that emerge directly from data and are chosen because of emphasis,

repetition, significance, or clarity of statement. I wrote these codes in the margins of the typed transcript as recommended (Hsieh & Shanon, 2005; Miles & Huberman, 1994; Morse & Richards, 2002). Codes were continuously reviewed, added and/or removed as new insights and ways of looking at the data set emerged.

I then imported the 26 typed transcripts into nvivo8 computer software (QSR, 2008), for further data analysis. Coding was continued in nvivo8 by creating nodes. A node (also known as code) is the name assigned to a group of text with related concepts. The coded text in the hard copies was again reviewed and coded appropriately in nvivo8. During the coding process, data was continuously reviewed and revised.

The next step in the analysis was pattern coding (or second level coding). Once the initial codes (nodes) had been assigned, they were reviewed. I noted that some of the codes/nodes were similar and could be merged to become a category. Combining similar codes/nodes into categories brought the codes down to a manageable number. From studying the categories, it became clear that there were patterns emerging that described the phenomenon in general terms that were true for most of the women. I was constantly writing memos of my thoughts and ideas and emerging insights that I wanted to explore further both within and between documents. Finally, I identified relationships between patterns and these further informed the final report. Table B7 shows an example of the data coding process.

Strategies for Enhancing Validity and Rigor

The research characteristics suggested by Lincoln & Guba (1985), for enhancing rigor were utilized in this study; these include: Authenticity, Credibility, Criticality and Integrity, Transferability and Dependability (Lincoln & Guba, 1985; Marshall & Rossman, 1995; Whitemore, Chase, & Mandle, 2001).

Credibility.

Credibility has been compared to internal validity of quantitative methods. Credibility consists of giving attention to the voices of participants. I made a deliberate effort to describe participants' perception of their experiences with abortion complications accurately. I have provided as many direct quotes from the women as possible to make the results believable. In addition, as recommended by, Lincoln and Guba (1985) I stayed in the field and conducted the interviews myself and I was provided with 'any-time' access to the study unit. This provision enabled me to observe the participants in the unit and how the health care providers interacted with them throughout their treatment experience. Furthermore, I also have many years of work experience in South Sudan. This has helped me to interact with women and to better understand some of the cultural issues influencing the life of the South Sudanese. Being able to intentionally observe the treatment aspect of the women's experience added depth to my findings. My familiarity with the situation allowed me to focus on the question and dismiss what was not relevant to the phenomenon of interest for this study.

Debriefing.

Another activity useful in establishing credibility is peer debriefing. The peer in this case is an experienced researcher who keeps the inquirer honest by playing "the devils advocate" (Lincoln & Guba, 1985, p. 308). The inquirer's biases are probed, meanings explored and the basis of conclusion clarified (Lincoln & Guba, 1985).

Authenticity.

Authenticity is closely linked to credibility. It involves portrayal of research that reflects the meanings and experiences that are lived and perceived by the participants. Authenticity is an important criterion for validity. I have tried to remain true to the study and presented the findings as provided by participants.

Criticality and integrity.

These are on-going reflection of open and critical analysis of all aspects of inquiry that contribute to validity (Lincoln & Guba, 1985; Whittemore et al., 2001). Critical appraisal is reflected in the systemic design of research. Evidence should substantiate investigators' findings and descriptions. Descriptions should be valid and grounded within the data. Criticality and integrity can be represented through recursive and repetitive checks of the truthfulness of descriptions and humble presentation of findings (Lincoln & Guba, 1985; Whittemore et al., 2001). I constantly checked the trustworthiness of the data and descriptions by carefully going through the transcripts multiple times.

Transferability.

Transferability has been compared to external validity in quantitative methods; however, in the context of a naturalistic research it is different from conventional quantitative studies. The burden of proving the transferability rests more with the investigator who wants to make the transfer than the original researcher. Judgments need to be made about the relevancy of the study to the second setting (Marshall & Rossman, 1995). The primary investigator in a naturalist research has the task of providing thick description necessary to enable someone interested in

making transfer to reach a conclusion about whether the transfer can be contemplated as a possibility. Hence, it is his/her responsibility to provide the data base that makes transferability judgments possible (Lincoln & Guba, 1985). I have provided thick descriptions of findings and research context, assumptions central to the study and an audit trail of the process, with the intent of enhancing transferability.

Dependability.

This is the researcher's attempt to account for changing conditions in the phenomenon, which is typical of qualitative/interpretive research (Marshall & Rossman, 1995). The best way to ensure a dependable study is to work closely with others experienced in the method and have them examine its acceptability by attesting to the legitimacy and adherence to the research method and design, and the careful documentation of the actual research process and changes made to enhance that process. The auditor examines the data for findings, interpretation and recommendations. They attest on whether these are supported by data and if the study has internal coherence (Lincoln & Guba, 1985). The faculty advisors especially the methodologist has played the major role of auditors to this study. All the raw data including transcripts and coded data was shared with the methodologist. Throughout the research process decisions and concerns were shared with the academic advisors. Their questions and input kept me on track and enriched the data coding process. In addition, I shared times of concern and those of discovery and progress with them.

Confirmability.

Confirmability captures the traditional concept of objectivity. Lincoln & Guba (1985) stressed that it is important to ask the question whether the findings of a study can be confirmed

by another source. By doing this, any evaluation done is not based on the researcher but the data (Marshall & Rossman, 1995). Marshall & Rossman (1995) cites an appropriate criterion as “...do the data help confirm the general findings and lead to the implications?” (p.145). One of the major techniques of establishing confirmability is similar to the audit system discussed under dependability above. Two other methods are triangulation and keeping a reflexive journal. Keeping an audit trail by the investigator helps reduce reported problems. Having an audit trail helps to systematize, relate, cross reference and attach priorities to data that might otherwise have remained undifferentiated until the writing of the report. I kept an audit trail by way of expanded interview notes, contact summary forms that provided trails of decisions and findings. The audit trails shared with the methodologist and the academic advisors include: Raw data-all data collected including transcribed tapes and field notes, and culture related interviews; data synthesis and analysis products- write ups of integrated field notes; data reconstruction and coding products-structure of categories findings, descriptions and conclusion, final report and relevant literature; and process notes-methodological notes (procedure, designs, strategies, rationale), trustworthiness notes and audit train notes.

Chapter Summery

In this chapter I have discussed the research methodology and provided my rationale for choosing qualitative descriptive (QD) study design. Qualitative Descriptive design allows for achievement of discovery of the phenomenon by bringing to light the perspectives of the participants through in-depth interviews. Purposive sampling methodology was used to involve women who had experienced post abortion complications as participants. Sampling continued until saturation was reached. Content analysis technique was used to analyze the data. Transcripts were imported in nvivo8 which enhanced the analysis process, pattern coding and

report writing. The strategies used to enhance rigor included: authenticity, credibility, criticality and integrity, transferability and dependability. Confidentiality was maintained throughout the study.

The next chapter presents the cultural context and the roles of the women in South Sudan. This chapter is provided before the findings chapter because it is reflective of the situation in which women live in South Sudan. It provides an understanding of women's situation and lessens the biasing which may cloud analysis.

CHAPTER 4

The Cultural Context for Women in South Sudan

Introduction

In South Sudanese societies, culture and gender norms play a very important role in a woman's life. While South Sudan cannot be viewed as having one homogenous culture, the status of women and how culture influences this is generally similar across the region (Fitzgerald, 2002). Most importantly, a woman's life revolves around the marriage institution and her reproductive function.

In this chapter, I present the cultural context of a South Sudanese woman to prepare the reader for a better understanding of the findings presented in chapter five. The primary discussion in this chapter is around the phenomenon of marriage and a woman's expected reproductive function within this institution. How the women's context influences their world view is enlightening. I discuss what it is like to be a woman in South Sudan, marginalization of women, the marriage process and bride wealth and some of the women's experiences during displacement. I further discuss some of the progress made so far to improve the status of women in the region.

Being a Woman in South Sudan

In South Sudan, women don't have rights... women are not considered important.... they are not entitled to any decision making ...women are not educated and have lots of problems... they are expected to deliver children each year (A female health provider as key informant).

South Sudan is a very patriarchal society and gender roles are shaped predominantly by cultural traditions. Culture is “the beliefs and customs of a social organization defined by obligations and expectations and the assignment of roles and responsibilities” (Fitzgerald, 2002, p.18). Within this context, a female child in South Sudan has a ‘special’ role in the family and community based on marriage and her reproductive potential. A female in South Sudan is also considered a bridge-builder. Through marriage the female has the potential to build alliances with other families, clans and ethnic groups (Duany, 2001; Fitzgerald, 2002).

During 21 years of civil war (1983-2004), the majority of women from South Sudan found themselves in the situation of being displaced from their homes. They became either refugees in some neighboring country, or internally displaced within Sudan. Their actual experiences related to violence during the war and time of displacement inevitably shaped their perspectives about their lives including issues of reproductive health.

During the process of data collection for this study, I realized that in order to answer my research question, I needed to understand the context and role expectations of the women of South Sudan. I also needed to learn how the context influenced their world view and life experiences. I learned that in South Sudanese society, the woman’s life revolves around the marriage institution and this phenomenon will be the primary discussion in this chapter.

Unfortunately, little research to date has looked at this context and its contribution to the values, beliefs and traditions of the women of South Sudan. Therefore information in this chapter is from a few published articles, anecdotal stories and experiences, news articles, and informal discussions with key informants. These conversations were held before, during and after data collection for the purpose of providing context for and a better understanding of the findings.

The study participants also gave valuable information about their situation and these data form the basis of this chapter.

Marginalization of Women

In a highly patriarchal society like South Sudan, a female child is often considered subordinate to a male child. Roles of females are confined to reproductive functions, rearing children, dealing with domestic issues, and working around the house (Duany & Duany, 2001; Fitzgerald, 2002; USAID, 2003). Whatever a female does is supposed to be decided, monitored and controlled by her parents, older brothers and close relatives when she is unmarried, and/or her husband and his relatives after she is married. For instance, there have been reports from certain locations in South Sudan that married women who look at other men or ride a bicycle are put in prison by their husband's relatives for up to six months because this behavior is considered to violate the defined cultural norms (USAID, 2003). Hence, a South Sudanese female receives her identity (internalized perception and/or identity imposed by the community) from the community according to how she lives her life and interacts with other community members. In her article concerning the special needs of Sudanese girls, Duany (2001) stated this process: "the point is that while individual achievement gives an American woman her identity, it is community life that gives an African woman her identity" (Duany, 2001, para1).

Education of females not emphasized.

In most parts of South Sudan, females are not allowed to go to school like their male counterparts. Instead, in keeping with their cultural traditions, they are expected to agree to an arranged or forced marriage soon after menarche (Aleu, 2009; Fitzgerald, 2002; USAID, 2003). Dixon (2005) highlights the story of a female 21-year old that he interviewed. She was attending school but was removed by her father and brothers in order to be married to a man 15 years her

senior. After her marriage, she stubbornly continued to attend school when this was not an allowed norm of her marriage commitment. Everyday her husband beat her in an attempt to break her stubborn spirit. Finally, he took her from school to the rural village so she could be a fulltime housewife.

A South Sudanese female child is raised with an understanding and belief that almost everything she does will revolve around being married, delivering children and taking care of her family. Marriage is the most important institution for a female and it is what grants her legitimacy and a place in society. Sabina Dario Lokolong, one of the few women who hold a powerful position in South Sudan is an assembly speaker in the State of Eastern Equatoria. She has faced so much opposition from her male colleagues because she is single and female. She recently commented in an interview with a journalist, “when the speaker enters the Assembly, all rise, this caused so much hostility towards me, an unwed female young speaker, they simply could not take it” (Chimbi, 2009, p. 6). She further explained that some of her colleagues opted to leave the assembly and their positions as members of parliament rather than have a woman in-charge.

A woman in South Sudan can only gain status and respect in society, based on the number of children she has produced through marriage. Because the society holds marriage in such high esteem, with community life norms, values, and beliefs strongly connected to the behavioral expectations in this arrangement, the marriage process is not just an affair for the couple. Rather, all close relatives of the man and woman are involved in the decision allowing the couple to marry, and the marriage process (Duany & Duany, 2001)

A female’s worth in South Sudan is not measured by the quality of her education or career but by being married and elevating her family’s status by bestowing bride-wealth. Bride-

wealth is acquired when the husband pays dowry to the woman's relatives during marriage. Bride-wealth (dowry) varies among ethnic groups depending on customs and economy of the area. Among the South Sudanese, dowry is paid mainly in forms of heads of cattle. However, the dowry may be in other forms of livestock such as sheep, donkeys, goats, agricultural tools, weapons, and increasingly cash or cash with other items (Duany & Duany, 2001; Fitzgerald, 2002; Shteir, 2006).

Marriage of a daughter therefore becomes an economic exchange event. The dowry paid can range from 15 to 400 heads of cattle depending on the economic situation of the man, and the woman's physical attributes (e.g. beauty, height). Although there are no marriage documents, once the dowry is paid, the husband has the authority to treat his wife as his property and is also granted full rights to children born of her (USAID, 2003; Development Assistance Technical Office (DATO), Women and Natural Resources Working Group (WNRWG), 2001; Fitzgerald, 2002; Shteir, 2006).

Many communities in South Sudan are made up primarily of farmers or pastoralists (cattle herders or keepers). The most important indicators of wealth are the amount of land and/or the number of cattle a family owns. As noted above, females have value through marriage because they can elevate the family status by increasing the number of cattle via the dowry payment. These cattle are then available to be reused as dowry payment if the father wants to marry other wives (polygamy is allowed in South Sudan), or her brother wants to marry. This practice/ritual puts added pressure and stress on a girl to begin thinking of marriage as soon as she becomes of age (Fitzgerald, 2002; Duany & Duany, 2001)

Because the society values females for their capacity to increase the family's wealth through marriage, once a girl has experienced her first menstrual period (anywhere from 12 to 16

years of age), she is considered ready for marriage. A female in South Sudan especially in the rural areas (over 90 percent of South Sudan populations live in rural areas) is expected to marry very young so that she can have many years to produce babies. Some females are committed to marriage as young as 10 years of age, usually to an older man (USAID, 2003).

In urban areas and among returnees who were refugees in neighboring countries, school attendance is starting to be valued. This is because there were opportunities for education in refugee camps and at times refugee children could attend local school in host countries (e.g in Kenya and Uganda). Parents are beginning to take girls to school though their numbers compared to boys are still very low. According to United Nations Development Fund for Women (UNIFEM) only 16 percent of women in South Sudan can read and write (UNIFEM, 2005). Furthermore, only 1 percent of the few girls enrolled in primary school actually complete their education at this level (United Nations Children's Fund (UNICEF), 2005). Formal education is mostly viewed as an investment in the family reserved for male children since they are the ones who advance the family name. It is assumed that whatever education a female child acquires will be lost when she marries into another family and assumes the expected position of housewife and child bearer (Duany, 2001).

There is a strong belief that a woman who is well educated will be more autonomous in her worldview and will want to choose her own husband. Education will empower her and she may refuse to take commands from her husband. This is not acceptable in the South Sudanese culture (Dixon, 2005; Duany & Duany, 2001). One participant in this study whose father refused to allow her to go to school explained: "I was telling him to send us to school...he said he had plans for me...I really wanted to go to school" (P#26).

Boys and girls have unequal and different experiences. Although boys are allowed to move freely within and between villages, girls are not given the same opportunity/freedom before marriage. When their brothers are going to school, the girls have to perform housework like fetching water, gathering firewood and cooking. One of the participants explained,

I married young because my father stopped me from schooling...since we were seven children; he said I was a girl he has to stop me from schooling so that I cook for those going to school...that is why he stopped me (P#24).

In most cases fathers determine whether a daughter goes to school or is given to marriage. The father always has the last word.

It was when I was in Khartoum, my mother left from the village to come and register me to school. When my father heard about this, he told my mother to remove me from the school and bring me back to the village. When my mother went back to the village without me they fought with my father that she should go and bring me back to the village (P#26).

This participant stayed in Khartoum with her uncle, and she never attended school.

The Marriage Process

There are multiple ways in which various communities and ethnic groups in South Sudan ensure that a woman who has come of age is promised to a future husband. Whichever method is used (they vary by ethnic groups) the woman's parents and close relatives (uncles, aunts) MUST accept the man and the man's relatives/family must do the same as a collective. As mentioned earlier, marriage is never solely a relationship between two people. For this reason, most women are in marriages arranged either by their parents or close family members. This communal involvement plus the dowry paid to the girl's family ensures that there are very few marriage dissolutions in South Sudan (Duany & Duany, 2001; Jok, 1999).

There are instances where a woman may have more than one man interested in her for marriage. According to a Kenyan nurse who worked in South Sudan for over 20 years, the girl's

parents (especially the father) and relatives will investigate the men and have the final word as to who among the interested men will be married to her. Background checks are done on the man to establish his family history and reputation, any possibility of blood relationships to the girl and any taboos (like witch craft) associated with that family. Once the background checks are cleared, the ultimate choice of who the husband will be is made by the girl's father based on the amount of dowry (e.g. head of cattle) the man is willing and able to pay. The discussions usually go back and forth between the potential husband's people and the woman's family. The man who offers the highest dowry will take the girl. Hence, marriage in this context is not a function of love, romance or sexual desire as it is in western cultures.

In these marriage arrangements, a woman is supposed to be obedient and marry the man her family has chosen. Her parents and the man's parents negotiate the marriage to completion without involving her. In certain instances, the future couple does not know each other. After the marriage negotiations are finalized, the woman is not expected to question or refuse the arranged marriage. If she does, she can be chased away from the parent's home and left with no economic and social support.

Most everyone in the family usually supports these arranged marriages. They (relatives) ultimately support the process and the woman who does not want to be married will have no recourse to argue her case against the decision. She will not have the social support to do that.

This phenomenon is illustrated by one participant as follows:

my question to my father was: "is this the only reason why you refused to take me to school, you wanted to give me a husband"?.when I said this, my father said that was his plan I cannot violate him. Then I kept quiet because I know there is nothing I can do...When they told me I have a husband and I will be taken, there was nothing much I was thinking because everybody related to me had accepted that I should be given to that manI cannot really insist on talking to them (relatives) because in our culture that is what they do to women... even if I think nobody can get me away from that...so I also relaxed (P#26).

Importance of dowry.

For every woman being married in South Sudan, dowry payment is critical and the husband and his relatives must pay it. The payment does not have to be a single event. The number of cattle agreed upon can be paid in installments until completed (Fitzgerald, 2002). This process may take many years but there is an agreement on how it should be done. Shteir (2006) conducted a gender assessment for UNIFEM in Wau (Western Bar-El-Ghazel) and found that bride wealth serves as compensation to the relatives of the bride or expenses incurred in raising her and reimbursement for expenses incurred at the marriage of her mother. It is also an acknowledgement for the service to be rendered by the bride to her husband and his family. The children she will bear bring stability to the marriage in the form of economic benefits acquired by the parents and relatives of the bride.

The woman's relatives or extended family also consider her marriage an economic benefit. The expectation is that the dowry will be shared among the girl's closest relatives. Dowry payment and sharing that dowry among close relatives is taken very seriously. It is a cultural belief that the woman's family can curse the couple if the man fails to fulfill the agreed upon dowry. Most participants in this study, whose husbands had not completed paying the dowry, believed that the family curse was a probable cause of the abortion and the deaths of their children. It is believed that these losses will continue until the respective parents get together, ask for forgiveness and agree on the solution.

From an early age, a female has no control over her life including decisions relating to reproductive health. A Sudanese female is expected to learn life skills from other female members of the family (mothers, sisters and aunties). She is taught how to manage the household, teach her children to respect the elders, and to be a good wife and mother. When a

woman is getting married for example, before the husband takes her, one option is for her to stay at her aunt's place for a few days so she can be taught how to live amicably with her husband and relatives: "when I was with the auntie, they were telling me how to stay with the man and family members... I stayed for three days in my auntie's house then they gave me to the husband" (P#26).

For most women, once they get married they submit and/or adapt to the economic, social, emotional situation they are given and move on with life as long as it is peaceful (no domestic violence) and they have healthy children. These are the things that count as reviewed by one participant, "Since I was brought to him, we have just been staying...no fighting... now since I have stayed for three years, I have become used to himthere is no problem" (P#26).

Manipulations of marriage rules.

There are certain situations when marriage rules are manipulated to the advantage or disadvantage of the woman. For example if a woman becomes pregnant out of wedlock, she is bound to marry the man (whether she likes him or not) who made her pregnant. However, if for some reason the woman's father does not like the man, or the man's parents do not like the impregnated woman, another man, often older will be chosen (Dixon, 2005). Also if a female is raped the man can be asked to pay a penalty (e.g. a goat) as decided by elders, but with the stipulation that he must commit to marrying the female he raped. In this case similar to other marriages, the process of dowry payment will be followed.

Some women are able to escape the pressures of an arranged marriage by using the community values and beliefs to their advantage. A participant told how she decided to become pregnant before marriage with the man she preferred as a husband. This is because among the Dinka tribe (a nilotic tribe and largest of the South Sudan tribes), once a man makes a woman

pregnant, he must marry her. She did not want to marry the man her parents chose for her because he was old. She planned with her boyfriend to get pregnant so they would have to get married. She got pregnant before getting married and her parents had no objection to her marrying her boyfriend. In this case she manipulated the rules so that she could have some level of autonomy in her marital choice.

In Dinka culture, it is not you to choose your husband. It is your parents to organize for your marriage. They give you to an old man. That brother of mine is not happy with my husband because he is young. He was planning to give me to another old man so that he can get a lot of cattle...I planned to conceive with that boy so that my brother can set me free (P#14).

In another example, the rules were manipulated by a woman's parents to her disadvantage. The participant got married when she was 16 years of age because the man had raped her and made her pregnant. She explained that, "he raped me...from there I conceived that is why I was made to marry him". The rape happened when they were refugees in Uganda. The rapist (present husband) was their neighbor. He came to the home while her parents were away and raped her. Although she was young, her parents insisted that she had to get married to this man because he raped her and she became pregnant.

I do not love that man...he used to talk to me but I did not love him...as he decided to rape me I conceived.....when my parents knew that I am pregnant they asked me...when I told them...they decided to take me to that man ...actually by that I was not happy. But just because this man he raped me by force. And on top of that he impregnated me. So I could not even refuse him...also after marriage he did not handle me badly up to today. He did not do any other bad acts (P#16).

Decision to Stay or Leave a Marriage.

It is not easy for a marriage to dissolve in South Sudan. Once a woman is married, no matter what happens, her father has to give permission for her to leave the marriage because of the dowry (bride wealth) agreement. If the woman separates from her husband, her father has to

pay back the cattle or any other form of dowry paid to her husband's family. However, as Duany & Duany (2001) explains, over time, the cattle paid as bride wealth are shared among many people and it is difficult to return the exact number originally paid. Because of the difficulty in returning the dowry, it is not unusual for a woman's family to send her to jail if she wants to divorce her husband against their (parent's) will. She is kept in jail until she changes her mind (Shteir, 2006).

One participant 25 years old, wanted to separate from her husband because he drank too much and had left her alone to care for their seven children. She tried leaving him a few times but her father made her go back to her husband because of the children. The dowry paid by the husband gave him full rights to his children.

Even my clothes which I put on are because of my mother. If I come here she buys for me clothes to go back with or sends clothes. Even me...I am selling alcohol which I use to purchase things like soap or small things in the house... The time I went to my father's to stay there...I was delivering one of my children. I delivered there at our home. After delivery my father told me to go back...I wanted to leave but because I have my children I am not allowed to go anywhere (P#11).

Another participant learned after the fact that she was in a polygamous marriage. Although polygamy is a common practice in South Sudan, not all women are in favor and this participant was one of the few who did not want to be in a polygamous marriage. Her family would not allow her to leave her husband.

I asked the man that why did he not tell me he was married so that I can make my own decision whether to marry a man with another wife...he (husband) did not say anything. Instead he said if I did not want to be a second wife I can go (P#25).

If for some reason a marriage is to end, the father of the woman and/or the man's parents have to be involved in an agreement related to the dissolution of the marriage. A marriage can be terminated if the husband does not respect the woman's family (especially her father); if he does

not complete paying the dowry; or if a husband abandons his wife and children. Sometimes the marriage is not dissolved but suspended until the husband pays the dowry or penalty for abandoning the wife. A penalty is most often determined by the woman's family (e.g. a goat). The decision to terminate a marriage is made by the woman's father regardless of her age.

That man could come to my home and quarrel there. He did not respect my father. My father said he does not want that kind of marriage. He wanted somebody who can handle me well and respect him. That is how that marriage stopped (P#24).

A 38-year-old woman with six children noted:

There was a problem between my husband and my family. He did not pay all that my parents wanted. So they came and picked me and said after he completes everything is when I will go back...he is saying there is no problem. He is just looking for the money then he will come and get me back...the amount I do not know. They wanted some money and some goats (P#23).

Marriage for Security.

There are situations when a woman and her family want her to get married because they believe that a husband can provide economic security. According to UNIFEM (2005), women's income in South Sudan is generally lower than men's by 68 percent. Women's earning power is mainly in the informal sector. Moreover, among the few who earn more, the men still control the income and decide on how to spend it.

In a situation where the woman is marrying for economic security, the woman may be aware of what is going on and may or may not have consented to it. Among the study participants who stated that they married for security, most were young and partial or total orphans. One participant who was 19 years old at the time of interview had been a refugee in Uganda and repatriated back to South Sudan. The repatriating agency did not provide for her housing. She had to rent her own place. She was sharing a room with other young girls but life became very difficult. Although she really wanted to continue with school, it was not easy for

her to do so, “I got married because there was nobody helping me. It was just him. I was not ready to get married. I got married because there was nobody helping me” (P#4).

The lack of economic security is illustrated by the fact that none of the participants in the study was employed except one. Most of the husbands had jobs in the South Sudan army. The other common form of income (for both men and women) was farming. Because the war had just ended, there were few formal sources of employment apart from the cash-starved government ministries.

I do not work...but I dig (farming)...like now if we dig, from those crops we get produce and sell (P#10).

The few husbands who had non-government jobs had to be gone for many days because of the nature of the work. When the men were going to be away, they made sure they left enough money and food to provide for the family’s needs while they were away.

The money will be left by my husband. Until my husband comes the money will be there. When he goes, he leaves things in the house (P#23).

The Marriage Life for a Woman

Once a woman is married, she becomes the property of the husband. Ownership is justified by the amount of dowry paid to the woman’s father and consequently provides the husband with authority over the woman (Fitzgerald, 2002; USAID, 2003). As one study participant explained, “...for this reason (dowry payment), a woman is not allowed to have opinion on anything—EVER”. *If* the woman has complaints against the husband, her family usually encourages her to try and stay with the husband. If there is a permanent separation between the couple, the cattle paid in dowry are claimed back by the husband. In general, women have no rights or voice in South Sudan. They are not allowed to make any important decisions in the family as all authority is with the males - husbands, brothers, fathers and uncles. Pavlish &

Ho (2009), recently found that the customary law is still commonly applied in South Sudan. The authors assert that customary law most often violates women's human rights. Furthermore, the current South Sudan government infrastructure is weak and cannot provide protection for women.

Reproductive function.

Women are married to have babies...if you do not have babies; they say you are filling their toilets for nothing (key informant).

The importance of a woman's reproductive function cuts across her daily life. The culture ensures that a woman's life is lived in a way that enables her to fulfill these functions. Children are highly valued among the South Sudanese societies. For instance, during her first pregnancy the woman goes to live with her parents in the third trimester (beginning of the seventh month) so that her mother can mentor her on motherhood practices and ensure a safe delivery.

At her familial home with her own mother, she is also helped with the baby until she is ready to go back home to her husband to get pregnant again. This time period may be up to two years in duration. This practice is used as a form of family planning, as during this period the woman cannot have sex with the husband. The woman stays at her parents' home away from her husband to avoid becoming pregnant before the child is 2 years of age. A South Sudanese born researcher Jok's (1999) comment on this phenomenon is that "most of the woman's life is spent childbearing. This means that she is either pregnant or breast-feeding throughout her reproductive age" (pg. 435).

A story narrated by some male key informants stated that a man whose wife becomes pregnant when the child is still breastfeeding or before two years, is considered a killer of young children. Most communities believe a pregnancy prior to the baby's second birthday will make

the baby emaciated resulting in death. If a woman becomes pregnant too soon, especially in rural areas, it is not uncommon for a husband to seek termination of that pregnancy. If the pregnancy is allowed to continue, it becomes a source of shame and stigma for the man in the village.

Decisions regarding sex.

All the decisions and actions pertaining to a marital sexual relationship belong to the man. A woman is supposed to have sex with her husband at any time he desires. The wife is not supposed to refuse. One of the roles of a married woman is to satisfy her husband sexually. If for example, a woman refuses to have sex with the husband and he forces her, this is not called rape-because she is his wife. One of the participants explained that, “woman cannot refuse to have sex with husband... if you do they charge you a goat”. When a woman refuses to have sex with the husband, he can beat her and report her to the community elders who will sit and decide her punishment, which usually is the payment of a goat to the husband (by the woman). If the woman is sick, the husband has to ascertain that she is sick and cannot have sex. Jok (1999) in his research among the Dinka tribe of South Sudan for example, found that 80 percent of the women they interviewed reported having been battered several times for refusing to have sex with their husbands. Many cases of abuse taking place at night were believed to emanate from a man’s unmet sexual needs. In such cases, neighbors do not intervene because sex is a man’s “husbandry right” (pg. 435). A woman is not supposed to initiate sex or display her sexual desires to a man. A key informant explained that “the decision to initiate sex in a marriage is the man’s role.....if the woman initiates sex or tries to show that she knows a lot about sex, she is perceived to be a prostitute” .

A group of midwives attending emergency obstetrics care (EmOC) training commented that in South Sudan women rarely experience erotic or passionate love as it is known in the

western cultures with their husbands. Their sexual desires or pleasures are not considered nor do they participate in the decision whether or not to engage in intercourse or any other sexual expression. One midwife commented that “we the older generation, our time for experiencing love and enjoying sex is past ...our children will enjoy”. When the group of midwives was asked what makes a woman in south Sudan happy, they said it is the children. This further emphasizes the importance of a woman’s reproductive function and underscores the value placed on children in this society.

Domestic abuse.

According to Duany & Duany (2001), women are not to be abused physically, because of their reproductive importance. The stressors which women and girls go through which would be considered emotional abuse in western cultures are not considered abuse in South Sudan. Nevertheless, it is considered a disgrace for a man to beat his wife.

However in reality, domestic violence does occur (Jok, 1999). A husband can beat his wife if he discerns she is not listening to him, said one key informant. Dixon (2005) in his article narrates some examples of domestic abuse occurring in South Sudan, especially when a woman is perceived as not being obedient to her husband. Whenever there is a serious disagreement that threatens the marriage, the involvement of the extended family and community elders is an effective support mechanism that encourages the couple to work through problems in constructive ways.

When Does a Woman Make Decisions?

Among the Sudanese societies, roles are allocated by gender, regardless of the community’s main sources of livelihood (Duany & Duany, 2001; DATO& WNRWG, 2001).

Within these prescribed roles, women can make relatively independent decisions about how to fulfill these roles effectively. Hence, despite the general lack of autonomy at a variety of levels, women can make certain decisions under certain circumstances. Additionally, a woman gains respect from society based on how well she accomplishes her assigned roles. Edward (2007) in a speech on the International Women's Day commented that in South Sudan, "women are valued and respected as mothers. They are also important as daughters because they bring wealth to the family upon marriage. Women are also seen as guardians of culture and traditions and are charged with imparting cultural values to the younger generation" (para 2). Edward further laments that these traditions do not accord the women power and authority commensurate to their roles in society

Generally, in South Sudan, men are expected to participate in settling family and marriage disputes and to guarantee community security. In agricultural societies of South Sudan, the women's roles include child bearing and caring for her children. The child rearing activities include teaching societal norms and values. Additionally she is responsible for food preparation and cooking meals, fetching water and firewood, fishing, collecting grass for construction of houses, preparation of land for farming, planting seeds, weeding, harvesting and storage of food (Duany & Duany, 2001; (IRI),2003; DATO & WNRWG, 2001). In addition, women may keep and care for small livestock such as chickens, ducks, and occasionally goats, all which can then be used as food or for income. Women also engage in economic activities such as the sale of surplus farm produce in the local market and the sale of firewood (Duany & Duany, 2001; DATO & WNRWG, 2001; USAID, 2003).

Among the cattle keeping communities, a woman's responsibility is to care for children, nurse the sick of all ages, fetch water and firewood, clear land, plant, weed, harvest, thresh, cut grass and reeds

for houses, collect wild foods, and fish. In addition, women milk cows, process milk to make sour milk, cream, butter and cheese (DATO & WNRWG, 2001; Duany & Duany, 2001).

Women are also expected to provide services during ceremonies, offer their advice or opinion discretely through male members of the household, and are entrusted with maintenance of peace and harmony within and between households and communities (Duany & Duany, 2001; DATO & WNRWG, 2001;). Obviously, in either agricultural or cattle keeping communities, the responsibilities leave women with very little time for leisure or participation in the larger community issues like economic or political decisions.

There are some additional situations in which a woman gains respect in this society. These include a woman who: is bestowed with a title, for example, chair of a woman's group, minister, teacher, has a husband who has responsibility in the society—army general or tribal chief; has a rich husband or is among the few women who are rich themselves; carries herself in a respectable manner, and has many children since South Sudanese love children for what they are supposed to bring to the families in future.

Women's Experiences as Refugees and Internally Displaced

During the protracted war in South Sudan, although all population groups were affected, women suffered disproportionately. Women were the majority by gender who became refugees and were internally displaced within South Sudan. At the time the war took place, over 50 percent households were and continue to be headed by women; most men died or were in the frontlines fighting. Some women experienced gender- based violence like sexual abuse in South Sudan and countries of refuge (IRI,) 2003; DATO & WNRWG, 2001).

Shteir (2006), in her gender assessment work in South Sudan noted that during the civil war in South Sudan, marriage for economic security was continued among the Sudanese in the

refugee camps and resettlements in neighboring countries. Shteir noted that the practice of bride wealth persisted because refugees experienced severe poverty, encampment and limited mobility. Hence, the practice of marriage and bride wealth was transformed into a coping mechanism for survival strategy. Girl's parents (refugees) recognized this as a necessary practice for economic survival in the camps.

Interestingly, although the civil war was the major reason why people left their homes and villages, according to key informants, some people left because the soldiers who were expected to protect them were beating them, taking their food and sometimes torturing them. These were soldiers from Sudan People's Liberation Army (SPLA). As discussed in chapter one, the SPLA is the rebel army which represented the Southerners and were fighting to liberate them from the injustices of the northern Khartoum government.

Actually we really did not want to go...It is just the disturbance of the soldiers. Sometimes they came, torture you, and take all your properties and tell you to cook for them...They came to our home, take our things... if you have salt, they start beating you and asking where did you get salt from? (P#2).

Another participant's family who suffered brutality from the SPLA explained that as children they were orphans being cared for by their grandmother who was always being beaten by the soldiers so she would give them whatever they wanted. The soldiers suspected the grandmother knew the whereabouts of her grandson who had been recruited into the army but had not reported for duty.

By then my elder brother was taken, trained to be a soldier, then he disappeared...from there if they come they first ask for that brother of mine. Yet they had taken him. Then they start beating my grandmother...They used to come daily. And any time they wish they come...we do not know whether he (brother) died or not...from there we decided to shift from the village to go to Congo (P#9).

Refugee camps: trauma, hardship and loneliness.

Many of the women described here became refugees when they were very young. Some did not even know when they became refugees or for how long they were refugees: “I was young but do not recall my years (age). I had not started seeing my menstruation” said one participant (P#13). Another participant who did not know how old she was at that time could only demonstrate her age using her hand, “by then my sister was of this size and I was of this size”. Yet another who did not know how long they stayed in the camp said, “we stayed ...I do not remember for how long” (P#19). All of the women stated that they came back to South Sudan because the war which displaced them finally ended and a peace agreement had been signed between the Khartoum and South Sudan government.

The women described their refugee experience as one of trauma, hardship and loneliness: “when I was there I was lonely. All my relatives were in Sudan. I was only there with my husband” (P#23). There were a few women who enjoyed the time they lived in the camps because they had access to education and free essential services like health care. In this way the war in the South Sudan can be viewed as both a negative and positive experience for women. On the one hand, women assumed more roles (e.g. heads of households) resulting in increased workloads and exposure to health risks for example. On the other hand, the war offered women (especially those who were refugees) opportunity to learn new skills and to become more self-confident and self-reliant (Fitzgerald, 2002; DATO & WNRWG, 2001).

The majority of participants however, did not like being refugees. They stated that they were not free at the camps, food was not adequate and it was difficult to access health services without money. As expected, most refugees also missed their motherland, South Sudan.

Life in the camp was so hard. At times there was no food. They (NGOs) could stay for two to three months without food. And even if they bring they do not bring a lot and consider the time it has taken with no food. They give just little. You then lack food. From there you go and dig for people and they will give you

food. Like me I used to go dig then I will be given something to eat. Even for clothes, you will go and wash for people, they get the old ones and they give you. Also, I had no brothers no sisters. I was thinking of my people (P#14).

The experience as a refugee was indeed traumatic for most of them. Some were orphaned at an early age and stayed alone with their siblings or relatives. Some described witnessing their relatives injured or killed while they were running to seek help and protection. One woman described how they were detained and her brother shot at by soldiers from the then rebel army, SPLA on their way to Congo. The SPLA soldiers shot him to stop his running and to recruit him into the army.

The SPLA turned them back; my brother and the wife...proceeded with other people. When I reached there, I had no where to stay, I was just...staying at the church. There was a certain pastor, he built us (orphans) a house...we were staying there. From there was a certain man decided to pick me from that orphanage and they took me... I came and stayed with these people...until I got married...(P#14).

While in refugee camps, some women continued to experience abuses from the military in the host country.

They (soldiers) came and asked for food. When my mum said there was no food, they started beating us...me and my mother ...with sticks...yes I cried. They did it three times then we realized and started running to the bush when they are coming...this went on for one year when they disturbed us... we could stay all day (in the bush) and sometimes come back the next day...When I remember that life I feel very bad (P#8).

Reports from key informants indicated that few refugees never really felt settled while in the camps. They longed to go back to their lives before the war.

Actually I wanted my people (in Sudan) because I thought I will die in Congo and these people will die here in Sudan and they will not know where I am buried. And also these people will die here in Sudan and I will not know...in Africa if you die your people will come and bury you well. But if you are in somebody's land like that one nobody will mind... you will die like a dog...nobody will come near you (P#14)

For the girls who were orphans, although some were staying alone or with relatives, they

reported that they just wished they were with their parents. They missed parental love

We did not do anything to survive.actually, there is nothing I can tell but what I thought is that parental love is the best love in this earth. That is why the way we stayed ... life was a bit difficult (P#15).

In some instances the refugee camps played a positive role in the life of South Sudanese girls interviewed. According to some accounts from key informants, parents took their children to refugee camps so they could go to school. Due to the war in Sudan, children were not able to go to school in South Sudan. As one young woman commented, "...I was taken there by my step mother to go to school..." (P#8).

A few who were there with parents were pulled out of school to help their parents with the farming work.

I had started schooling. Then I had no uniform. I stayed at home. I went climbing a mango tree, I fell and my hand got broken...The time the hand got healed, my father was sick. I had to remain home to help the mother with digging in the farm...there was nobody to help my mother...I started helping in 1997 but I do not remember how old I was (P#16).

Another woman was very young (around five years old) when she was in the refugee camp. Both her parents had died and she was staying with her grandmother who she describes as being powerless: "...she was also powerless...she could not help me...sometimes we used to go and dig like on Saturday...yes, we experienced difficulties" (P#3).

Internally displaced.

Some women were never displaced to other parts of the country or out of the country during the years of war. They mostly stayed with their families:

My mother came and picked me. During war it is not good to be scattered. From there I stayed a bit and got married (P#11).

Nevertheless, many were still destabilized by the war. Their parents did not want them to travel: “It was my father who detained us in our village...during the time of war I was very young...”

(P#12). Some stayed in the village but kept running to the bush when the soldiers came

We used to hide in the bush. When they come we hide. When they go we come out. Just like that. We used to do that because my husband was a soldier. He did not allow me to leave (P#21).

One woman whose family lives in the south and who was in Khartoum where there was no fighting did not know there was a war in South Sudan. She learned of the war when she came to the South to be married. This may be because she was very young during the war and did not fully understand what was happening beyond her immediate surroundings.

Repatriation.

When it came time to return home, most people travelled on foot in groups with their families, friends and even strangers. For the most part there was no organized repatriation by relief agencies. If the organizations were there, people evaluated them as too slow and did not wait for their assistance. Once the refugees returned to South Sudan, they were not provided with much to begin a new life. As one young woman, 19-years-old at the time of interview explained, “They (NGO) just said they would help us with school fees. The houses we were to look for ourselves. If we are having relatives then you go, if not you rent yourself. But the school fees they were paying” (P#4). For these women, once they were repatriated they were left on their own. As orphans they had to share living space (a house) so they could afford the rent. This put these girls at risk of exploitation.

Attempts to Improve Women’s Status

Because of the long war, many women were separated from their husbands while others widowed, or married to men who spend most of their time fighting on the war fronts or working

far from home. The result of these circumstances was that over 50 percent of the women in South Sudan assumed the role of heads of households and became responsible for providing food, caring for family members and ensuring the physical security of their families (Fitzgerald, 2002; DATO & WNRWG, 2001).

These new roles added to the woman's time and responsibility so that they have minimal time to participate in national rehabilitation and development. Although they are making decisions, the decisions are kept close to home and they are excluded from those involving the community and country as a whole. Additionally, the Sudan People's Liberation Movement (SPLM), the civilian arm of the liberation army, pledged to liberate every individual and society from all forms of political, economic, social and natural constraints to freedom, irrespective of ethnicity, religion and gender, but has failed to deliver what was pledged. Women activists in South Sudan believe that wide gaps still exist between the current status of women and what is desired and has been promised (DATO& WNRWG, 2001).

However, since the signing of the CPA in 2005, there has been a concerted effort to mainstream gender in all the sectors of the government. The long-term developmental goals of South Sudan have placed participation and equity as central principles to the social transformation of the society regardless of nationality, ethnicity, gender, class or any other categorization (GOSS, 2005). Although not much has been borne out in practice, it is a good place to start for the women of South Sudan.

Discussions have and continue to occur among various stakeholders who are concerned about the situation of women in South Sudan. In these meetings there is an acknowledgment and agreement by consensus that women's rights within South Sudan are violated in various ways. For example, before the signing of the CPA, a workshop was held in Nairobi, Kenya in 2001 with some of the stakeholders in

South Sudan. The workshop's key focus was to discuss the status of women and establish a better understanding of women's development needs and to identify ways of increasing women's participation in social, economic and political development. In light of the stark reality that women are traditionally marginalized and not included in social, economic and political decisions, it was noted that South Sudanese women's potential strengths should not be overlooked in the pretext of maintaining the traditional practices which marginalize women.

At the end of the workshop, there was consensus that further discussions were necessary on how to: increase women's participation in social, economic and political decision making; dialogue on the concept of women's empowerment and gender equity in the context of south Sudan; organize a forum to work on policy framework to ensure gender equity and develop assessment tools for gender impact of programs; and conduct a baseline study on the status of women in the New Sudan (post war Sudan) (Development Assistance Technical Office (DATO) & (WNRWG), 2001).

In April 2005, the South Sudanese women sent delegates to a donor conference in Oslo, Norway. The women represented all regions (including northern Sudan), comprising representatives from the Government of Sudan, the SPLM/A, civil society and academic institutions. They went to advocate for donor support for gender equality and women's rights in post-conflict Sudan (Norwegian Institute of International Affairs (NUPI) and UNIFEM, 2005). At this meeting, the women recommended 30 percent as a minimum threshold for women's representation at all levels and in all sectors. They also requested that at least 80 percent of donor funds to go towards reducing gender inequalities in law, policy and practice, and directly benefit women and girls from disadvantaged communities and rural areas to increase their capacities and access to resource (NUPI & UNIFEM, 2005). As a result of women's activism, the CPA and the

Interim Constitution of South Sudan has provided for 25 per cent affirmative action as a way forward to ensure gender balance (Government of Sudan (GOS)/SPLA/M, 2005; GOSS, 2005)

In 2007, UNIFEM convened a workshop with an overall objective to familiarize the participants with the concept of gender justice in the context of South Sudan as well as create space for discussion of the most pressing gender justice issues facing women in Sudan (UNFEM, 2007). This workshop further played an important role in illuminating and educating men and women on gender justice and some actions that can be taken to realize equity for women and men.

There are some positive stories resulting from these efforts. For example, in the education sector more girls are attending school. While the enrollment levels in schools are still very low, in parts of South Sudan, the numbers of girls attending schools quadrupled from 1999 to 2002 (USAID, 2003). While the absolute numbers remain small (e.g. 900 girls out of 34,000 attending school), the trend is promising. The African Girls' Education Initiative (AGEI), working together with the education authorities in Rumbek (Lakes State) started a project known as the Village Girls' School Project as part of a key strategy to increase girls' enrolment (USAID, 2003). In towns like Wau of western Bar-el-Ghazal, I saw girls attending primary school in large numbers and also there are some girls' only secondary schools.

The signing of the CPA, the Interim National Constitution and the Interim Constitution of South Sudan in 2005 laid the foundation for peace and the establishment of ministries such as the ministry of Gender and Social Welfare and Religious Affairs (MOGSWRA). The responsibilities of MOGSWRA cover three substantive areas including gender development, social and child protection and religious affairs. The ministry has helped to facilitate appointments of women in positions of power (including ministers, governors and commissioners) in the current

government of South Sudan. For example, the governor of Western Equatoria State, Honorable Jemma Nunu Kumba, is only the third post war governor of that State (Zindo, 2008). In the upcoming South Sudan's general elections in 2010, over 17 women currently serving the government in different positions have shown interest in vying for political seats (South Sudan Women's Agenda, 2009)

Although the numbers of women in political posts compared to men are still small, these women are already serving as role models for younger girls who are still confronting traditional practices such not having the option to attend school. Overall, South Sudanese women are becoming increasingly organized into social and economic groups at all levels of the society. Fitzgerald has documented some women's groups like Sudanese Women's Voices for Peace (SWVP) and New Sudan Women's Federation (NSWF), which are working in the rural areas to empower women. Some of the women's groups were formed during the war to look into affairs of war affected women and have continued to date. Some of the women's groups teach rights and civil society awareness to women around the country. They inform women of their rights and help bring cases to court whenever possible and appropriate. Women who had been exposed to rights awareness workshops had their self esteem strengthened (Fitzgerald, 2002). In these groups women are also advised on reproductive health issues, immunizations and other health issues. They also get training on tailoring, literacy and how they can support each other (Fitzgerald, 2002)

The government of South Sudan has put in place initiatives towards improving the status of women. These include:

- A gender policy launched in Juba in October 2009 by MOGSWRA (verbal communication with Kennedy Odhiambo, Juba October 3rd, 2009); and

- Standard operating procedures for prevention of and response to sexual and gender based violence in South Sudan (MOGSWRA, 2009) has been drafted and disseminated.

There are also a number of legal instruments which protect young girls from early marriage:

- The penal code 2008, Chapter 18 – Article 247, sub article 2, states that girls are not allowed to marry before the age of 18 years of age, and
- The Child Act 2008 include; Right to Protection from Torture - Article 22 (1) and
- Right to Protection from Marriage and other Negative and Harmful Cultural and Social Practices – Article 23 (1) and (2); and Rights of the Female Child – Chapter 26 (1) (GOSS, 2008).

Chapter Summary

The evidence provided in this chapter comes from anecdotal conversations with key informants, health workers, community members, news articles, as well as from published and unpublished documents. Data demonstrates that women in South Sudan do not have a voice within their society. Women are considered subordinate to male counterparts. Brothers, fathers, uncles, and husbands control a woman's life. Although she plays a special role because of her reproductive functions, and the amount of bride-wealth she is able to bring, a woman tends not to get any recognition or respect until after she delivers children for her husband. The customs of the society including the dowry paid by the husbands gives men absolute authority over women.

During the long war, a large number of females were uprooted from their homes and became refugees or internally displaced. Although this period of unsettled living exposed some to education and new ways of thinking, the majority of women remain subservient to men. The deeply rooted cultural rituals and mores remain dominant and observed by both men and women.

Most of the participants in this study stated that they did not like being refugees despite the fact that they had access to education. They were more comfortable once they returned to their former, familiar way of living. However there were some women who were excited about education and desired to continue learning. Appointments of women in positions of power and even the small numbers enrolled in school and women's organizations are beginning to change the status quo.

CHAPTER 5

Findings

Data for this study was collected from March 2nd to April 26th, 2008. I have discussed the findings in sections which include the demographic characteristics, experiences with abortion complications, post war context in relation to pregnancy loss; readiness for the pregnancy, actions taken to seek care, experiences with post abortion care, the aftermath of an abortion and the status of family planning. Data was collected from March 2nd to April 26th, 2008.

Demographic Characteristics of Study Participants

General Characteristics

The study participants ($n=26$) were women who 1) presented themselves to the county hospital stating that they were experiencing a post abortion complication or were experiencing an abortion with subsequent complications, 2) were voluntarily admitted for treatment at the gynecology unit at the county hospital for these complications.

Age .

A majority of participants could not tell their exact date of birth and the dates they gave were estimations given to them by family members or relief agencies in refugee and IDP camps. Only one participant knew her exact birth date. A majority of participants were estimated to be less than 24 years of age. The average age was estimated at 23 years (range 15 to 38; SD 8.86). Most participants who were not sure of their age were recorded in the unit registration book as adults with an "A". However, during the interviews and on probing that one participant estimated her age to be less than 15 years of age. Since most participants were not sure of their dates of birth, I did not exclude this participant.

Education.

In total, 16/26 (62%) participants had attended school. The average years of school was four. Only four (15%) participants had attended school for 12 years. Twelve (26%) had spent between one to eight years in school and 10 (39%) had not gone to school at all. The majority 10/16 (63 %), of those who went to school did so in refugee camps in neighboring countries mainly in Uganda. In East Africa, attending school from year nine to 12 is considered high school and below year nine is primary school. Among the 10 who did not go to school, 50% were in refugee camps and 50% were internally displaced persons (IDPs) in South Sudan, or were never displaced from their communities of origin.

Twenty participants were displaced in total; 13 were refugees in a neighboring country (Uganda, Congo and Central African Republic), and 7 were IDPs. Six participants were not displaced at all and stayed in their homes throughout the war, mostly in rural parts of South Sudan.

Orphans.

Among the women interviewed, 16 (62%) participants stated that they were either partial or total orphans. Partial orphans are those who have lost one parent (mother or father) to death and total orphan is one who has lost both parents. Five (19%) participants were total orphans and 11 (42%) were partial orphans. All participants who were partial orphans had lost a father either in the war or due to an illness. Most became orphans very young and some were cared for by relatives:

Because at that time there was nobody to stay with us (at the refugee camp)...we were only two with my brother...who was unable to care for me. So that is why my uncle took me to Koboko...my brother was left in Rhino camp...he was a bit big (P#4).

Some participants who moved in with relatives after becoming total orphans stated that they experienced mistreatment including being made to do house work and take care of younger children in the family. One such participant had gone to live with her elder sister who made her take care of her (sister's) small children.

She (sister) used to drink and come back and beat me. She could beat me even if I work (housework) she would say that I am not working... she was living all the house work for me...then I decided to run away from her to come to my brother. That was the time the war started (P#14).

Another participant who became very emotional and began crying during the interview narrated the mistreatment she went through with her sister in-law as an orphan. The participant's father had died when she was very young and her grandmother who was taking care of both the participant and her younger sister died. They subsequently went to stay with her elder brother who was married. The participant was 15 years of age at the time. At her brother's house, her sister-in-law made them do all the housework and sometimes never gave them food. Her brother also beat them frequently because he thought they were disrespecting his wife. Verbal abuse by her sister in-law, beatings and the burden of housework made her accept to be married off at 16 years of age, "She said she was not the one who killed our father. If we want to go we can go...the marriage is better because at the place of marriage nobody beats me and nobody quarrels me anyhow" (P#20). Although it sounds as if this participant made an autonomous decision, her brother still had to be fully involved in the marriage process. Her husband was 19 years old at the time of the interview and attending secondary school. During the time of the interview, her father in-law was the bread winner for the family.

Another participant who was a total orphan and lived with her grandmother until she (grandmother) died in a refugee camp had to start doing manual labor when she was about five years of age. She went to cut grass with adults for food: "I cannot tell the year but I was

young...my grandmother was powerless...she could not help me...I went (to cut grass) three times is when I combine and it makes one...sometimes we used to go digging” (P#3).

Marital status.

At the time of the interview, 25 (96%) of the participants were married. The one who was not married was engaged to be married. Despite polygamy being common in South Sudan, only two (12%) of the participants indicated that they were in a polygamous marriage. Nevertheless, all participants stated that they were married to men older than them, although none knew the husband’s age.

Fifty percent of the participants were not staying with their husbands at the time of the interview because the husbands were away working, attending school or attending to family/personal business. All those married thought that they might have been married before the age of 18.

Experiences with Abortion Complications

It should be noted that in South Sudan, an abortion is described by most women as pregnancy which *came out or is coming out*. Basically this means that the pregnancy is coming out (spontaneously) before it is term. For purposes of this study, this phenomenon (pregnancy coming out) will be described as abortion. An abortion is the removal or expulsion of an embryo or fetus from the uterus. It can occur spontaneously (miscarriage) or be artificially induced (Faúndes & Barzelatto, 2006). Prior to the study, a systematic review of in-patient records dating from February 2001 to March 2008 was undertaken at the gynecology unit (Table B8), as a way to develop an understanding of the most common conditions that bring pregnant women to the unit. The records revealed that during this period, a total of 5,195 women were admitted. I was unable to verify the accuracy and completeness of record keeping for some data. For instance, of

all the admissions, 1,220 did not have a specific reason for admission documented. They were listed as 'other'. Hence, in the calculations in table B9, this figure (1,220) was not included.

As shown in table B9, abortion related cases were approximately 45% of admissions to the unit during the review period. However, conversations with the health workers at the unit revealed that this could be a conservative number. They mentioned that abortion related conditions make over 50% of all admissions to the unit. Pelvic inflammatory disease was a far second (25%) and malaria also a far third, 12%.

Table B9 shows that 50% of abortion related admissions were due to threatened abortion, followed by incomplete abortion, 28% and complete abortion 15%. Seven cases (0.4%) were entered as 'criminal' (induced) abortion. Because abortion is illegal in South Sudan, most women do not admit that they have induced an abortion. Hence, the entries of criminal abortion were from the health providers' (nurses, doctors and/or clinical officers) observations and judgment based on findings after performing physical examination on the women. For instance, if the woman presented with bleeding, sepsis and vaginal trauma, this was indicated as a criminal abortion.

Interviews and record reviews that preceded the study indicate that most women experience complications of abortion during the first trimester. All the 26 participants stated that they had or were experiencing a spontaneous abortion. However, two of the participants probably had an induced abortion, although they did not explicitly state that the abortion was induced. This conclusion was arrived at based on the histories provided by the two participants. Both said they did not want to keep the pregnancy and did not plan to be pregnant.

Signs of Abortion

When the participants were asked about the things that were happening to them that made

them think they were having an abortion several women stated: slow onset of bleeding which later became severe, unconsciousness, bleeding until the products of conception came out, severe abdominal pain, initially water coming out followed by bleeding, no passing of urine and no bowel movement.

The most common sign experienced by the women was abdominal pain followed by acute bleeding. Usually the bleeding had a slow onset and later became very heavy. Presence of severe bleeding was reported by the majority of participants:

The bleeding started at 12NOON. Then I bled a lot actually. If I stand up bleeding came like water. If I sleep, my clothes were soaked up with blood. It went up to 5 am. My brother looked for a motorcycle and brought me here (P#11).

I went inside (the house), I felt my abdomen paining seriously. Then I knelt down. I just put my hands down like this, I felt something. From there I felt the child was out. Then I called the other woman at home to come and help me. Then they called the other medical person (neighbor) to come and help. From there when they removed the child I did not even know myself (unconscious). I was just down there... they came and raised my head (P#4).

A few participants experienced spotting for a few weeks before the profuse bleeding started. One participant bled for almost three weeks before she realized she was losing the pregnancy.

When it began I came to the hospital, then they gave me some drugs...I came to realize that I was bleeding because...when I am menstruating it takes four days...this one took me two to four weeks (P#22).

Not able to recognize myself (unconsciousness).

Unconsciousness was reported by 12 of the 26 participants. They became unconscious at home, on the way to seek medical care or after admission to the health facility. The state of unconsciousness was described by most participants as not being able to 'recognize myself'.

The time I reached the hospital I could not recognize myself. So when they gave me the treatment I did not recognize myself... I did not know. I came to recognize myself on Saturday...I was awake and found my body all soaked in blood. I was feeling pain all over...they gave me only drip...I woke up at 8 in the morning...I

was not able to even get up...I was weak, I could not support myself. My relatives supported me if I want to urinate or do anything (P#8).

It was at around 7 when I came to recognize myself...I bled until the fetus came out I did not recognize myself. I came to recognize myself...already put in the bed (P#9).

Some of the women were discovered unconscious in their houses by their relatives. As one participant stated, "...my auntie... discovered because she was talking to me and I was not talking...I called for her the time I was sick so she came. The time I was becoming unconscious she was there" (P#21).

Some of them lost consciousness upon reaching the hospital and were able to get immediate care.

I left home at 8am in the morning. When I arrived in the hospital, I was unconscious ...since it began at dawn; I rested at home until 8 am in the morning when I was brought here. The bleeding was heavy (P#6).

I came to outpatient department. I met the Clinical officer, the history was taken. The clinical officer told us to come to the gynecology unit...when I reached the unit, the bleeding was serious... really I was powerless (unconscious)...the nurse gave me some fluids, and then I was given some tablets... I took the tablets... (P#7).

Fetus came out.

Some of the participants stated that among the signs they saw is that the fetus came out after they experienced abdominal pains and bleeding. They reported that the fetus came out at home, in the hospital or on their way to the hospital. Most of the fetuses were given proper traditional burial. In South Sudan culture, death of a fetus is treated as the death of a human being. Proper burial of a fetus is therefore very important. If not buried properly, it is believed bad luck will befall the couple and they may not be able to have more children.

My sister told me that the fetus came out and they have already taken it home...it is not good to throw that fetus because it is already created... it is a person with limbs...the body is created. They better take and bury.....culturally here if that fetus is not buried, they believe that you can become barren (not able to give birth) (P#9).

Perceived Causes of Abortion

All of the 26 participants were asked what they thought caused the abortion. They mentioned three main factors and other conjectures related to cause of abortion. The following were the key factors from participants' answers: sexually transmitted infections (STIs), heavy workload at home, family curse related to failure of the husband to complete dowry payment and others: jaundice, malaria or typhoid.

Sexually transmitted infections.

Among the participants interviewed, half (13) mentioned either that they had suffered from a sexually transmitted infection (STI) in the past or were having signs and symptoms of STIs at the time of the interview. They related these to the abortion. Syphilis was the most common STI mentioned as a cause for the abortion. Other symptoms mentioned included painful wounds in the vagina and external genital area, vaginal discharge, itching in the genital area and pain when passing urine and during menstruation.

Before this pregnancy started, I had vaginal discharge and itching...it is when the pregnancy was one month (P#17).

There was a time these abdominal pains started... I felt some wounds down there (genital area)...then I came to the hospital...they prescribed for me some drugs to insert down...from there I stayed for a few days, the abdominal pain started again and bleeding started (P#16).

Syphilis.

The majority of participants believed that STIs were synonymous with syphilis. It is a common belief among these communities that most abortions which are not attributed to a family curse or any other cause may be due to syphilis. The women communicated to their husbands and/or relatives openly when they thought they had syphilis. As one participant stated, "I told him and he said that he is also experiencing the same signs...for him he complained of itching

only” (P#20). None of the women stated that the men were annoyed about the presence of the disease. The women were the first to be tested for syphilis in their families. The ease at which participants described their history with syphilis illustrated that STIs especially syphilis may be common in South Sudan. Generally, among the communities, it was believed that if a pregnancy is coming out, it is probably caused by syphilis: “they will tell you if you have syphilis that is what is killing your children” (P#13).

Some of the husbands went for tests and when found to be positive for syphilis received treatment. On the other hand, some (husbands) had not been tested or treated for syphilis, whereas the woman received treatment. Also, due to the transient nature of the South Sudanese populations during war, treatment of both partners was not easy. Most often, since the woman was the first to be tested, they were treated without the husbands. Some husbands started treatment and either left to look for work, were transferred to another station and the women (participants) were not sure if he continued with treatment.

When I talked to him, there was no bad thing he said. He told us to go for check up. In his planning he said we will get treatment with him. Then unfortunately he got transferred to Juba (P#22).

If my husband is here at home he takes treatment. But I do not know if he continues when he goes back to school (P#9).

Some of the participants first knew they had syphilis through the sickness of their children

It was the time that I was breastfeeding this small (third) baby. I went for examination. What made me go for examination, the baby developed rashes on the ear and the neck. The relatives suspected it was syphilis. They told me to come for examination. When I came they tested me and it was positive (P#5).

There was one case where the study participant had been diagnosed with syphilis but her husband refused to be tested.

The first time we came to the hospital he had said we will be tested together...when we reached the hospital he refused...he left me to be tested alone...he convinced me to be tested...if I am found to have the disease we will both be treated... from there he refused to purchase the drugs and was never treated (P#10).

Some of the participants did not get adequate treatment due to lack of money.

Since I tested it has taken four months. When they said I should come for treatment I did not have money because they need money for treatment. They said there are some tablets you take for one week one times (P#18).

I used to experience abdominal pain when I am almost to see my menstrual period. My husband suggested we go for a test. We came for test but since we did not have money we did not get treatment. Then we went back. My husband said he will sell the groundnuts and use the money for the drugs. But after selling he did not bring any drugs (P#10).

Some of the participants believed they suffered from chronic syphilis. They came to this conclusion either because their children died young or they had history of being diagnosed with syphilis during first trimester of pregnancy.

The first pregnancy came out. I was two months. By then I did not even know that I was pregnant. They told me when I came to the hospital. They tested and told me I was having syphilis- yes, the syphilis is there. Whenever I become pregnant they treat it again. This syphilis is like chronic. My parents had it. I was born with it (P#9).

Participants' knowledge of syphilis.

While some participants had no knowledge about syphilis others thought they knew what it was. None of the participants could say exactly how they got syphilis. Some of the things they stated include:

When I have it and we are sharing the same washing basin...or towel you can get it (P#22).

Somebody can contract syphilis from a seat, the bathrooms and toilets (P#13).

Some explained that syphilis can be contracted through sex:

Yes, through sex...when the husband has and the woman does not have it, when you meet with the husband you can get (P#22).

There was only one participant, who stated that she had never heard of the disease. This participant was born and brought up in Uganda. Her parents were Sudanese and she came to South Sudan as an adult. She was 18 years of age at the time of the interview.

Me also I do not know this syphilis. Only when I went to the clinic they told me there is sickness called syphilis...my boyfriend knows the syphilis but he did not tell. The time I went to tell him he said this sickness is common here (P#18).

Heavy physical work.

Heavy work was identified by the women as the second most common cause of their abortion. Most participants stated that in their day-to-day lives, they are involved with physical work as described in Chapter 4. Women are so used to doing this work that some could not see the connection between the abortion and the level and intensity of the work they do on a daily basis.

If a woman is married and is staying with relatives from the husband's side, especially brothers-in-law, it is her duty to see that the relatives are well fed, their clothes are washed and there is water for bathing every day. All these tasks place a lot of strain on the women's body, which may be a contributing factor to an abortion if pregnant.

Farm work.

Farm work is expected of women who typically multitask doing most of the work concurrently. For example, after she completes construction work on her new house, she still needs to go to the farm to get the produce and do other house work expected of her. Being pregnant is no excuse for doing less work. Additionally, majority of people who go to the farm can work there from morning to evening. One participant gave her example:

...if it is a day for carrying cassava, I carry from morning to sunset. From the water source we take it to somewhere else for sun drying. This also takes from

morning to sunset. From there we bring it home. If I deliver (give birth) I will stay one week after delivery then I start carrying the cassava...because this is routine...you do it and then you get something to eat...(P#11).

Most women walk long distances over rough and difficult terrain to get to a farm.

Although the participants could not estimate the mileage, most stated it took them two to four hours to reach the farms. When there is a lot of work and the farms are far, the women stay with relatives who live close to the farm while they complete the farm work. On average they stay for about a week but this also depends on whether the farm work is finished.

House work.

Carrying water, washing clothes, cooking), was also mentioned commonly as the type of work participants do. Participants did not relate these chores to abortion. One participant who washed everybody's clothes from 8 am to 3pm, and carried water in a 20 liter plastic container did not consider doing this a lot of work since it the norm. According to her, the weight of the container is a normal size carried by all women whether they are pregnant or not. A comment made by one participant brings insight to this attitude

Me I have not been doing heavy work. Even the water I am carrying is only two 20 litre jerricans (container} and I can go twice.....the place is not far... about 200 meters (P#14).

Housework is accepted culturally as a woman's job, especially anything to do with the kitchen. A man who goes into the kitchen is deemed abnormal and most women and even the villagers make fun of him. Some key informants revealed that this is a norm which is in fact preserved by the women themselves. A common belief that is reinforced culturally is that no woman wants to marry a man who goes to the kitchen to cook. Hence, when is getting married, one or two of her sisters to come and stay with her (at her husband's place) to assist with house chores. In the situation where one has no sister, the husband's sister will come and help. If there

are no sisters, then she has to do all the house work including cooking herself even when she is pregnant. A participant who had no female relatives to assist her explained,

At home I am alone, all the work I am the one doing. There is nobody who can help me...like fetching water, cooking ...at my husband's side, their mother gave birth to boys only, on my mother's side my sisters are in the village. So there is nobody to help me (P#26).

It does not matter how many people are staying in a household. If they are male in-laws for example, they are not expected to be involved in any day- to- day house work. As mentioned in chapter 4, roles are divided according to gender. There are things a man can do and there are those only women can attend to.

In our culture boys are not allowed to do what females are doing. If you tell them to help they can even beat you...we are all together six at home. The rest are my husband's relatives...but they just come to eat and go back to whatever they are doing...yes, they are all men... (P#26).

And because the culture dictates what type of work is for a woman and what type is for a woman, women almost never complain about their responsibilities. When participant #26 was asked what the boys were doing now that she is in the hospital, she stated, "they (boys) just go and eat in restaurants and come back... there is no one cooking for them" (P#26). This participant did not think that the work she did at home caused the abortion since this is what she does daily: "I really do not think that may be the cause...when I was pregnant with the first baby, I did the same amount of work and there was no problem...may be it is something else (P#26).

Women also take part in *construction work* by building their traditional houses. They are responsible for carrying the water used in the building (e.g. making bricks, or mixing the soil) and they also cook for the male builders. All the traditional houses have grass thatched roofs. Sometimes the women have to cut the grass. Women can work all day doing building- related work which also includes carrying water, preparing the soil for the wall, cutting grass and making the

walls smooth. For example, to make the walls and floor sufficiently smooth, it requires bending and stretching to reach higher parts of the wall. The soil and water are sometimes located some distance from where the house is being built. All these tasks are done by hand. The men usually dig the holes, secure poles which make the wall and placing the roof.

Family Curse.

Family curse is a phenomenon taken very seriously in South Sudan particularly in marriages. There are certain circumstances and events in the family over which married couples have no control and that must be sanctioned by the parents. If not sanctioned by the immediate family it is expected to bring a curse to the couple and their family. Interestingly, most curses within a marriage involve lack of dowry payment and respect for family members. As one participant stated, "...in our culture if a relative is not happy about the marriage, the pregnancy can come out ...". The following are two of many examples as described by two participants (A and B for purposes of this illustration), detailing the family curse they separately experienced:

Participant A:

The participant had delivered four children; the fifth was aborted . She had evacuation via manual vacuum aspiration (MVA) and she still had retained products of conception (POC). Her husband had not paid any dowry to the father despite the fact that they have four children together. Her father was annoyed and told her not to have any more children with that man:

Since I got married to the husband, I gave birth to four children and the husband has not paid anything...my father had said these four children should be the last and I should not give birth for this man again

The participant stated that her husband had paid some of the dowry with a small balance remaining. With the situation now regarding his job and income, what the husband is getting is just enough to care for the family. The husband cannot afford the remaining amount of dowry.

I am thinking it was just because my father is annoyed. And my father told me those four children are enough. I should not give birth for that man again... and the tradition says that whenever your father is annoyedthat may have contributed to the problem (abortion).

In this situation, the woman wanted her and her husband's parents to meet and decide what they will do. If her parents wanted to take her back then she will do as they say. She did not want to continue having children or becoming pregnant in the present situation. She believed that since her father continued to be upset, she will continue losing pregnancies in the future

Participant B:

Participant B is a 20 year old participant admitted with abortion that was not complete, i.e., part of the fetus and products of conception (POCs) were still in the woman's uterus. She had delivered three children previously who all died. When she got married, her father did not want her to marry a man from the Dinka tribe. So the husband was not allowed to pay dowry.

Actually from the death of the first born, my father had cursed that her daughter should not be married by a Dinka.

However, since they had started trying to have children (though unsuccessful), the husband offered dowry which the father accepted. That is when the issue was settled.

Then they called people from our family. They came and sat together. My father said he was so annoyed when I married this man. But as I have married and we have started having children with this man, he has set me free...

As seen in these two cases, marriage through payment of dowry is an important and symbolic binding commitment in this society. Both couples had no autonomy or control in their situations but to adhere to the norms imposed on them by the community. This particular norm also places the woman in a pressured position between two families. Her ability to have children is an investment for her own family and her husband.

Probability of Induced Abortion

Some participants might have induced the abortion. Although it was not directly stated, history and discussions with the participants suggested unwanted pregnancy. Some participants stated explicitly that they did not want the pregnancy but also claimed they did not do anything to interfere with it. One participant complained her husband was not providing economic support to her and the children. She was 25 years old, had delivered nine times with seven living children. The aborted pregnancy her tenth and during the interview she stated that she was not happy at all in the marriage and was unhappy with the pregnancy. She would have liked not to continue with the pregnancy:

This time I missed my period and I was not happy at all. I told my husband that it seems it may be pregnancy and if it is, I will abort...either I will take family planning pill so that it comes out. ... it is good if you stay in a family where you are helped. But now I am not helped with anything I am just there. So it is indeed paining me... if it is possible to remove it then ok, if it is difficult, it can stay (P#11).

She also stated that she conceived the most recent pregnancy when her most recent child was still very young and she would have liked to have waited until the child was older before having another child. She also indicated that her husband was not taking care of the other children sufficiently and wondered aloud, “why deliver again?.”

Post War Context and Abortion

Most participants did not comment about the possible relationship between the abortion and the stress and trauma of war or post war context of South Sudan. Participants offered two different perspectives: 1) they were happy that the war ended and that they were now home. Even if life was not optimum they were free again; and 2) due to the breakdown of social structures, they experienced life as difficult because of limited finances, education, psychosocial

support and health care availability. Many of the women thought they were “worse off” during the war.

This life is ok...there is a difference; this time is not the same as the time during the war...the difference is during the war, we used to run to the bush every now and then...there was a lot of disturbances...but this time, there is no disturbance...you can stay freely...(P#8).

For those who had been refugees in neighboring countries, they were just happy to be home where they could own farms and cultivate crops.

This situation compared to life of refugee, this one is better. Now like here we have freedom because Sudan is our country. If you can get access to move anywhere you can go. You can do your business, you can go to Juba, and Khartoum you are free to move nobody will ask you. There in exile it was like we were in prison. We cannot cultivate. Even if you cultivate they will ask you whose land you will be cultivating. Even in a camp we were just exactly like people in prison you cannot move anyhow. You just stay in the camp (P#14).

Some of the women interviewed were young in age (mostly less than 15 years of age) throughout the period of war and the abortion they experienced was their first pregnancy. Their understanding of the effects of war could be very different from their parents who were older and more experienced with life. Overall, they did not see the connection between the war and the abortion. As one participant stated,

For us now since there is no fighting I am thinking Sudan is now ok. Whenever you wanted to move elsewhere you can move...life is ok...there is nothing difficult...I do not think anything bad, for me I thought maybe there is infection that is why the pregnancy came out (P#6).

I think there is no relationship in the abortion and the disturbance (p#7).

Those who shared that their life was difficult during the war were discussing reasons other than the war. Some found life difficult because they were far from the hospital and could not get the help needed. Yet some were upset about the lack of money and subsequent lack of health resources present in south Sudan. As two participants indicated,

Yes, this situation could be one of the causes. If I could have been near the hospital, I could have come faster. But now in the village I had problems (P#10).

The problem is when you are not working it is hard to get money... Yes, I am working but money is very little since my husband is not workingit is difficult...everything is expensive...the money we are getting cannot afford what we want. That is the difficult part we experience in South Sudan here today (P#3).

Past Obstetrics/Gynecology History

Majority of participants did not report complex or complicated obstetrical histories. This could have been primarily because most of the participants had little education or knowledge to describe their history. This may also be because many were having their first child.

One participant had a history of retained placenta. Eight participants gave histories of having full term babies that died at birth. One mother reported she had three babies that died at full-term during delivery. The most common causes mentioned for the deaths of babies were premature delivery, insect bites and diarrhea. Only three participants stated that they had previous abortions.

One participant complained of chronic uterine pain. She thought she had injured her uterus somehow. On probing she explained that she had retained placenta in the two previous deliveries. The doctor had advised her not to deliver at home:

It started the time I delivered my third baby in this hospital. When I delivered the placenta got retained. The doctor removed it. Then also the fourth baby, the placenta got retained. The doctor removed it. After examining me, he told me there is something in my womb which attacks that placenta after delivery (P#14).

Antenatal Clinic (ANC) Attendance

Most participants' were at a pregnancy gestation of less than 16 weeks and had not started attending ante-natal clinics. However, some did not know that it was recommended that they attend the clinics to ensure the health of their baby and themselves. Their perception was

that in early pregnancy ante-natal care is not necessary. Some of the women were traveling or were planning to go back to their original homes. Because of their transient living situation they did not start attending clinics. Other barriers to clinic attendance mentioned by participants included lack of finances, long travel time and distance, embarrassed by their physical appearance during pregnancy, and general lack of knowledge about the importance of ante-natal care.

I did not have a dress for coming... this one I just purchased it this week. I had planned that this week I will come and I went and purchased this dress... the nurses' advice us to wear at least wide cloths. ...I had the fear...of coming with a tight dress (P#13).

I did not have money for the card and transport. From the village up to here it is 40 Sudanese pounds (\$20). When I was coming, I was carried with a bicycle to a certain place. From that place I paid 10 Sudanese pounds (\$5) (P#10).

At that time I was very deep in the village and the place is very far from the hospital. There is no service there which is near. There was no bicycle and the place can take a whole day walking (P#21).

The one participant who had attended the clinic did so after listening to a health education in the church: "in the church where I pray... Sometimes the Traditional Birth Attendants could come and teach concerning the pregnancy and tell us to go to hospital even if not sick" (P#9).

Readiness for the Pregnancy

Ready?Yes A Child is God's Gift!

Fourteen of the participants stated that they were ready for the pregnancy which they aborted. These participants had very broad smiles when the readiness question was asked during the interview. Some were surprised that we were asking the question (whether she was ready for the pregnancy) "the reason people get married is to deliver children... I was very happy because

it is the thing I liked” (P#2), commented the participant as she smiled broadly. The younger participants were more enthusiastic about the pregnancies compared to the older participants. One summarized her feeling: “because I wanted to deliver...it is not a problem to become pregnant in our culture”. The main reasons which these participants gave for wanting to become pregnant included: a woman is married to reproduce, had stayed longer than one year without becoming pregnant, comes from a smaller family and therefore wants more children, and the previous child died.

Pregnancy particularly for the young participants was seen as a way of gaining security in the marriage. One of them commented, with a big smile, “I wanted to become pregnant so that I can stay with the husband”. One participant who was not staying with her husband at the time of the interview said: “I wanted to conceive and deliver (smiles broadly!)...my feeling is, if I have money I will go to Bentiu (where husband is working) to become pregnant (laughs)...I will deliver ten children...when I complete treatment I want to get another one” (P#19).

Participants who had not become pregnant within a year of marriage expressed that they wanted to become pregnant. Becoming pregnant is the only way they could guarantee the solvency of the marriage.

The other child was now big. As a woman at home, you have to give birth to children. If the time has come and god has given, you have to receive it...(.smiles!)...I was happy when I conceived but now that it is lost it has given me a lot of loss. I am not happy about it (P#24).

I was happy...in our culture if the child is big, you become pregnant. My first born child was even taken to the village when he was very young that is why I became pregnant (P#26).

Some who came from smaller families wanted to get married and have babies to increase their numbers.

Because...we are very few (in our family), we are only three. I wanted to deliver so that those children can become the brothers and the sisters I never had (P#8).

Women whose children had died also wanted to replace the losses experienced. As one stated:

...I was happy... I wanted to deliver this baby so that it can replace the baby who died (P#20).

Not Ready for the Pregnancy

Five of the 26 participants indicated that they were not ready to become pregnant. Three main reasons mentioned for not being ready for the pregnancy were: child that preceded the pregnancy was still young (under two years old), previous health problems, and not married and interested in going back to school.

Two of the participants stated clearly that the pregnancy was unwanted and they would have wished not to continue with it. Despite not being ready to become pregnant, none of participants gave any indication that they had interfered with the pregnancy at any stage with any type or form of induction. When asked if they thought of inducing abortion, most stated that this was "god's gift". As one of the participants explained, "I did not think of removing it because that was God's gift. When God gives you anything you should not destroy. In the scripture it is says that do not kill. To destroy is like I am killing" (P#23).

Two of the participants stated that they had actively approached hospital staff to have the pregnancies terminated. However, in both instances they said they were counseled by the hospital staff to keep the pregnancies and they changed their minds. One participant explained her experience:

When I got pregnant I did not plan but it just happened. After the pregnancy I came to the hospital and they tested. So suppose I thought of what I could do with the pregnancy. But these people in the hospital advised me not to do anything. God is the one who gives children (P#3).

One of the participants whose previous child was under two years old commented:

This pregnancy came by mistake... the child is still young...one year and four months I would have liked the pregnancy after about two years...the time I conceived I informed my husband. He told me to keep the pregnancy...we will just take care of the child (P#17).

Note that even if shame is connected (culturally) with a couple becoming pregnant when there is a previous child who has not reached two years of age as discussed in chapter 4, some couples choose to continue the pregnancy.

Pregnancy when unmarried is not acceptable in this culture because a woman who delivers a baby out of wedlock does not attract a large amount of bride wealth. However, when a couple becomes pregnant the man is expected to marry the woman. For example, the only unmarried participant in this study stated that her pregnancy was an “accident”. Her boyfriend, however, was ready to come and negotiate with her family so he could marry her: “I am not married to the man. This was my first pregnancy and it was an accident. However, the man had agreed to marry me and we were waiting to go home to the man’s place. I had known the man for over one year” (P#18).

Some of the younger participants (less than 20 years of age at the time of the interview), were refugees in Uganda and had started going to school. They wanted to continue with their education. They were disinterested in becoming pregnant. These were the same women who got married in order to advance their current economic status.

I was not ready for the pregnancy because I was still in school and I did not know anybody that is why I got married and became pregnant. I did not wished to become pregnant... because at that time I was still in school. When I joined St. Joseph (school), there was nobody whom I knew. My husband was the only one I knew...and he is our neighbor...we were students and we were arranging to be married. Now when I got pregnant ...I came to his house (P#4).

Of the two participants who stated that their pregnancies were unwanted, both were

unhappy in their marriages. One was in a second marriage which she stated was abusive as was the case with her first marriage. The second, in addition to not being happy in her marriage, she had experienced multiple deaths of her babies which made her feel stigmatized: “yes before I conceived I had said that if I conceive I will kill myself or abort... I thought, every year I could produce and on top of that children are dying and I am losing blood. It is better for me to rest”

Participants who expressed that they experienced an unwanted pregnancy also experienced ambivalence. For instance the participant above when pressed further about whether she wanted this pregnancy, reiterated that she really did not say she did not want the pregnancy. She stated she didn't want the baby because of all the problems she was facing in her life generally. When asked what she would do if the pregnancy was not successful she stated: “If it (pregnancy) does not come out at all, I will just carry it like this. It looks like it is God's plan. If God did not put it in my womb it would not have stayed there... before I prayed for it to come out but all in vain”.

Actions to Seek Health Care

Immediate Action

Participants took various actions when they noticed problems with the pregnancy. All chose to inform a significant person in their lives (i.e., mother-in-law, husband, sister-in-law or close relative). Those who came to hospital unaccompanied by family or friends did so because family and friends were not available. In general, mothers-in-laws, considered authority figures in the culture, make most of the decisions about seeking care as well as taking charge of care such as giving medicines to the women as needed. Some of the participants did not even know why the decision was made to bring them to the county hospital. One participant explained, “as soon as the bleeding started at home at around 12, I was brought to the hospital.” Still some did

nothing, took traditional medicine or went to the nearest clinic.

Although there were some who avoided acting on abnormal symptoms for a few hours or days, they eventually sought out care because of progressive hemorrhage and pain. The reproductive functions and the high value placed on children in this society may explain why the women seek care promptly if things are not going well with the pregnancy.

Then bleeding started on Saturday at night. On Sunday morning the bleeding increased and was coming with a lot of clots. ...my husband decided to go and collect some drugs for me at the clinic. Then my mother in-law said that since the pain had increased better let my sister in-law escort me so that we come to the hospital... (P#20).

I experienced this problem at 4 am in the morning.... the time I realized I was bleeding I told my sister who advised me to come to the hospital immediately... we came together with my sister (P#2).

The participant and her mother-in-law's relationship were significant in asking for help or consultation related to the pregnancy. Not all participants felt comfortable telling their mothers-in-law when they were not feeling well during their pregnancy. Sharing this information depended on how well they knew each other and whether they were "close".

I used to take those drugs from the clinic. I thought they would help me but they did not help. Also during this period I feared to tell my mother in-law. It is my husband who told her what is going on but I used to fear to tell her...I am not used to her. Since I was married to that man, we have not stayed with her. This is my first time to stay with her. I still have that fear (P#15).

A few participants took a few days before coming to the hospital:

The bleeding took four days at home—Thursday, Friday Saturday and Sunday...I do not remember when I came to the hospital but I have been here for two days (P#21).

Various modes of transportation were used. These include: public transportation, boda boda (local name for bicycles and motorbikes). Some walked to the nearest clinic even if they were bleeding: "because of pain I walked for almost an hour. When it was serious, I sat down

and rest... after it cools I start again” (P#7).

Medicine taken at home.

Self-treatment at home before going to the hospital was not the norm of the group interviewed. A few indicated that they were given traditional medicines mostly by a mother-in-law. The medicine was supposed to stop the pain and bleeding: “when I started feeling pain the mother-in-law brought some drugs for me, then I was taken to the hospital” (P#15). Some who were suffering from other diseases took traditional medicine for specific illnesses even when they were pregnant: “I took some local herbs for diarrhea when I was pregnant...and before I became pregnant I was attacked by malaria” (P#20)

However, a few of the women felt uncomfortable taking any medicine or treatment without knowing how they would affect their pregnancy:

I did not take any drug at home because I did not know them...may be they are dangerous for my life. So I thought when I come to the hospital they will know which drug exactly they will give me so that it will help me (P#23).

Experiences with Post-Abortion Care

Health Center Level

For purposes of this study, any care which participants received at a health facility in the community when they began experiencing the abortion or a complication associated with the abortion will be described as Level 1. Included in Level 1 facilities are health centers, clinics (public and private), herbalists or traditional birth attendants. At this level there were also clinics run by various NGOs, private individuals and the government of South Sudan.

According to participants’ accounts, treatment of abortion complications at level 1 did not exist. Most patients explained the inadequacy of healthcare intervention including wrong diagnosis, and incorrect treatment. Some were just told to go home or given an appointment to come back even though they presented with vaginal bleeding. Some were advised that if things

did not change they should go to the hospital.

They just examined me and said it was malaria which was disturbing me. But I could not even feel any sign of malaria. .. I stayed for two hours at maltesa (clinic), then I went back home. Just less than 30 minutes the child came out and it was a baby boy (P#4).

Some of the participants had very bad experiences related to post abortion care management at the health center. This was best described by one of the participants who had a particularly bad experience with both the clinical management and attitude of the health workers. She was bleeding profusely, was very weak and had to be carried to the health center:

I came to recognize myself (unconscious) on Saturday...I was still at Mugo health center....I was awake and found my body all soaked in blood. I was feeling pain all over...they gave me only drip...I woke up at 8 in the morning... was not able to even get up...I was weak, I could not support myself....I was there in that health center for the whole of Saturday...I was given some tablets. They told me one was for worms and the other one was a vitamin...I bled until yesterday Sunday... The time I reached the hospital I was already unconscious (P#8).

The poor attitude and lack of professionalism of the health workers at this health facility was also best captured by this participant's experience:

Those people (health center) received me...from there they just went back home. They came back injected me and went back...they did not bother to check....the nurse put me on a drip...she waited till the drip got finished, then she left...she told me she is going home she will be back...there was nobody else apart from my mother (at the health center)...the guards were there but they were drunk (P#8).

This participant called her husband to come from Juba so that he could take her out of the situation to the county hospital. In certain instances, the clinic staff did not give proper advice leaving the participants confused as to what steps they needed to take to feel better or get well. Many received little guidance about the effects and side-effects of medications. This left some participants with no option but to take traditional herbs which often did not provide any relief.

Some of the participants just stayed at home for days because that is what the doctor had told them.

...at that clinic they told me to take the treatment for three days sometimes it can change. I also respected that clinic. The three days I came and told them it is still like this. But they say if it is still like this I should go direct to the hospital (P#18).

Traditional birth attendants also play a role in the care of women at Level 1 of care. For example, one participant went to a traditional birth attendant who was able to help remove the products of conception when she started bleeding. However, the patient had a retained membrane which the TBA did not have the expertise to remove. The TBA noticed this limitation and referred the patient to the County Hospital.

When the pain was serious at home, I called for the traditional birth attendant to come...when the fetus came out it was alive then after a few minutes it died...the traditional birth attendant was around. She tried to remove the clots...the membrane did not come out...then the traditional birth attendant told me she has no power. They have to bring me to the main hospital (P#12).

Care at the County Hospital Level

For purposes of this study, the care received at the hospital will be called level 2. Study participants who came to the hospital always arrived needing care immediately (a true emergency) because they were bleeding and in severe pain. They were first seen in out-patient department then transferred to the gynecology unit where they were admitted and received post abortion care. The majority of participants who received care at this level were very happy with the care they received. Those in severe pain received appropriate analgesia; some who were dehydrated from blood loss received intravenous fluids. Those diagnosed with incomplete abortion were taken for evacuation via manual vacuum aspiration. This procedure reduced the pain and they felt better. Some of the participants were unconscious when admitted to the gynecology unit. They were stabilized before being taken for evacuation. These procedures were

life saving and they felt that the care at the hospital was very good because by the time they regained consciousness they were feeling much better.

They took me there (MVA room) for checking...to clean my stomach... then the bleeding just stopped after they cleaned my stomach (P#1).

When I was brought to the hospital, the bleeding was heavy. After I was given drugs in the hospital, it took one day then bleeding stopped. I have taken two days without bleeding (P#12).

Provider preparation on PAC at the County Hospital.

During my systematic review of patients' condition and treatment charts, I found patients who should have been treated for incomplete abortion but were discharged home. The reason for discharge is that they were not bleeding heavily at the time of review by the health provider. Some were prepared for evacuation but when the doctor realized that the bleeding had subsided, the patient was told to continue with medication intervention. They were directed that if things became serious they should come back to the hospital. This happened with more than one participant.

All participants who were diagnosed with incomplete abortion on admission and discharged home came back to the unit with severe bleeding and the sequelae of severe blood loss (anemia and listlessness). Two such participants explained:

I was using a cloth but I kept on changing...whenever I put for some time, immediately it became full ...the cloth was changed for several times. It was changed by my sister when I was unconscious I do not know how many times...in the hospital there is nothing much they gave me.... they were planning to take me for evacuation. Then when they saw the bleeding stopped they said they cannot take me for evacuation since the bleeding stopped (P#7)

He told me it was threatened abortion he wrote for me the drug. The drugs are not there. I went to buy in the clinic. He told me if I take that drug it will help. In case

if the condition increases I should come back. At around 8 pm bleeding started very heavily...boda, boda brought me back (P#11).

Difficulty Reflecting on Care Received

The participant's experience with the care they received in general was relative to their condition before and after treatment for abortion complications. Most of the participants were not able to explain their care experience in any detail beyond basic description of the process. Most of the women displayed a lack of confidence in expressing themselves as evidenced by speaking in low tones and not clearly identifying what occurred in their experience. For instance, one participant when asked what she thought about the care said, "it is good because it can help somebody who is very sick (P#1). Another one stated, "since they said I have to stay for some time and come back, I will come to know the good care when I come back—whether it is good or bad"(P#10).

Their inability to provide data through their stories may have been developmental in that many of these women were young (less than 24 years of age), without life experience. Also their lack of or limited education may have been a contributing factor. Additionally, they have come from a cultural tradition that puts limitations on women expressing themselves to those in authority or to people they do not know. However, the participants demonstrated general appreciation for the care they received at the county hospital.

Appreciation of hospital care.

All but one participant were very happy with the care they received at the county hospital. Appreciation was directly related to relief from the pain and bleeding they experienced on admission. The participants stated that they were admitted when they were feeling very ill.

They evaluated the care they received as very good and almost all participants expressed great respect and confidence for the medical personnel at the hospital.

The care I received was good. I came when I was unconscious, and now I am conscious. I came when I was in severe pain, but now the pain is not there (P#15).

The care is good...It has helped me in my sickness...I have seen a change. When I came, my body was paining. I was given something for pain. My body stopped paining. I was given some medicine to stop bleeding. Now the bleeding has reduced. I have seen a change in my life (P#13).

Actually the services I would say thanks to these people working in the hospital. If it was during the war I would have died...Yes I am helped here at the hospital. When I came I was given a drip, some drugs and also they did evacuation for me. During the war there was nothing like that (P#21).

One of the participants compared her experiences at Level 1 and Level 2:

This one it has helped me...the one in the hospital...I am not feeling a lot of pain. Even the bleeding it is no longer there...I did not realize that I was getting medications. My body was worsening...health center was not ok because it did not help me...I was not happy with health center... my body was paining at the health center, these people did not give me any drugs for pain... (P#8).

Advice Needed after Post Abortion Care

Participants were asked if they needed specific advice when leaving the hospital. Many stated that they did not know what advice they needed. A few stated they would have liked to have received information about: how to care for themselves after losing a baby including psychosocial care and counseling, what to do to prevent abortion in the future, information about prevention of infectious diseases, self care during pregnancy to prevent abortion, and how to make sure as a consumer that they are getting the correct treatment at the health facility.

What you can do when you are pregnant...what you can do to prevent the pregnancy from coming out? And what you can do when you have already lost your child (P#1).

How to stay so that I do not acquire diseases like AIDS and other diseases which can cause abortion. Also if you conceive how you do keep yourself so that you do not abort? (P#21).

I want to be taught family planning so that I can stay without becoming pregnant (P#8).

Four participants said they did not know what advice they needed. Some stated that the health workers can give them whatever advice they thought is appropriate.

I do not know anything which the hospital can help me with. It is up to them to decide how they can help me (P#16).

but if you people have something to tell me...then tell me and I will respondIf people in the hospital have some advice for me...I am ready to welcome it even if they want to come up to my home I welcome it (P#23).

Suggestions for improving care.

The participants found it difficult to offer suggestions for improving care at the hospital. Most trusted the hospital personnel and felt they (hospital staff) were competent and qualified to take care of them, thus providing any suggestions or advice would not be appropriate. They gave the impression that they did not know what to suggest and gave a blank stare at the question.

Some of the common answers to this question were:

I have nothing to tell people at the hospital..." (P#14)

I do not have any opinion because I know they are medical personnel and they know what they are giving me. I am not worried. Even now they told me to go back they will explain. If I go home it is explained how I will use them (P#2).

One participant thought that the nurses were not polite and narrated an incident which occurred in the unit:

I can talk about the nurses...at times they are harsh to people. Like one day one of the women admitted in the unit went and spoiled the toilet. The nurse went there and started harassing that lady complaining that they should be discharged all.

She (nurse) went and told the clinical officer who came and discharged the patient (P#10).

Advice to Other Women with Similar Experiences

The women had various levels of advice for other women who would be in similar situations. Most women believed and felt positively about the medical and nursing care they received which resonates with how they felt about the care. They said they would advise other women to seek care immediately if they were experiencing an abortion:

For me, it would be good for somebody who got same experience to seek for medical care. Because if you come here in the hospital you can be easily helped (p#2).

I will give that woman the advice of coming to the hospital. I will give her an example of myself. If I did not come to the hospital I would have died. I will advice her to come to the hospital in time (P#21).

One of the participants even offered to escort the woman to the hospital

At home I will tell those people to come to the hospital. If it is a nearby person I will escort that person up to hospital. If you come to the hospital you will be helped and you will become ok (P#14).

One participant suggested that hospital staff should tell women how to eat healthy and how to respond when they experience an abortion. One woman described how when she was in Uganda some health personnel visited villages and told young girls who had reached reproductive age and those pregnant mothers to go to the hospital. She lamented that: “nowadays in Sudan, this does not exist” (p#7).

One said she would advise the participants to go meet with parents in case there is a family curse:

If you are not having a sickness, you go and sit with your...parents sometimes you are in the marriage and your parents are not happy. You can go back to your parents to give you the chance (p#18).

The Aftermath of an Abortion

Participants were unable or did not want to talk in-depth about their feelings about the abortion. Since the abortion had taken place at the time of the interviews. There was a sense that there was no need to really dwell on what had already happened. “since it came out itself and it was not caused by anybody...why should I feel bad...even if I think about it, I cannot get it back” (P#6).

It is God’s Plan

A majority of participants gave the impression that it was not appropriate to keep talking about the abortion. After all, what happened was beyond their control. Statements like: “...since it has come out, there is nothing I can do. I cannot put it back” (P#6), were common. Many of the participants attributed and/or rationalized the abortion and possibility of future pregnancies as being ‘God’s plan’ or in His hands. For this reason they just wanted to move on and in future have healthy pregnancies.

I cannot even put in my mind because it is God’s plan. The ones which God want me to be with them are there at home... this has already happened...even if it was to stay until the pregnancy reached 9 months until I deliver, and it was planned, the child would still have died. So for me I do not think (P#2).

Now if somebody can die how about the fetus? It is good to have life. One can get pregnant at any time...with this one I cannot put in my heart. If I think a lot I will die because of thinking (P#5).

Despite not wanting to dwell on the lost pregnancy, women expressed feelings of sadness, anxiety, blame from the relatives and the desire to really know what caused the abortion so it would not occur again.

Sadness

Most of the participants felt very sad because losing a pregnancy implied that they were not able to fulfill their reproductive responsibilities. Younger participants especially those whose aborted pregnancy was their first expressed more feelings of sadness than did older women. One participant could only say helplessly, “*What can I tell you...I feel sad*” (P#17) Another participant who was to be married said, “I am not happy...of course my family were already going to call this man because I am pregnant. He was also waiting for my family. Now that the pregnancy is out, I do not know what I can do” (P#18). The pressure to prove that one can deliver children is exceptionally high among the newly married. As one participant stated, “I am not happy...I have been married for only three months”

Once a woman becomes pregnant, the fetus is already being treated as a human being. If an abortion occurs, it is like losing a real person. .

I am thinking if I could deliver that one alive it can help me in my life also...because that one is already a given person from God. So why it came out?.. (P#3).

Abortion is bad because if the fetus did not come out it was going to be a person in future that could help somebody. (P#16).

There is stigma among married women who keep having abortions. Feelings of shame to be in a marriage without children persist. Stigma is also experienced by the couple, their immediate family, and the larger community. One woman who had children die previously said:

I feel sad ... with this husband I have no child like now if I can remember the first born I delivered the child died, now I tried to conceive the pregnancy came out...really will I get a child in future?...the first pregnancy I was happy he was going to have a baby, it ended in abortion. Now the husband is not happy with me. He thinks I do not want to deliver... (P#24).

One participant who had three previous abortions was so sad while speaking and showed

visible signs of distress. The thought of the loss made her very emotional and she cried during the interview. She shared how she felt about her abortion:

The first one I thought a lot to the extent that I could wake up at night and ask why God is doing this for me. My age mates have all given birth to two to three children. And why is it that this is happening to me? Why does God punish me like that...(P#25).

Pain and health complications.

Another source of sadness was the extreme physical pain and the health complications resulting from abortion. This was a source of anxiety to the women as they thought there was nothing to show for all the sacrifices made to have a successful pregnancy.

Because I experience this pain for abortion a lot, but the pain is for nothing. I do not see anything. If it is like labor pains for the baby, then you see the baby and you forget the pain. But now the pain is there for nothing...(P#25).

Now, I am thinking the abortion has given me a lot of complications. My health is not like before. With the loss of the child it really makes me very sad. If the child was alive and the complication is there, I would not think about it much (P#12).

One participant was so sad she felt like committing suicide. This was because she went through so much pain only to lose the baby:

When the pain started I thought of committing suicide or taking something so that I also die... first the pain of my pregnancy, and after that when it is now out, another pain...if it continued like that I should take medicine (suicide)...Because of the pain and also because of losing the pregnancy ... I feel really am suffering.. (P#4).

Some participants expressed the need for some consolation within the community to help them cope with the sadness:

Yes those people if it is possible they should guide me, talk to me so that I can be encouraged...If there is nobody who can talk to you, it is you yourself to at least pick that courage (P#7).

Blame

Because of the expected reproductive function of the women, in certain instances the women were being blamed for the abortion. One participant who had been diagnosed with syphilis was told that it was her fault because she did not go for treatment promptly. This despite the fact that she did not have money and her husband was away. Women are supposed to be responsible for a healthy pregnancy and a healthy baby. When they are sick and pregnant they are supposed to seek care promptly so that nothing happens to the baby.

He told me I am the one who caused this problem because I did not go for treatment for syphilis...I told him yesterday (I did not have money) and he gave me 100 SP (US\$50) for treatment... he says when I go home I should go direct for treatment for syphilis...he only came yesterday (P#18).

He thinks it is my fault that I did not come to the hospital in time. If I knew that my body was paining, I should have come to the hospital in good time. So it is my negligence (P#24).

The women expressed fear of rejection by husband and/or husband's relatives. It is shameful for a woman if rejected from her marriage because she cannot give birth or retain a pregnancy. Divorce initiated by the husband is a definitive source of shame.

I am worried because he called me today. He said he is coming and if he finds his pregnancy is out, he does not want me. He wants me to go back to my home... after calling me he also called my brother and told him the same thing...my brother then called me to tell me what he said...(P#24).

The husband's relatives can indeed put a lot of pressure on a woman who is not able to give birth. She can become a source of ridicule even if her husband supports her. One participant explained her situation: "it is just the close relatives who sometimes say in a joking way, you are eating our food for nothing and you do not even have a child...go to your family" (P#25). These comments are usually made in the presence of other relatives who begin to laugh at her. Sometimes these comments are made in front of the husband who does not defend her:

Yes they say when he is around. But also at times he fears to talk to them. He does not know what they will say afterwards. They will feel bad that he is defending me” (P#25).

There is further blame on the woman by the relatives when the child was going to be a first grandchild because there are great expectations. One participant stated, “they will feel bad because the pregnancy is out...this one was going to be the first born of that boy” (P#8). In such circumstances, some women resort to prayers as a coping mechanism to stay in the marriage.

For me I just tell him that maybe the lord has not planned for it...Yes, actually I am praying hard to God. It is only the word of prayer which sometimes gets me relieved. If I do not pray, the problems I am getting I do not know what would happen. I pray and get relieved b (P#24).

Plans for Future Pregnancies

When asked if they were interested in becoming pregnant in the future, most participants were enthusiastic that they wanted to become pregnant. Most of the participants wanted to replace the child or children who died and the aborted pregnancy. As one participant explained,

Because the first child died and this pregnancy came out I would want to become pregnant immediately (P#10).

Some also stated that their husbands would be the ones to decide whether they become pregnant or not.

I cannot avoid that because whenever you are staying with a man unless the decision comes from the two of you that the children you have are enough then you can stop. But as a woman I have no power deciding it for myself ...If it were my own feeling the children I have are enough (P#23).

Those who wanted to have a pregnancy hiatus chose this option to give them time to reflect and understand why the baby was lost. Some also explicitly stated that they would like to receive a medical evaluation before getting pregnant again. This desire was expressed to decrease anxiety of a repeat abortion.

I do not want to become pregnant immediately. I want to get the cause of this. If it is infection and I treat it, then later on I can conceive...I would like to stay for some time. Because giving birth is not easy. If you give it frequently, your body becomes very weak and you cannot last for long. I have to rest for some time when I feel I can handle another pregnancy is when I can think to conceive...I want to stay for about seven months (P#22).

A number of participants attributed the possibility of future pregnancy to God. “with the pregnancy it is just God’s plan. You cannot know that today I will meet with a man and conceive...if it was my plan I would like it after only one month” (P#21). Yet, there were some who really were not enthusiastic about having children immediately for other reasons. One participant did not think her husband took good care of her while she was not feeling well at the time of the abortion. Some had future plans like going to school.

At least finish school and complete year four. Then I can finish some training...before becoming pregnant again...to help myself. In other ways when something is defeating you when you are employed you can help yourself (P#4).

Knowledge and Use of Family Planning

Despite the shared wish by some participants to have a pregnancy hiatus, the majority had no idea about how to avoid pregnancy as 24 of the 26 participants had not used any method of family planning. A few had heard about family planning in refugee camps but had not used any method. Only two participants stated that they had used family planning in their lives. However, they had stopped because the methods were only offered at the private clinics and they did not have money to buy them.

Despite not having used a specific family planning method, a few participants were interested and stated that if they were taught they would use family planning. Staying away from the husband was the method of choice for majority of these women. They did not know anything about the modern contraceptive methods.

Yes, I have heard but I have never gone for it...they say there are some tablets...I just heard from the people (P#3).

I have never heard of, or used FP...I cannot use because I do not know how to use them... if told by the doctor; I will be able to take. (P#25).

Some who had heard about FP were told it is an agreement between husband and wife. A few who knew did not have correct information and had heard rumors and myths about modern family planning methods.

I heard that they are tablets you use and sometimes you can miss menstruation (P#25)

...is this the one which can make you not to deliver or they are the ones which make you deliver (P#26)

I saw from the neighbor who was using family planning methods. The neighbor used after delivering three children. From there she conceived and the pregnancy came out (P#10).

Wife stays away from the husband.

As mentioned earlier in this chapter, in most South Sudan cultures when the woman is pregnant, she goes to stay with her parents in the third trimester until the child is two years old. This practice is usually used as a form of family planning. The woman goes back to her husband when she is ready to have another baby. That is why polygamy is common and accepted among the majority of ethnic groups in South Sudan.

In my culture if I am delivering for the first time, when I am almost ...I will be taken back to my parents. I stay there until when I deliver. I stay there when I am ready to have another child then I come back to my husband (laughter) (P#19).

For those who are not able to go back to their homes and have young children, the wife and husband will sleep separately (in different houses) for two years without having sex. Sex in this context is primarily for procreation.

When I give birth to a child and the child is still young I sleep separately and the husband separate... I stay until when the child is running, the child is healthy. Up to a stage when I can conceive there will be no problem with the child (P#6).

When the husband works or is going to school away from home, this can be a form of family planning.

I know I will not conceive early because my husband does not stay with me...the husband is a student in Maridi. He will soon be going back to Maridi after they complete (P#24).

I feel it (FP) will be good because the husband is staying a bit distant from me...Sometime my husband goes and stays in that place for one month then he comes. Since my husband is a soldier, they said of recent they want to deploy them somewhere (P#8).

As mentioned in chapter 4, women do not have control over sex. If the woman is sick, the husband has to be certain that the wife is sick to a point that she cannot have sex (for example severe pain with vaginal bleeding). In such a situation, a woman can ask for permission to go back to her parent's home so that she can 'rest' from sex and have time to get well. One such participant wanted to go back to her home because she needed an operation for a gynecological condition. However, her husband demanded sex and would not leave her alone. Each time she became pregnant, it ended in an abortion.

I started that I want to go to our home. He asked why? I told him the doctor told me that I should not conceive until I am operated. I want to go to our home so that I am operated there. He said that if I stay how do I know that I will conceive? I have to stay here. If I go to our home, he will not give anything for assistance for that operation (P#25).

When asked what the husbands do for sex within these two years, most participants did not know.

You may not know what the husband will do. Since the husband is sleeping in his room, he may go to another woman (P#6).

A few participants wanted to use family planning methods but were not sure if the husbands would accept. They thought it was good for them to rest a bit so that they could have time to conceive again after recovery. Some had never used family planning and said outright that their husbands would not allow them. Although they were not ready to become pregnant immediately, they did not know how to protect themselves:

My husband cannot accept because he wants me to be pregnant (Laughs and smiles broadly) (P#8).

My husband has not allowed me to use it. When I start using it on my own it will bring mis-understanding (P#2).

Their husbands would like them to continue giving birth. One participant had tried to talk to the husband about family planning but he would not hear of it. He forced her to have sex with her and she became pregnant. “he said that now it means that I am refusing him. It seems I have somebody somewhere that is why I am doing that” (P#16).

A few participants were opposed to family planning because it is for those not interested in giving birth. Some also said they did not have any children and did not see the use for family planning. Nevertheless, some participants said they wanted the husbands to be included and others said they would hide family planning methods from their husbands. Those who wanted husbands included were sure that the husbands would agree to family planning. As one said,

He will accept because he has suffered donating blood....if he did not have a relative he would have donated two times (P#21).

My husband is someone who can understand. I can just explain the condition to him. Even if I become pregnant immediately when also it comes out it means we are doing nothing. I will tell the husband. And the good part is the husband will be transferred somewhere. This will be a good chance for me not to become pregnant (P#23).

Only two of the participants had used family planning in the past. Both lived in refugee

camps in Uganda. The reason they could not continue with modern family planning methods is because they did not have money to get re-fills of the pills from the clinics. Otherwise, their husbands allowed them to use family planning.

Some of the younger participants were interested in family planning. However, the health messages they got in school and from the community were that young girls are not supposed to use family planning.

In school they do not allow us to use family planning... I had but I never took...from the elders. They do say family planning are for elders but not for young girls like us....They say you must ask the husband then you take FP (P#4).

Some participants were interested and would like to be taught. Some who did not feel well said that they would like to recover first then they will consider family planning.

Because I have never used and I don't know how they are used...If I am taught well how to use them, then I would do that...I had wanted actually to rest a bit. Because these children I have been delivering them frequently—those ones who passed away. I delivered them one after the other... I had wanted to rest for two years... starting from now... It is important because it will enable me to recover. Like now I have no blood and I would like to recover that blood back (P#16).

There they taught us but we never saw the drugs. But they told us it is an agreement between the husband and wife, when the two agree then they go to the hospital where you will be given (P#23).

Chapter Summary

In this chapter I have presented the study findings from interviews with 26 women admitted with abortion complications. Majority of participants stated that they had experienced spontaneous abortion. Overall, the findings in this chapter have further illuminated the role of reproductive function in the lives of South Sudanese women. Not being able to give birth or keep a pregnancy to term is a major stigma among married women and a source of deep sadness and anxiety. Hence, the majority of the women wanted to become pregnant soon following the

abortion experience. Interestingly, none of the women connected the post war context of South Sudan with the abortion. As regards their experiences with post abortion care, the majority stated that they received good care at the hospital. However, among those who went to the health centers or clinics before coming to the hospital, the care was not very good. In chapter six that follows, I discuss the implications of these findings and provide recommendations for the way forward.

CHAPTER 6

Discussions and Recommendations

Introduction

This study explored and describes the experiences of South Sudanese women with abortion complications within the post war context of South Sudan. The findings from interviews with women indicate that experiences of participants who took part in this research with abortion complications were influenced by their assigned roles in the society - that of being married and once married expected to reproduce. These roles are culturally sanctioned and they shape South Sudanese women's world view in relation to reproductive outcomes such as abortion complications.

These findings have implications for nursing practice in Southern Sudan because they highlight the importance of understanding the women's cultural context in dealing with reproductive health issues such as abortion complications. Nurses are in a position to facilitate efforts to support change which must be compatible with the culture if they are to succeed in facilitating the health and well-being of the women.

I have discussed the findings under three main categories: women's cultural context shape their experiences with abortion complications; the nexus of culture, war context and reproductive health outcomes; and the health infra-structure and post abortion care. The implication of the findings to nursing practice is also discussed. I have provided two main recommendations based on the findings: 1) professional development of nurse midwives as leaders of interdisciplinary teams; and 2) implementation of reproductive health initiatives within a culturally relevant and gender sensitive framework. Finally, I have suggested areas for further research.

Women's Cultural Context Shape their Experiences

South Sudanese cultures are predominantly patriarchal with major inequalities between men and women. Among most ethnic groups, a woman's most important function is in her fertility and the ability to give birth. As cultural and societal expectations, a South Sudanese woman's role revolves around the institution of marriage and her reproductive function within this institution (Fitzgerald, 2002).

Payment of bride wealth (dowry) to the woman's parents by her future husband during the marriage process is an investment in the woman with expectation that among other things she will deliver many children (boys and girls). As mentioned in chapter 4, a man usually gets help from his close relatives to acquire the bride wealth for a dowry payment. This involvement of relatives from both sides in the marriage process including the financial investment puts immense pressure on the couple to start having children as soon as possible. A South Sudanese woman's world view as far as reproductive health is concerned is therefore shaped by this context. The marriage processes and the fact that it is not just a union of a couple but that of the extended families already denies a woman the right to make independent reproductive decisions such as family planning or timing of pregnancies.

Although these study findings cannot be generalized to all women of South Sudan they do shed light on the issues as portrayed by these women and their experiences with abortion complications and the powerful influences of their cultural context. These findings show that women's status relative to that of men and the importance of her reproductive function in society are issues that affect her across her life span. The important role that a woman's reproductive function plays is demonstrated by the manner in which participants in this study discussed their experiences with:

- abortion complications,
- emotions,
- health seeking,
- syphilis,
- utilization of modern family planning methods, and
- experiences during war and displacement.

Since a majority of women stated that their abortion was spontaneous, the word ‘miscarriage’ in this chapter is used synonymously with the words ‘abortion’ or ‘spontaneous abortion’. In case of a terminated pregnancy, it will be referred to as ‘induced abortion’.

Experiences with Abortion Complications

Although the women were able to describe the process, signs, symptoms and the events that led them to know that all was not well with the pregnancy, a majority were reluctant or unable to reflect on their experiences with abortion complication. Their reluctance to reflect on the abortion may have been because their opinion is rarely asked and the expectation is that they will follow tradition. They attributed the abortion that occurred to ‘God’s will’. The impression participants gave was that they did not have control of what had just happened to the unborn baby and saw no need to dwell on it. It seemed that since abortion had occurred, they were more focused upon preparing their bodies for the next pregnancy. Any reflection which was done was by way of expressing the desire to understand why the pregnancy came out in the first place, treat that cause and then try to become pregnant again as soon possible.

To further highlight the central purpose of the reproductive function, a majority of the women in this study stated that they were ready for the pregnancy when it occurred. The brightness and smiles in their faces when they spoke about this, shows the positive feelings and

pleasure these women have in being pregnant and giving birth. Most were surprised that they were being asked if they were ready for the pregnancy in the first place. To them, the answer was obvious; *“a woman gets married to deliver children”* (study participant). Hence, the happiness they experienced when realizing that they were pregnant was reinforced and bolstered cultural expectations.

A majority wanted to become pregnant immediately after recovering from the abortion experience. Although there were a few who expressed reluctance to being pregnant, it was not that they did not want to become pregnant. They were just not ready at that time either due to their health, the youngest child was under two years of age, they were not happy in the marriage or they wanted to rest to fully recover from the abortion, and also try to understand why it occurred. What was evident is that a majority of women welcomed being pregnant and the notion that they may never want to become pregnant again was not an option.

The implication of the finding in this section is that women’s concern to fulfill their reproductive function shapes their behavior to exclusively focus on regaining health getting better and becoming pregnant again ‘no matter what’, post abortion. This desire may have been more important than any other feeling these women had towards their experiences with abortion complication. For most of the younger participants (less than 20 years of age), a pregnancy was a means to stay in a marriage and gain social and economic security. They expressed the need to prove their reproductive function more adamantly than older participants who had other children.

Emotional Experiences

Feelings of sadness were expressed emanating from the miscarriage. The feelings of sadness were three fold: end of a pregnancy equals the death of a real person, physical pain but no baby; a pregnancy ending is personal.

End of a pregnancy equals the death of a real person.

When the pregnancy ended, the women felt like it was the death of a real person. For example, some of the participants stated that in most of South Sudanese cultures, as soon as conception is confirmed, the pregnancy is not just a fetus but considered a human being. Therefore if the pregnancy ends in an abortion, it feels like a death of a real person requiring a proper burial (with all the cultural ceremonies). This loss therefore became a source of sadness.

Physical pain but no baby.

Most women stated that the physical pain they went through during abortion was too much and there was no baby born alive to show for it. This was a source of stigma and sadness. One participant went as far as stating that she contemplated suicide because the pain was too much. She felt pain before the abortion as well as after it happened. Another participant was so traumatized with the pain to a point that she wanted to leave the marriage.

Pregnancy ending is personal.

Some of the women stated that they were being blamed for the abortion. This is also an illustration of the importance of the reproductive function and the responsibility bestowed on the woman to carry a pregnancy to term. A woman who is not able to keep a pregnancy is ridiculed by the husband's relatives.

Experiences with Health Seeking

Majority of women in this study did not delay in seeking health care. Immediately a woman noticed she was having problems (e.g. pain, bleeding) with the pregnancy, she would inform some significant persons in her life immediately (a mother-in-law, husband or a close relative). These relatives or significant others assisted with making decisions related to accessing the care and often accompanied the women. In some instances what appeared as a delay in

health seeking behavior was an experience of inadequate care in the current health care system especially at the primary health care centers, units and private clinics at the community level.

These actions taken immediately by the woman upon realizing that there was a problem with the pregnancy can also serve as indicators to the woman's involvement in an attempt to preserve the pregnancy. In any case, it seemed women are supposed to be responsible for a healthy pregnancy and a healthy baby. When they get sick while pregnant, they are supposed to seek care promptly so that nothing happens to the un-born baby. The women also made sure that somebody else knew what was happening possibly to avoid being blamed and also for psychological support.

Experiences with Syphilis

An important finding was that a majority of participants thought syphilis was the cause of abortion. Syphilis was the most commonly mentioned form of STI associated with the pregnancy loss. What was most enlightening is the ease and openness with which the women spoke about syphilis. Common advice from friends and relatives to a woman with threatened or experiencing an abortion was to go and be tested for syphilis.

From the record reviews at the study unit and anecdotal evidence, STIs are common in South Sudan and the second most frequent reason for admissions at the gynecology unit after abortion related complications. Most health facilities lack adequate treatment for syphilis hence patients report to the few private facilities in the community.

STIs and syphilis appear to be accepted as norm given the cultural context and stated beliefs. Women's main function is to please their husband sexually and bear him children. The men are free to have as many partners and even wives as they desire, a factor that is associated with increased risk for STIs. The men travel to other cities for work or when in the military thus

increasing their potential exposure to STIs. Even if the wife is treated for syphilis or another STI, she risks being re-infected by her husband when he returns. In addition, the practice of living apart for two years encourages the husband to find other women to satisfy his sexual urges-women who may have an STI. The sexual practices condoned by the culture points to the need for education and access to resources for safe sex.

The openness about syphilis and the desire by the women to access treatment could explain the need to keep the pregnancy and prevent an abortion. For example, the women who suspected they had syphilis were the first to be tested in their families. They were also focused on getting appropriate treatment so that it did not interfere with the pregnancy. Because of the transient nature of the populations especially men, couples were not adequately treated (especially male partners) and there was no way for the women to ensure their husband's treatment. Some of the participants were also not able to access care because of lack of money and at times because the health care system was not able to diagnose and treat syphilis effectively. The most significant aspect of this finding is that, because of the centrality of their reproductive function, women were very determined to get treatment for syphilis hoping that treatment would preserve the pregnancy.

Experiences with Modern Family Planning Methods

The majority of women had no previous history of modern family planning use (e.g. oral contraceptive pills, implants, injectables, intra uterine contraceptive devices (IUCDs) and condoms). This was primarily related to lack of access to family planning information and availability of contraceptive methods. However, many participants also believed that family planning is for women who are not interested in having children. A majority did not want to use family planning post abortion. According to some participants' accounts, their husbands would

not allow them to use family planning. The few who wanted to be taught and to use family planning stated that they had to convince the husbands before they could make a final decision. None of the participants stated that they could make a unilateral decision on family planning use. It is important to note that the few who may have been agreeable to using family planning wanted to rest but *not* to stop giving birth. Majority of the women used culturally sanctioned breast feeding and abstinence as methods of family planning.

Breast feeding and abstinence.

In South Sudan cultures, a woman should breastfeed her youngest child for two years before becoming pregnant. During the two years when the woman is breast feeding, she is not supposed to have sex with her husband. A woman comes back to her husband for sex when she is ready for the next pregnancy. Most couples especially in rural areas seem to have sex only for procreation (Jok, 1998). This culture is partly the reason why polygamy is allowed and very common in the region (Fitzgerald, 2002, Jok, 1998). Most participants mentioned that staying away from the husbands was a method of choice for pregnancy prevention. Women choose to control contraception by staying away from their husbands rather than negotiate use of modern contraceptive methods. Women in this study who did not want to become pregnant soon seemed to welcome this phenomenon (staying away from the husband). In general, modern contraceptives are still not embraced by communities of South Sudan. Only 3.5% of women were using modern contraceptives in 2006 (GOSS, 2006).

At a recent training on Emergency Obstetrics and Neonatal Care (EmONC) in South Sudan health providers narrated some of their experiences after dispensing contraceptives to a woman. If the husbands are not party to the decision, they sometimes confront the health workers on discovering that their wives are using contraceptive methods. A majority of the health

providers believe that a couple must be counseled together on family planning use to avoid repercussions and enhance acceptance. The emphasis must be that family planning is a method to enhance a woman's reproductive function as much as possible.

Practical pressure to procreate.

Pressure to procreate and uphold reproductive function plus to replace those who died during the war seemed to be a driving force discouraging the use of modern family planning methods. An estimated two million South Sudanese are believed to have died during the war, and more continue to die due to disease and other natural causes. Communities here believe that a woman's reproductive function should be maintained to replace the millions who died in the war.

Lack of access and availability.

At the study hospital, United Nations Populations Fund (UNFPA), South Sudan office had supplied various contraceptive methods. According to the nurse at the gynecology unit, family planning programs could not be started at the hospital. She explained that communities are yet to embrace family planning. As a result, the reproductive health kits were locked in a store (communication with a nurse, gynecology unit, March 29th, 2008). Reports from other health providers and observations made at major hospitals revealed a similar trend, no family planning programs.

Experiences during War and Displacement

The experiences of women during the long protracted conflict may have shaped their world view in many respects including reproductive functions. Among the 26 participants, 20 were displaced during the war, 13 as refugees and seven internally displaced within the country. None of the participants (displaced and not displaced) thought the present post war context of

South Sudan had contributed to the abortion. To most, during the war, things were so bad that they were just relieved to be back to their homes even if the situation was still not optimum.

Most of participants in this study were also very young (toddlers) during the war and some were not born when the war started. Majority returned to South Sudan after 2005 when the comprehensive peace agreement was signed that ended the war. They may not have known the magnitude of the effects of the war, as that was all they knew. Any difficulties which participants experienced were related to their living conditions during displacement. Overall, these women were more concerned about their reproductive function in the context of their culture and marriage but not in the context of the post war situation. Moreover, the effects of war may not yet be fully manifested in these women. It may be years before the true effect poor nutrition, emotional strain and impaired living conditions are evident.

The discussions in this section demonstrate the central place that a woman's reproductive function occupies in the lives of married couples. Women are more concerned in preserving and fulfilling their reproductive function than reflecting on their experiences with abortion complications. The dominating role of men in this society impacts any reproductive decisions a woman makes. It is therefore imperative that consideration should be made to implement reproductive health programs at the very least using a culturally relevant and gender sensitive framework. Most importantly, strategies to involve males, community leaders and members in reproductive health programs should be planned. Male involvement in reproductive health may change their attitudes towards women's roles and view them (women) in a broader sense and as useful members of society beyond their reproductive functions. Although women are not regarded as having high status relative to men in this society, the value placed on children and

the perceived importance of the woman's reproductive function can be used as impetus for implementation of culturally relevant and gender sensitive reproductive health programs.

The Nexus between Culture, Health Services and Reproductive Health Outcomes

This section attempts to illustrate how the cultural practices (early marriage and its consequences and beliefs in the family curse in South Sudan made worse by poor health system infrastructure in a post war situation can lead to poor reproductive health outcomes.

Early Marriage

Early marriage is allowed in South Sudan (often to older men), and the women are expected to start having babies immediately (Duany & Duany, 1999; Fitzgerald, 2002; GOSS, 2006). Women in this study married mostly at an age less than 18 years. At the time of the interview, majority were either adolescents or young persons. World Health Organization (WHO) defines adolescence as the period of life between 10-19 years, youth as between 15 - 24 years and young people between 10-24 years of age (WHO, n.d). Interestingly, the practice of early marriage among the South Sudanese continued at the refugee camps in Uganda and Kenya. Shteir (2006) in her assessment work on the situation of women in South Sudan noted that refugee camp marriages were motivated not only by culture but also economic and physical security which were often linked to basic survival.

Early marriage in a male dominated society, no economic security, low levels of formal education or no education at all has historically disempowered women in South Sudan. Women submit to the cultural context which deeply marginalizes them because this is all they know. This situation has left women with little knowledge about reproductive health issues. For example, most women in this study were not aware that attending ante-natal clinic would likely improve

their pregnancy outcome. They were also uninformed about the potential benefits of modern family planning methods. The marriage process itself is a good illustration of how women lose their reproductive rights and autonomy at a very early age.

Early marriage is not unique to South Sudan. There are many places in developing countries especially Sub Saharan Africa where these cultural beliefs and practices are still common (Locoh, 2009). Recent studies have shown that in cultures where women marry young, it is often among the poorest in society where marital strategies are for economic survival. The cost of education and delayed marriage for daughters in these societies is perceived as high with uncertain outcomes (Schuler, Bates, Islam & Islam, 2005). For women who marry young, it has also been shown that having children is central to their identities, and the only route to authentic womanhood (Locoh, 2009). The culturally sanctioned power differences between men and women in South Sudan have resulted in the gendered division of labor, risk of poverty and violence. Individually and collectively, these results contribute to poor reproductive health outcomes.

Gendered division of labor.

In South Sudan, the women's situation is made worse because of the hard physical work expected of married woman for the maintenance of the family. Once the bride wealth is paid, a woman has to prove that she is capable of performing hard physical work like carrying water, building houses and ensuring adequate food production, all without complaining. Pregnancy is not an excuse for not doing physical work. This gendered division of labor which places a heavy burden on women's lives and consumes much of their time, further hinders their participation in activities that can empower them. The belief that sending girls to school is less beneficial to the family further diminishes her contribution to community decision making. All these expectations

and limitations jeopardize women's reproductive health as they keep her ignorant of ways to promote health for her and the family.

Violence and poverty.

Other consequences of early marriage and childbearing include violence against women which can be in the form of sexual, psychological or physical abuse. Studies have shown that women, who marry early in situations where men are the custodians of wealth and have decision making authority on most important issues, as happens in South Sudan, are bound to be poor and suffer violence (Bongaarts & Cohen, 1998). The average years of school among the participants interviewed in this study was four with only *four* of the participants having attended school up to 12th grade. The majority did not have any formal sources of income.

Poor reproductive health outcomes.

Evidence exists to show that girls who marry young (less than 18 years of age) experience poorer reproductive health outcomes compared to those who marry at an older age. These include spontaneous and unsafely induced abortion, anemia, pre-eclampsia, obstructed labor, prolapsed uterus, chronic back pains and obstetric fistulas (Winkvist & Akhtar, 2000; Locoh, 2009; Blanc, 2001). Moreover, early marriage in sub Saharan Africa has been shown to place young married girls at a much higher risk of contracting Human Immune Deficiency Virus (HIV). This is because most partners of girls who marry early are usually older men and already exposed to sex and HIV (Clark, 2004). The risk of contracting HIV may be higher in South Sudan because polygamy and wife inheritance (a woman whose husband has died is re-married by her late husband's brother) are allowed and practiced widely (Fitzgerald, 2002).

Family Curse

The role of culture in relation to pregnancy outcome is also demonstrated by the belief that a family curse can cause an abortion. Most participants in this study whose husbands had not completed paying bride wealth and the father was not happy with the situation believed they had been cursed (by the father). Some of the women were ready to walk out of the marriage until the husband completed the dowry payment. They did not see the point of staying in a marriage if they could not reproduce. Once they were cursed, they believed the pregnancy would either come out or the child would die during infancy. This cultural belief is so strong that it overrides advice from health providers on abortion prevention, treatment or any other reproductive health care recommendation.

Health Services in the Post War Context

As mentioned in chapter 1, the health services in South Sudan were destroyed during the long protracted war. The public health system was literally non-existent. Skilled health workers were not available. The few skilled workers available were those trained either in Khartoum or neighboring countries (Kenya, Uganda and Central African Republic) when they were refugees. This severe lack of qualified health personnel poses a major problem in dealing with the health issues such as abortion complications.

All women in this study stated that they experienced a first trimester spontaneous abortion. The stories of two women indicated that they may have induced the abortion but this could not be verified. These study findings indicate that abortion is one of the causes of poor pregnancy outcomes in the region. High numbers of threatened abortion cases admitted at the gynecology unit and the numbers of incomplete spontaneous abortion are a case in point. There

is an obvious need for more empirical studies to establish the prevalence and determinants of the different types of abortions.

With the country recovering from 21 years of war, a public health system destroyed to the ground; a transient population, poor physical infrastructure and poor baseline health indicators, there are obviously numerous contributing factors to the poor maternal and reproductive health outcomes (GOSS, 2006). However, the severe lack of epidemiological data makes it difficult to know the depth and breadth of the problem. The present maternal mortality ratio, estimated at 2,054/100,000 live births is the highest in the world (GOSS, 2006). Most maternal deaths are caused by obstructed labor, hemorrhage, induced abortion, sepsis and hypertensive disease in pregnancy (e.g pre-eclampsia). The signs experienced by women in this study such as severe bleeding, unconsciousness and the fetus being aborted before the women arrived at the health facility are a good indication of how precarious maternal health is in South Sudan. Moreover, skilled providers for reproductive health are very low. Only 10% of deliveries are attended by skilled birth attendants (GOSS, 2006).

The poor state of health facilities was illustrated in this study by the care provided to participants at the clinics and health centers based at the community level. None of the participants received any post abortion care because it was nonexistent. Generally, the quality of care they received was very poor. Some were referred to the hospital on time and they received post abortion care.

The situation was better at the study hospital because post abortion care and use of MVA procedure for evacuations was available. UNFPA South Sudan office had organized a training for health providers (physician assistants, nurses, nurse midwives and physicians) on Emergency Obstetrics and Neonatal Care (EmONC) in February 2008—one month before this study began.

A nurse, physician assistant and a general physician were trained on MVA procedure. This was one of a series of EmONC courses which UNFPA is coordinating throughout the ten States of South Sudan to facilitate the prevention and reduction of the high maternal morbidity and mortality rates in the region.

Emergency Obstetrics and Neonatal Care.

Ideally, all women giving birth or with a pregnancy related complication should be cared for in an appropriate health facility. However, in developing countries such as South Sudan, pregnancy related complications are usually not managed appropriately due to lack of staff, equipment and accessibility to health facilities. Emergency obstetrics and neonatal care (EmONC) ensures that mothers and newborns who develop complications have access to well functioning facilities. EmONC services consist of two levels, basic and comprehensive functions (UNFPA, 2009).

Basic EmONC functions are performed at the health center without the need for an operating theatre. They include Intravenous (IV)/Intramuscular (IM) antibiotics, IV/IM oxytocics, IV/IM anticonvulsants, assisted vaginal delivery, removal of retained products and newborn care. The comprehensive EmONC functions requires operating theatre and is usually performed at the district level hospitals. The functions include all the six basic functions plus caesarian section, blood transfusion and care to sick and low birth weight newborns including resuscitation (UNFPA, 2009). It is recommended that for every 500,000 people, there should be at least four appropriately distributed facilities offering basic EmONC and one facility offering comprehensive EmONC. Hence, if the staffs are well trained in EmONC, abortion complications can be treated at the community level and the women do not have to travel to the hospitals (UNFPA, 2009)

For effective provision of EmONC in conflict and post-conflict situations like South Sudan, there are reproductive health kits distributed by UNFPA. Reproductive health kits are pre-packaged sets of medicines, equipment and supplies designed to meet the most basic RH needs in crisis situations. They are designed so that each kit can be used in contexts where there is little or no health infrastructure to address specific reproductive health problems. The kits are numbered from 0 to 12. For example, oral and injectable contraception are in kit 5 (UNFPA, 1999). These kits have been distributed at some state hospitals where a health worker has been trained in EmONC. However, the kits are not available at all health facilities especially those at the community level (primary health care units and centers) where most abortions occur

Induced abortion.

None of the women in this study admitted to inducing an abortion. Abortion is severely restricted in South Sudan. Coupled with the expected reproductive function discussed earlier, it may not be easy for women to come out openly and state that they induced an abortion. A South Sudan high court judge recently clarified the law to participants at an EmONC training. According to the Government of South Sudan penal code 2008, section 216, abortion is only allowed under two conditions: 1) to save the mother's life; and 2) if there is an intra-uterine fetal death. There is no exception for abortion even if the pregnancy is a result of rape. A woman who gets pregnant as a result of rape must carry the pregnancy to term. If the rapist does not marry her and she does not want the pregnancy, she is supposed to deliver the baby and her parents should take care of the baby.

- If an abortion is performed outside the stipulated conditions the offender will be taken to prison for up to 3 years or a penalty determined by a judge;

- If an individual attempts to perform an abortion to a pregnant lady, the offender will be jailed for up to seven years;
- If a doctor performs an abortion for a woman against her will, the doctor will be put in prison for 7 years; and if a doctor performs abortion for a woman against her wish and she dies, the doctor will be jailed for life (A lecture by Wau High court Judge, September 9, 2009)

Some key informants revealed that in most South Sudanese cultures, a woman who becomes pregnant before the youngest child is two years or is still breast feeding is a source of ridicule in the village. It is believed that only a man who wants to kill his youngest child makes a woman pregnant when the youngest is still breastfeeding. It is reported that in such a situation, the man may seek to procure pregnancy termination for the wife. If the pregnancy is terminated because of this reason, it is still illegal. None of the participants in this study whose children were less than two years gave any indication that the abortion was induced.

Nurses at the gynecology unit (study unit) stated that they sometimes admit and treat women with induced abortion. Although the women never admit it, but through examination, presence of trauma in the vaginal canal and foul smelling discharge due to sepsis, a diagnosis of induced abortion is made, commonly referred to as criminal abortion in South Sudan.

Overall, based on the records and discussions with various health professionals, spontaneous abortion is the most prevalent type among women in South Sudan at this time. Given the stress of war and the post war context, the high prevalence of some of infectious diseases and the accompanying lack of health infrastructure, services, and qualified personnel, further investigation, training and development of tools to best diagnose the different types of abortion in this context is necessary.

Implications of Findings to Nursing

This study is the first nursing led study conducted in South Sudan seeking to explore and understand the experiences of women with abortion complications. Evidence based practice (EBP) in the provision of health care among populations affected by crisis is still in its nascent stages. However, it is important to note that nurses are usually in the frontlines in response to complex humanitarian emergencies and disasters. When the war ends for example as in the present post war context of South Sudan, nurses remain the majority among the health care personnel providing the much needed health care. Findings from this study begin to form a basis for nursing research in this field. The paucity of data and the lack of nursing theories and conceptual frameworks in the field of international humanitarian emergencies should be a cause for concern to the nursing profession.

The study findings' relevance to nursing is that they have illuminated the fundamental importance of listening to the women and their perspectives on abortion complications and reproductive health morbidity in general. It has illustrated the role that culture plays in the Southern Sudanese societies in influencing women's reproductive functions. Hence, the findings emphasize the role of cultural sensitivity and relevance in nursing theories and practice. Whether an abortion is induced or spontaneous, an approach which is cognizant to the women's central role of reproduction is important. Developing culturally and gender sensitive reproductive health programs should be the role of the nurse.

Recommendations

These recommendations are made taking into consideration that South Sudan is just recovering from a 21 year civil war. The country is only four years old following the signing of the CPA in January 2005. The infrastructures in all sectors are being built from 'ground up'. On

the political front, South Sudan is expected to go through its first national elections as a semi-autonomous country in 2010. Following the general elections, there will be a referendum in 2011 for the Southerners to decide if they want to be an autonomous country or one country with the Northern government. Depending on the outcome of these activities, I recognize that long-term stability will be necessary in order to implement lasting interventions. Nonetheless, a collaborative, multi-sectoral, multi level, inter-agency and community-based approaches is needed to improve the status of women and maternal health in South Sudan.

Managing Abortion Complications

Management of abortion complications should be done within the broader context of reproductive health and safe motherhood initiatives, focusing on improving maternal health and reducing maternal mortality. The provision of a comprehensive reproductive health service package is the best option for South Sudan. According to the International Conference on Population and Development (ICPD) Program of Action (1994), "...reproductive health care is defined as the constellation of methods, techniques and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems. It also includes sexual health, the purpose of which is to enhance life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted diseases". A comprehensive reproductive health program for South Sudan would include for example: Emergency Obstetrics and Neonatal Care (EmONC), both basic and comprehensive levels including post abortion care (PAC); comprehensive family planning, including long-term, permanent and emergency contraception; HIV prevention and medical services; STI prevention and treatment; and prevention of all forms of gender based violence (GBV) and medical, psychosocial and legal

response services for survivors. Client counseling and teaching should be part of any reproductive health program.

Although South Sudan has not accumulated much evidence towards implementing health programs, recommendation is to use the evidence based model of community oriented nursing practice to address abortion complications and other maternal morbidities. Nursing interventions should be based on the core public health functions which are: assessments, policy development and assurance, (Krothe & Belcher, 2006 In: Stanhope & Lancaster, 2006), with practice as an added component. Figure A1 presents the framework discussed below on maternal health management of abortion complications in south Sudan.

Assessment.

The government of South Sudan through the ministry of health has conducted a number of baseline health assessments which have provided best estimates of health indicators. The most recent such assessment is the Sudan Household Health Survey (GOSS, 2006) which provided most of the baseline health indicators being used at present. Building on the baseline indicators, evidence based practice can be put in place slowly as programs are implemented.

Policy: Develop the Nursing and Midwifery Profession.

The health service workforce is severely lacking and skilled qualified personnel are few in all sectors of health. There has been no formal training for medical personnel of all cadres for the last 20 years. Short trainings including certificates in maternal and child health, traditional birth attendants and vaccinators, for example were conducted by various NGOs during the war to respond to emergency situations. However, there was no standardized curriculum. In response to the poor health indicators including maternal health, the ministry of health (MOH) released the

health policy, maternal and child health and reproductive health policies and strategies which will guide the implementation of reproductive health programs (GOSS, 2007-2011).

In order to accelerate the prevention of and reduce the current levels of maternal morbidity and mortality and improve reproductive health outcomes, the focus should be on developing nurse midwives along with other cadres of nursing. Anecdotal evidence shows that there are less than ten certified nurse midwives in South Sudan. The maternal, neonatal and reproductive health (MNRH) strategies released by the ministry of health have identified the development of midwives as a cadre of health professionals needed to adequately address maternal health issues in the country. Indeed nurse midwives should be central in the provision of reproductive health and reduction of maternal mortality and morbidity within the core public health functions.

Why focus on nurse midwives?

It is well documented that investing in professional midwives helps in the reduction of maternal mortality (UNFPA, 2007). Essential midwifery competencies encompass all the three core health sector strategies for reduction of maternal mortality which include:

- Comprehensive reproductive health care, including family planning and safe abortion (where legal) or where necessary post abortion care;
- Skilled care for all pregnant women by qualified midwife, nurse or doctor during pregnancy and childbirth. Skilled care is care provided by a skilled attendant: a physician, nurse, nurse midwife or others with basic midwifery skills.
- Emergency care for all women and infants with life threatening complications (UNFPA, 2007).

The midwifery concept is critical and needed in South Sudan because it directly addresses the issues discussed in this document as regards to the Southern Sudanese women's status and reproductive health issues. Most importantly, the midwifery concept forges partnerships with women, leads in advocacy so that women's voices can be heard, and encourages cultural sensitivity when dealing with women from various backgrounds (International Confederation of Midwives (ICM), 2002).

Midwives play an important role in implementing basic EmONC including manual vacuum aspiration procedure for emergency treatment of a woman experiencing complications from incomplete abortion. EmONC services are necessary at the community level where most abortion complications occur. Since they work at the community level, midwives can serve as the 'point of entry' into the health care system for a majority of women.

Midwifery competencies also emphasize the importance of culture and cultural norms surrounding sexuality and childbearing practices of the women they serve (ICM, 2002). This is an important factor in South Sudan that has been demonstrated by the findings of this research. Culture plays a crucial role in a South Sudanese woman's reproductive health.

Compared to doctors, a midwife spends a lot of time with patients. A South Sudanese obstetrician/gynecologist who is also the county's reproductive health director general (reports directly to minister of health) at a graduation ceremony emphasized the need for the health care professionals and specialist like obstetricians and gynecologists to embrace the role of nurse midwives in the reduction of maternal mortality and morbidity (Communication, director general reproductive health, MOH, GOSS, October 1st, 2009).

South Sudan is also lagging behind in achieving all the eight millennium development goals (MDGs). Midwives can be instrumental in addressing MDGs #3, 4, 5 and 6 which are

directly related to reproductive health, and also instrumental to improving the status of women in general in Southern Sudan: MDG 3 - promoting gender equality and empowering women; MDG 4 - reducing childhood mortality; MDG5 - improving maternal health; and MDG6 - combat HIV/AIDS, malaria and other diseases (SSCCSE 2004).

The ministry of health should accelerate the current plans to introduce the nursing and midwifery profession in the country. The ministry should facilitate the development of a nurse midwifery training programs to improve the quality of and access to reproductive health at all levels of the health system; help establish a nursing council for standardization of nursing and midwifery practice; and strengthen the nursing profession by encouraging the establishment of a nurses' and midwives associations.

Plans are already underway to start the first training of certified nurse midwives in Juba, South Sudan. Currently, there are nursing and community midwifery programs at five locations in South Sudan: Yei, Kajo Keji, Maridi, Nimule and Lui counties. The midwifery schools are meant to produce skilled health workers quickly so that they can begin to address the maternal, neonatal and other health issues. After completion of the training, the midwives receive certificates which allow them to practice at the health facilities including health centers and hospitals.

The government of South Sudan has recognized the importance of training nurse midwives to address maternal health in the region. This is clearly outlined in the maternal, neonatal and reproductive health (MNRH) strategy document. The specific objectives in the MNRH include: expanding the current training of community midwives to all the ten States, task shifting/sharing by training of non physician clinicians (such as midwives) to perform life saving procedures including caesarian section, train professional midwives in other countries, develop

professional curriculum for midwife training and train professional graduate midwives (MNRH, 2009). Thus, accelerating the development of the nurse midwifery workforce is an endeavor which needs to be put into action as a matter of urgency.

Practice: Culturally and Gender Sensitive Reproductive Health Programs.

Considering the culture, status of women vis-à-vis men, and the importance placed on the reproductive functions for a married woman in South Sudan, I recommend a culturally and gender sensitive approach to reproductive health programming. In recent years, the importance of gender sensitive approach to reproductive health has been highlighted at various forums. These include at the International Conference on Population and Development in Cairo in 1994, the Fourth World Conference on Women in Beijing in 1995, and the fifth-year reviews of both of those conferences in 1999 and 2000, respectively. Gender was highlighted as an essential part of equitable, sustainable development. The conferences encouraged reproductive health programs to examine gender issues that underlie health problems, address women's health needs throughout their life span, view sexuality as a positive part of a woman's life, and address men's responsibility to respect women's reproductive rights (Management Sciences for Health (MSH), 2001; Wang & Pillai, 2001).

Addressing strategic gender needs in South Sudan will begin to empower women so that they can challenge their subordinate status vis-a-vis men, and to reduce the inequality that currently exists between the sexes. Reproductive health is a good entry point in beginning to address issues regarding women empowerment. There is synergy between reproductive health and the issues of women's and men's participation, empowerment, equity, and human rights (MSH, 2001; Wang & Pillai, 2001).

Gender sensitivity and perspective.

According to MSH (2001), gender sensitivity is the understanding of socially determined differences between women and men that lead to inequities in their respective access to and control of resources. Gender sensitivity includes the willingness to address these inequities through strategies and actions for social and economic development (MSH, 2001). A gender perspective takes into account gender roles, social and economic relationships and needs, access to resources, and other constraints and opportunities imposed by society or culture, age, religion, and/or ethnicity on both men and women (MSH, 2001; Stalin, Eckermann, mishra, Nkowane, and Waallstam, 2007).

Traditional gender roles as seen in South Sudan already deny women control over their sexual decisions. Experience and research have demonstrated that attention to gender issues can enhance the impact of reproductive health programs (Stalin, et al., 2007). Issues of gender inequity, for example, can be part of the reason why policies and programs may work more effectively in some countries than in others, in helping women and men to achieve full reproductive choice (MSH, 2001; Stalin, et al., 2007). In South Sudan, the attitude towards family planning use serves as a good example. A gender sensitive framework for South Sudan will ensure that women, men and community leaders are educated and involved in reproductive health programs for better health.

Women empowerment through reproductive health.

Women's empowerment approaches seek to balance the gender equation by giving women access to information, skills, services, and technology; encouraging their participation in decision making; and creating a group identity that becomes a source of power. These approaches recognize that targeted interventions are still needed in many settings to free women

from a long tradition of restrictive social norms (Wang & Pillai, 2001). In South Sudan this can be achieved through already existing and newly established women groups. For example, ‘safe houses’ can be established where women can be empowered with education on reproductive health, nutrition, immunization and any other health related issue. The women are given a chance to express themselves in the absence of men and they can also learn from each other. Similar programs have been instituted in parts of South Sudan. For example, Fitzgerald (2002) invited women to a ‘women’s only’ forum for the first time during her assessment. She comments that “despite the precarious situation, these women demonstrated clarity of purpose and vibrant, logical thinking when articulating their aspirations” (pg 51). She observed that women when given a chance in the absence of men are able to articulate their visions.

At the safe houses women can learn, share and support each other. Also, reproductive health programs can train and use female outreach workers to enhance their status and prestige in their families and communities, and gain opportunities for employment or access to micro-finance programs. With time these groups can be empowered with income generating activities of their choice while educating communities on reproductive health issues. Rights awareness classes, income generation, conflict resolution and adult education can restore hopes and dignity of these women. Furthermore, advocacy for universal education for women and girls in South Sudan has begun and must be accelerated.

Recommendations for Future Research

As a follow up to this study, I recommended six potential research areas:

1. Abortion studies-prevalence, incidence and risk factors. This data is needed for South Sudan given the indication that the incidence and prevalence of spontaneous abortions is high. For

logistical reasons, it will be feasible to begin such studies at major hospitals. Depending on the findings, community based follow up research can be conducted.

2. Abortion measurement tool: A tool should be developed which can be used to diagnose the different types of abortions especially spontaneous and induced abortions.
3. Reasons why a woman would terminate a pregnancy in South Sudan given the central role of reproductive functions and the cultural context of South Sudan
4. What are the patterns of contraceptive use and reasons for using family planning among couples or women using them?
5. Explore effects of cultural determinants/practices/beliefs on utilization of reproductive health programs.
6. Explore strategies to involve men in reproductive health within the cultural context of South Sudan.

Study Limitations

This study had two main limitations worth noting. *First*, the qualitative design necessary because of the paucity of data available related to the question does not allow for generalization of findings to a broader population. The findings cannot be generalized beyond the women interviewed at the gynecology unit in the county hospital. Moreover, women admitted at the gynecology unit were self selected. Those who were not able to reach the hospital may have different characteristics which might have provided different findings and information. However, the findings have elicited important research questions and potential hypotheses with which to begin building a nursing oriented evidence based practice. The findings provided a glimpse of the important role that culture plays in the lives of South Sudanese women and the fundamental value given to their reproductive functions in this society. *Second*, the interviews were conducted

using translators. Participants in this study represented ten different languages. Translating between these different languages may have affected accurate representation of participants' description of events. To check on this, simultaneous return translations were done throughout interviews to ensure accuracy of participants' views

Conclusions

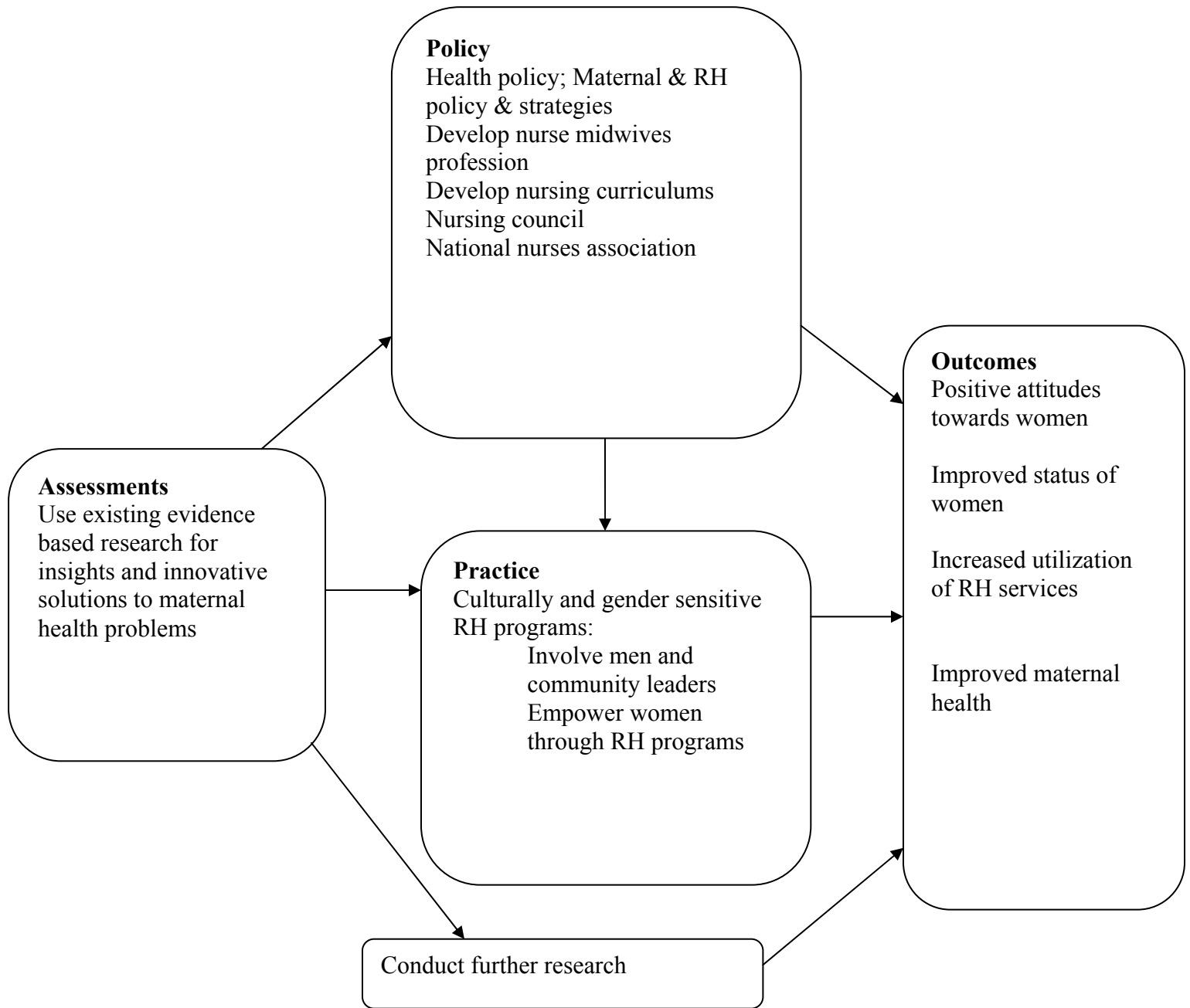
This study has demonstrated that the incidence of spontaneous abortion was high among study participants. However, women's view their experiences with abortion complications is influenced by culture, status of women within this culture and their expected reproductive function. Immediately after an abortion treatment, women in this study were most concerned about regaining their health and resuming the reproductive function as soon as possible.

The marriage institution and role of bride wealth are very important and are central to women's lives in South Sudan. South Sudan being a largely patriarchal society, after women are married, they not only become the husband's property, but are regarded in lower status in relation to the men. Therefore giving birth to many children is a way for a woman to gain some limited respect. Hence, not being able to give birth or keep a pregnancy to term is a major stigma among married women and a source of deep sadness and anxiety.

In designing reproductive health programs, the significant part played by women's reproductive function must be addressed in any approach. Building on the existing policies, culturally and gender sensitive programs are appropriate given the context. Training of nurse midwives to take the lead in the provision of maternal and reproductive health will be fundamental. Education for girls and women empowerment initiatives can use reproductive health as an entry point given the importance of reproductive function in this society.

APPENDIX A: LIST OF FIGURES

Figure A1: Framework for maternal health management of abortion complications in South Sudan



APPENDIX B: LIST OF TABLES

Table B1: Selected health indicators

Indicator	Measurement
Total area (sq kilometers)	640, 000
<i>Population</i>	
- Total population (2008)	8.2 million
- Rural percent of total	98
- Proportion of population 0-4 years (2006)	14.9
- Proportion of population under 17 years (2006)	51
- Life expectancy at birth in years (2000-2005) male/female	42
<i>Fertility</i>	
- Total fertility rates -births per woman (2001)	6.7
- Crude birth rate per 1000 people	50.5
- Teenage birth rate (2001)	50.5
- Crude death rate, 2001	22
Health Indicators	
Physicians per 100,000 people, 1990-2002	1
<i>Maternal and Child Health</i>	
- Maternal mortality ratio per 100,000 live births (2006)	2,054
- Infant mortality rate per 1000 live births (2006)	102
- Under five mortality per 1000 (2006)	135
	180

- Pregnant women receiving ante natal care by skilled attendant, percent 2006	26.2
- Births attended by skilled staff (percent of total 2006)	10
- Contraceptive prevalent use, women (any) 2006 (percent)	3.5

Malnutrition

- percent under five suffering from wasting (w/h) moderate and severe (2006)	21.9
- Prevalence of malnutrition under weight (weight /age) percent of under five (2006)	32.8

HIV/AIDS

- Prevalence of HIV males percent, 15-24 (2001)	1.1
- Prevalence of HIV females percent, 15-24 (2001)	3.5
- HIV adult prevalence (15-49), end 2001	2.6

Education

- Primary completion rate percent (2001)	2
- Ration female male enrollment in primary and secondary school (percent), 2006	25
- Primary completion rate, male percent 1995-2001	3
- Primary completion rate, female percent 1995-2001	0.8
- Trained teachers in primary, percent of total, 2000 (pre & in-service)	50
- Adult literacy rate, percent 2001	24

Water and Sanitation

- Access to improved water source, percent of population (2006)	48.3
- Access to improved Sanitation percent of the population (2006)	13.1

Table B2: Levels of the Government Health Care System in South Sudan

Facility Level	Health Activities
Community Based Health Activities	Limited curative and preventive activities supported by the community. Co-operation between health committees, a network of community based health volunteers and supported by the MOH.
Primary Health Care Unit (PHCUs)	First-line health facilities. One PHCU for 15,000 people. Typically staffed by a community health worker (CHW) and a Maternal and Child Health worker (MCH). Services include preventive (immunizations, antenatal care, normal deliveries and family planning), simple first aid activities and case finding and treatment.
Primary Health Care Center (PHCC)	Covers ~ 50,000 people. Services include all types found at a PHCU. Additional services: laboratory diagnostics, observation unit, a 24 hours emergency obstetric care. Clinics are staffed by trained clinical officers and nurse midwives. Emergency obstetrics care, e.g. manual removal placenta.
County Hospital	A first-line of a referral hospital from a PCHU, with 80-100 beds. Serve ~ 300,000 people. Services: outpatient departments, curative, laboratory and X-ray services.
Tertiary/Teaching Hospitals	The highest level of the health care system. All medical problems which cannot be managed at the lower levels are referred here. The hospital also undertakes teaching of physicians, nurses, and other medical cadres.

(Ministry of Health-Government of South Sudan, 2006)

Table B3: The World's Abortion Laws by Restrictiveness

Category of restrictiveness of abortion	# of countries	% of world's population
I. To save the woman's life or prohibited altogether	69	26
II. To preserve physical health	34	9.4
III. To preserve mental health	23	4.2
IV Socioeconomic grounds	14	21.3
V Without restriction as to the reason	56	39.3

(Center for reproductive rights, 2007)

Table B4: Spontaneous Abortion: Definitions and Subcategories

Abortion subcategory	Definition
Complete abortion	All products of conception have been passed without the need for surgical or medical intervention
Retained products of conception Incomplete abortion	Not all of the products of conception have been passed; retained products may be part of the fetus, placenta, or membranes
Inevitable abortion	The cervix has dilated, the products of conception have been expelled
Early fetal loss (missed abortion):	A pregnancy in which there is fetal demise (usually for a number of weeks) but no uterine activity to expel the products of conception
Recurrent spontaneous abortion	There are three or more consecutive pregnancy losses
Septic abortion	A spontaneous abortion that is complicated by intrauterine infection
Threatened abortion:	A pregnancy complicated by bleeding before 20 weeks' gestation

(Griebel et al., 2005; Weeks & Danielsson, 2007, pg. 1243)

Table B5: Methods for Estimating Incidence of Abortions

What is Measured	How it is Measured
Complications of Induced Abortions	Estimates the number of post abortion-care patients admitted in hospitals for reasons related to induced abortion
Induced abortion mortality	Uses mortality caused by induced abortions to measure incidence.
Retrospective and prospective abortion studies	<i>Retrospective:</i> household surveys asking women retrospectively about prior induced abortions. <i>Prospective:</i> household surveys asking women prospectively about prior induced abortions.
Surveys of illegal abortion providers	Surveys of illegal providers estimate abortion rates where abortion is illegal but provided openly in medical facilities, can be gathered by surveying the providers. The medical facilities provide the numbers of abortions that are performed
Classification of abortions according to probabilistic criteria	The World Health Organization (WHO) established criteria for categorizing whether abortion complication is the result of a spontaneous or induced abortion. The WHO classification is based on four criteria: “certain”, “probable” or “possible” induced or spontaneous abortion
Indirect approach	Indirect approach questions are designed with filter (non abortion related) questions used earlier in the interview. The filter questions follow routine demographic questions and before questions about unwanted pregnancies
Classifying abortions using women’s characteristics	A different indirect approach to classifying abortions into induced or spontaneous. Their scheme utilizes a large data base of respondent derived characteristics related to subjects and events surrounding pregnancy termination. Information about pregnancy termination is found in the demographic health surveys (DHS).
Anonymous third party reports.	Asks survey respondents whether they know or have heard within their social network of a woman or women who have had induced abortions.

(Barreto et al, 1992; Casterline, 1989; Chen, Ahmed, Mosley, 1974; Huntington, Mensch, Miller, 1996; Huntington, Mensch, Toubia, 1993; Rossier, 2003; Rossier, Guiella, Ouedraogo, & Thieba, 2006; Magnani, Rutenburg, McGann, 1996; Measure DHS, 2006; WHO, 1996)

Table B6: Languages Spoken by Participants

#	Language	Number of Participants
1	Kakwa	8
2	Arabic	5
3	Kakwa/English	3
4	English	3
5	Pojulu	2
6	Shulluk	1
7	Mardi	1
8	Acholi	1
9	Nyangwara	1
10	Kuku	1
	TOTAL	26

Table B7: Example of the Coding Process

In vivo units of major content	categories	Descriptive patterns of responses
<p>“What made me to marry young, my father stopped me from schooling...since we were seven children, he said I was a girl he has to stop me from schooling so that I cook for those going to school. That is why he stopped me. That is what made met to get married”</p> <p>“I did not know this man before. The marriage was a plan between his parents and my parents. Then later on they took me from home and brought me here”</p> <p>“It was a plan between my father and my husband’s father. For me I was just there innocent. I did not know. Then he told my uncle to put me in a plane and bring me to Juba. Then immediately as I dropped in Juba, they had completed the program and they gave me to the husband”</p> <p>“My question to my parents was: “Is this the only reason why you refused to take me to school, you wanted to give me a husband”?”</p> <p>“I got married because there was nobody helping me. It was just him. I was not ready to get married”</p> <p>“he did not send me to school because for them they believe that if you take a woman to school, she will go and choose her own husband without the agreement from the parents”</p>	Marriage process	Being a woman in South Sudan
<p>“There was a problem between my husband and my family. He did not pay all that my parents wanted. So they came and picked me and said after he completes everything is when I will go”</p>	Bride-wealth	
<p>“The bleeding started at 12Md. Then I bled a lot actually. If I stand up bleeding came like water. If I sl”leep, my clothes were soaked up with blood. It went up to 5 am. My brother looked for a motorcycle and brought me here” “I went to the market on Saturday. I was purchasing my small things for selling. I started coming back; I just had bleeding coming abruptly. I continued moving and my body was becoming weak”</p>	Signs/ bleeding/pain	Pregnancy Loss Experience
<p>“Where I slept the bed sheet which I used was full of blood and even the blanket was full of blood. And also I tried to pad myself but it could not help at all”</p> <p>“It is my stomach which was paining and bleeding” The bleeding took me from morning up to 12MD is when I became unconscious”</p> <p>“The cloth was changed for several times. It was changed by the sister when she was unconscious she does not know how many times”</p> <p>“I was unconscious. When she brought me to the hospital I do not know when I reached the hospital”</p> <p>“I just came to feel I am in hospital”</p>	Unconsciousness	
<p>“From there when they removed the child I did not even know</p>	Fetus out	

<p>myself. I was just down there. They came and raised my head”</p> <p>“when I went inside, I felt my abdomen paining seriously. Then I kneel down. I just put my hands down like this, I felt something. From there I felt the child was out”</p> <p>“It was only water until the fetus came out. There was no blood”</p> <p>“The fetus came out alive, it took some minutes then it died”</p> <p>“When the fetus came out is when I realized there was nothing in the uterus”</p>		
<p>“Another sickness they are calling syphilis here is the one which made this pregnancy to come out. I tested that sickness and I have it. I have never gone for treatment”</p> <p>“Yes. I asked them syphilis which sickness is that. They told me if you do not treat it can take the pregnancy out”</p>	Syphilis	Causes of pregnancy loss
<p>“In the village I carried cassava from the farm...then from there all this cassava I left it there. There was no way of carrying it all during the running away from the rebels. I carried only one sack for the children”</p> <p>“I did not count. Every work at home is on me...I cannot even count what I did”</p> <p>“Because I did not have any other sickness before. It is only this work that I am doing. I do not fall sick anyhow...”</p>	Heavy work	
<p>“ In our culture boys are not allowed to do what females are doing. If you tell them to help they can even beat you”</p> <p>“They said that there was a misunderstanding when her baby died between the father and the uncles. The father decided to bring a goat to the uncles”</p> <p>“At our side because since I got married to the husband, I gave birth to four children and the husband has not paid anything. So my father had said these four children should be the last and I should not give birth for this man again... The father was so annoyed...”</p>	Family Curse	
<p>“I did not want this pregnancy. The reason is because I suffered a lot at that first husband. He mistreated me a lot. I reached an extent of cursing myself that I did not want to deliver any more children”</p> <p>“I did not believe that this was going to be a real pregnancy. I thought it was a problem with menstruation...that is what I thought”</p> <p>“The child is very young that is why I do not want this pregnancy”</p> <p>“I wish this pregnant can come out, let it come out”</p>	Unwanted	Pregnancy readiness
<p>“I was happy about it...because I have already got pregnant and it was my first time to be pregnant”</p> <p>“it was given by God. So it is alive, I am so happy. I did not know it would happen the way it has happened”</p> <p>“Yes because I want to conceive and deliver”</p> <p>“I liked it. The reason people get married is to deliver children”</p> <p>“The other child was now big. As a woman at home, you have to give birth to children. If the time has come and god has given you have to receive it”</p>	Ready (Yes)	

“In our culture if the child is big, you become pregnant. My first born child was even take to the village when he was very young that is why I became pregnant I was very happy. Because of that one (pregnancy).

“Before I could not I am not feeling alright even if I am with people. I was ever thinking about my life how I can be and how my life can end. So after I became pregnant I say God is with me. I thank God”

Not ready

“This pregnancy came by mistake”

“This was an accident I don’t know”

“I was not ready to conceive because with delivery for me I usually have complications. My health is not fine”

“I wanted to take some time about three years, and then I will give birth to other children”

“I told my mother in law”

Informed a relative Taken to hospital

Immediate action taken

“As soon as the bleeding started at home at around 12 I was brought to the hospital”

“When the bleeding started, I had already planned to come to the hospital. As I was coming to the hospital the fetus came out”

“Then bleeding started on Saturday at night. On Sunday morning the bleeding increased and was coming with a lot of clots. Then we came to the hospital”

“It is my mother who decided that may be there is retained blood in my stomach I should be brought to the hospital”

Decision to seek care

“Because the bleeding was so severe and I was bleeding”

“I feel sad like now if I can remember the first born I delivered the child died; now I tried to conceive the pregnancy came out. Really will I get a child in future?”

Sadness

Aftermath of pregnancy loss

This abortion has given me a lot of complications. The loss of the child it makes me very sad. If the child was alive and the complication is there, I would not think about it much”

“I am feeling sad because it made her have pain for nothing and last minute it came out”

“he says when I go home I should go direct for treatment for syphilis”

Blame

“he thinks it is my fault that I did not come to the hospital in time. If I knew that my body was paining, I should have come to the hospital in good time. So it is my negligence”

“I am worried because he called me today. He said he is coming and if he finds his pregnancy is out, he does not want me. He wants me to go back to my home”

Table B8: Most Common Causes of Admission at the Gynecology Unit: Feb 2001 to March 2008

Condition	Freq	%
Abortion Related	1806	45
Pelvic Inflammatory Disease (PID)	1008	25
Malaria	483	12
Urinary Tract Infection (UTI)	322	8
Fibroids	191	5
Infertility	165	4
TOTAL	3,975	100

Table B9: Types of Abortions at the Gynecology Unit: Feb 2001 to March 2009

Abortion type	Freq	%
Threatened	901	50
Incomplete	510	28
Complete	264	15
Inevitable	84	4.7
Septic	21	1.2
Habitual	19	1.1
Criminal	7	0.4
Total	1,806	100

APPENDIX C: IRB DOCUMENTS



BOSTON COLLEGE
Institutional Review Board
Office for Research Protections
Waul House, 3rd Floor
Phone: (617) 552-4778, fax: (617) 552-0948

IRB Protocol Number: 08.218.01

DATE: February 18, 2008

TO: Monica Onyango

FROM: Institutional Review Board – Office for Research Protections

RE: Perceptions And Experiences Of Women With Abortion Complications Within The Post War Context Of South Sudan

Notice of IRB Review and Approval
Expedited Review as per Title 45 CFR Part 46.110, FR 60366, FR, # 7
Waiver of Documentation of Informed Consent [Title 45 CFR 46.117 (c) (2)]

The project identified above has been reviewed by the Boston College Institutional Review Board (IRB) for the Protection of Human Subjects in Research using an expedited review procedure. This is a minimal risk study. This approval is based on the assumption that the materials, including changes/clarifications that you submitted to the IRB contain a complete and accurate description of all the ways in which human subjects are involved in your research.

This approval is given with the following standard conditions:

1. You are approved to conduct this research only during the period of approval cited below;
2. You will conduct the research according to the plans and protocol submitted (approved copy enclosed);
3. You will immediately inform the Office for Research Protections (ORP) of any injuries or adverse research events involving subjects;
4. You will immediately request approval from the IRB of any proposed changes in your research, and you will not initiate any changes until they have been reviewed and approved by the IRB;
5. The IRB has waived the requirement for obtaining the signature as allowed under 45CFR 46.117 (c) (2). The research presents no more than minimal risk of harm to subjects, and involves no procedures for which written consent is normally required outside of the research context.

6. You will only use the informed consent documents that have the IRB approval dates stamped on them (approved copies enclosed).
7. You will give each research subject a copy of the informed consent document;
8. You may enroll up to 40 participants.
9. **If your research is anticipated to continue beyond the IRB approval dates, you must submit a Continuing Review Request to the IRB approximately 60 days prior to the IRB approval expiration date. Without continuing approval the Protocol will automatically expire on February 15, 2009.**

Additional Conditions: *Any research personnel that have not completed CITI education certificates should be removed from the project until they have completed the training. When they have completed the training, you must submit a Protocol Revision and Amendment Form to add their names to the protocol, along with a copy of their CITI education certificate.*

Approval Period: **February 15, 2008- February 14, 2009**

Boston College and the Office for Research Protections appreciate your efforts to conduct research in compliance with Boston College Policy and the federal regulations that have been established to ensure the protection of human subjects in research. Thank you for your cooperation and patience with the IRB process.

Sincerely,



Christina Booth Steele, MS, CIPP
IRB Designee
Director of Research Protections

mg

(For OHRPP use only) BC IRB Protocol#: _____



Boston College Institutional Review Board
Office for Human Research Participant Protections
140 Commonwealth Ave., 116 Carney Hall
Chestnut Hill, MA 02467
(617) 552-4778 Fax: (617) 552-0948 E mail: irb@bc.edu

IRB Application Form

For Initial IRB Review Only

I. Study Title: Perceptions and Experiences of Women with Abortion Complications within the Post War Context of South Sudan
(If funded must match the sponsored title)

II. Principal Investigator Information

A. Name of Principal Investigator	Monica Adhiambo Onyango	B. Are You? (Please check)
C. Mailing Address:	1025 Hancock Street, Apt. 14F, Quincy, MA 02169	<input type="checkbox"/> Faculty
D. Department:	Nursing	<input type="checkbox"/> Staff
E. E-mail address:	onyangmo@bc.edu	<input type="checkbox"/> Undergraduate Student
F. Primary Phone Number:	617 817 1602	<input checked="" type="checkbox"/> Graduate Student
G. Alternate Phone:	617-471-4634	<input type="checkbox"/> Postdoctoral fellow
H. Faculty Advisor's Name:	Dr. Rosanna DeMarco	<input type="checkbox"/> Other:
I. Faculty Advisor's Phone:	617-552-8718	
J. Faculty Advisor's E-mail:	RDema10519@aol.com	

III. Funding

A. **None (Go on to Section IV)**
Do you plan to apply for funding in the future? Yes* No * Please explain:

B. **University Funded:** List source:

C. **External*:** List source and grant number:

D. **Federal*:** List agency, department and grant number:

*Wait until you have been notified that your project will be funded before seeking IRB approval unless otherwise instructed by funding source. Submit documentation of funding status with application and a complete copy of the grant with your IRB application

E. Is BC the primary awardee for the grant? Yes No* If No Please list Primary Awardee:

F. Are there subcontracts Yes* No If Please list sub-contractors:

IV. General Study Information

A. Participant Recruitment Numbers Females: 40 Males:	D. Estimated Project Duration Start Date: 2/1/2008 End Date: 4/30/2008
B. Participant Ages (please check) <input type="checkbox"/> 0-7 (parental consent and oral child assent) <input type="checkbox"/> 7-11 (parental consent and child written consent) <input checked="" type="checkbox"/> 12-18 (parental consent and written consent) <input checked="" type="checkbox"/> 18-65 <input type="checkbox"/> 65+	E. Why is this Project being conducted? (please check) <input type="checkbox"/> Faculty/Staff Research <input type="checkbox"/> Undergraduate Coursework <input type="checkbox"/> Master's Thesis <input checked="" type="checkbox"/> Doctoral Dissertation <input type="checkbox"/> Other:
C. Special Study Populations (check if applicable) <input checked="" type="checkbox"/> Minors (under 18 years) If including minors, also complete Studies Including Minors <input type="checkbox"/> Pregnant Women/Fetuses or products of labor & delivery <input type="checkbox"/> Prisoners <input type="checkbox"/> Physically or mentally challenged <input type="checkbox"/> Diminished capacity for consent Other:	

V. Research Risk

Boston College IRB Approved

Submit Materials by E-mail: irb@bc.edu

Page 2 of 6

FEB 15 2008

Thru: Feb 14 2009

*Research must present no more than minimal risk to human participants in order to qualify for expedited review. Minimal risk means that the "probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests." (45 CFR 46.102)

A. Does the research propose greater than minimal risk to participants? Yes* No

*If yes skip to part C of this section

B. Does the research include prisoners? Yes* No

*If research includes prisoners, the application must be reviewed by the full board

C. Check all procedures that apply to the research:

(1) Clinical studies of drugs and medical devices

(2) Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture.

(3) Prospective collection of biological specimens for research purposes by noninvasive means. Examples: hair and nail clippings; saliva, deciduous teeth at time of exfoliation or extracted during routine care.; excreta and external secretions (including sweat); un-cannulated mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings; sputum collected after saline mist nebulization.

(4) Collection of data through noninvasive procedures routinely employed in clinical practice, excluding procedures involving x-rays or microwaves.. Examples: physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the participant or an invasion of the participants privacy; weighing or testing sensory acuity; magnetic resonance imaging; electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography; moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

(5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis).

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

(8) Continuing review of research previously approved by the convened IRB as follows:(a) where (i) the research is permanently closed to the enrollment of new participants; (ii) all participants have completed all research-related interventions; and (iii) the research remains active only for long-term follow-up of participants; or(b) where no participants have been enrolled and no additional risks have been identified; or(c) where the remaining research activities are limited to data analysis.

None of the above categories apply.

For a comprehensive list of Expedited Categories see <http://www.hhs.gov/ohrp/humansubjects/guidance/expedited98.htm>

D. Does this study involve any of the following? (Check all that apply)

Deception or Punishment

Use of drugs

Covert observation

Induction of mental and/or physical stress

Procedures which may risk physical/mental harm to the participant

Materials/issues commonly regarded as socially unacceptable

Information relating to sexual attitudes, preferences, or practices

Information relating to the use of alcohol, drugs or other addictive products

Procedures that might be regarded as an invasion of privacy

Information pertaining to illegal conduct.

Genetic information that may be linked to a participant's health status, such as genetic markers for cancer, heart disease, etc.

Information normally recorded in a patient's medical record, and the disclosure of which could reasonably lead to social stigmatization or discrimination.

Information pertaining to an individual's psychological well being or mental health.

Information that if released could reasonably damage an individual's financial standing, employability, or reputation within the community.

Please provide details on all procedures checked above: How are they integral to the study?

VI. Research Summary:

FEB 15 2008

/2006

Thru: Feb 14 2007

VI. Research Summary:

Please attach a brief research summary (2-3 pages maximum) using the topic headers **A-I** below. Please use simple language and avoid technical jargon. For additional guidance on the research proposal summary the Boston College IRB Research Summary Guidelines at http://www.bc.edu/research/rcip/human/meta-elements/doc/BC_Guidelines_for_Res_Sum.doc.

Note: Grant, thesis, dissertation or course work proposals may not be submitted in lieu of the Research Summary because traditional proposals do not include specific information on risks, benefits and detailed informed consent procedures. Grant, thesis or Dissertation proposal should be attached as an addendum to the IRB application. Some of the information in a traditional proposal may be cut and pasted into the Research Summary such as the introduction, methods, materials and analysis.

A. Introduction and Background:

1. State the problem and hypothesis
2. Provide the scientific or scholarly reason for this study and background on the topic

B. Specific Aims/Study Objectives:

1. List the purpose(s) of the study (what are you hoping to learn as a result of the study)

C. Materials, Methods and Analysis (quantitative and qualitative):

1. Describe data collection methods (Procedures)-be specific
2. Describe the specific materials or tools that will be used to collect the data- be specific
3. Describe timeline of the procedures and how long each procedure will last
4. Describe how you will analyze your data; describe the analysis type and procedures including statistics and scientific or scholarly justification for the use of these analyses- be specific

D. Research Population & Recruitment Methods:

Describe:

1. Inclusion and Exclusion Criteria (what participant traits are needed to be included, what traits exclude participants?)
2. What is the scientific or scholarly justification for the number, gender, age, or race of the population you intend to recruit?
3. How did you choose the source of participants or data? (census records, BC students, Mass General Hospital records, etc.)
4. Recruitment procedure (if applicable) including who will recruit participants
5. Tools that will be used to recruit (payment, advertisements and flyers attach copies to this application)

(**Note:** participant payment beyond \$600 must be reported to the IRS, and this requirement must be added to the consent form)

E. Informed Consent Procedure

Describe:

1. Who will perform the informed consent procedure?
2. How will that person be trained? (previous related coursework, previous experience, one-on one training with PI or faculty, etc.)
3. How will the prospective participant's competence or understanding of the procedures be assessed ;will participants be asked questions about the procedures, or encouraged to ask questions?

F. Confidentiality:

Describe the Provisions for participant and data confidentiality:

1. Where the data will be stored, and who will have access to the data and the area?
2. How will the data be stored, and in what format (hard or electronic copy, identifiable or de-identified)
3. How will the participant's identity be coded? Will the codes to identify participants be stored with the data? (**Note:** If you are working with a Hospital or Clinic, please see information on HIPAA and Research at <http://www.bc.edu/research/rcip/human/hipaa/>)

G. Potential research risks or discomforts to participants

1. Indicate the type of risk that may result from participation. Consider psychological or emotional risks, social stigma, change in status or employment, physical risks or harms, information risks-breach of confidentiality and any effect loss of confidentiality may have on status, employment, or insurability. If the protocol involves treatment, what are the risks compared to other treatments in terms of "standard of care"?
2. Consider the likelihood and magnitude of the risks or discomforts occurring?. Are they unlikely, or likely to occur and what effect would the discomforts or risks have on the individual should they occur?
3. How will you minimize risks? Some examples include informed consent, adequate staff training and experience, debriefing, and monitoring adverse effects on participants.

H. Potential research benefits to participants

1. Indicate the type of benefit that may result from participation. Consider psychological or emotional benefits, learning benefits, physical benefits and discuss if participant will benefit directly or if the benefit is largely to gather generalizable knowledge or provide scientific or social information on a topic that may benefit society. DO NOT OVERSTATE the benefit.
2. Consider the likelihood of the benefits. Will all participant benefit, some or none?

(**Note:** Monetary compensation is not a benefit of participation, it is a recruitment tool)

I. Investigator experience. Please Attach a current copy of your C.V., unless a current copy is on file.

VII. Informed Consent and Waiver of Elements of Informed Consent or Documentation

A. The informed consent document should include all required elements of consent (See BC Consent Guide for informed consent samples). **Confirm that each element is included in your consent form** (unless you are requesting a waiver or partial waiver of consent skip question VII. B):

- A statement that the study involves research
- The purpose of the research in lay terms (in language understandable to the participant)
- A statement that they are being asked to participate in research, and how they were selected to participate
- The purpose of the research in lay terms
- The expected duration of the participant's participation "You will be asked to complete a survey every month for 1 year"
- The total time commitment of participation in the procedures "the survey will take 20 minutes to complete"
- A brief but complete description of all procedures to be followed (if research includes treatment describe which procedures are experimental and alternatives to those procedures)
- The risks or discomforts that are reasonably expected from the research, and a statement that "There may be unknown risks"
- The benefits to the participant or others that are reasonably expected from the research
- A statement of confidentiality that provides the participant a contact at the institution who may be reached if injury occurs or confidentiality is breached (this should be someone other than the researcher)
- A statement that participation is entirely voluntary and may be discontinued at any time
- A statement that withdrawal from participation will not result in denial of entitled benefits
- Invasive biological, clinical or behavioral interventions require specific descriptions of the procedure
- The consent form must be signed and dated, or oral consent must be witnessed and signed and dated by the witness
- A statement and check box that indicates the participants have a copy of the informed consent document

Note: Individuals with added protections require both permission of a legal representative and assent of the individual.

B. In some instances the IRB may consider altering the informed consent requirements. To be considered for an alteration or waiver of the required elements of informed consent, one of the following must apply in accordance with (45 CFR 46.116 (d)) or 45 CFR 46.117 (c)

Are you requesting an alteration or waiver? Yes* No
 * If you are requesting a waiver you must complete the BC [Request for Waiver/Alteration of Consent](#)

VIII. Research Staff (e.g., PI, Co-PI, Research Assistant, etc.). Please list and submit educational certificates for all personnel who will interact with the data. The online educational site ([hyperlink](#))

Name and credentials	Date of IRB Training Certificate	Research Role	University/Department
Monica A Onyango, RN/M, MPH, MS, PhD (c)		Principal Investigator	School of Nursing

IX. Performance Sites:
 (e.g., Boston College, Massachusetts General Hospital, Newton Public Schools, etc.). If the institution has an IRB, IRB approval must be received from that institution as well as Boston College. If the Institution does not have an IRB, the Institution must authorize or provide permission for the research activities (please attach a letter of permission from an Institutional Official, or send as an email to irb@bc.edu). If you are collecting data at a Hospital with an IRB, seek Hospital approval prior to submitting the BC IRB Review application.

Name of Institution	Date of IRB Approval
Yei County Hospital, South Sudan	

X. Acknowledgement
SUBMISSION OF A PROPOSAL TO THE BC IRB REQUIRES THAT THE PRINCIPAL INVESTIGATOR (AND MENTOR IF THE PI IS A STUDENT OR FELLOW) SIGN THIS PAGE AND READ COMPLETELY THE DEFINITION OF "SCIENTIFIC MISCONDUCT" AND ANSWER ALL "CONFLICT OF INTEREST" QUESTION GIVEN BELOW.

- A. Scientific Misconduct**
 "Scientific Misconduct" shall be considered to include:
1. Fabrication, falsification, plagiarism or other unaccepted practices in proposing, carrying out or reporting results from research;
 2. Material failure to comply with Federal requirements for the protection of human participants, researchers and/or the Public;
 3. Failure to meet other material legal requirements governing research;
 4. Failure to comply with established standards regarding author names on publications;
 5. Failure to adhere to issues of confidentiality as provided in the participant consent form, the study protocol, and as outlined in the Code of Federal Regulations (45 CFR 46).

B. Conflict of Interest

1. Are you or any member of your immediate family (spouse or domestic partner and/or dependent children) an officer, director, partner, trustee, employee, advisory board member, or agent of any of the following (check all that apply):
 - An external organization funding this project
 - Any external organization from which goods and services will be obtained under this project (including those to which you may be subcontracting a portion of the project work)
 - Any external organization whose financial condition could benefit from the results of this project
 - Any external organization having business dealings in an area related to the work under this project

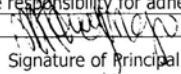
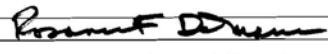
2. Are you or any immediate family member the actual or beneficial owner of more than five percent (5%) of the voting stock or controlling interest of (a) the external organization funding this project or (b) any external organization from which goods and services will be obtained under this project (including those to which you may be subcontracting a portion of the project work), (c) any external organization whose financial condition could benefit from the results of this project, or (d) any external organization having business dealings in an area related to the work under this project? Yes* No

3. Have you or any member of your immediate family derived income within the past year, or do you or any member of your immediate family anticipate deriving income, exceeding \$10,000 per year from (check all that apply):
 - An external organization funding this project
 - Any external organization from which goods and services will be obtained under this project (including those to which you may be subcontracting a portion of the Project work),
 - Any external organization whose financial condition could benefit from the results of this project
 - Any external organization having business dealings in an area related to the work under this project

Do not include funds that would pay your university salary under a sponsored project budget
***If you checked any of the above, please specify the extent of involvement:**

4. For those projects funded by any external entities, do you have a current, up-to-date Conflict of Interest Disclosure on file with the Office for Sponsored Programs that describes this financial relationship? Yes* No (if no you must submit an undated COI disclosure before IRB approval)

SIGNATURES

SIGNATURE OF PRINCIPAL INVESTIGATOR		
The undersigned accept(s) responsibility for the study, including adherence to the ethical guidelines set forth in the Belmont Report, Declaration of Helsinki, the Nuremberg Code, the ethical principles of your discipline, the Common Rule and Boston College policies regarding protections of the rights and welfare of human participants participating in this study. In the case of student protocols, the faculty supervisor and the student share responsibility for adherence to policies.		
Monica Adhiambo Onyango		1/16/08
Print Name of Principal Investigator	Signature of Principal Investigator	Date
SIGNATURE OF FACULTY RESEARCH SUPERVISOR- REQUIRED FOR STUDENT RESEARCH		
By signing this form, the faculty research supervisor attests that (s) he has read the attached protocol submitted for IRB review, and agrees to provide appropriate education and supervision of the student investigator, above and share the above Principal Investigator responsibilities.		
Dr. Rosanna DeMarco		1/16/08
Print Name of Faculty Research Supervisor	Signature of Faculty Research Supervisor	Date
SIGNATURE OF DEPARTMENT CHAIR OR DEAN-REQUIRED FOR FACULTY RESEARCH		
Your signature below affirms that you have been informed about the research project		
Print Name of Chair or Dean	Signature of Chair or Dean	Date

Perceptions and Experiences of Women with Spontaneous or induced abortion Complications within the Post War Context of South Sudan

A. Introduction and Background

Emerging from four decades of civil armed conflict, South Sudan is facing challenges which have direct bearing on health status of the populations. Years of civil war resulted in the destruction of physical, social, political, administrative and health infrastructures to the ground. Presently, South Sudan is one of the least developed regions with almost 98 percent of its population based in rural areas. About 90 percent of the population lives below US \$1 a day [NSCSE, 2004; Muhondwa & Rweyemamu, 2006]. The region has some of the worst health indicators. For example, maternal mortality ratio is 1,700 per 100,000 live births – the fifth highest in the world. Additionally, some of the cultural practices like polygamy, early marriages (as early as 12 years old), teenage pregnancies, domestic violence and low literacy levels have placed women at high risk of poor reproductive health outcomes including spontaneous or induced abortion complications (UNFPA, 2007).

Spontaneous or induced abortion complications are some of the significant reproductive health problems affecting women in South Sudan. On average, five to seven women are admitted and treated daily at the State hospitals with spontaneous or induced abortion complications (UNFPA, 2007). In certain health facilities, over 50 percent of all monthly admissions in gynecology units are due to spontaneous or induced abortion complications. Post abortion care is inadequate or nonexistent (UNFPA, 2007; Palmer, 2007; Muhondwa & Rweyemamu, 2006).

Study Rationale: The purpose of this study is to investigate the perceptions of women's experiences with complications of spontaneous or induced abortions in a post war context of South Sudan. Presently, there are no empirical data in South Sudan (or any war affected region in Africa) on women's experiences with abortions during or after internal armed conflict. However, anecdotal evidence and some baseline health assessments from South Sudan have shown that spontaneous and induced abortion are significant reproductive health problems which need attention (UNFPA, 2007; Palmer, 2007). This study will illuminate the importance of establishing context specific solutions and interventions to begin to address spontaneous and induced abortion problem in the region. Findings will also start to document empirical data, form a basis for continued research on reproductive health and inform policy and practice.

B. Study Objective:

To explore and describe the perceptions of women who have experienced a spontaneous or induced abortion in the post war context of South Sudan.

Research Question: What are the perceptions and experiences of women who have suffered spontaneous or induced abortion complications within a post war context of South Sudan?

C. Methods Materials and Analysis

The research will use qualitative descriptive method of inquiry to conduct in-depth interviews with women treated for spontaneous or induced abortion complications at a gynecology unit in South Sudan. I will use an open ended semi-structured interview guide. Women who would have received treatment for spontaneous or induced abortion complications and meet the inclusion criteria on the day of interview will be eligible for the study. I will use a two step method to recruit participants.

The *first step* will be on the day when the study will be explained to the participant. I will then give the participant time to think about the risks and benefits of the study. The *second step* will be on the next day when I return to conduct the interview if she agrees to take part. Those who decline will not be interviewed. The extra day will provide participants with time to consider the discussions and decide whether to take part or decline without any undue influence. This will be possible because after an abortion treatment, women are placed under observation for a day or two before being discharged home.

I will conduct three hour training for the nurses in the unit on the details of the study, confidentiality issues and how to approach participants eligible for the study. The nurse caring for the participant in the gynecology unit will be the first to inform her about the interview. This will be done after a woman has received treatment for spontaneous or induced abortion and is waiting to be discharged home. If she agrees to take part, I will be informed by the health provider. I will then approach her and take her to a private office

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space within the hospital, and relatively close to the gynecology unit. I will explain the purpose and details of the study to the participant including the informed consent process. I will give the women one day to think about the discussions and whether she is interested in taking part in this study.

The next day after the participant consents to the interview, the process will proceed in the same private location as described above. The participant will be allowed and encouraged to answer questions spontaneously. The interview session will last for 60 to 90 minutes.

I will use a translator during the interviews. South Sudan has over 60 languages. Most of these populations have settled in Garrison towns such as Yei due to security. English is the official and also the language of instruction in South Sudan.

A multi-lingual female translator will be identified by the hospital leadership. **This will be an individual with prior experience in translation at the hospital and whose day to day responsibilities do not include work at the gynecology unit. Since I am not a regular employee at the hospital, it is important that the Medical Officer in charge of the hospital takes the lead in identifying the translator. He is more acquainted with the employees at the hospital and this is usually the practice under such circumstances. Moreover, whoever they identify would have gone through the necessary background, credibility and professional checks required before employment. She is also professionally accountable to the hospital leadership.** I will train her for one day on the details of the study including procedures, confidentiality, and informed consent and maintaining a comfortable distance with participants.

I will also explain to the translator that during translation of the consent and questions, she needs to simultaneously translate line by line to me as she translates to the participants. This will enable me to ensure that participants who do not speak English have understood the contents of the informed consent clearly including the questions which I will be asking. Finally, the translator will sign an agreement witnessed by the medical officer in charge of the hospital. This will bind her to follow the expected research guidelines.

During interviews, I will take detailed notes and audio tape the interviews. After each interview, participants will be given 500 Sudanese Dinar (~US\$2) as remuneration for her time. This amount is not considered coercion in South Sudan. In the African context of giving, it is viewed as a good gesture.

Data analysis: Data will be analyzed using conventional content analysis; a technique widely used in qualitative descriptive research. First, all field notes will be typed and audio tapes transcribed as soon as possible following each field work. I will also keep a contact summary sheet which will help with reflection after field work. The second step will be to read the typed notes thoroughly and repeatedly to obtain a sense of the whole. Data will then be broken down into smaller units which will be coded according to the concepts they represent.

The next step in the analysis will be grouping the codes into patterns representing constructs (second level coding). Content memoing and comparisons of the data will be performed to document any ideas or insights emerging within the codes and patterns. The emerging constructs will be used to organize data into meaningful broader patterns. Relationships between constructs will be identified and their relationship with the study question established. In addition to written text, in vivo codes, constructs and patterns, data will also be displayed in forms of charts and matrices to ease visual representation. To enhance rigor, I will utilize the frameworks which include: Authenticity, Credibility, Criticality and Integrity, Transferability and Dependability.

D. Research Population & Recruitment Methods

I will use purposive sampling technique to select participants for the study. Interviews will be conducted until data saturation is met. The inclusion criteria includes: women treated for complications of spontaneous or induced spontaneous abortion at the gynecology ward in Yei county hospital; should be 12-49 years of age. The exclusion criteria includes: a woman with any cognitive defects and cannot voluntarily consent to the interview; a previous history of spontaneous or induced abortion but currently admitted to the unit with a different gynecologic problem. Of important note is that in south Sudan, women are married as

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young as 12 years old. Excluding them in this study on the basis of their age will deny them justice as they are most vulnerable. Their voices on this issue are equally important and critical.

Although anecdotal evidence and a recent reproductive health assessment documented that culture in South Sudan allow marriages of women as young as 12 years of age (UNFPA, 2007), due to decades of war, the legal system in that region is still in its infancy. There is no official documentation at present which explicitly explains the situation of minors less than 18 years in regards to the circumstances stated in this study. Culturally, it is common knowledge that women as young as 12 years old are being married in parts of South Sudan. These women are at a higher risk of various forms of gender based violence and exploitation. However, their emancipation is not yet included within the legal frameworks as understood in the United States or other "Western cultures".

Nonetheless, I still want to make a case for including this age group despite the present limitation of the legal framework and empirical evidence specific to South Sudan. As I have stated in different sections of the detailed protocol (pgs. 14-15 & 25-31), in any armed conflict and post conflict situation, women and girls are at risk of experiencing poor reproductive health outcomes including abortion complications. They are often victims of exploitation including early and forced marriage, forced pregnancies, sexual abuse and rape used as a weapon of war. These atrocities have been documented from conflicts in Darfur (Western Sudan), South Sudan, Liberia, Sierra Leone, former Yugoslavia and others (Carballo & Frajnzgier, 2001; Dahrendorf & Shifman, 2004; IRIN, 2004; Jennings & Swiss, 2001; Olujić, 1998; Shanks, Ford, Schull & de Jong, 2001; Swiss & Giller, 1993).

The principle of 'justice as fairness' (originating with John Rawls and relied upon in the Belmont report) is clearly about ensuring that those who might benefit as a result of research have an opportunity to participate given that the benefits are likely to outweigh possible harms (personal communication, Pamela Grace, February 2, 2008). The perspective of these women is crucial to designing health services and practices that address their particular needs. To leave them out constitutes an injustice. I believe it is a professional responsibility to include them.

The study will be conducted at a gynecology unit in Yei county hospital, Southern Sudan.

E. Informed Consent Procedure

After explaining the details of the study to a participant, I will give her consent form to read. If she cannot read I will read and explain the contents through a translator using terms typically used by participants. After reading the consent form, participants will not be asked to sign or put a mark anywhere on the form. Verbal consent will suffice. The topic of spontaneous or induced abortion is very sensitive and in South Sudan inducing an abortion is illegal. Asking a woman to sign a document on such a sensitive topic will be interpreted very negatively. Furthermore, in South Sudan, over 90% of the population reside in rural areas with very low literacy rates. These populations are usually not comfortable (especially in Africa) signing documents. It may be perceived as implicating them for an illegal act.

There will be signature lines for the principal investigator and a witness. I will sign the consent form indicating that I have explained the form and purpose of the study to the participant. The translator will be the witness. A copy of the signed consent form will be given to the participant.

Overall, participants will be re-assured that taking part in this study is voluntary and that their participation or non participation will not affect the care they receive that day or in the future. Participants will have the option to stop the interview anytime if they wish. After the interview, participants will be given an opportunity to share what it was like to participate in the interview and ask questions. Audio tapes will be played back to them so that they can confirm the recordings.

If a participant becomes upset, I will stop the interview and take a break. If the participant does not want to continue at that point the interview will end. **I will then ask if the participant would like a counselor**

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to talk with. If she does, I will contact a counselor that is available in the hospital so that she can receive timely counseling on site. A nurse trained in counseling and study procedures will be on standby during the research period for this purpose.

F. Provisions for Subject and Data Confidentiality

Confidentiality will be maintained from data collection to report writing. The consent forms, field notes and audio-tapes will be coded with pseudonyms and will have no identifiers which can be linked to a particular research participant. I will keep research materials in a locked box specifically dedicated for this and kept in my office. I will be the only one with the key to this box.

G. Potential Research Risks

This study will hold no more than minimal risk to participants. However, being asked to take extra time after discharge may cause some inconvenience to her. Also, she may find some questions too personal or making her feel guilty or a sense of loss. She will be reassured that she does not have to answer these questions.

H. Potential Research Benefits to Participants

Participants will not get any direct benefit by taking part in this study. However, their views on spontaneous or induced abortion hopefully will help the Ministry of health of South Sudan to put in place policies which will improve health care for women who may and those who suffer from complications of pregnancy loss. Information from this study will also help in future studies on spontaneous or induced abortions care in Southern Sudan.

I. Investigator Experience (see CV attached)

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Thru: Feb 17 2008



Boston College Consent Form
William Connell School of Nursing
Principal Investigator: Monica Adhiambo Onyango
Type of consent: Adult Consent Form
Date Created: January 16, 2008

Read this consent form carefully and ask as many questions as you would like before you decide whether to participate in this study. This form contains all parts of this study. Once you are aware of the study, you will be asked if you wish to take part, if so the investigator will give you a signed copy of this form.

Introduction:

You are being asked to take part in this study. It is being conducted to know views of women about their experiences of pregnancy loss. The study is called: **“Perceptions and Experiences of Women with Pregnancy loss Complications within a Post War Context of South Sudan”**. You have been selected as a possible participant because you received treatment in this hospital unit, for complications which came about after you lost a pregnancy.

Purpose of Study:

By participating in this study, we will be able know how you and other women feel about your experiences with the pregnancy loss in South Sudan during this post war period. You and other women from this unit of the hospital who experienced a pregnancy loss like you will be asked to participate in the study

Description of the Study Procedures:

This interview will be completed in a private office in this hospital. I will ask you questions about the pregnancy you have lost and the care you got after the loss. During interviews, I will be taking notes as you answer the questions. I will also tape record your answers as you speak. If there is a need for a translator to help you understand me or me to understand you, the translator may be present also. The translator will be a woman.

Risks/Discomforts of Being in the Study:

There may be unknown risks to you in this study. However, in general, there are no expected risks to you. Nonetheless, taking part in the interview will mean that there may be a short delay in your discharge since you will be giving me some of your private time to discuss your experiences. This may cause some inconvenience to you. You may also find some questions too personal or upsetting. You have the right to not answer questions such as these.

Also, should you become upset, I will stop the interview and take a break. If you do not want to continue at that point the interview will end. **I will then ask if you would like a counselor to talk with. If you do, I will contact a counselor that is available in the hospital so that you can receive timely counseling on site. A nurse trained in counseling and study procedures will be on standby during the research period for this purpose.**

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Benefits of Being in the Study:

The purpose of this research is to explore and describe the views of women like you who have experienced a pregnancy loss in South Sudan, Yei county hospital. You will not get any direct benefit by taking part in this study. However, we hope that your views will help the Ministry of health of South Sudan to put in place policies which will improve health care for women who may and those who suffer from complications of pregnancy loss. Information from this study will also help in future studies on pregnancy loss and post pregnancy loss care in Southern Sudan.

Compensation:

After the interview, you will be provided with money for food and your transportation back home. The cost of food and transportation will not be more than 500 Sudanese Dinar. **If you choose not to continue with the interview, you will receive 250 Sudanese Dinar as an appreciation for your time. You can still use this money for your food or transportation as you would have done if you completed the interview.**

Costs:

There is no cost to you to participate in this research study.

Confidentiality:

The records from this study will be kept private including your identity. The notes I take will be given numbers. All electronic information which include typed notes and tape recorded data will be coded and secured using a password protected file. Your name will not be included in notes or the tapes. The research records will be in a locked box kept by me. I am the only one who will have access to these materials. All the study materials both electronic and hard copies will eventually be destroyed after the findings have been published.

The study results will be made known to the Institutional Review Board of Boston College, my advisors at Boston College, Ministry of Health of South Sudan, and Yei hospital medical officer in charge. The internal Boston College auditors may also review the research records. The findings will also be shared with the larger public health community by publishing in a relevant journal. Your name will not be included in any of these entries.

Voluntary Participation/Withdrawal:

Your taking part in this study is completely voluntary. If you decide not to take part this will not affect the care you may get from Yei county hospital. Please ask questions if there is anything you do not understand. You are free to withdraw at any time, for whatever reason. There is no penalty or loss of benefits for not taking part or for stopping your participation.

***Dismissal from the Study:**

I may decide to discontinue your participation without your permission because I may decide that staying in the study will be bad for you, or for any other reason.

***Compensation for Injury:**

During the interview process, in case there is an emergency medical problem or injury as a direct result of your participation in this research, the nurse in charge of the unit will be contacted to help you receive the care. Any care provided in this hospital is free. Please note that overall decisions regarding care and compensation for any research related injury will be made on a case-by-case basis.

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Contacts and Questions:

The researcher conducting this study is: Monica Adhiambo Onyango. For questions or more information concerning this research you may contact her at: +2566477112475; +256772540541 OR Rhoda Ndangire at: +256-477-100503; email: rhodagire@yahoo.com

If you have any questions about your rights as a research subject, you may contact: Director, Office for Human Research Participant Protection, Boston College at: +1(617) 552-4778, or irb@bc.edu

OR

Dr. Olivia Lomoro, South Sudan Ministry of Health, Juba. Tels: + 256 477114246 (*Gemtel*); +249 912501218 (*Mobitel*); or email: achaber@yahoo.co.uk.

Copy of Consent Form:

I will give you a copy of this form to keep for your records and future reference.

Statement of Consent:

I have explained this research study to the participant. The participant has read the contents of this consent form (or the consent has been read for her) and has been encouraged to ask questions. I have provided answers to participants' questions. The participant has given her consent to participate in this study. I am available to answer any questions now or in the future regarding the study and the participant's rights

Signatures/Dates

Signature of Principle Investigator

Date: _____

Witness

Date: _____

Participant has taken a copy of the Informed Consent Document

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Thru: Feb 14 2009

GUIDING QUESTIONS FOR IN-DEPTH INTERVIEWS.

These questions can only be asked if the woman has given an informed consent. The woman should be encouraged to answer questions spontaneously.

Introductory note:

My name is Monica Onyango, I am a student at Boston College in the United States of America and a member of faculty at Boston University School of Public Health. I am conducting this research to explore, understand and describe your experiences with the pregnancy which you just lost. I would like to take a little of your time to ask you a few questions regarding what you think about your experiences from the time you discovered that you are pregnant, when you lost the pregnancy to the time you received treatment at this hospital. The answers you give will remain confidential. The interview process will take about 60 to 90 minutes. I would like to tape this interview so that I get an accurate representation of what you say. Before you leave, the tape will be played back to you so that you can confirm your answers.

I would like to start by asking you some general questions

Demographic Characteristics

- 1) How old are you? ___ years
- 3) How many years of school do you have? ____ Years
- 4) What is your current marital status? _____
- 5) How many children do you have? _____
- 6) Where were you during the years of war in Sudan? _____
- 7) How many other pregnancy losses have you had? _____

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Now, I would like you to tell me about this pregnancy you just lost

8) I know this may be difficult, but can you tell me the events or signs that made you think that you might be losing the pregnancy?

Follow up questions (the probes should be used depending on the woman's answers. Different probes can also be used)

- Can you tell me more about the events you think may have led to this pregnancy loss? What did you take or do before the bleeding started?
- In your opinion how do you see the present post war context affecting this pregnancy loss? Can you talk more about this?
- Did you want to become pregnant or did you wish you were not pregnant? When you first found out that you were pregnant how did you feel about it? *(Depending on the answer, probe for reasons for wanting/not wanting to become pregnant)*
- Once you realized you were bleeding, how long did it take you to look for assistance? How did you feel about this experience? Was this assistance before, during or after the bleeding started? How long did it take you to get assistance?
- Can you explain to me exactly the nature of assistance you received and from whom? What instructions did this person give you?

9) Why did you come to seek treatment at this hospital?

- What was your experience with the care you received at this hospital?
- What are some of the suggestions you may have for caring for women in a similar situation like yours in hospitals in South Sudan?

10) Given what you have experienced with this pregnancy, what are your thoughts about pregnancy loss in South Sudan at present? What are your thoughts about this experience of pregnancy loss?


11) We have covered a lot of ground today. Do you have any further comments?

Thank you very much

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	Boston College Institutional Review Board Office for Human Research Participant Protections 140 Commonwealth Ave., 116 Carney Hall Chestnut Hill, MA 02467 (617) 552-4778 Fax: (617) 552-0948 E-mail: irb@bc.edu
Research with Minors	
I. Study Title: (If funded must match the sponsored title)	
II: Investigator Information	
A. Name of Principal Investigator	Monica Adhiambo Onyango
B. PI's E-mail:	onyangmo@bc.edu
C. PI's Phone	617-817-1602
III: Study Information	
A. Minimal Risk Research Are the risks involved in participating in this research are those that parents would allow their minors to experience in the course of their everyday lives (45 CFR 46.404.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No* *Please elaborate	
B. Greater than minimal risk with direct benefit The research risk is greater than minimal and it presents the prospect of direct benefit to the participant (45 CFR 46.405) ? <input type="checkbox"/> Yes* <input type="checkbox"/> No *Please justify:	
C. Greater than Minimal Risk The research risk is greater than minimal with no direct benefit to the minors but is it likely to yield generalizable knowledge about the subject's disorder or condition (45 CFR 46.406) And The minors being recruited have a disorder or condition that would place them in a group other than average healthy child therefore, the research qualifies as a minor increment over minimal risk. (This risk is slightly more than what the average healthy minor would experience but is reasonable for these participants because it is not more than they would experience or expect given their condition.) <input checked="" type="checkbox"/> Yes* <input type="checkbox"/> No * Provide Source: See explanation in "D" below *When were these data collected: And <input type="checkbox"/> 1. The risk represents a minor increase over minimal risk; <input type="checkbox"/> 2. The intervention or procedure presents experiences to subjects that are reasonably commensurate with those inherent in their actual or expected medical, dental, psychological, social, or educational situations; <input type="checkbox"/> 3. The intervention or procedure is likely to yield generalizable knowledge about the subjects' disorder or condition which is of vital importance for the understanding or amelioration of the subjects' disorder or condition; <input type="checkbox"/> 4. Both parents must give their permission unless one parent is deceased, unknown, incompetent, or not reasonably available, or when only one parent has legal responsibility for the care and custody of the child; or <input type="checkbox"/> The research uses healthy minors and is greater than minimal risk. It presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health and welfare of minors but presents no direct benefits to the participants (45 CFR 46.407) (Please note, research in this category must be reviewed by the BCIRB and then submitted to the DHHS Secretary for review by a panel of experts.)	
D. Justification for inclusion of minors: Please provide a scientific or medical rationale for the inclusion of minors (Refer to 45 CFR Part 46, Subpart D and the NIH Policy). Participants less than 18 years of age are included as I consider them important to the issue under investigation. Because of some cultural practices in South Sudan, in certain instances girls as young as 12 years old are already married. Because of their age compared to older women, physically and physiologically these girls stand a higher risk of experiencing abortion and serious complications. Also given that South Sudan has been and is just recovering from a long armed conflict, gender based and sexual violence is common. Young women are more vulnerable to sexual exploitation and abuse leading to unwanted pregnancies and unsafely induced abortions. Thus, in-keeping with social justice perspective, it is important to include women less than 18 years in this study so as to establish ways of intervening. Excluding them would victimizing them further and making them more vulnerable.	
E. Assent Process	
1. In addition to obtaining permission from the minor's parent or guardian, federal regulations require that you obtain the minor's assent to	

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participate in the research. The assent process must be compatible with the minors' developmental level.
Please discuss the assent process: See #2 below

2. Have you attached an assent document that describes the process Yes No*

* If No, please justify: No Assent or Parental Consent will be used in the Study for the following reasons:

The individuals in the group I will be interviewing is considered to be in the category of "emancipated minor" using US terminology. Additionally, it is common in South Sudan for individuals less than 18 years of age to seek and receive health care without the consent of their parents or guardians. Moreover, on many occasions older children accompany their younger siblings to the health facilities for treatment if for some reason the mother cannot accompany them. As regards reproductive health issues, it not strange to find women less than 18 years old married with children. Overall, health services are always provided accordingly without parental or caregiver consent.

Often, a woman receives post abortion treatment as an emergency to save her life. Hence, a woman less than 18 years of age, and not accompanied by a parent or a guardian, is typically allowed to give her consent for the procedure. Therefore, at the time of the interview, these women would have consented for and received emergency post abortion treatment. Informed consent the way we understand and apply it here in the United States is not the same as in South Sudan.

The interviewing process will be the same for this group of women as with adults. The study will be explained through a translator. The content of the consent form will be read to them and their permission to participate in the study will be asked. However, they will not be asked to sign anywhere in the consent form. They will also be informed of where to go or who to call in case of any concerns arising during the interview process. There will be no identifying information in the consent form which can track any individual informant.

F Guidance on Remuneration

(reference: Children's Workgroup Report, National Human Research Protections Advisory Committee, 4/5/01 draft)

- Minors may receive small gifts of appreciation for participation. Gifts should rarely be cash and should never be contingent upon study completion.
- Parents or legal guardians may be compensated for travel or time lost from work.

G. Consent (permission) requirements

If "yes" is checked in either III(A) or III(B)above, the consent of only one parent is required, III (C) requires the consent of both parents

Emancipated minors (those with children, married, or those that have been legally emancipated) may be consented as adults.

Adolescents in the State of Massachusetts have the legal authority to consent for treatment without parental permission when treatments are for sexually transmitted diseases and pregnancy. To protect the best interests of the minor, the BCIRB will make the final determination as to whether or not parental permission is required for these types of research studies.

SIGNATURES

SIGNATURE OF PRINCIPAL INVESTIGATOR

The undersigned accept(s) responsibility for the study, including adherence to the ethical guidelines set forth in the Belmont Report, Declaration of Helsinki, the Nuremberg Code, the ethical principles of your discipline, the Common Rule and Boston College policies regarding protections of the rights and welfare of human participants participating in this study. In the case of student protocols, the faculty supervisor and the student share responsibility for adherence to policies.

Monica Adhiambo Onyango		
Print Name of Principal Investigator	Signature of Principal Investigator	Date

SIGNATURE OF FACULTY RESEARCH SUPERVISOR- REQUIRED FOR STUDENT RESEARCH

By signing this form, the faculty research supervisor attests that (s)he has read the attached protocol submitted for IRB review, and agrees to provide appropriate education and supervision of the student investigator, above and share the above Principal Investigator responsibilities.

Dr. Rosanna DeMarco		
Print Name of Faculty Research Supervisor	Signature of Faculty Research Supervisor	Date

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(For OHRPP use only) BC IRB Protocol#:	
---	--

Boston College IRB ¹ with Minors Form
Approved 11/15/06

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Thru: Feb 14 2009

Submit Materials by E-mail: irb@bc.edu

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**BOSTON COLLEGE
Institutional Review Board**

Statement on HIPAA Protected Health Information Use

Principal Investigator Name: Monica Adhiambho Onyango

Project Title: Perceptions and Experiences of Women with Abortion Complications Within an Post War Context of South Sudan

Please complete this form and submit it with your IRB application if you will be working with health information.

The Health Insurance Portability and Accountability Act (HIPAA) makes provision for the maintenance of confidentiality of Protected Health Information (PHI), for both the living and deceased, that is obtained from or through covered entities (hospitals, insurance companies, clinics, or other providers involved in any electronic transmissions related to their roles or services).

Definition of Protected Health Information (PHI):

- Information that is a subset of health information, including demographic information, collected from an individual, related to the past, present or future physical or mental health or condition of an individual;
AND
- Either (i) identifies the individual (see PHI identifiers below); or (ii) presents a reasonable probability that the information could be used to identify the individual.
AND
- Used within or disclosed from a covered entity.

There are three categories of covered entities: (1) health plan; (2) health care provider that conducts certain financial and administrative transactions electronically (i.e., billing, funds transfer); (3) health care clearinghouse: processes or facilitates the processing of health information in non-standard format to standard format or vice versa.

PHI identifiers:	
1.	Names (individual, employer, relatives, etc.)
2.	Address (street, city, county, precinct, zip code – initial 3 digits if geographic unit contains less than 20,000 people, or any other geographical codes)
3.	Telephone number
4.	Fax number
5.	Social Security numbers
6.	Medical record numbers
7.	Dates (except for years) connected to subjects, including birth date, admission date, discharge date, date of death, ages >89 and all elements of dates indicative of such age (except that such age and elements may be aggregated into a category "Age >90")
8.	E-mail addresses
9.	Health Plan Beneficiary numbers
10.	Account numbers
11.	Certificate/license numbers
12.	Vehicle Identifiers and Serial numbers (e.g., VINs, License Plate numbers)
13.	Device Identifiers and Serial Numbers
14.	Web Universal Resource Locators (URLs)
15.	Internet Protocol (IP) address numbers
6.	Biometric Identifiers (e.g. finger or voice prints)
7.	Full face photographic images and any comparable images
8.	Any other unique identifying number, characteristic, or code

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All applicants to the BC IRB who will be working with health information are required to complete the certification below as part of the BC IRB application process. Any investigator who will in the course of his or her research make use of PHI must also provide evidence to the BC IRB of any waivers/alterations of Authorizations granted by the Privacy Board/IRB of the covered entity, and may be requested to provide additional information as part of the BC approval process.

I certify that to the best of my understanding, this project does not involve any Protected Health Information (PHI). Should any change in the project occur so that PHI may become part of the data for the research, I will immediately inform the BC IRB and the covered entity's Privacy Board/IRB and I will follow their guidance in plans for changes to the protocol. I will not carry out any portion of the project involving PHI without formal approval from the BC IRB and the covered entity's Privacy Board/IRB.

This project involves PHI that is derived from an organization or institution that is not part of Boston College. I certify that such information will be used for research purposes only. *Please complete A-C below:*

A. The source (name of institution, organization, or individual) of the information is: _____

B. The specific categories of information are (e.g., diagnosis, treatment status, insurance status, depression score):

C. If a waiver/alteration of Authorization has been granted by the Privacy Board/IRB of the covered entity, please submit a copy of the other institution's HIPAA waiver/alteration approval letter for this research protocol. If the other institution does not have a Privacy Board, please complete the appropriate form below:

If PHI will be obtained with written HIPAA authorization from individual subjects, please complete the [BC Authorization Form](#);

If PHI will be fully de-identified (include no HIPAA identifiers as previously listed), please complete the [HIPAA De-Identification Certification Form](#);

If PHI will be a limited data set (include no HIPAA identifiers except dates such a birth date, admission and/or discharge date, treatment dates or geographic location excluding street address), please complete the [Limited Data Set Agreement](#);

If PHI will be preparatory to research only (data that will be reviewed only to establish that sufficient or appropriate data will be available for the proposed work.) Investigators may not remove any of the information under review from the covered entity's premises during the review, nor may they record or disclose any PHI (including the HIPAA identifiers listed above) in a way that may directly or indirectly be used to identify particular individuals, please submit supporting documentation;

If PHI will include information on decedents only, please complete the [Application for Research on Decedents' Information](#);

If you are seeking a waiver of HIPAA authorization from the institution, please complete the [Application for Waiver of Individual Authorization for Use or Disclosure of Protected Health Authorization](#)

This project involves Protected Health Information that is already existing data, documents, records, pathological or diagnostic specimens, which are publicly available. I certify that such information will be used for research purposes only. (Please complete the [Application for Waiver of Individual Authorization for Use or Disclosure of Protected Health Authorization](#)) This data/material will be obtained at or from:

Other (please describe).

Signatures: _____

Principal Investigator: Monica Adhiambo Onyango Date: _____
 Boston College IRB Approved

FEB 15 2008 by IRB Chair or Designee: _____ Date: _____

Thru: Feb 14 2009



Boston College Institutional Review Board
Office for Human Research Participant Protections
 140 Commonwealth Ave., 116 Carney Hall
 Chestnut Hill, MA 02467
 (617) 552-4778 Fax: (617) 552-0948 E mail: irb@bc.edu

Informed Consent Waiver/Alteration

Instructions: In order for the IRB to approval a waiver of the informed consent process or a partial waiver of any of the required elements of consent, regulations Federal Regulations: 45 CFR 46.116(d)(1-4) require:

1. The research involves no more than "minimal risk;"
2. The waiver will not adversely affect the rights and welfare of the research participants;
3. The research could not practicably be carried out without the waiver; and
4. Whenever appropriate, the research participants will be provided with additional pertinent information after participation.

If your study qualifies for the above criteria, complete this form to request a waiver and attach the form to the Initial IRB Review Form.

I. Study Title: Perceptions and Experiences of Women with Abortion Complications within the Post War <small>(If funded must match the sponsored title)</small>	
Context of South Sudan	
II. Principal Investigator Information	
A. Name of Principal Investigator	Monica Adhiambo Onyango
III. Type of Waiver Requested	
A. Are you asking for a partial waiver of consent? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
B. Are you asking for a total waiver of informed consent? Yes <input type="checkbox"/> *No <input type="checkbox"/>	
C. Are you asking for a waiver of only the documentation* of informed consent Yes <input type="checkbox"/> No <input type="checkbox"/>	
(*All elements of the consent process will be presented to the prospective participants, but the documentation of the process will not be made)	
D. Check all elements that that will be omitted from the consent process:	
<input type="checkbox"/> All Elements will be omitted	
<input type="checkbox"/> A statement that the study involves research, an explanation of the purposes of the research and the expected duration of the subject's participation, a description of the	
<input type="checkbox"/> procedures to be followed, and identification of any procedures which are experimental;	
<input type="checkbox"/> A description of any reasonably foreseeable risks or discomforts to the subject;	
<input type="checkbox"/> A description of any benefits to the subject or to others which may reasonably be expected from the research;	
<input type="checkbox"/> A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject;	
<input type="checkbox"/> A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained;	
<input type="checkbox"/> A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained;	
<input type="checkbox"/> A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained;	
<input type="checkbox"/> An explanation of whom to contact for answers to pertinent questions about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject; and	
<input type="checkbox"/> A statement that participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss of benefits to which the subject is otherwise entitled	
<input checked="" type="checkbox"/> Signature and name	
<input type="checkbox"/> Other Please explain:	
D. What is the rationale for this alteration/waiver?	The topic of abortion is very sensitive and in South Sudan induced abortion

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Approved

ver Request

Submit Materials by E-mail: irb@bc.edu

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	<p>is illegal. Asking a woman to sign a document on such a sensitive topic will be interpreted very negatively. Furthermore, in South Sudan, over 90% of the population reside in rural areas with very low literacy rates. These populations are usually not comfortable (especially in Africa) signing documents. It may be perceived as implicating them for an illegal act. Hence, verbal consent will suffice. I will use the translator while explaining the contents to participants. There will be a signature line for the principal investigator and a witness. I will sign the consent form indicating that I have explained the form and purpose of the study to the participant. A copy of the signed consent form will be given to the participant.</p>
<p>E. Does the research pose more than minimal risk* to the research participant?</p> <p>*Minimal risk is defined in 45 CFR 46.102(i), mean that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p>F. Will the waiver will adversely affect the rights and welfare of the research participants:</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p>G. Can the research practicably be carried out without the waiver; AND</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p>H. Whenever appropriate, the research participants will be provided with additional pertinent information after participation</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/></p>
<p>Note: If you answered Yes to any of the questions E-H, your research does not qualify for a waiver of consent. Include all required elements of consent using the format and headers in the Boston College Informed Consent Template (on line at http://www.bc.edu/research/rcip/human/meta-elements/doc/sample_consent_new.doc)</p>	

Boston College IRB
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Request
'2007

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**GOVERNMENT OF SOUTHERN SUDAN
(GOSS)**

MINISTRY OF HEALTH



Our Ref:.....

Your Ref:.....

Date: 5/03/2008..

To: Monica Adhiambo Onyango
William Connell School of Nursing
Boston College-USA

APPROVAL OF RESEARCH STUDY IN SOUTHERN SUDAN

Dear Monica,

SUBJECT: ABORTION IN A POST WAR CONTEXT OF SOUTHERN SUDAN

I am writing in response to the request for authorization for the study on "Women's Perceptions of Abortion in a Post War Context of South Sudan". After close review of the proposal, I am glad to inform you that the ethical committee at the Ministry of Health for the Government of Southern Sudan (MoH-GoSS) has given you an approval of the study. The Ministry acknowledges the importance and need for the study in improving Reproductive Health in Southern Sudan.

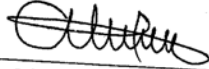
As the survey is scheduled to take place in Yei, Central Equatoria, I request that you coordinate this it closely with the State Ministry of Health, Central Equatoria state and the respective administrative payam officers

Please, keep the Ministry informed incase of any changes regarding the research and on its progress. I look forward to the report, especially the recommendations that will be generated as a result of the survey.

Note that any information generated from the study should not be published without the consent of the MoH-GoSS.

Head Office: P.O Box 88, Juba, Southern Sudan
Tel: (+249-811820678 / +249-811820134)
Email: mohgoss@mohgoss.sd

Good luck and don't hesitate to get in touch should there be any queries.



Dr. Olivia Lomoro Damian
Directorate of Research, Planning & Health Sys Dev
Ministry of Health
Government of Southern Sudan

CC: Dr. Monywaar Arop Kuol
Under Secretary
MoH-GoSS-Juba

CC: Hillary Okanyi
Director General
Central Equatoria State
Juba

THE REPUBLIC OF THE SUDAN
MINISTRY OF HEALTH
CENTRAL EQUATORIA STATE
JUBA

TEL.NO. 020435/020502



جمهورية السودان
وزارة الصحة
ولاية الإقليم الوسطى
جوبا

NO:- SMOH/CES/17.L.1

Date:- 7th March 2008

The Executive Director
Yei Civil Hospital
Yei

Subject:- Approval for Ms. Monica Adhiambo Onyango to conduct a
Research exercise at Yei Civil Hospital.



Dear Sir/Madam,

Ms. Monica A. Onyango has requested to be granted approval to conduct a study/research on "Women's Perceptions of Abortion in a Post War context of South Sudan".

We (MOH/CES) are, by this letter, giving our approval for her to carry out her study. It is also worth mentioning that the ethical committee at the MOH/GOSS have already granted their approval for the research.

We are, therefore, asking your good end to cooperate and render her whatever help she may require to facilitate her work.

Best regards and thanks.



DR. HILLARY O. OKANYI
DIRECTOR GENERAL
STATE MINISTRY OF HEALTH
CENTRAL EQUATORIA STATE/JUBA

APPENDIX D: CONSENT FORM



Boston College Consent Form
William Connell School of Nursing
Principal Investigator: Monica Adhiambo Onyango
Type of consent: Adult Consent Form
Date Created: January 16, 2008

Read this consent form carefully and ask as many questions as you would like before you decide whether to participate in this study. This form contains all parts of this study. Once you are aware of the study, you will be asked if you wish to take part, if so the investigator will give you a signed copy of this form.

Introduction:

You are being asked to take part in this study. It is being conducted to know views of women about their experiences of pregnancy loss. The study is called: "Perceptions and Experiences of Women with Pregnancy loss Complications within a Post War Context of South Sudan". You have been selected as a possible participant because you received treatment in this hospital unit, for complications which came about after you lost a pregnancy.

Purpose of Study:

By participating in this study, we will be able know how you and other women feel about your experiences with the pregnancy loss in South Sudan during this post war period. You and other women from this unit of the hospital who experienced a pregnancy loss like you will be asked to participate in the study

Description of the Study Procedures:

This interview will be completed in a private office in this hospital. I will ask you questions about the pregnancy you have lost and the care you got after the loss. During interviews, I will be taking notes as you answer the questions. I will also tape record your answers as you speak. If there is a need for a translator to help you understand me or me to understand you, the translator may be present also. The translator will be a woman.

Risks/Discomforts of Being in the Study:

There may be unknown risks to you in this study. However, in general, there are no expected risks to you. Nonetheless, taking part in the interview will mean that there may be a short delay in your discharge since you will be giving me some of your private time to discuss your experiences. This may cause some inconvenience to you. You may also find some questions too personal or upsetting. You have the right to not answer questions such as these.

Also, should you become upset, I will stop the interview and take a break. If you do not want to continue at that point the interview will end. **I will then ask if you would like a counselor to talk with. If you do, I will contact a counselor that is available in the hospital** so that you can receive

timely counseling on site. A nurse trained in counseling and study procedures will be on standby during the research period for this purpose.

Benefits of Being in the Study:

The purpose of this research is to explore and describe the views of women like you who have experienced a pregnancy loss in South Sudan, Yei county hospital. You will not get any direct benefit by taking part in this study. However, we hope that your views will help the Ministry of health of South Sudan to put in place policies which will improve health care for women who may and those who suffer from complications of pregnancy loss. Information from this study will also help in future studies on pregnancy loss and post pregnancy loss care in South Sudan.

Compensation:

After the interview, you will be provided with money for food and your transportation back home. The cost of food and transportation will not be more than 500 Sudanese Dinar. If you choose not to continue with the interview, you will receive 250 Sudanese Dinar as an appreciation for your time. You can still use this money for your food or transportation as you would have done if you completed the interview.

Costs:

There is no cost to you to participate in this research study.

Confidentiality:

The records from this study will be kept private including your identity. The notes I take will be given numbers. All electronic information which include typed notes and tape recorded data will be coded and secured using a password protected file. Your name will not be included in notes or the tapes. The research records will be in a locked box kept by me. I am the only one who will have access to these materials. All the study materials both electronic and hard copies will eventually be destroyed after the findings have been published.

The study results will be made known to the Institutional Review Board of Boston College, my advisors at Boston College, Ministry of Health of South Sudan, and Yei hospital medical officer in charge. The internal Boston College auditors may also review the research records. The findings will also be shared with the larger public health community by publishing in a relevant journal. Your name will not be included in any of these entries.

Voluntary Participation/Withdrawal:

Your taking part in this study is completely voluntary. If you decide not to take part this will not affect the care you may get from Yei county hospital. Please ask questions if there is anything you do not understand. You are free to withdraw at any time, for whatever reason. There is no penalty or loss of benefits for not taking part or for stopping your participation.

***Dismissal from the Study:**

I may decide to discontinue your participation without your permission because I may decide that staying in the study will be bad for you, or for any other reason.

***Compensation for Injury:**

During the interview process, incase there is an emergency medical problem or injury as a direct result of your participation in this research, the nurse in charge of the unit will be contacted to help you receive the care. Any care provided in this hospital is free. Please note that overall decisions regarding care and compensation for any research related injury will be made on a case-by-case basis.

Contacts and Questions:

The researcher conducting this study is: Monica Adhiambo Onyango. For questions or more information concerning this research you may contact her at: +2566477112475; +256772540541 OR Rhoda Ndagire at: +256-477-100503; email: rhodagire@yahoo.com

If you have any questions about your rights as a research subject, you may contact: Director, Office for Human Research Participant Protection, Boston College at: +1(617) 552-4778, or irb@bc.edu

OR

Dr. Olivia Lomoro, South Sudan Ministry of Health, Juba. Tels: + 256 477114246 (*Gemtel*); +249 912501218 (*Mobitel*); or email: achaber@yahoo.co.uk.

Copy of Consent Form:

I will give you a copy of this form to keep for your records and future reference.

Statement of Consent:

I have explained this research study to the participant. The participant has read the contents of this consent form (or the consent has been read for her) and has been encouraged to ask questions. I have provided answers to participants' questions. The participant has given her consent to participate in this study. I am available to answer any questions now or in the future regarding the study and the participant's rights

Signatures/Dates

Signature of Principle Investigator

Date: _____

Witness

Date: _____

Participant has taken a copy of the Informed Consent Document

APPENDIX E: INTERVIEW GUIDE

GUIDING QUESTIONS FOR IN-DEPTH INTERVIEWS.

These questions can only be asked if the woman has given an informed consent. The woman should be encouraged to answer questions spontaneously.

Introductory note:

My name is Monica Onyango, I am a student at Boston College in the United States of America and a member of faculty at Boston University School of Public Health. I am conducting this research to explore, understand and describe your experiences with the pregnancy which you just lost. I would like to take a little of your time to ask you a few questions regarding what you think about your experiences from the time you discovered that you are pregnant, when you lost the pregnancy to the time you received treatment at this hospital. The answers you give will remain confidential. The interview process will take about 60 to 90 minutes. I would like to tape this interview so that I get an accurate representation of what you say. Before you leave, the tape will be played back to you so that you can confirm your answers.

I would like to start by asking you some general questions

Demographic Characteristics

- 1) How old are you? ___ years
- 3) How many years of school do you have? ____ Years
- 4) What is your current marital status? _____
- 5) How many children do you have? _____
- 6) Where were you during the years of war in Sudan? _____
- 7) How many other pregnancy losses have you had? _____

Now, I would like you to tell me about this pregnancy you just lost

8) I know this may be difficult, but can you tell me the events or signs that made you think that you might be losing the pregnancy?

Follow up questions (the probes should be used depending on the woman's answers. Different probes can also be used)

- Can you tell me more about the events you think may have led to this pregnancy loss? What did you take or do before the bleeding started?
- In your opinion how do you see the present post war context affecting this pregnancy loss? Can you talk more about this?
- Did you want to become pregnant or did you wish you were not pregnant? When you first found out that you were pregnant how did you feel about it? *(Depending on the answer, probe for reasons for wanting/not wanting to become pregnant)*
- Once you realized you were bleeding, how long did it take you to look for assistance? How did you feel about this experience? Was this assistance before, during or after the bleeding started? How long did it take you to get assistance?
- Can you explain to me exactly the nature of assistance you received and from whom? What instructions did this person give you?

9) Why did you come to seek treatment at this hospital?

- What was your experience with the care you received at this hospital?
- What are some of the suggestions you may have for caring for women in a similar situation like yours in hospitals in South Sudan?

10) Given what you have experienced with this pregnancy, what are your thoughts about pregnancy loss in South Sudan at present? What are your thoughts about this experience of pregnancy loss?

11) We have covered a lot of ground today. Do you have any further comments? Thank you very much

APPENDIX F: CONTACT SUMMARY FORM

Contact Summary Form

1. What were the main issues and themes that struck you with this participant?

2. Summarize the information you got (or failed to get) on each of the target questions for this contact
 - Got:

 - Did not get:

3. Anything that struck you as salient, interesting, illuminating or important in this contact?

4. What new (or remaining) target questions do you have in considering the next contact with this participant?

References

- Ahiadeke, C. (2001). Incidence of induced abortion in Southern Ghana. *International Family Planning Perspective*, 27(2), 96-101 & 108. Retrieved from <http://www.jstor.org/stable/2673822?origin=JSTOR-pdf>
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