RISK COMMUNICATION AND GENDER BASED VIOLENCE:
A case of child marriage and obstetric fistula in North Central Nigeria.

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University of Stavanger, Norway
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PREFACE
Risk or risk event has direct impact upon people’s lives. People die, become sick or experience serious losses because, they ignored or misjudge risk event or had too much confidence that it cannot happen to them. Thus making the study of how risk or social problem is communicated an important academic subject. The institutional means and socio-cultural factors impacting the handling of certain risk events have direct and indirect consequences for each individual affected by those socio-cultural arrangements and institutional actions. It is therefore important to address the understanding of the social and cultural context in which certain risk events takes place.

Hence, an integrated risk approach is employed in studying child marriage - a type of gender-based violence (GBV) with physical and mental health implications for the exposed victims. This research sought to focus not just on risk perception of a group but also on socio-cultural analysis of responses and analyses of risk communication activities. Using a risk communication perspective in this research will help in highlighting what people think about child marriage and it health implication (OF) Obstetric Fistula and an appreciation of how information and knowledge is exchanged among and between individuals in socio-cultural groups.

The research question was based on the socio-cultural factors that impact the prevalence of child marriage. Studying the above issue in an area, plagued and prone to armed conflict has been a new and a treasured experience.

The first chapter introduces the work and states clearly the major reason GBV is an important topic in risk and safety management research. This chapter identifies the objective of the study and states that societal factors and culture influences what people view as a risk event. The same factors also determines how people responds to risk events. What is considered as risk in certain cultures are not considered risk in other cultures. The chapter also outlines the major health hazard connected to child marriage, and how armed conflict and other socio-cultural factors has contributed to the prevalence of child marriage and increased cases of obstetric fistula among married young girls in North central Nigeria. Sexual intercourse with a minor is considered a health hazard and crime against the minor victim in some developed societies, while in other societies, minors/young girls are given away in marriage by their parents or guidance. Chapter two introduces important concepts guiding the research. The concepts of
child marriage is explained as well as other important concepts. The third chapter introduces risk communication perspective with focus on culturalist risk theory and SARF framework used in analysing empirical data. Chapter four outlines the social constructionism research design used in the study. The chapter also takes note of methodology used in data collection and data analysis. It explains the validity and reliability of the study as well as the ethics requirement employed. Chapter five details empirical findings and analysis of those findings. It takes note of those cultural beliefs and experience that impacts people’s perception and response to risk event. Signals through which child marriage is amplified and fistula disease attenuated are outlined. Chapter six accounts for notable factors that influence the prevalence of child marriage in North Central Nigeria. Chapter seven discusses the general finding and gives a recommendation for future research.

Chinwe Philomina Oramah
Stavanger, June 2015
ABSTRACT

Gender based violence, often targeted against girl children in the name of child marriage has profound health problems, compromising victim’s physical and mental health as well as eroding their self-esteem. In addition to causing physical health problems, it is the most pervasive human rights violation in the world. Yet most of the gender based violent acts enjoy much socio-cultural support. Researches have shown increasing link between child marriage and fistula disease. This study focusses on child marriage in Jos North Nigeria; it explores and examines the various socio-cultural factors that have shaped child marriage response.

This study adopted integrated risk theory and social constructionist framework for understanding how socio-cultural factors shape child marriage prevalence. The research demonstrates that people’s concern and expectations with respect to threat, danger and risk event reflects their socio-cultural norms. Socio-cultural factors such as, cultural preservation, conflict, gender bias, trust building, institutional, social and cultural processes, shape the interpretation and evaluation of child marriage and its health implications. Thus, humans adapt to the material world, including threats and risk events through thought and conversations based on their knowledge, ideas, values and beliefs, which they share, or at least identify with within their socio-cultural context.

Key findings from the study, suggests that child marriage prevention in north central Nigeria is being compromised by cultural preservation and other socio-cultural factors embedded in societal institutions. Findings also highlighted that the conflict plaguing the North Central Nigeria is impacting child marriage prevalence in two ways. Firstly, it has created lack of trust between the people and governmental/non-governmental agencies and undermines the health concerns linked with the practice of child marriage. Secondly, it has increase the vulnerability of young girls to rape and other types of sexual violence by strangers leaving some parents with less choice than to give out their child in marriage when they are still considered pure. Conflict causes break down in important societal infrastructure and result in weakened health system that often times lags behind in provision of adequate health care for pregnant young girls. The young married girls are often expected to bear children soon after marriage, which makes them vulnerable to pregnancy and childbirth complications, including obstetric fistula. Research has noted that married adolescent have relatively little access to information about maternal health care thereby leaving room for the three types of delay that causes fistula.
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List of Abbreviations

CEDAW Convention on the Elimination of all Forms of Discrimination against Women
CEDPA Centre for Development and Population Activities
CFR Council on Foreign Relations
CFRN Constitution of the Federal Republic of Nigeria
CRC Convention on the Right of a Child
CRR Center for Reproductive Rights
DFH Department of Family Health,
DHSPS Department for Health, Social and Public Safety
FGDs Focus Group Discussion
FHR Fundamental Human Rights
FMH Federal Ministry of Health
FMRWG Forum on Marriage and the Rights of Women and Girls
GBV Gender Based Violence
GF Genital Fistula
GNB Girls Not Bride
HRW Human Right Watch
IASC United Nations Inter-Agency Standing Committee
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<tr>
<td>ICRC</td>
<td>International Committee of the Red Cross</td>
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<td>ICRW</td>
<td>International Center for Research on Women</td>
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<tr>
<td>IPPF</td>
<td>International Planned Parenthood Federation</td>
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<td>IRIN</td>
<td>Integrated Regional Information Networks</td>
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<td>NDHS</td>
<td>National Demographic and Health Survey</td>
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<td>National Committees for Research Ethics in Norway</td>
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<td>NGAW</td>
<td>National Geographic Atlas of the World</td>
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<td>NHRC</td>
<td>National Human Right Commission</td>
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<td>OF</td>
<td>Obstetric Fistula</td>
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<td>OHCHR</td>
<td>Office of the UN High Commissioner for Human Rights</td>
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<td>R C</td>
<td>Refugee Council</td>
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<tr>
<td>RVF</td>
<td>Recto-Vaginal Fistula</td>
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<td>SRI</td>
<td>Sexual Rights Initiative</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNFPA</td>
<td>United Nation Population Fund</td>
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<td>UNGA</td>
<td>United Nation General Assembly</td>
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<td>UNHRC</td>
<td>United Nation Human Rights Council</td>
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<tr>
<td>UNICEF</td>
<td>United Nation’s Children’s Fund</td>
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<td>USAID</td>
<td>The United State Agency for International Development</td>
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<td>UNSCR</td>
<td>United Nations Security Council Resolution</td>
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<td>VVF</td>
<td>Vesico-Vaginal Fistula</td>
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<td>WHO</td>
<td>World Health Organization</td>
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1.0 INTRODUCTION

It is well known that perceived risk based on social experience and subjective judgements often times deviate from objective risk for different social groups (Oltedal et al 2004). The social experience of risk is not confined to the technical definition of risk measured within the product of probability and consequences (Renn et al 1992). Humans are impacted by their surroundings and this further influences cognition as well as behaviour and individual decisions. Our environment, affects how we interpret, the potential threats and hazards surrounding us. Thus conceptualizing, clarifying and preventing risk events and practices embedded in socio-cultural context poses a significant problem and challenge to societal risk management. Even individual risk judgement is unlikely rational, since we do not always rate the most risky activities as more dangerous than less risky ones (Sjöberg et al 2004). Therefore, risk is open to social definitions, such that risk not visible to us can be changed, magnified, dramatized or minimised within knowledge (Beck, 1992). Gender based violence (GBV) a topic that has been given few attention in risk management research in recent years, especially in conflict and complex emergencies has been a major victim of social definitions and interpretations (see Scharffscher 2010, Skogsrud 2010, Olsen & Scharffscher, 2004 Ward & Vann 2002). The consciousness from which GBV arise in risk management and safety research includes an awareness of violence against women before, during and after crisis and the health implications of such violence.

Risk is communicated and made sense of within the socio-cultural context in which it is interpreted. Hence, the impact of risk communication depends on a complex interaction of audience characteristics, factors influencing perception, and the trust they have about the source and the content of the risk message (Breakwell 2000).

Literature in the field of risk communication is full of methodologies, good practice, to do lists and theories designed to help professional in reducing risks and its impacts. This study is not questioning the effectiveness of these methods and practices, but would like to stress that very rarely does risk communication literature analyse the ontological and epistemological nature of risk events and dangerous practices and thus why different socio-cultural groups perceive the same risk event in different ways (Rosa 2003). Threats are politically negotiated within the system through amplifications and attenuations by logical abstractions that call upon myths and cultural metaphors to justify desired conclusions and to foster public support (Dake 1992).
However, “we are still left with the question of why risk perception differ from one socio-cultural group to another” (1992:27).

1.1 BACKGROUND OF STUDY
The World Development Report (2011) claims that more than 1.5 billion people live in countries stricken by armed conflict. Rates of sexual and other forms GBV are reported to be higher in areas of armed conflict than in non-conflict settings (Marsh et al 2006) In some of these countries there is an existing socio-cultural context, with cultural beliefs and norms that seems to encourage GBV. The implications of violence against young girls and women during crisis and armed conflicts has received international attention, leading to numerous attempts to address culpability and impunity issues through processes that include access to justice instrument and institutions of international resolutions (UN Women 2013). Several international agreements acknowledge the importance of protecting women and girls in situation of conflict. Hence, the United Nations Security Council Resolution on Women, Peace and Security addresses the impact of war on women and mandates the protection of women and girls during and after conflict in its resolutions. The resolutions explicitly recognise sexual violence as a security issue and tactic of war and thus demand parties to armed conflict to adopt concrete prevention and protection measures (UNSCR 1325(2000), 1820 (2008), 1888(2009), 1889(2009) 1960(2010), 2106(2013), 2122(2013). The resolution has been successful in terms of norm building, but has been less successful in terms of implementation. In most societies and regions, women and girls remain disproportionately affected by armed conflict. Despite efforts to address issues of GBV in armed conflict through policy agreements, GBV continues to escalate due to lack of policy implementations and social cultural context tolerating such acts.

Breakdown in political and social institutions create a combustible environment in areas enduring humanitarian crises or internal conflicts that heightens the threats to girl’s security and well-being and exposes some to the practice of child marriage (UNFPA 2012, Vogelstein for (CFR) 2013). Child marriage threatens girl’s lives and health, and it limits their future prospects. Girls pressed into child marriage often become pregnant while still adolescents, increasing the risk of complications in pregnancy and childbirth (UNFPA July 2014). These complications are the leading cause of maternal death and fistula disease among married young girls in developing countries such as Nigeria. Despite the abuse and violation young married girls endure during child marriage, most developing societies in the world have social institutions that legitimize, obscure and deny these abuses. The same act that would be punished
or at least regarded as punishable if directed to a stranger, a neighbour or an acquaintance often
go unchallenged when men direct them at young girls, especially within the confines of
marriage (Powell and Henry 2014). Most countries where girls are victims of child marriage
have laws on minimum age of marriage, but they are largely ineffective, not enforced or operate
alongside customary and religious laws. Customs, cultures and traditions are often used as
excuse to neglect the duty to protect, respect and fulfil the rights of young girls (IPPF 2006).

1.1.1 The nature of conflict in Jos North Plateau state Nigeria
Nigeria is a federal constitutional republic comprising 36 states and the Federal Capital
Territory Abuja. The country known as the most populous in Africa is divided into six geo-
political regions namely: North-East, North-West, North-Central, South-East, South-West and
South-South. The North is predominately Muslims while the South is predominantly Christians.
Each of Nigeria’s 250 identifiable ethnic groups (National Geographic Atlas of the World 2005)
perceive itself to be linguistically, culturally and historically distinct, although four-the Hausa
and Fulani in the north, the Yoruba in the south-west and the Igbo in the south-east constitute
a larger share of the population. Tension among these four are well documented, as are
hostilities among other lesser-known groups who have grievances against both the major ethnic
groups, the Nigerian state (which they perceive as insensitive to their interests) and one another
(Best and Kemedi 2005).

Plateau State is in the north central with estimated 20 ethnic groups with different cultural
practices, but predominantly Christian. The introduction of Islamic Sharia Law in 12 northern
states intensified suspicion and brought about religious overtone into what was initially a classic
conflict between indigenous farmers, traders and herders in Plateau State (IRIN, 2004a). Plateau
State, particularly Jos, the state capital has been experiencing political crisis or inter-communal
violence over indigene rights and political representation since 2001. The total number of
people killed in these protracted conflicts in Plateau State from 2001 to 2010 is estimated at
between 4000 to 7000 (Krause 2011). There has been violent attacks in several areas in addition
to Jos. These areas include, Wase Langtang North, Langtang South, Shendam, Mikang, Qua’an
Pan, Barkin Ladi and Riyom. Tension between ethnic groups rooted in the allocation of
resources, electoral competition, fears of religious domination, and contested land rights have
led to these protracted conflicts.

The tensions and crisis have been aggravated by government policies that effectively make
millions of Nigerians second-class citizens by discriminating against “non-indigenes” or
“settlers”, those unable to prove roots linking them to the original inhabitants of an area (HRW,
2006, 2009). The issue of indigeneity began to take on increased importance not long after 
Nigeria’s independence, with regional policies that discriminate against the indigenes of other 
regions in areas as diverse as employment and acquisition of land (Kraxberger 2005). The 
principle behind “indigenisation” was to protect the identity, right and interests of the country’s 
numerous minority groups, but it has become a powerful means of exclusion under which non-
indigenes are denied access to already limited resources such as education, land, participation 
in political affairs and public sector jobs (Ibid 2006, 2009)

Both religion and ethnicity are politically manipulated for the populist cause. Ethnicity has 
played a significant role in religious conflict in Plateau State, where sectarian groups have 
exploited tensions between Hausa and Fulani settlers and the indigenes. The religious 
dimension may have been misconstrued as the primary driver of violence, when in reality 
disenfranchisement and inequality may be the main cause (Kwaja 2011).

The 2001 Jos crisis claimed at least 1000 lives (HRW, 2001). Long standing tension between 
2002-2004 within certain communities had subsequently escalated into violence, which left 
about 700 dead in the attack on the town of Yelwa in southern Plateau State (HRW 2005). In 
2008, clashes between Muslim and Christian youths rocked the city of Jos, leaving at least 700 
dead. The worst death following this protracted crisis was recorded in 2010, with over 1000 
lives lost. In 2011, a bomb attack detonated on 2010 Christmas Eve celebration, led to daily 
crashes between Christians and Muslims mobs in villages around Jos killing scores of people 
(Mohammed on Reuters 30th Jan 2011). The year, 2014 recorded the two most recent attacks, 
in which a twin bomb attack killed 118 people in May 2014 and on 12th December; another 
twin bomb attack killed at least 30 people (Marr in The Guardian 12 Dec 2014)

The number of internally displaced persons since these conflicts started in Plateau State is in 
tens of thousands, from 2001 to 2010 estimated 50,000 were displaced (IRIN, 2005, 2010a). 
More have been displaced between 2011 and 2014. It is difficult to say the actual number of 
the people internally displaced since there is no official camp for them. They shelter with family 
and friends where they can find them (Campbell in CFR 2014). The pervasive insecurity, in the 
state led to declaration of state of emergency in 2004. 11 years later only the heavy presence of 
military and police forces ensures a fragile calm in the state, especially Jos.

Violence and displacement have reshaped Jos and its environs. Communities has become 
religiously and culturally segregated causing shifts in pattern of residency, business, 
transportation, trade and the issue ‘of no-go-areas (Ibid 2011). The consequences of armed
conflict extends far beyond direct battlefield casualties. While the obvious effect of armed conflict is the destruction and malfunctioning of infrastructures, resulting to weakened capacity for operation and functioning of important societal institutions, sexual violence meant at humiliating enemy camp are being employed. The poorest and most vulnerable in society, particularly women, girls and children are the victims of sexual exploitation and are exposed to even more precarious situations as livelihood, homes and social norms are upended (Read 2012).

1.2 GENDER BASED VIOLENCE IN ARMED CONFLICT
GBV is “a violence that occurs as a result of the normative role expectations associated with each gender, along with the unequal power relationship between the two genders, within the context of a specific society” (Bloom 2008:14). In an effort to combat GBV, CEDWA Declaration refers broadly to the general right to equality and freedom from all forms of discrimination. Thus the Declaration includes the right to life, the right to liberty and security of the person, the right to equal protection under the law, the right to the highest standard of health, the right to just and favourable conditions of work and the right not to be subjected to torture or other inhuman or degrading treatment. The Declaration also, includes the right of equal protection in times of armed conflict or natural disaster. The liability of non-state actors is recognized, and violence in private life is included within the definition. The denial of the rights implicit in the Declaration would thus constitute violence against women. The universal nature of the norms underlined in a provision that “traditions and customs” cannot be used by state to avoid their obligation to eliminate violence against women.

The Convention on the Elimination of All Forms of Discrimination against Women and the Declaration on Violence against Women have thus combined to develop international law which now clarifies that traditional and cultural practices perpetrated by the Stata or in family life and the community constitute violence against women and an infringement of universal and indivisible human rights. The connection between violence against women, gender based discrimination and harmful practices have been developed further by the general recommendation of the Committee on the Elimination of Discrimination against Women (UN, 2010). Violence, either gender based or otherwise are fascinating because they open a window on the inner working of society. And like disaster, it provide graphic illustrations of human condition in many of its forms, plights and manifestations (Alexander 2013).

Studies have revealed that women and girls in conflict settings are more affected by violence than any other population of women in the world, and all women are at risk of rape, child
marriage or other forms of sexual violence (Vulnerable Women Project 2009). This does not mean that there is no evidence of sexual and other forms of violence against men during armed conflict. Sexual violence against children and teenagers is strongly gendered and appears to inexplicably affect girls. Up to half of sexual violence are committed against girls below the age of 16 (UNFPA, 2014). Rates of sexual and other forms of GBV are reported to be higher in areas of armed conflict than in non-conflict affected settings (Marsh et al 2006). Hence, establishing the exact rates of GBV in areas of humanitarian emergency is challenging, as many of the best estimates are flawed but often cited as fact (Palermo and Peterman 2011). However the estimate, there is an evidence of increase sexual and other GBV in conflict settings than in non-conflict settings (Ibid 2009).

Nigeria, as part of international community has a number of legal and policy instruments for the protection of women and young girls in peace and during conflict situations. Unfortunately GBV of all sought are still prevalent in Nigeria (Ukwuoma 2014) both before, during and after conflict. Some women are beaten on a daily basis, while others are victims of rape, genital mutilation and sexual abuse. Some young girls are denied education, forced into child marriage, trafficked for different purposes, (such as prostitution and drug trafficking) and used as sources of cheap labour. These violent and abusive practices do not only negate international best practices, they undermine Nigeria’s legal and policy commitment to uphold the protection of women and young girls as part of the international community (Ibid 2014). While most of these violent acts may easily be condemned by most people, a few others seem to enjoy much socio-cultural accommodation. This study identifies child marriage as one of such form of GBV that enjoy much socio-cultural support.

1.3 GENDER RELATIONS IN ARMED CONFLICT
Gender is a process of creating distinguishable social statuses for the assignment of rights and responsibilities (Lorber 1994). The conventional expectation is that in time of conflict men take up the role of fighters in the battle lines to protect, kin, community and country, while the women stay home to keep the household. Such stereotypical interpretations cast the male as aggressors and invariably as the perpetrators of violence (Ibid 1994). While some of the stereotypical assertion holds true, the shifting power dynamics of armed conflict impose significant role adaptation on the part of both males and females. Changes in the gender roles ascribed to women and girls can sometimes be seen as positive developments; the girls can mature more quickly and acquire independency and new level of responsibility (Holst-Roness 2006:8). El- Bushra asserts that the optimism of the long-term lasting impact of changes in
gender roles during war has been losing strength. She notes two common trends. First, while gender roles do change in violent conflicts, and women do take greater responsibilities within the household and community, institutional supports that “would provide women with decision-making power consistent with these new and more responsible roles have been slow in coming” (El-Bushra, 2004:169). According to her therefore “the ideological underpinnings of gender relations are barely touched and may be reinforced through conflict’ (Ibid 2004: 169). This implies that gender relations may stay intact, even when gender roles changes. Secondly, she notes that gender on one side, is utilized in preserving different political and economic orders, and while on another side, violent conflict and war are used to preserve gender orders (Ibid 2004). El-Bushra’s work on several states in Africa shows how violent conflict becomes a means of preserving, achieving and reclaiming the lost prerogatives of dominant masculinity such as property, control, and social status as well as dominant gender hierarchies (Zarkov, 2006: 224).

Gender signs and signals are so ubiquitous that we usually fail to note them unless they are missing or ambiguous (Lorber 1994). Much of these social relations involves the negotiation of taken-for–grant understanding about the desired or appropriate behaviour within a social situation (Fenstermacher & West 2002). What is considered as appropriate and desirable behaviour depends on salient aspects of an individual’s social environment and identity, including gender and social status (Higgins & Browne 2008:214)

Zarkov notes that gender is an organising principle of social life that affects different level of social reality, not only individual people’. It interacts with social institutions, values, norms, ideologies and doctrines that produce different notions of what it means to be male or female (Zarkov 2006). Gendered thus, means the division of people into differentiated groups, ‘men’ and ‘women’ and the organization of the major aspects of society along those binaries. The binary division intertwine with major socially constructed differences-racial categorization, ethnic grouping, economic class, age, religion, and sexual orientation-which interact to produce a complex hierarchical system of dominance and subordination (Lober et al 2006:2).

Lober is of the opinion that patriarchy is much more including than gender, in that it reflects the violence and misogyny that imbues many of the social and emotional encounters of women and men (Lober et al 2006:2). The struggle between exposure and social erasure of child marriage in wars belongs to a complex dynamics of different relations of power within which child marriage and the victims are given meaning. According to Zarkov, therefore “social and cultural norms and specific political contexts affect the visibility of the victim of sexual violence
by providing or withdrawing the discursive space within which the victim can speak or be spoken about” (Zarkov 2006:221).

Long before a man uses open violence against a woman, the woman may have experienced structural violence in a marriage/relationship and a community that gives him power over her (Moser & Clark 2001). In patriarchal familial ideology state such as Nigeria, armed conflict increases divisive discourse, deepening the differentiation of men and women, masculinity and femininity. In an extreme form of patriarchy, men honour is seen as depending on women’s purity (Cockburn 2001). Women and girls are thus reminded that by biology and by tradition, they are keepers of health and home, while men are there to protect. The demand of child marriage is often equated to purity, innocence, freshness and better productive capacity (real or imagined?). The society has been structured to view sex and sexual violence outside marriage as a taboo, making a victim of rape and other sexual violence outside marriage worthless and a shame to herself, her family and her community. Neglecting the sexual abuse and violence child marriage practice exposes the victim to. For some men, a child-wife is far easier to subdue, manipulate, exploit and abuse than her matured independent counterpart (Jalal 2014).

1.4 IMPLICATIONS OF CHILD MARRIAGE
Child marriage is a practice of coercing, deceiving or forcibly giving out a child into marriage at such an age when he/she is still regarded as a child and incapable of understanding the nature of marriage as to give free, full or informed consent to it (UNICEF 2001, 2014, UNFPA 2004, 2006, 2012, and 2014). The child is also considered physically, psychologically and emotionally not ready for marriage responsibilities. Under the practice of child marriage, parents and guardians initiate the marriage and scheme the child into marital union with husbands, who are most times far much older than them. In Nigeria, the practice which is predominantly forced on the girl child, often times, defies any objection or protest from the victims, without consequences (see UNICEF State of the world Children 2011).

The harmful practice of child marriage is considered as GBV because it involves mostly young married girls who are mostly forced into non-consensual sexual relations, and denied the freedom and personal development, because of their gender (GNB 2013). The assumption prevails that sex within marriage is a priori consensual, but research shows that young married girls are highly vulnerable to sexual violence by their adult husbands (UNICEF 2001). The sexual abuse most of these girls endure within the confines of marriage will be punishable or at least regarded as punishable if, such act were carried out by strangers, neighbours and acquaintances. Most girls who are unhappy in child marriage are isolated and have nobody to
talk to as people who endorse their situation surround them. These girls are also denied their reproductive rights. According to UNPF report, the maternal mortality rate was 840 deaths for every 100,000 live births in 2008. The high rate was due to births to adolescents and women at high risk of complications from pregnancy (US 19 April 2013: Nigeria Human Right Reports).

A recent analysis of the concept of child marriage has highlighted the fact that there is no universally accepted definition of the word “child” leading to no universally accepted definition of “child marriage” and divergent interpretations of the concept (Ibid 2013). However, the UN Convention on the Rights of the Child (CRC) defines a child as a “human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier.” (CRC Article 1 1990). This definition has influenced different interpretations of what a child is. “Since different nations allow their citizens to attain majority at different ages, and some allow majority to be attained upon marriage, this deference to national law is a real and concerning loophole (SRI 2013)

Child marriage and early marriage are often used interchangeably. However, the two concepts differ in context. Early marriage does not refer solely to age. It refers to an individual’s level of physical, emotional, sexual and psychological development that would make a person unready to consent to marriage. Nevertheless, some stakeholders are concerned that the term “early marriage” is less concrete than child marriage, and fear that injunctions against early marriage can allow for marriage at any age based on social norms and customs (SRI 2013).

Child marriage in many instances marks an abrupt transition into sexual relations with a husband who is considerably older and unchosen. According to UNFPA 84% of first births to adolescent’s girls occur within marriage at ages between 15-19 making most of these girls married without their free and full consent as required by the international convention on Child Act (UNFPA, 2004, 2012). This practice is against child act, which states that: “child has the right to the protection of the law against unlawful interference with …or correspondence, nor to unlawful attacks on his or her honour and reputation” (CRC Article 16 in UNHR 1989)

Child marriage remains a widely ignored violation of the health and development rights of girls and young women. Governments are often unable to rectify discrepancies between national laws on age of marriage and deep-rooted customary and religious laws. This is due to official accommodation of cultural, societal and customary norms that shape and govern the institution of marriage and family life (Center for Reproductive Rights 2000:52). Child marriage is culturally packaged as a social acceptable necessity which in many cases amounts to “socially
licensed sexual abuse and exploitation of a child (Forum on Marriage and the Rights of Women and Girls 2001) It is also one of the most persistent forms of sanctioned sexual abuse of girls and young women (IPPF 2007)

1.4.1 Prevalence of child marriage in Nigeria
In Nigeria, child marriage is extremely more prevalent in some regions than others. Northern Nigeria has one of the highest rate of child marriage in the world. More than half of Nigerian women in the north are married by the age of 16, and are expected to give birth to a child during the first year of marriage (UK 2012:2). Demographic and Health Survey (DHS) reported the median age of marriage for 15 to 19 years olds in the northeast to be 15.9 and in the northwest to be 15.7(Nigeria DHS Nov 2009:94). There is also a report that some girls in northern Nigeria are married by the age of 12 (Navai Report on Times 28 Nov 2008). The practice of child marriage is stimulated by the fact that, although Nigeria legal age of consensual sex is 18, there is no statutory law on rape for girls sexually violated in the confines of marriage. The law criminalizes rape and provides penalties of 10 years to life imprisonment, but recognises spousal rape as a separate offence, which is often difficult to prove in court (US 19 April 2013)

1.4.2 Obstetric Fistula (OF) and Genital Fistula (GF) complications In relation to child marriage
Child marriage is a primary indication of women’s exposure to the risk of pregnancy and early childbirth. Notably child marriage/childbearing are rightly identified as risk factors of obstructed labour and therefore among the indirect causes of OF (Federal Ministry of Health, Nigeria 2011). According to medical experts, one of the notable direct causes of VVF/RVF is delayed or obstructed labour during childbirth. OF occurring in young women usually below the age of 20 years is closely associated with early pregnancy and childbearing when the pelvis of the girl is not yet developed to stand the rigours of giving birth to a child. Obstructed labour also causes GF thus:

“Prolonged obstructed labour that result in genital fistula also produces a field injury in the pelvis that gives rise to many other birth-related injuries now described as Obstructed labour Injury Complex. These injuries then manifest in diverse problems that the fistula patient copes with. Hence focusing simply on the hole between the bladder and the vagina ignores the multifaceted nature of the injury that many of these patients have sustained” (Agboola 2006: 45).

OF does not occur only as a result of protracted labour and pelvic disproportion, it can also occur as a result of violent penetration or violent sexual intercourse. In relation to a young girl married to an older more developed man, the girl can be subjected to forceful and violent sexual
intercourse in exercise of his right and power. There is the possibility of fistula arising from such intercourse depending on the girl’s genital development, the force applied and the depth of penetration (Ukwuoma 2014). The complex case of fistula influences the girl’s life even after repair.

1.4.3 Post Fistula Repair Effects
Fistula limits the chances of normal or complete reproductive functions and normal vaginal delivery by the affected mother even after repair. Subsequent delivery by such women must be through a caesarean section, making the cost implication unbearable. Victims of VVF/RVF have psychological trauma, which further complicates their sexual situation even after repair (Ukwuoma 2014). Most of them are stigmatized in the society, both by their families and other community members, due to false beliefs that fistula is not a medical condition, but a spiritual curse.

1.5 RESEARCH OBJECTIVE
The relationship between child marriage and fragile state has been explored. Countries with high rates of child marriage tend to be among the world’s most fragile and least stable (Lemmon 2014). Fragile state or conflict reinforces poverty, limit economic opportunity, limits girls chance to education, contribute to regional instability, weaken social institutions and increase the chance of sexual violence and assault targeting women and girls. In such circumstances, particularly in cultures where sexual violated girls are regarded as worthless, as social upheaval and GBV increase in time of conflict, families turn to child marriage as a way to protect their girls from the disproportionate burden girls bear during armed conflict. The socio-cultural implications underlying sexual violence by stranger increases girls’ vulnerability to child marriage during conflict and other humanitarian crisis, when family and social structures are disrupted. Parents may marry off their young daughters as a sort of protection, particularly in context where sexual violence is common. A kind of protection that exposes the young girl to non-consensual sex (IPPF 2007). The exposure to sex, often leads to child pregnancy, complications and other physical and traumatic experiences such as OF.

While the dangers to which women and girls are expose to in pregnancy in conflict situations are not necessary different from non-conflict situations, armed conflicts jeopardize people’s immediate access to health care and at the same time affects health system capabilities to respond to these dangers and hazards. Pregnancy related outcomes appear to depend on the availability of effective health care services. As child marriage escalate due to armed conflict,
the limited available health care services sets a tone for devastating health consequences for girl victims.

The extent to which these parents understand the danger they expose their children to, varies due to illiteracy and lack of information from one socio-cultural context to another. Theoretically, we can assume that once parents and communities understand the irreparable harm that the practice of child marriage can inflict on girls, physically and psychologically, the practices can be made to stop. Unfortunately, that is not how people make decisions in general and about risk in particular (Morrow 2009). Knowledge is important, but people “experiential system” also comes into play (Leiserowitz 2007). The feelings, emotions and values we have gained through experience, including the experiences of our social networks, have a major effect on our decisions (Ibid 2009). This is particularly true in a society where people depend heavily on communal assessment of situations, including levels of risk. Most decisions are made to conform to the social-cultural norm of the public. In such settings, ordinary people bring more to their definitions and evaluations of risk than recognised in the reductionist framing of experts (Wynne 1996). That is why parents who are aware of the health implications of child marriage nevertheless, still conforms to the practice for other socio-cultural reasons. This is due to the assumption that humans do not simply view and respond to dangers as unmediated facts. Rather,

“They engage with danger and hazard through learned and shared views or beliefs’—broadly labelled their culture. They adapt to the material world, including danger and risk events, through thought and conversations’, on the basis of their education, of the ideas, values and beliefs, that they share, or at least recognizes, and by reflecting upon experience. People’s concerns and expectations with respect to dangers and hazards reflect, and indeed are integral to, cultural norms” (Hewitt 2008).

This study is on risk communication and socio-cultural factors affecting prevalence of child marriage. It discusses factors contributing to people’s perception of child marriage, individual and socio-cultural barriers to behaviour change. The study aims to contribute to the knowledge and understanding of how risk events interacts with, socio-cultural factors, to shape interpretation and inform preventive strategies of such risk events.

1.6 PROBLEM STATEMENT
Understanding the complex interplay between socio-cultural norms, experience, awareness and response to risk communication is an important contribution to risk research. This can inform effective communication strategies and policy decisions regarding risk event. Effective
communication is critical to the successful resolution of any type of health, safety and environmental controversy. For effective communication and response to a risk event, the individuals, communities and the factors that contribute to such risk have to be explored. I have chosen to concentrate on the social and cultural factors that inform the prevalence of child marriage and how these factors attenuate the risk of (OF), that is, the role the factors play on how the visited community and Nigerian society is responding to the link between child marriage and OF, especially in a conflict setting.

The focus of this work is on social-cultural factors that shape child marriage. I am arguing that risk event understanding and response is social-cultural rather than objective phenomena. Thus, any effort at risk prevention and reduction involves planning and actions in collaboration with the involved socio-cultural groups. The intended research problem statement is:

What socio-cultural factors shape child marriage interpretations and response in a conflict prone setting?

To solve the research problem I have chosen to answer two relevant research questions that informed the problem; thus

1) What are the socio-cultural norms and factors that shape child marriage interpretation, evaluation and response?

2) What channels of risk communication influence amplification/attenuation of child marriage and OF?

1. 7 LIMITATIONS OF STUDY
As with any piece of research, there are limitations. Firstly, this study is limited to child marriage, a sub-category of broader GBV. Secondly, child marriages are not restricted to females; however, the female gender forms the backdrop of this thesis. I have chosen to concentrate on young girls below the age of 18, specifically between the ages of 10 – 17, exposed to child marriage. Thirdly, due to the purposive selection of study communities and the nature of the sample, the findings cannot reliably be generalized beyond the socio-cultural populations included in the study. Lastly, although I have tried to ensure the reliability and validity of responses, underreporting or overreporting of socio-cultural factors that shape child marriage practice and response to OF cannot be entirely ruled out.

Applying integrated risk theory to a topic often studied under gender framework has its limitations. Risk theories have been applied in relation to humanitarian assistance in refugee
camps as involving humanitarian organizations with definite organizational structures. This study is community based and does not purport to be a comprehensive study of governmental and non-governmental organization that engage with relationship between child marriage and OF. Rural and urban communities in developing countries are not often managed with the same administrative pattern implicit in western concept of “organization”. However, health consequences of child marriage falls under the umbrella of health risks, which have been studied with applicable risk theories.

There are different types of armed conflict. The armed conflict reflected in this study is of non-international nature. That means that, there is no breakdown in the entire system of the state, but only in conflict areas. As a result, there is no known refugee camp for those affected by the conflict. Hence, governmental agencies of the state (law enforcement, justice system and health system) are therefore responsible for prevention of child marriage and other sexual violence as well as response to health implications of such violence.

It must be stated clearly that the purpose of this research is not to contest established facts regarding factors that contribute to prevalence of child marriage and other GBV. Rather, it is to broaden the horizon of on-going discussion with contextual analysis of how socio-culture context influences people’s risk interpretation and impact risk communication. Despite the fact that child molestation and abuse should not be tolerated by any civilized society, evidence presented by those interviewed is cautiously treated because emotions were invested in the participants’ answers. In some instances, the respondents felt it was their duty to defend their traditions and practices. Although the continuous neglect of child marriage as an abuse by some socio-cultural groups is one challenge in dire need of many answers, this study does not in any way pretend to provide all the answers.

1.8 PREVIOUS RESEARCH
Cynthia Cockburn (1999) contextual analysis in “Gender, armed conflict and political violence” emphasizes the importance of gender differentiation and local constructions of masculinities and femininities embedded in issues of agency and diversity. She argues that asymmetry in the relative positions of men and women is an important ordering principle that pervades the system of power relations, especially in four moments of conflict. The four moments being: before armed violence breaks out, in times of war and repression, in process of peacemaking and finally in post-war periods. In each stage she opines that, “the contextual specific female and male positioning and agency in patriarchal gender systems and the identities they generate underwrites their roles as social actors” This means that people (men, women, girls, boys) do
often accept the societal ascribed roles irrespective of the consequences of such role (Moser & Clark 2001:5).

According to Enloe (1990), the gendered orders of violence are built through institutions, such as state, the military, the bureaucracy, the educational system and the family. They are dynamic and are organised along the lines of gender, class, race and other identities. They are also, enshrined in religious beliefs, language and symbolic orders. The above doing gender dynamics according to (Harders 2011:138) “refers to the symbolically, materially and culturally diverse structures that shape our actions and perceptions despite individual preference”

Holst-Roness (2006) in the studied topic; “Violence against girls in Africa during armed conflict and crisis”, revealed that sexual violence used against girls in wartime hinders their safety. Some of the girls are raped and assaulted with the purpose of humiliating the opposition dignity and honour. The study also highlights the plight of young mothers who gave birth outside marriage. Most African countries are patrilineal, where social identity comes from the father. Children of rape lack access to resources that would have been otherwise available from their father’s lineage. Rapes and other types of sexual violence exposes the victim to health implications such as sexual transmitted disease, unwanted pregnancy, HIV and psychological issues such as ostracism and reprisals on the part of the family members or the wider community, owing to the notion that the victim have been “dishonoured”.

Lemmon G.T(2014) in the research titled “Fragile States, Fragile Lives: Child Marriage Amid Disaster and Conflict” found out that armed conflict and / or natural disaster weaken social institutions, limit economic opportunities and increase the chance of sexual violence and assault targeting women and girls. In such circumstances, families resort to child marriage as a way of protecting the girls. He questions if protection from sexual violence through child marriage is real or perceived due to the physical and psychological implication of such practice.

Obmabegho and Cherry (2014) research on “Adolescent Pregnancy in Nigeria” finds that societies where young girls are given by their parents to be married, child pregnancy is not considered as a problem. Pregnancy among young girls is a significant problem in the developing and least developed countries. Girls can become pregnant before their bodies are matured enough to carry and deliver a child. Nigeria is one of the countries faced with this dilemma. Early pregnancy is common among young married girls especially in the northern part of the country. Early pregnancy, which is otherwise, referred to as adolescent pregnancy by Obmabegho and Cherry (2014) accounts for high mortality rate, fistula disease and other
health risks among young mothers. This according to them is due to poverty and inadequate health care available to the victims before and during child delivering.

The next relevant research informing this study is a study carried out by (Wall et al 2004) titled “The Obstetric Vesico-vaginal Fistula: Characteristic of 899 patients from Jos, Nigeria”. They studied 932 fistula cases and identified 899 cases (96.5) associated temporally with labour (that lasted at least for 2 days) and delivery among married young girls with the average age of 15.5 years. The characteristics of the victims pinpoints child marriage as the leading cause of fistula disease in the north central Nigeria.

(Melah et al 2007) in a more recent study titled “Risk Factors of Obstetric Fistulae in North-Eastern Nigeria” revealed that the major risk factors included early marriage (average of 14 years) obstructed labour during childbirth among the young married girls (93.7 %) and illiteracy (96.3%). Gender inequality according to their finding was another risk factor responsible for prevalence of fistula. They concluded that illiteracy is a leading factor that determines how frequently the issue of the “three delays” in fistula will occur and result to fistula disease.

The mentioned bodies of work outline the factors influencing child marriage in a conflict setting. Some of the research findings highlighted physical health consequences of child marriage and child pregnancy among young girls. However, the current study is exploring the complex interplay between socio-cultural factors, awareness, amplification/attenuation processes and response to risk of child marriage. To contribute to effective risk communication strategies and policy decisions regarding child marriage.
2.0 RELEVANT TERMS AND CONCEPTS
This chapter will explain the relevant terms and concepts underlying this research. These concepts and terms are the backdrop on which this study is built.

2.1 GENDER
Gender is a socially constructed definition of women and men. It interacts with social institutions, values, norms, ideologies and doctrines that produce different notions of what it means to be male or female (Zarkov 2006). Gendered on the other hand means the division of people into differentiated groups, ‘men’ and ‘women’ and the organization of the major aspects of society along those binaries (Lober et al 2006). The binary division intertwine with major socially constructed differences: racial categorization, ethnic grouping, economic class, age, religion, and sexual orientation - which interact to produce a complex hierarchical system of dominance and subordination” (Ibid 2006:2)

2.2 GENDER BASED VIOLENCE (GBV)
This is a term used to describe any harmful act that is perpetrated against a person’s will, and that is based on socially ascribed (gender) differences between male and females, which in most setting privilege men (Human Right Watch 2004). The term GBV has been defined as “any violent act that is likely to result in , physical, sexual, or psychological harm or suffering to women , including threats of such acts, coercion, or arbitrary deprivation of liberty, whether occurring in public or private life” (CEDWA: General Recommendation, No, 19, 1992, OHCHR Article 11993). There are different nature and types of GBV varying across cultures, regions and countries. GBV include but not limited to sexual violence, sexual exploitation and abuse, forced marriage, child marriage, domestic violence, forced prostitution and harmful practices such as female genital mutilation, honour killing, and widow inheritance among others. These types of violence can result to physical conditions such as trauma to reproductive organs, sexual transmitted disease, unwanted pregnancies, that can lead to unsafe abortions and other complications (WHO 2012). There are also several psychological consequences of sexual violence including, “anxiety, shame, post-traumatic stress, depression, loss of sexual pleasure, fear of sex and loss of function in society” (Laurie & Petchesky 2008). The physical and psychological effect of gender-based violence has prompted a growing awareness more than ever to address the situation of women and girls all over the world, including those in armed and post conflict situations (The UNSCR 1325, (2000), 1820(2008), 1888(2009), 1889 (2009),1960 (2010) and 2106(2013) (UNSCR, 2010 , U N G A. July 2013) The UN Declaration on Elimination of Violence against Women has linked gender-based oppression and violence...
against women by emphasising that violence against women is “a manifestation of historically unequal power relations between men and women, which have led to domination over and discrimination against women by men and to the prevention of the full advancement of women” (Ibid 1993) An estimated one in three women worldwide will be physically or sexually abused, and one in five will experience rape or attempted rape in their lifetime (WHO 2005, Heise et al 1999). The large majority of GBV takes place in the home, where the victim often experiences repeat attacks and sexual assaults (Willman 2008)

2.3 SEXUAL VIOLENCE
Sexual violence is a term used to describe any sort of unwanted sexual behaviour that is imposed on someone. It is term used to describe sexual act by coercion, violence and intimidation on a person regardless of the relationship with the victim. According to World Health Organization it is “any sexual act, attempts to obtain a sexual act, unwanted sexual comments or advances or acts to traffic, or otherwise directed, against a person’s sexually using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work” (Jewkes et al in WHO Report 2002). In this study sexual violence will be viewed as a term that incorporates any behaviour that is perceived to be of sexual nature, which is unwanted or takes place without consent or understanding (Department for Health, Social and Public Safety 2008)

Sexual violence more often than not takes place in context of gender inequality and specific cultural beliefs and attitudes about gender roles, especially those concerning male and female sexuality’. Such social exclusion can also reinforce other economic and social inequalities and risks, including lack of access to basic services, justice and livelihood sustenance (Oduro & Ayree, 2003; UN, 2005a) and result to vulnerability to neglect, violence and abuse, in the home, community and the state. Whether we are addressing child marriage, rape, intimate sexual violence, sexual violence by strangers, our strategies must be responsive to the particular and distinct characteristics of the violence in question: their dynamics, the social norms and power dynamics that sustains them, and the context in which they occur.

2.4 CHILD MARRIAGE
This is a term used to describe formal or informal marriage between a partner that is less than 18 years of age and an older partner (UNICEF 2005). It is also referred to any marriage carried out below 18, before the girl is physically, psychologically and physiologically ready to shoulder responsibilities of marriage and childbearing (UNFPA 2006, IPPF 2007). This type of practice is rooted in social norms that encourages gender discrimination. Over the years,
discussion has favoured child marriage over early and forced marriage” to underscore the fact that girls often agree to child marriage because they lack the mental capacity and conceptual right to understand the implications. Child marriage is a reality for both boys and girls, although girls are disproportionately the most affected. Young married girls are at risk of violence, abuse and exploitation. Evidence shows that girls who marry early becomes pregnant right away and expose themselves to maternal deaths, protracted labour, obstetric fistula (OF) and other health dangers related to pregnancy (UNICEF, 2009).

2.5 OBSTETRIC FISTULA (OF)
The world health organization defines obstetric fistula as an abnormal opening between a woman’s vagina and bladder and/or rectum through which her urine and/or faeces continually leak (WHO: Obstetric Fistula, 2006). The two classifications of fistula generally include fistula from obstetric causes including Vesico-vaginal Fistula (VVF) and Recto-vaginal Fistula (RVF) and have devastating consequences particular in developing countries where health services are poor and unaffordable by most victims (Danso et al 1996, Wall et al 2005, Adler et al 2013). The victim suffers damaged vulva and vagina in addition to dripping urine and faeces with foul smell. In addition to leakage, pain and discomfort of the wounds, the victims tended to experience general body weakness, which reduces their capacity to carry out their daily day-duty responsibility (Mselle et al 2011). The physical condition leads to divorce and rejection by their families and in certain cases, leaving the victim in solitude. Without help and assistance some victims takes to begging or prostitution for survival. OF is a condition that develops as a result of an abnormal communication that develops between a woman’s vagina and her bladder and/or rectum, rendering her incontinent of urine and/or faeces (Donny & Weil 2004). This occurs when a woman is in prolonged labour for an extended period, from 2 days to a full week. The baby’s head lodges against the pelvic bones, and as the uterus contracts, it keeps the baby skull lodged tight against the pelvic bones. The pressure exerted by the baby’s skull on the surroundings soft tissues cuts off blood supply to these tissues and caused the tissue to become necrotic and die (Anest 2009) In addition to the pain and suffering caused to the mother, estimates show that most of these obstructed labours result in death of the baby.
3.0 THEORETICAL FRAMEWORK
This chapter presents the theoretical frameworks of analysis used in the study. It accounts for the theoretical lenses through which child marriage in conflict prone Jos north will be scrutinized and analysed to address the research problem. Social constructionist theory recognise that norms for masculinity, feminity, roles allocated to girls, boys, women and men, and sexual scripts vary across communities. The nature of the study warranted theories in social construction of risk. Thus, risk communication perspectives, focusing on cultural risk and social amplification of risk approaches will be used to answer the research questions. In general, cultural risk theory will be based on social and cultural factors that shape perception, while social amplification of risk framework will look at how risk is amplified or attenuated by the channels and processes it goes through in a socio-cultural context.

3.1 RISK
The omnipresence of risk has left its mark in public perception and public debate (Aven & Renn 2010:1). Given the ubiquity of risk in almost every human activity, it is surprising how little consensus there is about how to define risk. However, the study of risk literature discloses that concept of risk is used as an expected value, a probability distribution as uncertainty and as an event (Ibid 2010:2) Within the above concept lies ontological and epistemological aspects of risk.

The ontological aspect of risk expresses a state of the world independent of our knowledge (Rosa 2003). Within this perspective, risk is viewed as a situation or event where something of human value (including humans themselves) is at stake and where the outcome is uncertain (Ibid 2003, IRGC 2005). As an objective state of the world, risk exists independently of our perceptions and our knowledge claims, subjective judgement about what id risk and how likely a risk will be realized (Rosa 2008:108f). The ontological status of risk places into an arena of disagreement over questions of knowledge, about our perceptions and understandings of risk and about our understanding of how groups and societies choose to be concerned with some risk while ignoring others (Ibid 2010).

The epistemological status of risk expresses our perception and knowledge of the world. Risk coincides with the perception of it (Douglas and Wildavsky 1982, Rayner 1992, Wynne 1992b). Risk theories of perception have often opined that there is no such thing as real or objective risk (Slovic, 1992). In the last several decades, risk has been described, defined and managed across scientific fields. According to Aven and Renn (2009a) “Risk refer to uncertainty about and severity of the events and consequences (or outcomes) of an activity with respect to
something that humans value” The early discussion of risk centred on the distinction between risk that could be quantified objectively and subjective risk.

The objective methodologies of risk often neglects the hermeneutical, aesthetic, psychological and culturally bounded forms of subjectivity and inter-subjectivity in and through which risk is constructed, perceived and responded (Pidgeon et al 2003). Thus, Lupton (2012) defined risk as a quantifiable measurable phenomenon as well as subjective reality. Making the concept of risk not just an objective measure of potential harm; but also a cognitive and emotional bridge between the negative events affecting other people and our own fear and expectation (Lockie & Measham 2012:1).

Different cultures may have different mental representation of what they consider “risks” independent of the magnitude or probability of harm (Pidgeon et al 2003, Ibid 2010:14). This means that what individuals or societies perceive as risk and decide to choose as a risk are not shaped only by objective state of risk, but are also shaped by social, cultural, and political factors, as well as the experts analytical tools for identifying risk (Pidgeon 2003). Risk therefore constitutes mental construction (OECD 2003a; 67, Aven and Renn 2010). The status of risk as a mental construction has major implications for how risk is perceived and managed in different societies. Actors create and select risk by creatively arranging and reassembling signals that they get from “real world” (Ibid 2010: 14). Making the societal risk management process not arbitrary but guided by cultural values (such as share belief that every human life is worth protecting), by institutional and financial resources (such as the decision of a national government to spend or not to spend money on risk management), and by systematic reasoning (such as distinguishing between more likely and less likely events (Ibid 2010:14).

The study of risk management and risk avoidance strategies requires attention to forms of meaning making within socio-symbolically inscribed institutional fields (Elliott 2002:301). Risk appears to mean different things to different people (Brun 1994) , and actions and understandings about risks are learned by socially and culturally structured conceptions and evaluations of the world, what it looks like, what it should or should not be (Boholm, 1998). Thus clarifying the role of socio-cultural context implicit in risk perception, communication and response has become a concern in an effort to bridge the gap between positivist and constructivist view of risk (Rosa 2003). This thesis is therefore dealing with physical and socio-cultural dimension of risk in order to pinpoint that “the link between risk as a mental construct and reality is forged through the experience of actual harm (the consequence of risk) in the sense that human lives are lost, health impacts can be observed, the environment is damaged or
buildings collapse” (Aven & Renn, 2010:14). In this thesis, risk is defined as a situation or event where something of human value (including humans themselves) is at stake and where the outcome is uncertain (Pidgeon 2003, Rosa 2003:56) Risk is involved in all our important decisions including environmental risk, health risk and relationship risk (Leiserowitz 2007). One does not accept risks - one accepts options that entail some level of risk among consequences, when the decision maker considers benefits or costs, the most acceptable option need not be the one with the least risk”(Fischhoff 1989). An example of this is when parents marries off their young daughter, because they are more afraid of the known stigmatization risk, they, “the family and the victim” will be exposed to if the child is raped, than the unknown physical or psychological risk of child marriage.

Needed in this study, is therefore a more comprehensive risk concept that spans the different perspectives of risk and provide an integrated approach for capturing the physical and socio-cultural aspects of risk. The comprehensive concept captures the dual nature of risk as a potential for physical change and as a social construction, requiring dual strategy for risk management. GBV with respect to child marriage is considered in this study as risk event, due to its physical and psychological implications.

3.2 RISK COMMUNICATION

Although the study in risk communication as well as social problem that shape the public discourse on risk are considered new, the practice may be as old as human culture. Throughout human history, individuals and groups have had to contend with social and cultural problems that shape discourse on risk (Plough & Krimsky 1987). The early rational for risk communication was based on the divide between the scientific way to assess risk and the lay people approach which tend to over/or underestimate risk. Hence, risk communicators adopted methods to teach the public about real risk so that they can act rationally and make informed choices about what risk to accept or not accept (Leiss 1996). The modern trend however denotes that risk communication has surpasses the limited boundaries of giving public relation advice for information programs on risk and extended its focus on the flow of information between subsystems of society (Kasperson 1986:275, Zimmermann 1987:131, Jasanoff 1987:116). Based on that extension, risk communication can refer to any directive, purposeful or nondirective public or private communication that informs individual about the existence, nature, form, severity, or acceptability of risks (Plough & Krimsky, 1987:6). It may as well describe the controlled release of information towards certain well-defined ends or it may represent the unintended consequences of informal messages about risk (Ibid 1987). The means
of risk communication provide the opportunity to take into account the risk-related concerns of involved parties, engage in dialogue, carry out appropriate actions enabling to reduce perceived risks and encourage public participation as well as enhance mutual understanding (Palencher, 2005, 752-755).

3.2.1 Effect of perception on risk communication
Risk communication is a process of exchanging information among interested parties about the nature, magnitude, significance, or control of risk. This process can be obtained by understanding the factors that influence people’s risk perception to (Cavello 1991) evaluate the extent to which a given risk event or a cultural practice is accepted (Borrow 2009).

Table 1. Effects of Risk Characteristics on Risk Perception

<table>
<thead>
<tr>
<th>Greater Acceptance of Child marriage and OF</th>
<th>Less Acceptance Child marriage and OF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary by family /community</td>
<td>Coerced or imposed</td>
</tr>
<tr>
<td>Has clear benefit to the family/community</td>
<td>Has little or no benefit to the community</td>
</tr>
<tr>
<td>Under the family/community control</td>
<td>Controlled by others outside the community</td>
</tr>
<tr>
<td>Fairly distributed</td>
<td>Unfairly distributed</td>
</tr>
<tr>
<td>Natural hazard /Act of God</td>
<td>Manmade or technological hazard</td>
</tr>
<tr>
<td>Statistical and diffused over time and space</td>
<td>Catastrophic</td>
</tr>
<tr>
<td>Message generated by trustworthy, honest, and concerned informant</td>
<td>Messages generated by untrustworthy, dishonest, or unconcerned informants</td>
</tr>
<tr>
<td>Affects adults only</td>
<td>Affects children</td>
</tr>
<tr>
<td>Familiar</td>
<td>Unfamiliar or exotic</td>
</tr>
</tbody>
</table>

Adapted from Cavello (2008)

The above factors helps explain why preventing child marriage as practice with OF as a medical implications, without confronting the socio-cultural context in which such practices are accommodated may prove futile. Child marriage is an acceptable practice, which family willingly partake in. Once a girl reaches the age of maturity and gets married, she is considered an adult. Hence a young married girl with OF is considered an adult, with a disease caused by act of God.

Risk perception is the subjective assessment of the likelihood of a specified type of unwanted event happening, and how concerned we are with the consequences. Perception of risk goes
beyond the individual, and it is a social and cultural construct reflecting values, beliefs, ideology, and history (Weinstein, 1989). Risk perception appeared on the stage of policy in the 1960’s and was implicated as the main determinant of public opposition to technology, most notably, to nuclear technology (Martin, 1989). In an attempt to deflect people’s unexpected opposition to technology, comparison of risks was suggested (Sowby 1965). Risks such as smoking, driving a car, and using public transport were found to be greater than the risk of living close to a power plant. This approach did not deter people from their unwillingness to accept technology risks, perhaps not surprisingly. Starr detailed investigation on risks acceptance found that society seemed to accept risks if such risk events were associated with benefits, and were voluntary (Starr, 1969, 1985).

Social and cultural positions also determine risk perception. However, while individual and groups risk perception is a complex function of that individual’s and the groups psychological, social, institutional and cultural position (Slovic 2001), accepting risk can also be determined by two factors: dread (how fearful that risk is) and familiarity (how habituated an individual or the group is to that risk) (Rohrmann, 1999, Renn 2005). In life-threatening situations, risk-dread could be easily overridden by risk-familiarity due to a person’s habituation to high level of risk (Tzanakis 2011)

Risk communication has become a novel concept in the scientific pursuit, employed to understand and analyse risk related decisions and behaviour in modern society (Ibid 1991). The conventional account neglects social and cultural norms and experiences, which may be of equal or greater importance to the technical understanding of how and why a risk message gets transmitted (Ibid 1987). When risk communication becomes embedded in socio-cultural context, risk judgement are unlikely to be entirely rational. Nevertheless, the new term has only changed the focus of attention from a static description of what risk means for different communities to a dynamic analysis on how these communities exchange information about risk and adjust their behaviours (Renn 2001:320). Their environment influences humans and affects cognition as well as behaviour and individual decisions. Bearing that in mind, risk communication perspective in this study will focus on cultural risk and social amplification of risk approaches.

3.2.2 Cultural risk theory
According to culturalist approach, values and cultural settings impacts people’s perception of risk (Johnson & Covello 1987, Dake 1991, Stern et al 1995). This means that values and worldviews of certain social and cultural context shape the individual’s perception and
evaluation of risk. Cultural theory focuses on what is shared by people who form solidarities of outlook through their interactions in the social world (Tansey & O’Riordan 1999).

Culture is defined in this context as “the common way that a community of persons makes sense of the world…a set of plan, instructions, and rules” (Gross & Rayner 1985). Edward Said (1994) identifies culture as a community’s reservoir of what defines them as a people, which in most cases represents the best that has been known and thought. When a culture is viewed in that aspect, it becomes a space for engagement by various interests and forces (Njogu & Orchardson-Mazrui 2006). Thus uncritical reading of this notion of culture according to them, entails a valorisation of one’s culture and an assumption that it is not answerable to views from the rest of the world. This can lead to blind endorsement of dehumanizing aspects embedded in one’s culture. Here the community is described in terms of its culture: its jokes and slang; its conventions, stereotypes, typical practices and common knowledge; and its symbols that represent and guide the thinking, feeling and behaviour of its members (Griswold 2013:11). To conceptualize how culture and social world came together, or in other words, how people in social context create meaning Griswold recommended conceptual tools such as the cultural object, the receivers, the producers and the social world (Ibid 2013). A cultural object may be defined as shared significance embodied in form (Griswold 1986). It is a socially meaningful expression that is audible, visible, or tangible or that can be articulated. This include religious doctrine, a belief that women are weak and need protection. To understand the social world of a particular group, we need to understand their cultural object, because cultural objects and the people who create and receive them are not floating freely but are anchored in a particular context (Griswold 2008:15). Cultural objects are articulated and communicated by creators/producers, while other people classified as the receiver experience cultural objects. For a cultural object to be recognized there must be people who receive them, who hear, read, understand, think about, enact, participate in and remember them within a social world (Ibid 2008:15). These cultural objects, when acknowledged by a social group becomes the socio-cultural factors that guide their actions. Hence, cultural theory of risk will help in comprehending the role of socio-cultural factors in managing a social problem (risk event management) and thus what implications a failure to confront these cultural ideologies will have on prevalence of child marriage.

Culturalist theory suggests that “the view of particular individual on matters are shaped by the nature of social groups of which they are part, i.e., various organisations, peer group influences or other authority, and by the degree to which individuals feel bonded to larger social groups”
Thus, revealing one of the assumptions of cultural theory that members of groups with common outlook are disposed to impose risk is socially constructed within each type of group even though certain objective threats are at its root (Douglas and Wildavsky 1982:7). Society has no direct access to these risks, except within the categories and selection filters provided by the group: all socio-cultural institutions perceive and select risk subjectively. In this way, socialized cognitive patterns work like filters in the evaluation of information about risks (Stern et al 1995:726). Individuals and groups perceive the consequence of a risk event and these perceptions lead to personal and social responses depending on the personal values and beliefs of the individuals and the social images and norms concerning the cultural interpretation of this event in a specific socio-cultural context (Renn, 1991). If something does not fit into the existing classification system on which social order is founded, it is thought to be impure, polluted, and therefore not acceptable. According to this theory, risk events and social problems too are defined by checking whether and how it threatens the group’s moral, political or religious order and whether or not it fits the accepted system of classification of reality. The group’s dominant way of life and the fact that the risk threatens to jeopardize this way of life determines, whether the risk will be recognised or rejected. Thus according to Douglas and Wildavsky the choice of risks to worry about depends on the social forms selected. In order words, the choice of risks and the choice of how to live are taken together. Each form of social life has its own typical portfolio, common values lead to common fear (and, by implication not to fear other things (Ibid 1982: 8).

Douglas and Wildvsky notes that, the social and cultural perception of risk operates within two spectrums, “each socio-cultural arrangement elevates some risks to a high peak and depresses others below sight” (1982:8) Selection of certain threats and hazards and attribution of social forms to these threats is just one side of the coin; the flip side is (groups, socio-cultural and society’s) tendency to ignore and downgrade potential threats. This theory also explains how people agree to disregard most of the potential threats that surround them and interact to concentrate only on selected aspects (1982:9). Thus according to Douglas (1990:10) the evaluation of risk or its outcome is a political aesthetic and moral matter. Cultural theory is important for helping to comprehend the social construction of risk, through processes of value identification and trust building (Ibid 1999).

Douglas (1997) opines that all human activities rely on social construction and warns about confusing the phrase ‘social construction of risk’ as a denial of reality of risk. For instance, the Hausa-Fulani people of Jos North have a number of ‘taboos’ and unacceptable events that were
explored as part of their culture. One of these taboos is a girl getting pregnant and having a child outside marriage. Another one is a girl being sexually violated by a stranger.

Douglas and Wiladvsky theory points directly to the need to pursue two different lines of research on risk; its social selection and construction and its ignoring and denial (Stankiewicz 2008). Most research concentrates on the social selection and ignores the problem of ignoring risk. This study will explore both aspects of the theory as analytical framework. Cultural theory implies that risks are socially constructed; namely, people choose what to fear and how to fear it to sustain their preferred pattern of social relations (Ibid 1982). Hence, cultural theory accounts for the social construction of risk in terms of three interlinked domains

1) The form of social relationships people maintain

2) Cultural biases such as shared values and beliefs including views on human nature, views on society, risk perceptions and so-called myths of nature, which especially refer to biases toward risk event

3) Preferred behavioural strategy (Ibid 1982)

The three domains constitute four systematic different ways of life and a particular outlook on risk: fatalists, hierarchist, individualists and egalitarians.

- Egalitarians favour public participation in decision
- Individualists sees nature as robust and want to make their own decisions
- Hierarchists tends to see nature as ‘robust within limits’ and wants well established rules and procedures to regulate actions.
- Fatalists believes that attempts to control life is futile.

The above views are confirmed and reinforced through social interactions (Bennett et al 2010) Behavioural responses evoke institutional reactions and regulatory changes, which in turn act as agents for new risk management efforts and changes of protective actions. Individuals tend to associate societal harms from famine to sickness to natural disaster with conduct that transgresses societal norms. According to this theory, individuals selectively credit and dismiss claims of societal danger based on whether the risk event is one that defies or instead conforms to their cultural norms. Grid categorizes the degree to which people are constrained and circumscribed in their social and cultural role, while group dimension represents the degree to which the individual’s life is absorbed in and sustained by group membership (Douglas, 1982)
Those with individualistic orientation or low group expect individuals to cater for themselves and tend to be competitive, those with communitarian beliefs assume that individuals will interact frequently …in a wide range of activities in which they must depend on one another, a condition that promote values of solidarity (Rayner, 1992:86). The grid dimension measures the pervasiveness and significance of social differentiation within a worldview. Those with high grid expects things such as opportunities, respect and the likes to be distributed on the basis of social classification, such as sex, lineage descent in a senior clan (Gross and Rayner, 1985:6). Low grid persons value state of affairs in which no one is prevented from participating in any social role, because of their sex, age and family connection (Ibid 1992:86)

Figure 1. ‘Group-grid’ worldview typology Douglas (1970)

Group –grid provides a frugal typology of highly significant commitments that are likely to shape individual identities, and to determine their group-based affinities, in a manner that transcends the scores of associations they might happen to form with like and unlike minded persons (Kahan et al 2007). This indicate that there is a presence of demographic variation in risk perception when individual cultural worldviews are taken into account (Slovic 2010). The group-grid representation of cultural theory of risk, supplies a realistic picture of the types of socio-cultural groups and associated beliefs likely to generate identity forms of cognition.
According to Kahan (2007), Cultural-identity-protective cognition will generate two sorts of variance in risk perception. Individuals holding differing worldviews should disagree with one another when their respective norms clash on the value of a dangerous activity. While individual holding the same worldview will agree. Hierarchical individualistic wo/men in Jos North are experiencing threats to their status because successful professional roles they occupy perhaps overtake traditional patriarchal norms that assign status to women for occupying domestic roles. This status conflict informs political dispute over education and freedom for girls. The free availability of education and professional jobs for women symbolize the ascent of egalitarian and individualist norms over hierarchical ones that celebrate motherhood as the most virtuous social role for women. The social role that child marriage play massages male ego and patriarchy. Accordingly it is individualistic and hierarchical Hausa - Fulani men whose identities are threatened most by policies of child right act, that form the most sceptical attitude about asserted child marriage health and mental risks.

Fuller and Vassie (2004) have accused the theory of ignoring the argument that human behaviour is based solely on the concept of self-interest. A concept that economists and political scientist uses in explaining individual’s drive for financial and political power (Ibid, 2004). However, there is an evidence that culturalist theory of risk accepts the uniqueness of subjective individual positions but predicts a number of cultural biases in the representation of danger, hazard and risk events (Oltedal et al 2004, Slovic & Weber 2002, Tansey & O’Riordan 1999). The theory suggests that, because politics is a collective process (Ibid 1999), then what is important is to understand how groups select and frame risks (Ibid 1999). Cultural theory looks at the relationships amongst human beings and “argues that risks are defined, perceived, and managed according to principle that inhere in particular forms of social organisation” (Rayner, 1992: 84).

Cultural theory has been criticized as an analytical framework. Fuller and Vassie (2004) pointed out that this theory often ignores that people who may be classified to behave in certain way often behave in quite different ways from their expected stereotype in some situations. To them therefore cultural theory should be viewed more as a predictor of the most likely views and actions that may be taken by people. This study has taken note of this weakness and notes that values, attitude and feelings influence thinking and behaviour within groups in different situations. Risk communication always takes place in a social setting, involving various interests, power relations, and actors’ own agenda. However, clarification, understanding and openness can help in communication a specific risk issue (Drottz- Sjoberg 2013)
3.2.3 Linking cultural theory of risk to risk communication

How does this affect risk communication? People assertively regulates their understandings with information about the truth or falsity of those beliefs. People with opposing predisposition seek out support for their competing views through opposingly biased form of information search (Kahan 2012). They construe or assimilate information, whatever its provenance, in opposing ways that reinforce the risk perceptions they are predisposed to form (ibid 2012). Cultural theory is important in this study, as it will help to comprehend the social construction of risk, through processes of value identification and trust building (Ibid 1999).

Even someone whose sense of worth is not invested profoundly in-group membership might treat the views of the group s/he associates with and trust as indicative of commonly held belief. This means that perceived predominance of a belief within a group influences information processing even when a member of that group uses systematic reasoning. In effect according to Cohen (2003), an unselfconscious desire to affirm group beliefs motivates both heuristics and systematic reasoning. Challenges to commonly held group or socio-cultural beliefs can undermine a person’s well-being either by threatening to drive a wedge between that person and other group members. Take for instance cultural-identity Affirmation. This according to Cohen et al is essentially the mirror image of identity-protective cognition (Cohen et al 2007, 2000) Identity-protective cognition posits that individuals react dismissively to information that is discordant with their values as a type of identity self-defence mechanism.

3.2.4 Social amplification of risk framework (SAFR)

The social Amplification of risk Framework (SARF) was devised in 1988 in order to provide a more comprehensive and systematic approach to analysing how risk and risk events interact with psychological, social, institutional, and cultural processes in ways which intensify or attenuate risk perceptions and concerns and thereby, shape risk behaviour, impact institutional process and affect risk consequences (Kasperson R et al 1988, Renn 1991, Kasperson R 1992, Burns et al 1993, Kasperson R & Kasperson J 1996). This framework is designed to integrate the technical analysis of risk and cultural, social, and individual response structures that shape the public experience of risk (Ibid 1988). The social amplification representation has evolved as an umbrella framework that provides ample space for social and cultural theories (Kasperson 1992, Kasperson et al 2003)

The theoretical starting point is the assumption that “risk events” and its experience can be properly assessed through the interaction among the physical harm attached to a risk event and the social and cultural processes that shape interpretation of that event, secondary and tertiary
consequences that emerge, and the actions taken by leaders and public” (Peters & Slovic 1996., Maris et al 1998 Kasperson et al 2003). This theory aims at describing how psychological, social, cultural, and political factors interact to “amplify risk/attenuate risk” and produce ripple/understated effects. The aim of the framework is to get a clear and distinct picture of how people estimate risks and how they make choices in relation to them and thus what influences whether they deem a risk acceptable or not. The approach also focuses on the individual and her way of conceiving risk event (child marriage and its health and mental implications), how our conceptions of risk are culturally mediated, with reference to how these cultures are formed by the social contexts in our societies (identity and power) (Roeser et al 2012)

SARF describes the various dynamic social processes underlying risk perception and risk response (Kasperson et al 2003). The process either amplifies or attenuate risk event. SARF tries to explain those processes by which certain risks or risks events assessed as minor by experts might produce massive public reactions, and even have substantial financial and social impacts (risk amplification), while other risk events assessed by experts as dangerous do not produce anxious reactions, but are almost ignored (risk attenuation). Examples of risk attenuation is smoking and road accidents in developed countries, and gender based violence in underdeveloped countries. Thus in SARF

“Events pertaining to hazards interact with psychological, social and institutional and cultural processes in ways that can heighten or attenuate public perception of risk and shape risk behaviour. Behavioural patterns in turn generate secondary social or economic consequences. These consequences extend far beyond direct harms to human health or the environment to include significant indirect impact” (Renn et al, 1992).

To analyse how the social attenuation processes imbedded in relevant institutions (family, communities, law enforcement, justice system, health system and national constitution) shape response to child marriage and its consequences especially in conflict setting the two known amplification stations will be employed:

3.2.4.1 Social station of amplification/attenuation
According to (Kasperson et al 2003) the amplification/attenuation stations include individuals, social groups, and institutions for example, family, religious institutions, cultural institutions, educational institution, health institution reporters and the mass media, politicians and government agencies or other social groups and their members etc. The institutional structure, functions, and culture influence the amplification or attenuation of risk signals. Even the individuals in institutions do not simply pursue their personal values and social interpretations;
they also perceive the risk, those who manage the risks, and the risk “problem” according to cultural biases and the values of their organization, institution or group (Peters & Slovic 1996, Maris et al 1998)

According to SAFR, psychological, social, and institutional factors influence risk perception and behaviour through a network of socially mediated communication channels. These are either formal (public relations campaigns, community meetings and media, or informal communication channels (word of mouth interaction within social networks (Ibid 2003).

The main thesis of SARF is that information processes of relevant institutions dealing with child marriage, their institutional structures, social behaviour, and individual responses from them shape the social experience of child marriage in ways that either increase or decrease public perceptions and response to it. The response a family and other state institution gives to the issue of child marriage defines to a large extent the structure and cultural influence of such family as well as the institutions. Social stations of amplification/attenuation will analyse how the relevant institutions involved in child marriage attenuation of risk signals affect their response strategies.

3.2.4.2 Individual Stations of amplification
These are affected by psychometric tradition, such as risk heuristics, qualitative aspect of the risk, prior attitudes, blame and trust, cultural group and social units that codetermine the dynamics and social processing of risk (Kasperson 2003).

Risk amplification/attenuation ties reactions to social-cultural, economic and institutional processes as well as the risk events characteristics (Ibid 2003). The framework considers issues such as the stigma associated with a hazard, assignment of blame and the social dynamics within a society in order to understand why a risk might become amplified or under-estimated. Various case studies have shown that events related to hazards dynamically interact with psychological, social, cultural and institutional factors, resulting in amplification or attenuation of individual and social representations of risk and danger (Burns et al 2003). For an effective amplification of a hidden hazard, the ideological stance of the information giver and the positive political position encapsulated by top government officials pronouncements on the topic are valuable (Renn 1991). This will help solve the problem of value identification and trust building between the risk information giver and the receiver of risk information.

The key element of social attenuation and amplification processes is their dynamic nature, coupled with the way in which different institutions constantly seek to transform both scientific
information and policy debates about risk event. To amplify awareness about the hidden hazard inherent in child marriage, a multi-directional communication process should be shaped by the social learning of the producers and receivers of the information. Gender based violence, child marriage and obstetric fistula in this study are considered as significant hazards and risk events subject to social attenuation of risk perception and response in armed conflict prone north-central Nigeria.

Amplification and attenuation occurs in two stages. In the transfer of information about the risk or risk event and in the response mechanism of society (Kasperson et al 1988)

In the first stage of the framework, the message transferred have meaning for the receiver only within a socio-cultural context. In this instance, the receiver of information draws inference about the relationship between the source, the transmitter and the signal (Ibid 2003)

The second stage of the framework deals with intensification /attenuation processes. Kasperson et al (2003) argue that social amplification account for the observation that some events will produce ripples of secondary and tertiary consequences that may spread far beyond the initial impact of the event. Likewise, the social attenuation account for the observation that some high-risk events will produce less or no response.

The attenuated risk leads to behavioural responses, which in turn, results in secondary impacts. Particularly disturbing is that even risk events with major physical consequences often elicit poor public concern and produce extraordinarily meagre social impact, at levels unanticipated by conventional risk analysis (Barnett & Breakwell 2003). As amplification, provide a corrective mechanism by which society acts to bring the technical assessment of risk more in line with fuller determination of risk. At the other end, the relatively low level of interest by public in risk presented by significant hazards as indoor radon, driving without seat belt, (Ibid 1988) allowing girls whose pelvis are not well developed to marry and bear children serves as examples of the social attenuation.

Highly appreciated social and cultural value may increase the victim’s tolerance for weak evidence as well as reduce the victim’s rejection of strong evidence. A prestigious/trusted communication/information source can compensate for trivial factual messages (Ibid 2003). Thereby influencing the behaviour of an individual and his/her group. Behavioural patterns generate secondary social or economic consequences. These consequences extend far beyond direct harms to human health or the environment to include significant indirect impact (Burns et al 1992, p 139-140)
3.2.4.4 A structural description of social amplification/attenuation of risk

Figure 2. Conceptual framework of SARP adapted from Kasperson et al 1988
This theoretical framework is grounded in ripple effect. The rippling of impacts is an important element, which suggests that the processes can extend or constrain. It also points out that each order of impact, or ripple, may not only allocate social and political effects but also trigger or hinder managerial intervention for risk reduction (Kasperson et al 1998, Kasperson et al 2003).

In this framework, the ripple effect starts from the risk event. The interaction between risk event and social process makes clear that, risk has meaning only to the extent that it treats how people think about the world and its relationships (Ibid 1988). The information system and characteristics of public response that compose social amplification or social attenuation are essential in determining the nature and magnitude of risk events (Ibid 1988). If the risk event is attenuated/amplified, it will affect the event characteristics and information flow, about the identified characteristics. The information system may amplify or attenuate risk event in two ways: by intensifying or weakening signals that are part of the information that individuals and social groups receive about a risk event or a social problem. There are several key amplification steps, but for this study, the important amplification and attenuation steps consist of:

- Attaching social values to the information in order to draw implications for management and policy
- Interacting with one’s cultural and peer groups to interpret and validate signals
- Formulating behavioural intensions to tolerate the risk or to take actions against the risk event or risk event manger
- Engaging in group or individual actions to accept, ignore, tolerate, or change the risk (Ibid 1988)

How dangerous a risk event is portrayed shapes the signal with which the event will both be interpreted and responded to. If the interpretation is positive, the acceptance of such risk event will increase, if it is negative, people will respond with rejection of such risk event. The rejection and acceptance of risk events impacts how it is often responded to in different societal institution. In this study, the acceptance of child marriage in Nigeria has impacted the application of child right act and has also influenced response to the consequences of child marriage.

This framework will help in understanding the interaction for different risk events for different social experience and for different cultural groups (Ibid 1988). Many risks are not experienced
directly, in which case, individuals becomes aware of such risk events from other people or through the media/local news channels. The channels of information risk events flow through, informal personal network, through a group network, through socio-cultural norms and through the media. The information regarding a risk event often helps in shaping people’s perception about it.

This theoretical framework has been criticized following challenging questions as regards its key elements (Rosa 2003). SARF distinguishes, on one hand, between “true” or “objective“ risk and, on the other hand, subjective risk and that subjective risk due to amplification distortion, virtually always deviates from true risk. An amplification or attenuation process, effectively captured in the SARF, intervenes between risk and our knowledge of risk. Consequently, Rosa (2003) opines that the epistemology of risk comprises a continuum ranging from realism/objectivism to relativism/subjectivism.

This study has included both proactive and reactive measures influencing child marriage and fistula disease. Proactive impact is prevention, which can be done through policy implementation and effective risk communication strategies. The second impact revolves around reactive measures, such as bringing perpetrators to justice, provision of functional health services for pregnant young girls during pregnancy and childbirth. Giving voice to the problem of fistula, by providing a platform for victims to air their view. See chapter 5.
4.0 RESEARCH DESIGN AND METHODOLOGY
This chapter looks at the design and the methodology of the research. It started with the exploration of the social constructive philosophical strands adopted in this research. The chapter explained the case study research as a scientific inquiry and its appropriateness for studying socio-cultural factors that shape evaluation and response to child marriage in the studied communities of this study. It also explained the tools and the methods employed in the collection and analysis of the data for the study. The study used tools for data collection such as, interviews, focus group discussion, field notes and non-participant observation. This chapter also explained the concepts of validity, reliability and ethics as they affects the data collected in this study. Before discussing the methodology of the study, it is useful to detail the philosophical assumptions that guided this research. These philosophical positions helped form the critical element in the design of my research, especially the specification of the questions which I answered (Blaikie, 2007).

I adopted social constructionism, because it enabled me to explore and understand socio-cultural phenomena and the existing constructed social world and its interpretation by the people in Jos North communities in Nigeria (Andrews 2012). Even though I acknowledge the existence of multiple individual understanding as the people in the studied communities differently construct and interpret risk events and social issues, there is relative consensus in the knowledge and interpretation that exist within them (Guba & Lincoln 2006). Social constructionism philosophical standpoint focuses upon tangible realities and participants socially constructed realities (meaning making, sensemaking, cognitive and emotive activities) (Lincoln 2001). It emerged over three decades ago and has been associated with qualitative research with its origin in sociology (Andrews 2012). Its focus is on re-distribution of power via information sharing activities by inquirers with and among stakeholder (Ibid 2001). The terms constructivism and social constructionism tend to be used interchangeably under the generic term constructivism as noted by Charmaz (2006). However, constructivism proposes that each individual mentally constructs the world of experience through cognitive process while social constructionism has a social rather than an individual focus (Young and Colin, 2004). In trying to make sense of my participants interpretation, I acknowledge that social constructions view knowledge as constructed as opposed to created as such meaning is shared, thereby constituting to taken for granted reality (Ibid 2012). In applying, this epistemological worldview I consent that there is an objective reality, but concerns my study with how knowledge is constructed and understood. As required by the applied worldview I focused on
the historical and cultural setting of participant’s and acknowledges that their background shapes interpretation (Ibid 2012).

4.1 RESEARCH DESIGN
In order to make findings on the socio-cultural norms that shape interpretation, evaluation and response towards child marriage, I had to design a working document. This working document according to Blaikie (2010) is meant to provide a detailed account of how a social science inquiry will be carried out. For a successful enquiry, there are certain elements that are required in research design to enable the researcher arrive at the result. These elements are research problems to be investigated, method and strategies of solving the research problem (Ibid 2010). A good research design is the conceptual structure within which research is conducted; it constitutes the blueprint for problem formulation, collection and analysis of data (Kothari 2004). The selection of research questions and research strategy will thus influence the data selection, data collection, data reduction and data analysis. Vogt et al (2012:3) echoes the fundamental implication of research design and how everything ultimately flows from the design choice. They conclude that, design choice is the one most closely tied to the research questions and theories.

Pinpointing the research question is the methodological point of departure in any social science research, because it is through answering the research question that the research problems will be solved. The questions are needed to define the nature and scope of the research, while at the same time acts as a guide for appropriate research strategies and methods of data collection. Blaikie (2010), grouped research questions into “what” question “why” question and “how” questions. The type of questions chosen will define the whole research process; guide the researcher’s argument and inquiry. In other words, all data collected should be linked to research questions, even in cases where the research questions are being modified as the research progress (Veal and Darcy 2014:376). Research questions should also be correlated with the method and research strategy chosen. This study is focusing on the ‘what’ type of questions.

Research have different purposes of study. Knowing the purpose of study will determine whether the study will be, descriptive, evaluative, understanding, exploratory or combination. Further planning is difficult without knowing this critical information since it determines all of the following steps in the research project (Blaikie, 2010). The purpose of this study is to explore socio-cultural norms and experiences that shape awareness, evaluation and response to child marriage and fistula disease.
4.1.1 The Case study Design

My research design is exploratory, single case study, which is coherent with the purpose of the study. Blaikie referred to this design as understanding in nature (Blaikie 2010). The case study according to Yin (2003) investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not evident. This type of design copes with the technically distinctive situation in which there will be more variables of interest than the data points out and as one result. Case study relies on multiple sources of evidence. It benefits from prior development of theoretical propositions to guide data collection and data analysis (Yin 2013). While limited in the lack of generalizability, case studies “provide a method to investigate a contemporary event involving risk within a real life context, and they contribute to enhanced knowledge of complex social phenomena” (Sellnow, Ulmer, Seeger & Littlefield 2009:54).

Case study approach was adopted with the intention to understand the complex socio-cultural phenomena presented by this inquiry. Owing to the complexity of the variables involved, this research retain a meaningful characteristics of real-life events for achieving good data collection and analysis of child marriage and fistula disease that is prevalent in North Central Nigeria (Yin 2013, Burns 2000). The focus of investigation in this thesis is directed towards child marriage and its health implications in Jos north Plateau state of Nigeria. I want to explore why child marriage is still prevalent in Jos north despite numerous studies suggesting that it is one of the leading cause of fistula and maternal death in developing societies. The study approach focused on communities in Jos North, which were investigated as a unit because of shared, socio-cultural features.

Jos North communities in Plateau State are selected from many other communities and Local Government Areas (LGA) such as Mangu LGA, Kano State, and Bauchi State etc. Jos North was purposely selected based on the protracted ethnic religious violence plaguing the communities. The LGA has different ethnic communities laying claim to indigeneity of the place (Higazi 2011). At the period of the research, it is still viewed as a fragile LGA and prone to conflict, where a little incident could lead to major crisis.

Due to the nature of the research design highlighted in this thesis, the appropriate research strategy would be inductive and adductive. There are different elements of abductive strategy that will be ignored due to the nature of the thesis. This choice is based on underlying factors guiding the inquiry. The topic is looking at a phenomenon that has been researched severally but from risk communication perspective.
Communication within a socio-cultural context impacts interpretation, evaluation and response to a risk event. The relevant theories for this is the risk communication perspectives, focusing on cultural risk and social amplification of risk approaches. In general, cultural risk theory will be based on social and cultural norms and experiences, while social amplification of risk framework will look at how risk is amplified or attenuated by the channels and processes it goes through. Thus in the complex communication context of risk communication, one research methodology is particularly appropriate, due to its capacity to explore, describe, or explain the dynamics of the situation. The case study approach to research in social science is a fitting method for identifying the interaction between individuals, messages, and context. “The case study method allows investigators to maintain the holistic and meaningful characteristics of real-life events” (Yin 2013:2). It works well to identify best practice for risk communication because individual situations are defined or isolated. Relevant data are collected about the situation, and the findings are presented in such a way that a more complete understanding is reached, regarding how communication and messages communicated shape interpretation, evaluation, and responses from those in similar socio-cultural context.

This study employed child marriage and its health implications as it happens in Jos North Local Government Area as a case study. A five-week fieldwork was conducted in Jos North, Plateau State of Nigeria. This study aims at depicting how social-cultural factors impacts people’s interpretation and response to child marriage and its health implications, especially fistula disease. Though it is a study in gender based violence, the aim is to view how socio-cultural factors affect risk communication strategies that shaped risk interpretation and response to child marriage and fistula disease. It is often easier for people to act based on their interpretation of information available and known to them.

4.2 RESEARCH SETTING
The situation in northern parts of Nigeria especially, Plateau state has created ethnic and religious tension between different socio-cultural groups. Jos as a city has been under tension since 2001. From 2001 to date there has been different violent armed conflicts between, different socio-cultural and religious groups. Some places have also been subjected to suicide bomb attacks. There is always the fear of not knowing when the next attack will occur for strangers like me, residents however carry out their daily activities. Discussing the issue of child marriage and other gender based issues proved a lot more difficult than anticipated, especially within the socio-cultural community in Jos Plateau State that felt that their culture was under attack. It turned out that different socio-cultural and religious groups are more protective of
their practices from others than I earlier anticipated. I was meant to understand that people listen to information if they trust the source of that information, especially if it is from the locals that understand their situations. I therefore employed the help of community leaders. The women were initially not willing to talk to me, until their community leaders assured them that I meant no harm. Before embarking on this field study, I anticipated that getting male participants was going to be problematic, while getting women to talk about gender based violence will be easier. It turned out that men were easily assessable than women, though not without help from community leaders.

4.2.1 My position in the research
I anticipated some challenges in the North central region especially in Jos city, due to protracted crisis that has plagued the city since 2001. In the first week, I carried out my activities with fear based on two things; firstly, being an Igbo (from the south-eastern part of Nigeria) I feared that I will not be welcomed to research on a sensitive topic such as child marriage; secondly, coming from Norway, I feared that I might be perceived as having a lot of money and therefore become a target of robbery or assault. Fortunately, none of the above feared incidents took place.

Before I went to Nigeria, I made contacts with friends who live in Jos and other towns in Plateau State, and was assured that the situation was not as it has been portrayed in the media, as people still go about their daily businesses. I knew I could communicate in English, Nigeria’s official language, but feared I could meet people that will be more comfortable with native/local language. The nature of conflict in Plateau State constitute a risk and safety issue for non-residents like me. Through the help of my guide and community leaders, peaceful areas were selected for observations and interviews. As part of precaution, I visited each village with a local guide, who were introduced to me by the my informant via the community leader. My guide, whom I met through a friend, introduced me to the community leaders. Both the guide and my friend are from different ethnic and socio-cultural groups in Plateau State. My guide however, has an ethnic and political affiliation to the Hausa socio-cultural group, which made it easy for him to introduce me to the community leaders.

4.3 RESEARCH METHODOLOGY
Using tools adapted from qualitative research methodologies, I set out to observe, conduct focused group discussion (FGDs) and individual semi-structured interviews. I recognize that to give expression to multitude of complexities and interconnections of risk communication, risk interpretation and risk response, I needed to confront wide view of social-cultural factors. These social-cultural factors are embedded in values, beliefs and assumptions that influence risk
communication and influence risk interpretation, evaluations and response. Even though I acknowledge the existence of multiple ‘understandings’ as people in particular socio-cultural groups differently construct information and interpretations that shape their behaviour and response, there is relative agreement in the knowledge and behaviour that exist within them (Guba and Lincoln, 2004). I interpreted these social realities from their stances and beliefs. This I did by getting primary data such as interviews, focused group discussion (FGD) and observations from the field, meanings and explanations by seeking for clarification and probing for confirmation to ensure a better understanding of child marriage prevalence in the communities visited. The extent to which the community members view child marriage as a practice with right and health implications was also determined.

The socio-cultural factors implicit in risk communication and its impact on risk interpretation, evaluation and risk response constitutes the primary focus of this research. I set out to assess how this dynamic has influenced the prevalence of child marriage despite its physical and psychological implications using qualitative research method.

4.3.1 Qualitative approach
Qualitative research is a broad approach to the study of social phenomena (Marshall & Rossman 2011:3). I adopted qualitative approach because of its phenomenological position which allowed me to gain insight into people’s interpretation of child marriage and fistula within the socio-cultural context of the communities studied (Flick, 2002). This method of research may be defined as any data-gathering technique that generates open-ended, narrative data or words rather than numerical data or numbers while quantitative approach vary greatly from the former by using small set of closed-ended definitions generated by RDs in a multiple-choice survey questionnaire (Monsen & Horn 2008:65). Qualitative research enables researcher to ask new questions, answer different kinds of questions and readdress old questions, aiming to yield data that are richer in description and presumably, deeper in insight and understanding than closed-ended quantitative measures (Monsen & Horn 2008:66). The main intention of qualitative interview is not to compare cases/units but to get access to actions and events that are viewed as relevant for the research/study. Access to the single respondent and the way he or she views the world is central (Ryen 2002:85). If the researchers “goal is to describe something, understand something or develop new perspectives, it is common to use qualitative data collecting techniques” (Johannessen, et al, 2004). A qualitative study brings the researcher closer to the respondents both physically and psychologically. It is therefore important for the researcher to have a reflexive attitude in order to provide a good analytical interpretation for
the empirical data. Reflexivity is a competence and “is based on the belief that a researcher cannot be neutral, or objective, or detached, from the knowledge and evidence they are generating. Instead, they should seek to understand their role in that process. Indeed, the very act of asking oneself difficult questions in the research process is part of the activity of reflexivity” (Mason 2002: 7 Blaikie 2010: 53). It yields significant findings and is a viable means of problem solving in the field of social science (Monsen & Horn 2008:74). Another reason for adopting qualitative approach is due to the complexity that underlines risk communication among community members and between community members and risk management professionals.

The obvious limitation of qualitative case study research is that generalization cannot be made from any one data set to larger populations; it is also difficult to compare qualitative studies because they are context bound. Data analysis in qualitative study tends to be time consuming and tedious. The two main methods of conducting qualitative research is through observation and interview.

4.4 DATA COLLECTION
This section discusses the forms of data collection tools while on the field. My fieldwork was conducted between 29th March to 3rd May 2015. The primary data collection employed; purposive sampling, case study approach, qualitative semi-structured interview, focused group discussion and non-participant observation.

The sampling of respondents and informants is based on relevance to the research topic rather than their representativeness (Neuman 2000). I adopted a purposeful sampling strategy, which would allow me to carefully select individuals who have direct relevance to the subject of study. The aim was to interview the socio-cultural groups directly affected by child marriage to find out the factors that shape interpretation, evaluation and response to child marriage, a strategy labelled by Babbie (2008) as purposive sampling. Purposive sampling is employed on the basis of knowledge of the population, its elements and the purpose of the study. This method is overtly subjective, but useful for typical case sampling. With the use of purposive sampling, respondents with typical characteristics are selected due to good evidence that they share the same characteristics of the population and the socio-cultural group being studied (Calmorin and Calmorin 2007). It is worth noting that I exceeded the pre-planned number of respondents and participants. The initial plan was to sample 12 parents 6 fistula victims, and 3 informants from three institutions, but when I heard that more parents and more fistula victims were willing and ready to participate, I utilized the opportunity. This made my sampling quite opportunistic, but relevant.
Within the whole period of this research, documents such as reports, government papers, publications (books, journals, policy papers) and other relevant documents relating to the topic of study were sought from university library, state library, research centres, online libraries, and government offices. These documents are of immense help in critical exploration and analysis of the subject matter on socio-cultural factors impacting interpretation and response to child marriage and fistula disease in Jos North.

In this study, I interviewed 24 parents, 1 fistula surgical doctor, 1 law enforcement officer, 1 family Judge and held a focused group discussion with 12 fistula patients. Among the 24 respondents interviewed (12 men and 12 women), 10 respondents are parents to fistula patients (5 men and 5 women). While the other 10 respondents have given their children to early marriage. 4 parents however were not victims of child marriages and thus have their girls in university and were against given them out in marriage. 2 out of all the 12 women interviewed got married after the age of 20. 2 of the male respondents married their wives after the age of 20, while they themselves were not very older than their wives. Among all the respondents, 3 out of 12 men have educational level below secondary school. 6 men among the respondents have higher education 3 have university degrees. Among the female respondents, only 2 have more than Koranic, primary school and secondary school education. 2 women have higher education. Another 2 have secondary education, while the remaining 8 have either Koranic or primary education.

Among the 12 fistula patients, 8 got married before the age of 18. The average age of the 8 patients was 15.5. The other 4 patients developed fistula as a result of poor maternal health. In total, group or individual interviews was held for 39 persons. 36 of the respondents are from Plateau state representative of the Hausa, Fulani, and Anaguta communities, including 3 informants from other socio-cultural groups also in Plateau State. Purposive selection of the respondents seemed as a useful approach due to the element and purpose of the study. Jos north LGA is home to different socio-cultural groups, but not all the groups support and endorse child marriage. For valuable answer to the research question therefore, the socio-cultural groups involved in practice of child marriage are purposively selected. The qualitative semi-structured interview was deemed necessary as it fits into the structure of the study. Below is the table representation of the category of the respondents and the informants.
Table 2. Semi-structure personal interview and FGDs by category conducted Between 30th March to 3rd May 2015

<table>
<thead>
<tr>
<th>Category</th>
<th>Number interviewed</th>
<th>Average age</th>
<th>Ethnicity</th>
<th>Average age of marriage for females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men who have daughters that are victims of fistula disease</td>
<td>5</td>
<td>60</td>
<td>4 Hausa, 1 Fulani</td>
<td></td>
</tr>
<tr>
<td>Men who have given their daughters early in marriage, but they are not victims of fistula</td>
<td>5</td>
<td>59</td>
<td>2 Hausa, 2 Fulani, 1 Anaguta</td>
<td></td>
</tr>
<tr>
<td>Men who have not given out their daughter early in marriage</td>
<td>2</td>
<td>46</td>
<td>1 Hausa, 1 Anaguta</td>
<td></td>
</tr>
<tr>
<td>Women, who married before the age of 18 and are mothers to victims of fistula disease</td>
<td>5</td>
<td>45</td>
<td>4 Hausa, 1 Fulani</td>
<td>15</td>
</tr>
<tr>
<td>Women who are married before the age of 18, whom their married young daughters are not victims of fistula</td>
<td>5</td>
<td>50</td>
<td>2 Hausa, 2 Fulani, 1 Anaguta</td>
<td>16</td>
</tr>
<tr>
<td>Women who have not given away their daughter to child marriage</td>
<td>2</td>
<td>48</td>
<td>1 Hausa, 1 Anaguta</td>
<td>22</td>
</tr>
</tbody>
</table>
Fistula disease patients, who are victims of child marriage & 8 & 35 & 4 Hausa, 3 Fulani 1 Anaguta & 15.5

Fistula disease patients who are not victims of child marriage & 4 & 23 & 2 Hausa, 2 Anaguta & 20

Law enforcement & 1 & 40 & Jos North LGA (Hausa) &

Justice System & 1 & 50 & Jos North LGA &

Health care professional & 1 & 44 & Mangu LGA &

4.4.1 Interview

Interview is a common data gathering method in qualitative research. It is an interaction between two or more individuals with specific purpose in mind (Kumar, 2005). Interview method in qualitative research seeks to uncover the perceptions, positions and experiences of the participants (Dawson 2002). I chose semi-structured interview method for this study, since it was the most appropriate, given that I wanted to find good informative answers as well as give the interviewee the opportunity to angle their opinions, experiences and interpretations of child marriage and its health implications. Semi-structure type of interview is recommended if the researcher “want to know specific information which can be compared and contrasted with information gained during the interview” (Dawson 2002:28). It requires the interviewer to have designed and phrased interview questions and topics of interest beforehand. I used an interview guide, with predefined questions, but kept the dialogue with the interviewee, open for unanticipated relevant information. Most of the interviews were recorded, but on some occasions, I took notes. The same questions were asked to all the 24 respondents (the parents). For the key informants, the same questions were used for law enforcement and justice institution, while a different question was used for the informants from the health care system. The same questions were used in the (FGDs). A more survey-characterized semi-structure was used to avoid the problem (Andersen, 2006) refer to as pure conversation based interview, which is often too unsystematic and open. I used three different interview guide, one for the 24 respondents from the communities, one for the two informants representing the two institutions.
(law enforcement and justice system) and one for one informant representing the health care professional.

The interview guide was structured to cover the following topics (a) socio-cultural norms and experiences that influence child marriage (b) The impact of these cultural norms on how risk event is communicated to shape interpretation, evaluation and response to risk event. There was different interview situations and two languages used for the different situations. Some of the respondents and informants were interviewed in English language, while others were interviewed in Hausa (one of the three major languages in Nigerian)

4.4.2 Focused group discussions (FGDs)
Another aspect of fieldwork data gathering was conducted through FGDs. I conducted 1 FGD with 12 fistula patients. All of these patients developed fistula as a result of protracted labour. 8 are victims of child marriage and the other four developed fistula due to poor maternal health care. The aim was to gain insight into the extent to which child marriage, contributes to fistula disease and the social, and psychological implications of having such an ailment. The focused discussion was conducted at the VVF centre. Efforts were made with help from health care professional to select victims from Jos North LGA. The focused group discussion centred around socio-cultural factors that influences people’s perception of fistula and the practice of child marriage.

4.4.3 Non-participant observation
The research also employed non-participation observation in addition to the two main data collecting instruments used. Non-participant observation refrains from intervention from the field (Flick 2002) In the course of the interview; I visited 9 socio-cultural communities. On few occasions I witnessed assaults on women and unmarried girls. In one instance, I was buying a ‘roasted corn’; while a woman, who had already bought hers was standing beside me and eating her roasted corn. A boy/man (not sure which) came out of nowhere and snatched the ‘roasted corn’ from the woman. When she threatened to call her husband, the boy/man indicated that he did not know that she was married and apologised to her. Other observation included women being escorted by their sons or male relatives, even to scheduled interviews. On one occasion, it took my guide about 10 minutes to convince a respondent’s husband to leave the interview room. He only agreed to leave, if I was going to be alone with her, without the presence of a male. She was not allowed to show certain parts of her body (her face) to a male outside her family. In another incident, a bus driver asked me go down, because he wanted to carry men, that were not willing to sit together with a me (a woman). When I probed to know the reason
why they would not share the bus with me. The driver simply ordered me to leave his bus, without explanations. All the incidents relevant to the study were noted down in my diary as soon as I observed them.

4.5 DATA ANALYSIS STRATEGY
Data analysis involves a number of stages; data management, generation, interpretation and presentation (Yin 2009). In this study, the process of data analysis started with data management. This process facilitates inspection of the data for representative and coherence with the research question. The field notes and audio tapes were used for reference during the period of writing. A detailed review of the result was carried out with the purpose of identifying recurring responses to questions. The next stage was to generate relevant data for the study. The interpretation stage is an integral and important stage of data analysis about the socio-cultural factors that influence the interpretation and response to child marriage and fistula disease. The themes that emerged from the data, were gender bias, poverty, security, cultural beliefs and misconceptions, trust between the source and receiver of information and stigmatization. I compared the themes developed to ensure that they were suited to answer the two research questions posed in chapter 1.3. The entire process of data analysis made it possible to develop consistent explanations based on the research questions and analytical framework for interpretation and representation (Creswell, 2007)

4.6 VALIDITY AND RELIABILITY
Reliability and validity are important when it comes to issues of accuracy for both quantitative and qualitative research (Silverman 2001). Validity in research is related to developing the understanding of the qualitative data. The question of validity centres around the issues of ‘accuracy in asking the right questions’; accuracy in terms of the precision and details of the data; accuracy in the truthfulness of the information gathered; (Denscombe 2002). This is why some researchers question the degree of validity of a qualitative research method. Description of social reality is based on the researcher’s ontology; it is therefore difficult to produce a complete picture and understanding within the interpretative approach. To ensure validity the questions asked were drawn from the research question, which the research was proposing to answer, thus allowing the conclusion to be traced to the research question. Field research validity can be threatened by the number of period available for observation and interviewing. I found this one the challenges I encountered. During the collection of the interview data, validity with regards to the interviewer’s credibility and the quality of the respondents is important. I tried to make the interview situation, relaxing for the respondents to enable them
give a truthful account of events. The transcriptions of the interviews constituted a little challenge due to conceptual validity. Some of the participants spoke a different language that might have been affected when translated. I however called the respondents to ensure that my transcription is a representation of their opinion. The data is thoroughly analysed to get the correct interpretation. What may be perceived as the negative aspect of the use of qualitative interview method is that, the respondents must answer directly without a large degree of reflective answer. In this study, I repeated certain questions to ensure, that the respondents and key informants, gave an account they consider accurate. This study as a qualitative inquiry is not designed to be statically representative for generalization. The result generalized its finding to risk communication and socio-cultural factors affecting impact. The availability of different documents from other secondary sources with similar information was helpful in cross checking for accuracy.

Reliability of a qualitative enquiry relates to whether the same result can be achieved if another study is conducted using the same methods of research. The issue of reliability has been debated in social science as it concerns data collection through qualitative method. For Demarrais, interviews appear more complex than most researchers think because “even questions that are apparently simple in both structure and topic leave much room for alternative interpretations by both interviewer and respondent” (Demarrais, 2004:54). Reliability may be complicated in qualitative research, because the researcher will have an influence on the interviews. Reliability questions the data’s credibility. To achieve reliability in this study was a detailed description of the methods employed in the research during the preparation for field work, data collection process, transcribing, analysis and presentation of research findings (Ritchie and Lewis, 2003) Reliability is described as the consistency with which cases that are assigned to the same categories, and if different observers or the same observer on different occasions find the same results (Silverman 2001). To ensure reliability I tried my possible best to explore, explain, describe and carry out the research process in an honest, trustworthy and reliable way. I also worked hard to limit the biases to the absolute minimum by interviewing the right participants and making sure that my personal opinions are kept in check. This study attempts as much as possible to present the research in an honest and transparent manner. To ensure this, I always made sure that the questions were clear to the participants who took part in both the interview and FGDs.

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4.7 RESEARCH ETHICS
Research ethics specifies the way researchers ought to conduct themselves when they investigate (Shkadwe-Frechet, 1994:2) They refers to a complex set of value, standards and institutional schemes that help constitute and regulate scientific activity. This research is based on the National Committees for Research Ethics in Norway (2006). A good scientific inquiry is based on general ethics of science; just as general ethics is based on common-sense morality (NESH 2006:5). My adoption of NESH ethical guidelines was to help me in observing the rules of confidentiality, free and informed consent, objectivity and accountability. Two broad categories of ethical problems arise in connection with scientific research: those related to process and those related to products. These ethical responsibilities are partly associated with standards related to the research process, which includes relationships between researchers, and partly with respect for the individuals and institutions being studies, including responsibility for the use and dissemination of the research (NESH 2006:6). This means that norms should be regulated as it concerns the subject and object of study as well as the research process.

Social science researcher have access only to those investigated through communication, including interview, discussion and document analysis. To discuss and analyse those investigated, the researcher must have access to respondent’s language and tradition (Ibid 2006). I tried as much as I could to identify with the participants. The researcher is also bound by ethical standards to obtain free and informed consent based on the tradition of those participating in the study. In the communities, I studied, a word of mouth is considered as biding and a signed consent. In certain cases, participant’s freedom and self-determinations can be respected, even though consent has not been obtained beforehand. This is done when the individuals are not directly participatory in the study as in this study, people not directly involved where mentioned.

Ethics deals with norms and rules about what is right or wrong. Simply put ethic’s primarily concerns how People treat one another. “Ethical issues arise when research directly affects people, particularly in relation to data collection, be it through participant observation, interviews or experiments”(Johannessen et al, 2004:89). Qualitative research, especially the qualitative interviews, faces a lot of ethical challenges (Dalen, 2011). Some of these challenges are in relation to the respondent's right to privacy, correct transcription of the collected data and consent and trust between the various parties. Nevertheless, it is important to point out that the question of ethics does not only apply during the actual interview, but during the whole research
process (Ryen, 2002). The respondents in this study are presented anonymously as it concerns their personal experiences and the contribution that will be made to the subject of study. To ensure the anonymity of the 3 key informants, I decided not to mention the location of their institutions.

The research has ensured that no falsification or inventing of evidence occurs at the point of transcription and analysis. I did this by affirmation of unclear issues from respondent and re-examining of raw data, to avoid engaging in fraudulent practices and scientific misconduct (Hulley et al 2013).
5.0 KEY FINDINGS AND ANALYSIS

Consequently, I embarked on the field research process with two sets of interrelated questions.

1) What are the socio-cultural norms and factors that shape child marriage interpretation, evaluation and response?

2) What channels of risk communication influence amplification/attenuation of child marriage practice?

In this section, I present the key findings of the field research carried out in the study location. Where possible, I will triangulate qualitative information obtained during the field study with data source available on the subject matter. For purpose of clarity, the empirical findings will be used to analyse the research questions divided into two parts. The first part will describe the socio-cultural factors that influence people’s interpretation and response to child marriage and other gender based violence. This empirical data will be used to access the claim that socio-culture factors shape child marriage interpretation and response. The second section will detail the risk communication channels, both among the communities and between the communities and the health care professional. To assess the claim that channels of risk communication influence amplification/attenuation of child marriage practice and its health consequences respectively. Child marriage and its physical and psychological implication are negotiated and attenuated within socio-cultural context, often leaving the professionals messages in limbo.

5.1 What are the socio-cultural norms and factors that shape child marriage interpretation, evaluation and response?

In order to comprehend the role of socio-cultural factors in managing a social problem (risk event management) and thus what implications these socio-cultural factors have on prevalence of child marriage, we need to list these socio-cultures factors and analyse why people conform to cultural hegemony. In the analysis of socio-cultural factors that shape child marriage from the perspectives of the parents in the studied communities, four themes emerged related to cultural preservation, gender relations, conflict and economic status.

Among all key respondents, there was a clear recognition of the pervasive of traditional/cultural gender bias in communities, which involve, domestic violence against women, girls marrying early, instead of going to school. These gender biases are tied to weakness of the female gender, her fertility and ability to have children, her honour, family honour and her community honour. While boys and men are expected to work and provide for the family. Girls are expected to emulate their mothers whose place are in the kitchen, and whose task is to bear children. The women are also expected to be obedient and submissive to their husband, and men were
expected to make all the decisions and protect their female folk. Among most of the key respondents, child marriage is not regarded as an abuse against the young female. They (some respondents) regard it as a function meant for the girl child, which is rooted in their culture.

5.1.1 CULTURAL PRESERVATION
Purity and chastity before marriage.
To preserve the practice of child marriage, my respondents expressed the significance of chastity, honour and women fertility. These norms are built around the belief that a girl should be married early and as a virgin within their cultural context. Among my respondents child marriage is practice imbedded in their culture handed over to them by their ancestors. To ensure the continuity of this practice, certain norms and actions are encouraged, while others are discouraged. There is a strong emphasis on the age of marriage for the girl child to ensure the maintenance of chastity and family honour.

*If a girl marries as a virgin, there is often a special praise to the family, especially the mother for raising her daughter with honour and dignity (50- year old housewife)*

*We give out our daughters early in marriage, because we do not want them to bring shame to themselves and the community (57-year-old businessman)*

A girl is expected to marry as a virgin for the maintenance of the custom of chastity. Thus, parents insists that, the tendency of a girl marrying as a virgin is much higher, at a younger age than at an older age. This can be due to the fear of stigma attached to premarital sex and associated family honour. Certain behaviours are considered unacceptable both from the girl and from her entire family. Acts and behaviours such as promiscuity, a girl having sexual intercourse outside marriage, or a girl having a child outside marriage. To avoid the girl exposure to unacceptable behaviours, marrying her early is considered a better option. They describe some situations where girls and their families have been disgraced because the girls were found not to be virgins, after their marriage. It often takes the help of the husband to prevent such humiliation. Those not married as virgins are not respected as much as those that achieved that fit. The woman (the mother of the girl) in so many occasion has had to shoulder the blame of letting her daughter become promiscuous.

*My sister was humiliated and sent packing by her husband when her daughter’s husband told people that she was not a virgin as expected. Everybody blamed her because she was the one that stopped her from marrying at an earlier age (55-year-old housewife)*

They acknowledge that some men cover up for their wives, even when they discover that the chastity norm has been broken. The number that do that is not significant.
When I was introduced to my young wife, she told me she was no longer a virgin; I did not believe her at first. I later discovered that she was telling the truth. I could not bring myself to expose her shame. I just divorced her and told her parents and my people that I was no longer interested in marrying her (45-year-old civil servant: male respondent)

When a girl child attain certain age or size, she becomes exposed to boys and men that will exploit her sexually and make her promiscuous. Because we view promiscuity as a taboo, to prevent it, it is advisable to marry the girl early. (60-year-old businessman)

Respondents recounted witnessing a couple of girls who were exposed to sexual violence at a matured age. Thus, they perceive matured girls to be more susceptible to promiscuity, than young girls are. Accordingly, their response is preventing a girl from becoming promiscuous by engaging in child marriage, which is interpreted, as acceptable within their socio-cultural context. As for matured girls, their situations within their culture is describes by the respondents as shameful and humiliating.

*Matured girls are not respected; people always ask them about their husbands to humiliate and remind them about what they have missed. Men can do anything to them, since they know that there is no husband to protect them. Nobody wants to see her daughter suffer like that* (60 -year old businessman)

**Childbearing capability**

According to my respondents, another reason they think a girl should marry early is for her fertility. Early age of marriage they opines maximizes the girl’s childbearing potential. Childbearing is an important element in the life of a married woman. Most of my respondents (mostly men) are of the opinion that a girl that marries at a later age might not be able to have children for her husband. Any woman that ends up without a child because of her matured age will lose her place in her husband home and would be viewed as a failed woman.

*Age, plays a big role in our (women) fertile and childbearing capability. Our women bear more children, because we marry them early and they start having children early* (a male respondent: 60-year-old politician)

To them there is a huge difference between marrying early and not having a child and marrying late and not having a child. When a girl marries early and fails to conceive, the problem is blamed on bad luck or act of God, but when a girl marries late and fails to have children, it becomes a different case. Respondents recounted a situation where a matured girl was unable to give birth to a baby, despite the proof from her husband that he married her a virgin.

*Both of them were disgraced, people claimed that her husband lied about his wife’s chastity to the people. It was a terrible incident for the couple* (55-year-old housewife)
Mothers and fathers do as much as they can to marry off their daughters early, when she is considered pure, to avoid the humiliation the girl will go through, if she becomes unlucky with child bearing.

5.1.2 GENDER RELATION
The gender relation dominant in the socio-cultural group’s way of life is that which views a father as the breadwinner and the decision maker and the mother as a wife and mother. The ideal woman is non-assertive and respectful to her husband and her husband’s family. Her role is mainly confined to bearing and taking care of children, cooking and other household tasks. By virtue of dowry having been paid for her hand in marriage, she is considered the man’s property. Her female children are also expected to follow this tradition by marrying early and having their own children. Among the female respondents, child marriage is a method used to reinforce the marginalising the women folk and limit young girls chances of development and challenging the status quo.

_I was told several things when I insisted on finishing secondary education instead of marrying. I think they (men) especially those not educated, feel threatened by educated matured women, because they (men) will not be able to control them (educated girls) as they (men) will want. The issue of promiscuity is a myth made up to support male domination._

(45-year-old public servant; a female respondent)

They also think that child marriage is a method men are using to keep the control they have in the society.

_I think that, it is a practice instituted to stop female children from going to school and having enough resources to challenge the male order in our society._

(47-year-old public servant; a female respondent)

However, some female respondents expressed their lack of understanding of the significance of male domination and female marginalization or consequences of such violence.

_Matured girls who are not married are made fun of, mostly by us (women), and our men, hardly marries matured women” because, matured unmarried girls are regarded as promiscuous._

(45-year-old housewife)

_I still remember what my sister went through, when she insisted on going to school and finishing her education. We (the female children) assisted our parents in beating her to submission because she disobeyed our father._

(45-year-old housewife)
Respondents express that the role of a wife and a mother is instilled in a female child in an earlier age to prepare them for the challenge. The girls are meant to stay close to their mothers for lessons on cooking, taking care of children and keeping the house clean. The boy stays close to the father to learn manly activities and how to protect the home.

*I was taught from a small age that a place of a woman is in her husband home, taking care of the household and the children. Marriage is seen as an important institution in this society and those not married are not treated with respect.* (51-year-old petty trader: a female respondent).

The assumption, that the girls education threatens to jeopardize this way of life determines, the common reaction towards sending a girl to school. Social-cultural factors has generate identity-protective cognition on the issue of child marriage. Hierarchical communal women and men will be the most receptive of all claim that a girl will become promiscuous if allowed to go to school and have a good profession, because they are the ones, whose identities and cultural beliefs are threatened. To them therefore, free educated and professional woman symbolize denigration of motherhood and a challenge to an established patriarchal society known and acceptable to them.

*I think most educated girls are arrogant and see being a good wife as a problem, they are also hardly obedient to their husband. Most men do not want to marry them* (A 55-year-old man; trader)

Some female respondent disagrees with the above assumption and assert that the negative attitude towards education is informed by new challenges gender role is facing in the society. According to those that anticipate change, more parents are willing to send their female children to school. Few educated women have been placed in political position, and few women are acting as the breadwinners in their homes.

*I believe that with time and more effort from local women, more girls would be allowed to reach maturity and acquire good education before marriage. Some of us that have been opportune to acquired good education, and have good jobs are contributing to the welfare of our home and encouraging our children to do the same, the challenge is immense* (49 year old female public servant)

*In a home where the man is not the breadwinner, the woman has much to say in the decision making of the home, and I have met some women who did not enjoy being married as children. We are therefore doing all we can to change that practice. Because I do not think that some women see themselves as the weaker sex that should be excluded from decision-making* (47 year old female public servant)
Hierarchical women are experiencing threats to their status because successful professional roles they occupy perhaps overtake traditional patriarchal norms that assign status to women for occupying domestic roles. This status conflict informs political dispute over education and freedom for girls and re-enforces the practice of child marriage. Respondents express that the few women, insisting on challenging the statuesque are the educated ones.

**Sexual violence by stranger**
The male respondent do not however see child marriage as part of maintaining patriarchal order. Most of them claim that they engage in child marriage to protect their daughters from the ills of the society. They claim that once a female child reaches puberty, she becomes a target of sexual exploitation and sexual violence.

> There are several men out there ready to sexually abuse girls that are not married, especially boys and men from other cultural groups. To avoid this we give them out in marriage for their own protection (60-year-old business man)

**Conforming to gender role**
Conforming to gender role, promotes the prevalence of child marriage. According to some male respondents, women play significant role in child marriage prevalence. Some of them alleged that women are the ones that raise children and often times arrange marriage for their daughters.

> Some of us (men), think that we have control, when it comes to child marriage, but in the real sense of it, we do not. They (women) decide and make it look as if it is our choice (men) (53- year old civil servant; male respondent)

> In my experience my daughters marriages were arranged by their mother. In one instance, I had wanted my daughter to get a good education, but that was never to be. Her marriage arrangement started months before the man came to me to declared his intentions. You could imagine my shock, when I said no to the request only to be told that the man in questions had already spent a lot of money on my family without my knowledge. I finally had to agree to the marriage, since I did not have such money to pay the man back. It is hard for a man to accept that such decision had been made for him, but in my own case. I was left with little or no choice (62-year old civil servant)

Respondents especially the females agrees that the pressure is placed on them to engage in certain actions, due to the culture that blames the mother when thing go wrong in the life of a child, especially if the child is a girl. Some of them pointed to the issue of the “real woman”. Most of the respondents agree that a real woman is the one that respects the gender role embedded in the culture, whose job is to ensure that her daughter marry early as a virgin, have children and take care of her home.
Respondents recounted experiences of women that have failed in their duties as women. Describing the humiliation from the community as exhausting. The culture of “real woman” drives the action of most of us (women). A mother is seen as a failed mother if her daughter brings shame to the family, by going against the role expected of her.

*My mother was regarded as a failure by her friend and almost the whole community when she and my father sent me to secondary school; people said and did all sought of things to her. When I could not stand the humiliation my mother was subjected to I persuaded them to marry me to a man that were interested in me. I was lucky that my parents wanted me to finish my education, so they continue paying my school fees and encouraged my husband to allow me finish my studies* (56- year old politician; A female respondent)

Respondents’ recounts that challenging the expected norms of the community can have a negative consequences for both man and the woman, but always worst for the woman. They (the women) are of the opinion that most of their actions are designed for them. They act as a result of construe or assimilate information, within their socio-cultural group.

Respondents associated gender role with the rights of girls and women in their society. The right that has affected the prevalence of child marriage and other types of gender based violence. Respondents are of the opinion that women and men do not have the same rights in the community. However, the female respondents blames this on the behaviour of the men towards the women and female folk.

*They (men) do not want to accept that women have rights. The do all they can to oppose your idea, even if it is better. Some of us (women) are even abused if we oppose their (men) bad treatment and nothing will happens, because most of us (women) have been made to believe that it is the men’s world.* (50- year old politician female)

*The men will rather send a male child to school, even if the female child is doing better academically, because he is a male. We (women) have no right to inheritance, neither from our parents nor from our husband’s family. We do not have right to anything even our body* (47-year-old female public servant)

Due to expected gender role there is a general assumption among men that girls and women are weak and should not be allowed to engage in certain roles and functions in the society. Against the assertion that parents place little value on their girls and perceive them as ones not worth sending to school. Some male respondents claim that their actions are not meant to hurt their female children.
We (men) will not purposely hurt our daughters, we (men) sincerely think that giving them away to good men, was going to save them from men that are willing to exploit them and bring shame to them and our family (58-year-old male civil servant)

5.1.3 CONFLICT & ECONOMIC STATUS
As mentioned earlier in chapter 2, the conflict in Plateau has not only caused ethnic tension, but has affected peoples, life style and economic stability. Among most of my respondents, poverty has increased because of the conflict and more families cannot afford to send their children, especially the female ones to school. Some even alleged that schools as targets of attacks and are causing parents to think twice before sending their children. When these girls are not in school, the second alternative becomes sending them on hawking business. However, some still insist that conflict has no significant impact on child marriage and fistula disease. They claim that conflict has become part of their daily lives and no longer affect their daily activities.

We have gotten use to the conflict. People are living their lives normally I do not think that it is impacting child marriage. It is a practice that has gone on for so many years, even before the conflict started (57-year-old trader: male respondent).

Some respondents think that the conflict has affected their lives in so many negative ways. The impact of the conflict ranges from poverty, to exposure of the girls to sexual violence and assaults. Respondent’s recounts that Plateau State was a tourist state when it was peaceful. The conflict has affected tourism significantly.

I used to sell souvenir, before the conflict started, but had to change business because people are no longer visiting the state. I also know people that quit their business because, customers are no longer coming. The conflict is affecting other business too (60-year-old businessman).

Respondents express that the armed conflict has led to loss of lives. They insist that they have lost their friends and family members. Some children have been made orphans and will have to be catered for by their uncles and other family guardians.

People are being killed, especially men, leaving their family members in the care of guardian. Things are not the same, people are no longer coming to the city and businesses are closing down (60-year-old business man)

People are losing their home, businesses and properties. Our girls are also being exposed to sexual violence by strangers due to poor security brought about by armed conflict in the State. (62 male businessman).
I know three young girls that were married off, because their uncle could not afford to pay their school fees due to poverty, when their father died during 2010 crisis (60-year-old businessman)

Due to the poverty on the wake of conflict, Respondents opine that the people’s means of livelihood have changed. In some families, girls and boys are being sent to hawk things to ensure their family survival. Respondents express fear of their children being in danger of kidnap and assaults if sent to schools.

We (men) have lost our means of livelihood leading to alternative means of survival. Our girls are being sent out to hawk goods by our women, and this exposes them to men exploitation. To avoid them (the girls) from becoming promiscuous and bring shame to their honour, some of us (men) decide to give them away to marriage. (60-year male civil servant)

I think that kidnapping of girls from school can also happen here as it has happened in other places. Many of us are afraid of losing our girls or having them kidnapped or violated by strangers (55-year old female trader).

They refer to other cases of kidnap, especially the one that took place in “Chibok” where Boko Haram members kidnapped hundreds of girls.

The impact of gender role on Obstetric Fistula prevalence

Among my respondents, there is strong indication that a strong woman id the one that delivers her baby through the normal method. When a woman is culturally considered weak, if she delivers her baby through caesarean operation, many women strive to deliver through normal method, despite medical issues that suggests otherwise. To them caesarean is an expensive operation, which so many of them cannot afford. Even when the family can afford the cost of operation, many women, prefer to deliver their babies through the natural method of delivery to prove that they are strong. In the process of difficult delivery, the three delays are encountered. The three delays are manifested in Life threatening emergencies and can result in bad outcomes if prompt effective treatment is not sort (Thaddeus & Maine 1994). The three delays are encountered when there is; (a) delay in seeking health services (b) Inadequate health services for the patient (c) no health care services available. If there is a complication during childbirth, and a girl encounters any of the delays, the implication will be life threatening. The extent to which this cultural practice takes the health risk of the woman into consideration was not determined in this study. Respondent’s recounts cases where girls have been made to deliver through normal method even when advised otherwise by health care professionals.

I was told in the hospital during anti-natal that I could only deliver through caesarean, but when the time came, my husband took me to a local midwife on the advice of our female
neighbour who told me that only weak women request for operation and told my husband that the hospital suggestion was a way of making more money from people. After two days of child labour without success, I was finally rushed to the hospital, but then it was late, as the baby died and I developed fistula afterwards (21- year old who has lived with OF for 6 years (FGDs)

Even when the woman want to go to the hospital for safer delivery, her husband must approve of it, because she cannot take such decision on her own according to cultural practice. This cultural practice mandates a wife to take permission from her husband before engaging in any activity.

I was in labour, but with my husband not around. I screamed and screamed until our neighbour, took me to a local midwife, after several hours of pushing, she use razor to cut, me, but that did not work. Before my husband arrived and took me to hospital, it was too late. The baby was dead, and I could not control my urination. My husband left me, with the claim that I broke the rules for not waiting for him (22- year old who has lived with fistula in 5 years FGDs).

Impact of conflict on OF
Among my respondents, conflict has impacted the prevalence of OF in the sense that, in addition to the poverty, people are experiencing, curfew imposed by the state. The curfew has made assessing medical help in the late hours of the night more difficult. Security issue is causing problem for women, especially if they encounter trouble during child delivery. They recount women that have developed OF because there was no available private or public transport to take them to the hospital.

It has become difficult to get public transport to seek medical help, especially during odd hours of the night. My neighbour developed OF because she wanted to deliver in a local clinic run by a local midwife. I did all I could to get her to go to the hospital but she refused. After a day and half of labour, she decided to seek, medical help, but there was no transportation. Before she finally made it to the hospital it was late (49- year old female public servant)

5.2 How do channels of risk communication influence amplification/attenuation of child marriage practice and its health consequences?
In order to comprehend how channels of risk communication amplify child marriage and attenuate OF, SARF will be employed for analysis. This framework will provide a structure that will help in interpreting empirical findings. In relation to perceptions and response to child marriage and fistula disease, cultural risk theory will help further understanding about the drivers of attenuation and amplification, within socio-cultural groups. These perceptions are interpreted as response to several socio-cultural factors such as belief system, gender relation, poverty and security system. In the analysis of attenuating and amplifying factors of child
marriage and OF three themes emerged: Cultural preservation, value identification and trust building

5.2.1 Cultural and belief Preservation within the socio-cultural group
SARF identifies categories of mediator which intervene between the risk event and its consequences and suggests a causal and temporal sequence in which they act. Information flow through first various sources and then channels, triggering social stations of amplification, initiating individual stations of amplification, precipitating behavioural reactions. The framework identifies two stages. Within Stage (1), the focus is upon the hazard events, the relationship between the various stations of amplification and their relationships with public perceptions and first order behavioural responses. Stage (2) is concerned with secondary impacts. Here there is a direct link between the amplification of risk perceptions and behaviours and secondary consequences. That physical event such as child marriage and OF are observed and interpreted by groups and individual, amplified/attenuated by individuals and social processes, and then expressed in terms of societal consequences.

Respondents recounts the humiliation they face when they try to tell people that OF is a medical condition that is mostly caused when a girl’s pelvis is not matured enough to go through the rigours of childbearing.

*When I tell people that my disease is a medical condition, they will just laugh and tell me to go and confess my sin and appease the gods. Some people even think that it is a communicable disease* (24-year old who has lived with OF for 8 years FGDs).

Some of the signals serve to increase or decrease the amount of information about an event or hazard, to heighten the salience of the message. Respondents opine that OF is labelled as a moral transgression defect rather than a physical cause of giving birth when a girl is not matured enough to bear the physical burden of pregnancy. They describe their indignation at the treatment they receive from some of their family members and friends.

*My husband left me as soon as I started licking, claiming that it was my infidelity to him that caused my sickness. My father told me not to come back to his house, to avoid bringing shame to the family. Only my mother visits me in secret* (19 year old who has lived with OF in 3 years)

Respondents recounts that people often time get offended when they tell them that OF is not a spiritual problem but a medical condition. Some of them expressed that the components of the decoded message of (OF) being a medical condition caused by child marriage is inconsistent with previous beliefs and contradicts the value they have attached to child marriage.
There is a strong awareness of internal communication being influenced by people's beliefs, which makes any message that is inconsistent with beliefs within the system unacceptable. This view is affecting some of the OF victims as some of them express their doubt on the link between child marriage and an OF.

_Sometimes, I feel the medical staff is telling us that we have a medical condition to make us feel better about ourselves. It is hard to accept that one has not done anything wrong, with all the negative treatment from people. But I have also seen people get well. It is confusing_ (35 year old who has lived with OF for 18 years)

_I do not want another girl to go through what I am going through, but it is difficult to convince people about something they do not believe exist_ (19 year old OF who has lived with fistula for 3 years FGDs)

They victims are stigmatized as people who have committed offence and deserve to be punished, because the misconception of their medical condition has been sold to people within their socio-cultural context. The misconceptions about fistula is causing extra psychological dilemma to the victims of fistula especially young girls, who mostly are abandoned by their husbands and family members. The stigmatization makes their story and information mostly irrelevant in their various communities.

Respondents are of the opinion that the story of the OF victims are not heard, because they have been made to look unworthy of speaking in public. The men supporting child marriage will do and say anything to deflect attention from the issue.

_If people hear their voices, it may not cause an excessive change, but it will make people step back and think before giving out their children_ (45-year-old female civil servant)

SARF presents the mass media as primary amplifier, but as explained in the theory section. There is evidence that even sustained media coverage does not by itself ensure risk amplification. My respondents especially the females do not have access to news media such as radio and television. Yet the have local information concerning the cause of OF. Some of the information were obtained during interactions with family, friends and among other women during meetings and/or community gathering. Communications takes different forms in their community. It can be informal between friends and family members or formal, between members and community leaders. However some mostly among the male respondents expressed that they have access to media, but often view information from the media, with a lot of suspicion and scepticism. Sometimes, when they get certain information about an event, they
discuss it among themselves. They also express that they discourage their children from adhering to information from outside their community. Some of the women admits they do not know what the television look like, not because their husbands cannot afford television, but because, they feel it is not wise exposing them to the wild world of television. Even those that admit having television and radio express that they are discouraged from watching certain news channels. Men on the other hand are used to news media but notes that certain news about their practices are provocative.

*So many television channels in this country are full of provocative images and information. That is why I do not want my children and wife to watch and hear I saw a documentary about child marriage. It was full of disrespect for our culture. They make us look like monsters. Some of the girls they use are just actors and most of the content are false* (50-year old civil male servant)

Media can make people aware of a risk event, but when they listen and watch media news, they interpret the messages to suit their beliefs and practices. Respondents are of the opinion that beliefs embedded in their culture and communicated among them in their community, can withstand any media coverage, unless it gets approval from them.

People understanding of and responses to risk information are continually negotiated and refined through everyday conversation and argument. The resources provided by personal experience and local knowledge can constrain and limit understanding and knowledge of an outside information. Respondents are of the opinion that trusted information channels are their family members, friends and community leaders, because they are the ones that have their interest at heart.

5.2.2 Value identification within the socio-cultural group as a significant channel
To understand how certain risk which is not so significant are amplified and a more significant risk attenuated. I posed a question to find out the prevalence of rape and sexual violence by stranger. Findings suggests that the chances of girl being raped by a stranger is very low. They hear about rape and sexual violence by strangers, but know almost no victim to such violence. However, there are thousands of young married girls with fistula disease, yet they find it difficult to believe that child marriage contributes to OF.

*I have heard that sexual violence happens to many girls but, personally I do not know who it has happened to After 2010 crisis, so many girls were given away to marriage because of the claim that they were raped and had become pregnant. I knew one of them, and she did not give birth until one year later. It is difficult to verify these claims made by several people most times* (47-year old female public servant)
Respondents express that information about rape and sexual assault is not news to them. It is one of the reasons why they practice child marriage. It was also expressed that culture impacts people that work in government institutions. When the people do not view an event as a crime, it is hardly punished even by the law enforcement. Male respondents are of the opinion that intimate sexual violence is not a crime. It is the man’s right to assault his wife sexually if he so wish. When confronted with the issue of abuse on the part of a young married girl. I was told that it is not a crime. Once a girl is married she automatically becomes a woman in the eyes of their culture and law.

*I have not yet been part of intimate sexual violence perpetrator arrest. What does that even mean in our society? Most of us even in the law enforcement, believe that it is the right of the men, to do certain things to their wives* (40-year-old male from Law Enforcement).

*The laws and system by which certain acts are perpetrated often handicap us. Child marriage cannot be punished because most of them takes place under Islamic, Christian and customary laws.* (50-year old female from Justice Department)

There is also an expression that due to the stigma of rape or sexual violence against a young unmarried girl and her family. Parents are often not willing to seek justice behalf of the girl.

*I have come across cases of sexual violence by strangers, but often times, the parents will not want to prosecute to protect their daughter from the social stigma of rape* (50-year old female from Justice Department)

In essence, child marriage is socially perceived as an accepted practice. People use interpretive frame to make sense of things. Assessment does not occur in a vacuum, but arises out of social interactions involving values, emotions and power relations. According to some of my respondents, the risk of a girl being raped or becoming promiscuous is viewed to be greater than the health risk she will face in her matrimonial home. In most cases, they blame this on the patrilineal inheritance whereby property is inherited from one’s father or other paternal ancestor. The practice also ensures that property remains within the family from generation to generation (Azinge 2013)

*When a girl is raped, her value in life decreases, she brings shame to herself and her family” It gets worse if the girl becomes pregnant outside marriage. If there is a pregnancy and a birth of a child, the life of that child is bound to be ruined because we have a culture where inheritance is obtained through father* (59-year old civil servant: male respondent)

Among my respondents, social problems are learned and feared as a result of perception and interaction within their socio-cultural group. Once they perceive an event to be acceptable, the
chances that this will be shared within the social group by which those people operate can be very high. The information about health implications of married girls have been negotiated through misconception. OF is not considered by most people as a medical condition, but as a divine punishment for a course for disloyal or disrespectful behaviour (Umoiyoho et al 2011). Another misconception is that fistula is caused by venereal disease or that it is divine punishment for sexual misconduct (Roush 2009). This is the dominant information among the community members. The women are of the opinion that solving the problem requires more than television campaign by strangers. It requires a community awareness that will involve community leaders, whom the people look up to for a trusted information.

**Cultural and belief Preservation outside the socio-cultural group**
On the meso-level, questions about how the functional system of Government such as National and State constitutions process and present information about child marriage affects its prevalence. The secondary impact include calls for regulatory action concerning child marriage, constitutional change, litigation, loss of confidence in institutions. The call for Nigerian constitutional was not successful on the ground that 12 Nigeria States are governed under Sharia Law. There is a strong sense of marginalization perceived by this socio-cultural group. Instituting laws and policies will be met with strong opposition. Respondents are of the opinion that the issue is more complicated than Sharia law, since Plateau state does not practice Sharia law.

**5.2.3 Trust building as a factor within the socio-cultural setting**
Respondents express that they become aware of acceptable and unacceptable behaviour or hazard through direct experience or through communication with their family, friends, and other community members. For them thus, the source of the information matters. When an individual perceives an event as unacceptable, it is shared with other members for the best advice and action. The same logic applies when an event is perceived to be good. In that way, each individual ensures that the event is interpreted as conforming to acceptable action or behaviour. Once a risk event is represented, it goes through further refinement process and re-interpretation at the level of socio-cultural groups (social filter) and individual psychological filters. If the risk event is represented as positive within a socio-cultural group, this may stimulate response towards such risk event by individuals.

Child marriage and its health implications are experienced by people, giving the victims and their social network (families) knowledge of what it entails. The health care professional are however aware of the health implications of child marriage. Nevertheless, people experience,
awareness and response to child marriage are properly defined through interaction between the potential harm attached to child marriage and the social and cultural process, which shape the interpretation of child marriage. As expressed by respondents, messages within their community is not only judged by the content but also by the source. They expressed scepticism towards information from the medical practitioner.

There are a lot of information out there; some of them are true, while some of them are not. It is very difficult to determine which is which (62-year old business man)

A respondent recounted an experience with the medical practitioner that has increased doubt and increases mistrust of information

They always recommend operation in the hospital during childbearing, even when it is not necessary, because they want to collect more money. In my own experience, my wife have delivered through natural method, even when we were told in the hospital that she would not be able to deliver through natural method (60-year old male trader)

I have heard so many times that child marriage, causes fistula, but, there are many women, suffering from the disease that a not young mothers. There are also so many young married girls that have had children without contracting the disease (56-year old civil servant)

It is often heard for me to believe that child marriage is the leading cause of fistula, because I was married at the age of 13 and started having children immediately. I never encountered any trouble and my daughters who married early have not encountered problems either (53-politician female respondent)

I was married at the age of 14 and I had my first baby without any problems before the age of 16. All my daughters are married with children without problem (59-year old housewife).

The experience of some mothers seems to create a moral basis for marrying their daughters early. Because they did not encounter any problems during pregnancy and childbirth, they assume that it should be the same for every girl.

Lack of trust with child marriage advocates
Lack of trust with outside sources of information is amplifying child marriage and attenuating OF. There is a strong presence of mistrust between the community members and medical practioners, including child marriage advocates.

My daughter is an OF patient, but I have other daughters that were married at a younger age, without problem. When I asked for explanation, I could not understand all the big grammar, the doctor spoke about, I am not sure that my daughter understood either (52-year old male trader)

An informant acknowledge the challenge of communicating physical condition such as OF. The opposition is blamed on the established misconceptions about the condition.
Giving information is not difficult, what is difficult is giving information that counters people’s established misconception about a disease or a hazard, especially when you do not have the answers they want (44-year-old male health care professional)

Information about certain social problems are discussed among the people and their community leaders. One of the community leaders indicated that the problem with understanding the information lies with the lack of trust that exist between them and the medical practitioners.

If people get the whole information from the sources, they trust, it can impact behaviour change. They often do not trust that we (medical practitioners) are giving them the right information (44-year-old male health care professional)

I encountered a case of two sisters. The older one was brought in for fistula repair by her parents. Before and after treatment, the whole family present in the treatment centre were counselled including the younger sister. 2 years later, the parents came back with the younger sister for her own repair, she herself had been married a year earlier, and had developed fistula, during childbirth. When confronted, the father admitted that he did not believe that child marriage was the cause of fistula (44-year-old male health care professional)

The issue of trust is also associated with believing the source is unbiased and not sensationalizing. There is an indication that child marriage campaign is mainly instituted to mock and embarrass the custom of those practicing it.

I think that the issue of child marriage as a cause of fistula is often biased and sensationalized to mock our cultural practice. I am therefore convinced that the current child marriage campaign is not because of care for our girls, but an attack on our culture (65-year-old trader: male respondent)

Even though some fistula treatment centres, organizes forum to warn young girls of the disease and advice those with successful repair not to have normal delivery in the future, the impact is yet to be seen. Most of my respondents alludes that medical experts are out to mock their cultural practice. Male respondents spoke about sexual violence by stranger and how women contract disease through such abominable act. People’s confidence and trust in the government and the agencies advocating against child marriage plays a big role in prevalence of it.

Conflict as amplifier of child marriage
My respondents view the ethno-religious conflict as a threat to their socio-cultural existence.

I think our tribe is being marginalized because we are in the minority (48-year-old male trader).

He thinks that if they become the majority, they can stake their claim on deserved resources and political position, and thus view campaign against child marriage as another war directed to their culture. Plateau State has been experiencing protracted ethno-religious conflict since
2001, as mentioned earlier in chapter 1. The conflict has not only affected people’s sense of security, life style and economic stability, it has contributed to each socio-cultural group re-enforcing and protecting their cultural identity. The conflict has been linked to frustration based on relative deprivation and history of discrimination among some socio-cultural groups.
6.0 SOCIO-CULTURAL FACTORS NECESSITATING THE NEGLIGENCE OF CHILD MARRIAGE AND FISTULA
Findings suggest that educational level (illiteracy) among women, social and family status, economic status, experiences and informational influence from outside the effected socio-cultural group, lack of policy implementations are the main factors in dealing with the practice of child marriage. What the people engaging in child marriage know and do about such events are mediated by a range of socio-cultural factors including social conditions (such as gender, wealth, ethnicity) and cultural settings such as language, beliefs, traditions, customs) as well as institutional policies. In most places, people are also more or less exposed by information and ideas coming from outside their socio-cultural groups. In Jos North, there is a strong consensus that information coming from outside the socio-cultural setting are viewed with scepticism.

6.1 Socio-cultural factors, institutional settings and their influences on how people respond to child marriage
Cultural and social norms are rules or expectations of behaviour within a specific cultural or social group. Often embedded in the structure of the society, these norms offer social standards of appropriate and inappropriate behaviour. The norms also govern what is acceptable or not acceptable and co-ordinates our interactions with others (Young 2008). Highly influential in shaping individual and group behaviour, including engaging in harmful practices, but vary substantially among groups. Cultural and social norms persist within society because of individual’s preference to conform, given the expectation that others conform (Lewis 1969). Cultural acceptance of child marriage among some socio-cultural groups in Nigeria, either as a means of maintain population growth or as a means of protecting the girl child from the ills of the society is a risk factor for mental and physical health of the child. Gender bias, poverty, security are some of the factors that influence child marriage in Jos North.

6.2 Socio-cultural factors that shape child marriage and OF
The socio-cultural factors identified in this study are gender bias, conflict, poverty, safety and security:

6.2.1 Gender bias
There are certain assumptions about gender roles and identities that influence child marriage prevalence. Chastity is one of the major reasons for child marriage practice in North Nigeria; many parents want to ensure that their daughters do not have children outside marriage. The fear and the stigma attached to premarital sex and bearing children outside marriage, and the associated family honour are often seen as valid reason by parents to marry off their young
female children (IPPF 2007) There is also the issue of culture that allows inheritance only through the father. This perennial culture makes it difficult for children that are born outside marriage to have a valid identity.. Parents are often left with the choice of giving out their children before; they become promiscuous and bring shame to the family. Often times, there is a social stigma against matured girls that are not married, they are in addition not respected in the community. There is also the fear, that with a good education, the girl will be less willing to fulfil their traditional roles as a wife and a mother. Many parents also curtail their girls education and marry them off, due to fear of the high level of sexual violence and assault encountered en route and even at school (Ibid 2007). Some of my respondents however alleged that child marriage helps in population growth. These beliefs may not have any scientific merit, but they perceive them to be viable.

6.2.2 The impact of conflict on child marriage
Plateau has been experiencing protracted conflict since 2001. As mentioned earlier in chapter 2. The conflict has not only caused ethic tension, but has affected peoples, life style and economic stability. Among most of my respondents, however the conflict has not had a significant effect on child marriage. Few of the respondents thinks that conflict has caused some people to lose their means of livelihood, especially when properties were destroyed in the twin bomb that claimed 118 lives in 2014. The conflict has pushed the government to abolish “okada” (transporting people with motorcycle) business, for the fear, that suicide bombers were using that as a strategy to bomb their targets. Poverty has increased because of the conflict and more families cannot afford to send their children, especially the female ones to school. Some even alleged that schools as targets of attacks and are causing parents to think twice before sending their children.

6.2.3 The impact of conflict on Obstetric Fistula prevalence
In as much as some my respondents, thinks that there is no significant increase in the number of girls married before, during the protracted conflict, statistics shows that the prevalence of fistula is more in North Central Nigeria (estimated at 0.8%) as against 0.5% and 0.3% in North East and North West respectively. The prevalence can be due to a popular assumption that strong women deliver their children using natural method. Another reason can be due to lack of trust on the information of health care professionals. Some of my female respondents claim that there is a cultural practice that mandates a woman to take permission from her husband before going even to the hospital. The implication of this is that if a woman enters into labour, when her husband is not present, she will be required to wait for his approval. That can be the
reason why as low as 28% of women give birth with the help of a health care professional (Ebuehi and Akintujoye 2012). Upon encountering complication the three known delay can put her life in danger and expose her to fistula disease. The three delays are manifested in Life threatening emergencies can result in bad outcomes if prompt effective treatment is not sort (Thaddeus& Maine 1994) The three delays are encountered when (a) delay in seeking health services (b) Inadequate health services for the patient (c) there is no health care services available. If there is a complication during childbirth, and a girl encounters any of the delays, the implication will be life threatening. The extent to which this cultural practice takes the health risk of the woman into consideration was not determined in this study.

6.2.4 Poverty
The parents of some of the child marriage victims are poor and use marriage as a way to provide for the girls future. Child marriage can also be used to build alliance with a more powerful family. In certain cases, parents have given out their daughters in marriage to pay off a debt or settle dispute. This is when the girl is seen as a burden or valued as capital for their exchange value in terms of goods, money or livestock (IPPF 2007) The issue of dowry, pushes some parents to give out their girl child for marriage for economic reasons. When a family in a patriarchal society does not have enough money to send all their children to school, they often send the male children and marry off the girls. A family, that is poor and cannot afford to send all their children to school, some of these children starts engaging in hawking to contribute to the family needs. Because of the culture that does not allow a married woman to go outside the house, young girls are sent on errands that also leaves them vulnerable to men exploitation.

6.2.5 Safety and security
The common assumption detected in this study, is that child marriage protects girls from promiscuity and sexual transmitted disease. The reality is quite different. Married girls are more likely to become infected by sexual transmitted disease than the unmarried girl. Child marriage takes place under polygamous union, which means that the girl’s husband has more than one partner. In a society, where sexual violence is not often punished, girls are often in danger of being raped or sexually assaulted by strangers. Sexual violence by a stranger reduces the value of a girl in the community of study. Some parents, in order to protect their children from such violence, chose to marry them as a sign of protecting her. This practice according to them, indirectly protect children from lacking identity. Some were of the opinion that if there is a pregnancy outside marriage the life of that child is bound to be ruined because of their perennial culture of inheritance. Findings indicate that some of the married young girls in Plateau state
were already pregnant before they got married. Those who were raped were given out by their parents to avoid further humiliation.
7.0 DISCUSSION AND CONCLUSION
7.1 DISCUSSION
The empirical findings will be discussed with the presented theory in two parts. The first part will discuss the first research question while the second part will discuss the second research question.

7.1.1 What are the socio-cultural norms and factors that shape child marriage interpretation, evaluation and response?
As was demonstrated in the analysis of the findings; exploring the socio-cultural factors that influence the interpretation of child marriage and its health implications; fistula disease cannot be done with yes and no answers. I used a probed, open-ended question to assess knowledge of child marriage and adolescent pregnancy-related diseases rather than normal approach, in which respondents are asked why they think child marriage is prevalent despite the medical information that such practice has health implications. Most of the respondents express that the acceptability of the practice is to preserve the culture of chastity among young married girls. If something does not fit into the existing classification system on which social order is founded, it is thought to be impure, polluted, and therefore not acceptable (Douglas and Wildavsky 1982). Behaviours such as promiscuity, pregnancy outside marriage and sexual violence by a stranger are strongly opposed. To institute certain acceptable behaviours in a society, other behaviours are often rejected. This according to (Douglas 1982) is done by socio-cultural arrangement of such behaviours or risk, the accepted behaviour are elevated and the unacceptable ones depressed. Accordingly, their response is preventing a girl from becoming promiscuous by engaging in child marriage, which is interpreted, as acceptable within their socio-cultural context. Thus, their views about child marriage and sexual exploitation by strangers are shaped by the nature of social groups of which they are part of (see Tansey and O Riordan 1999). Thus proving Douglas (1966) assumption that risk events can be chosen based on beliefs about purity, danger pollution and taboo and as way of maintaining social and cultural order.

There is also a concern about a girl’s fertility being dependent on her age of marriage. The increasing concern about fertility of an adult woman/girl cannot be explained by objective reality but through perception based on social and cultural process (Ibid 1982). Whether child marriage has a direct link to childbearing capability of a woman or not, the choice of focusing on certain things reflects people’s beliefs about values, social institutions, nature, and moral behaviour (Douglas & Wildavsky 1982). Any behaviour that will disrupt their cultural practices are deemed unacceptable. People selectively credit and dismiss claims of societal danger based
on whether the risk event is one that defies or instead conforms to their cultural norm (Douglas 1982). Selection of promiscuity and sexual violence by strangers and attribution of social forms to these threats is just one side of the coin; the flip side is (groups, socio-cultural and society’s) tendency to ignore and downgrade potential threats such as that of child marriage (Ibid 1982).

There is a strong expression of what is expected of a woman and girl, as well as the man and the boy. The woman as a wife and keeper of home and a man as protector of the family and the one that makes all the decision This belief can be a desire to maintain gender relations, which, packages child marriage as socio-cultural necessity for girls (Ibid 1982).

Some female respondents are of the opinion that the gender bias is facing a new challenge by successful women indicating the presence of what Slovic (2010) describe as presence of demographic variation in risk perception when individual cultural worldviews are taken into account. Group –grid provides a frugal typology of highly significant commitments that are likely to shape individual identities, and to determine their group-based affinities, in a manner that transcends the scores of associations they might happen to form with like- and unlike minded persons (Kahan 2007). The females with a sense of change have belief affinities with information from outside the socio-cultural group, but have not succeeded in making any significant impact. Cultural theory accepts the uniqueness of subjective individual positions but predicts a number of cultural biases in the representation of danger, hazard and risk events. The norms that support these practices are constructed through politics and collective process (Jordan and O’Riordan 1999) which have the men as the major players in their community.

Women and men that have tried to encourage change have met with opposition. This according to Kahan (2012) is due to the assumption that, people with opposing predisposition seek out support for their competing views through opposing biased form of information search (Ibid 2012). They construe or assimilate information, whatever its provenance, in opposing ways that reinforce the risk perceptions they are predisposed to form (ibid 2012). Some of those engaging in non-acceptable behaviour, such as sending their girls to schools, have met humiliating treatments. Thus, challenges to commonly held group beliefs can undermine a person’s well-being either by threatening to drive a wedge between that person and other group members. It also decisively regulates their experiences with information about the truth or falsity of those beliefs (Ibid 2012).

On inquiry about the effect of conflict on child marriage. Majority of the respondents expressed its significant. Few of them thinks it is of no significant. Accepting risk can be determined by
two factors: dread and familiarity. In life-threatening situations, risk-dread could be easily overridden by risk-familiarity due to a person’s habituation to high level of risk (Rohrmann, 1999, Renn 2005, Tzanakis 2011). However, those that view conflict as a significant factor expresses that the girls have become more vulnerable to the danger of rape, and sexual assault by strangers. Whether the perceived danger is real or not, Alexander (2013) is of the opinion that “there does not have to be a real danger, it is sufficient that one be perceived (Alexander 2013:16). The self-protective behaviour need not have a positive, tangible result: indeed, panic can easily lead the panicker into danger, rather than out of it (Ibid 2013:16). He concludes that People do things for cultural reasons, whether they act with or without self-awareness. Perception and interpretation of risk and disaster has cultural root.

7.1.2 What channels of risk communication influence amplification/attenuation of child marriage and OF?

Nearly everyone said they had heard of fistula disease. Few got their information from health care professionals while other got the information from communication channels within the community, very few got the information from news media, while some have children or relatives suffering from the disease. All recognize it as a life threatening disease/illness, contracted when a woman undergoes obstructed labour, though a troubling majority viewed it as merely a medical condition that is contracted by those that have done something bad in life. Still, people substantially underestimated the connection between child marriage and fistula disease. Physical events such as child marriage and OF are observed and interpreted by groups and individual, amplified/attenuated by individuals and social processes, and then expressed in terms of societal consequences (Renn et al 1992). SARF identifies categories of mediator which intervene between the risk event and its consequences and suggests a causal and temporal sequence in which they act. Information flow through first various sources and then channels, triggering social stations of amplification (Kasperson 1992). Previous beliefs that contradicts value to which the receiver feels attracted, are ignored or attenuated (Renn et al 1992).

The key element of social attenuation and amplification processes according to Kasperson and Stallen (1991) is their dynamic nature, coupled with the way in which different people in a socio-cultural group constantly seek to transform both scientific information and policy debates about risk or social event. To amplify awareness about the physical and mental risk inherent in child marriage a multi-directional communication process should be shaped by the social learning of the producers and receivers of the information (Ibid 1991. In essence, the mapping of the initial belief system about the hazard that is the target for risk communication is thus
crucial. In this case correcting those misconceptions about fistula disease will help people put things in a more preventive perspective.

Attitudes, beliefs and behaviours are heavily influenced by an individual’s socio-cultural environment. Population group may have its own characteristics that affect how people perceive and communicate risk. These characteristics may include religious beliefs, health and risk regulations, and community traditions, all of which can affect how people perceive and respond to risk information (Lundgren 2013). There is a strong influence of culture in the practice of child marriage. Increasing negative information about behaviours that threatens child marriage practice helps in its amplification. Social agents within a social cultural group generate and mutate risk signals, by acting as amplification stations (see Kasperson et al 2003, Kasperson 1992, Renn et al 1992, Kasperson et al 1988) The opposition to rape, sexual violence and pregnancy outside marriage is heightening the salient of child marriage as an acceptable practice. Thus, the increase or decrease of the volume of information about a risk event (child marriage and its health implication), heighten the salience of certain aspects of a message, or reinterpret and elaborate the available symbols and images, thereby leading to particular interpretations and responses by other participants in the social system (Kasperson et al 2003:15).

To understand how certain risk which is not so significant are amplified and a more significant risk attenuated (Kasperson 1988). I posed a question to find out the prevalence of rape and sexual violence by stranger. Findings suggests that the chances of a girl being raped by a stranger is very low. They hear about rape and sexual violence by strangers, but know almost no victim to such violence. However, there are thousands of young married girls with fistula disease, yet they find it difficult to believe that child marriage contributes to fistula disease. For Barnett & Breakwell (2003) “highly appreciated social and cultural value may increase the people’s tolerance for weak evidence as well as reduce the people’s rejection of strong evidence. A prestigious/trusted communication/information source can compensate for trivial factual messages” (Ibid 2003).

As expressed in risk communication theory; individuals and groups learn to fear certain risk events more than others as a result of their social interactions. While there are individual differences, in risk perception, which may be due to biology and personal taste, risks are experienced and shared with others and these collective experiences are a major factor in our personal assessment (Flint and Lutoff 2005). If people think a risk event is acceptable, the
chances that this will be shared within the social group by which those people operate can be very high. The information about health implications of married girls have been negotiated through misconception. OF is not considered by most people as a medical condition, but as a divine punishment for a course for disloyal or disrespectful behaviour or as divine punishment for sexual misconduct (Roush 2009, Umoiyoho et al 2011).

SARF presents the mass media as primary amplifier, but as explained in the theory section. There is evidence that even sustained media coverage does not by itself ensure risk amplification (Petts et al 2001). Media can make people aware of a risk event, but culture is more capable of making people become salience about such risk events (Douglas 1986). The culture of promiscuity and chastity embedded in the community is amplifying child marriage practice.

In the issue of risk communication between the community and outside informants and among the community members. There is an expression that People understanding of and responses to risk information are continually negotiated and refined through everyday conversation and argument (Kasperson et al 2003). The resources provided by personal experience and local knowledge can constrain and limit understanding and knowledge of an outside information. Respondents are of the opinion that trusted information channels are their family members, friends and community leaders, because they are the ones that have their interest at heart. Lack of trust from outside sources of information is amplifying child marriage and attenuating OF. There is a strong presence of mistrust between the communities and medical practioners, including child marriage advocates. Trust is associated with believing the source is unbiased and not sensationalizing. There is an indication that child marriage campaign is mainly instituted to mock and embarrass the custom of those practicing it. Most of my respondents alludes that medical experts are out to mock their cultural practice. People’s confidence and trust in the government and the agencies advocating against child marriage plays a big role in prevalence of it. For a successful communication, with risk bearers “the agency must be seen as unbiased, able to conduct its activities uncompromised by any hidden agenda and or undue influence by particular interests” while at the same time providing adequate opportunity for the people to make their concerns known” (Kasperson 2005)

Even though some fistula treatment centres, organizes forum to warn young girls of the disease and advice those with successful repair not to have normal delivery in the future. There are factors that affect the persuasiveness of any communication and effectiveness of a message.
According to Breakwell (2000) these factors are a function of the interaction between the characteristics of the audience, the source of the message, its content and the audience perception of risk event.

A hazard or risk event is said to become known either through direct experience or through communication with others either through formal and informal information providers (Renn 2011) These sources of information creates the risk representation and enhances filters that reconfigure information. Once a risk event is represented, it goes through further refinement process and re-interpretation at the level of socio-cultural groups (social filter) and individual psychological filters. If the risk event is represented as positive within a socio-cultural group, this may stimulate response towards such risk event by individuals. In many circumstances, messages are initially judged not by content but by the source: who is telling me and can I trust him (Renn and Levine, 1991). Any message from a source seen as untrustworthy is liable to be disregarded, no matter how well intentioned and well delivered. The above assertion leaves the information from health care professionals about health risk of child marriage in limbo. The experience is also an attenuating signal for OF eradication. Some mothers seems to create a moral basis for marrying their daughters early (Zevallos 2012). Because they did not encounter any problems during pregnancy and childbirth, they assume that it should be the same for every girl.

My respondents view the ethno-religious conflict as a threat to their socio-cultural existence. The conflict has been linked to frustration based on relative deprivation and history of discrimination among some socio-cultural groups (Ostein 2009). No group wants to die out, or its language and traditions to die out, or its traditional privileges to be reduced (Ibid 2009). The groups that feel discriminated can engage in practices that will increase their population growth as result of maintaining their cultural and social presence. Majority of the respondents thinks that if they become the majority, they can stake their claim on deserved resources and political position, and thus view campaign against child marriage as another war directed to their culture. Wendy Griswold (2004) is of the opinion that people do not change or discard their traditional beliefs and cultures in this post-modern globalized world. According to her when a group’s cultural boundaries are threatened by outside pressure, the group reasserts traditional beliefs instead of succumbing to change” (Ibid Griswold 2004).

The secondary impact in risk amplification include calls for regulatory action concerning child marriage, constitutional change, litigation, loss of confidence in institutions. The call for
Nigerian constitutional was not successful on the ground that 12 Nigeria States are governed under Sharia Law. This has influenced actions of those advocating for child marriage prevention and OF eradication. Even those working in the law enforcement feels handicapped by the countries laws.

7.2 CONCLUSION
This study has discussed child marriage as GBV with risk communication theories. The importance of taking account of socio-cultural factors that influence risk interpretation and response was highlighted. It was also argued that risk events acceptance is a construction that takes place through communication and information sharing among people in a particular socio-cultural group.

The social context and culture in North central Nigeria endorses GBV through the practice of child marriage thereby, giving room for physical and mental health hazard for the victims of such practice. Child marriage is not the primary cause of fistula, but research has shown that adolescent girls are more exposed to it than adult women (Wall et al 2004, Wall et al 2005). It is not child marriage itself that causes physical and psychological risk but the consequences of child marriage. The married young girl lacks basic knowledge of what maternal health implies, and lacks capabilities of making informed decision when exposed to danger of early pregnancy and child labour.

The affected socio-cultural groups that practice child marriage view any policy instrument and programmes as suspicious tactics employed to disadvantage their groups’ population growth and cultural practice. In addition to this threat to cultural/traditional practice, the conflict in North Central Nigeria is detrimental to; and worsens health implications of child marriage due to consequences of war such as material damage, financial problems, poor security system to bring sexual violence perpetrators to justice, and fear about the unknown future of the girls, when exposed to violence of war. The conflict has evoked mistrust of information from outside known communication channels and hence heightened the level of suspicion.

To understand how risk events is responded to in social and culturally different environments we need to know how risk is perceived, explained, understood, communicated and acted upon, by the participants that have to bear the consequences of these cultural practices and the producers of these practices. Using the SARF framework with a case study approach and qualitative sampling technique a detailed and systematic analysis of relevant socio-cultural factors in the social amplification/attenuation of child marriage is made. With this
methodology, this study has illuminated how producers of child marriage as a practice use culture, religion and norm to successfully communicate child marriage as an acceptable practice, with the inadequacies of government and non-governmental agencies reaction.

There is an indication of trust issue between the people with outside culture and whatever information, they have. The people in the socio-cultural community studied view outside information with so much scepticism. This sceptical approach does not exclude risk communication. This is a community based qualitative study; a more comprehensive study, including efforts of humanitarian organizations advocating for child marriage prevention will be required to explore the most effective way to communicate health issues connected to dangerous practices such as child marriage. The factors influencing child marriage prevalence must be understood before appropriate communication strategy and programmes to prevent and respond to it can be planned.
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i. Appendix A- Interview Guide

**BACKGROUND INFORMATION**

- Name
- Age
- Occupation
- Ethnicity

**HEALTH SYSTEM/DOCTORS/HEALTHCARE PROFESSIONALS**

1. Please kindly introduce yourself (age, position, tribe, religion)
2. How many fistula patients do you have in this area? Base on your data.
3. What are the major causes of fistula disease?
4. What do the girls and their families believe is the cause of fistula?
5. What effort is the health sector making to communicate with the community about the risk of fistula?
6. What are the obstacles in convincing people to deceiver from the practice of child marriage?
7. Has there been an increase in fistula cases among married teens, since the crisis in Plateau state?
8. Is there any effort to prevent, child marriage through preventive programs and awareness campaigns concerning fistula?
9. Does the ministry have a community-based program to address the child marriage issues and other factors causing fistula?
10. Does the ministry have a program to educate young pregnant girls about fistula, to enable them seek adequate care?
11. Are there other measures you consider more effective than education programs when it comes to reducing the number of young girls suffering from fistula?

**LAW ENFORCEMENT/JUSTICE SYSTEM**

1. What do you know about the concept of child marriage?
2. Have you heard of fistula disease?
3. What do you think is the cause?
4. How did you get the information?
5) To what extent do you think the crisis in Plateau state has contributed to child marriage and other sexual violence?

6) What is this institution doing to protect women and girls from gender based violence?

7) What do you think is the reason for the low rate of convictions for men who have been violent towards girls and women? Both for intimate partner sexual violence and sexual violence by strangers?

8) Do you have any mandate to protect the child from such harmful practice (following the conducts of the right of a child)? If yes, how, and if no why?

9) What competing interests or challenges hinder the ability to address child marriage and gender based violence?

10) Is the security/law enforcement cooperating and coordinating with other sectors such as medical care, legal advice, counselling, protection and shelter in their effort to prevent and respond to GBV?

11) Are there social and cultural factors that hamper the enforcement of protective policies?

12) Are all Nigerians treated equally in the eyes of the law, or do the justice system take into consideration, ethnic and cultural practices?

COMMUNITY- BASED PARTICIPATION

1) What age do you consider appropriate for marriage?

2) Do you think girls and women have as much rights as the boys and men?
   3a) If yes why, and if no why?

3) What socio-cultural factors influence the prevalence of child marriage?

4) How has conflict in Plateau state influenced child marriage?

5) Which do you consider more risky; child marriage, intimate sexual violence, rape, sexual violence by stranger? Give reason for your answers

6) Is sexual violence by stranger, a topic that is often discussed?

7) Do you know anyone that has been raped or sexually violated?

8) What problems do you think married young girls face in their marriage?

9) What do you know about fistula disease?

10) What do you think is the cause of fistula disease?

11) Where did you get your information?
12) What can be done to make people/society aware of risk of child marriage and poor maternal health care?

13) What channel of information do you think is most effective in addressing the issue of child marriage?

14) Do you think that people’s awareness of fistula can change the trend of child marriage?

15) If yes, why, and if no why?

16) What do you think is the solution to the problem?
ii. Appendix B - Focused Group Discussions

BACKGROUND INFORMATION

- Name
- Age
- Educational status
- Occupation
- Ethnicity
- Parity
- Marital status

1) How long have you had this condition? (Duration of the fistula)
2) How did you get information about repair?
3) Causes of fistula (from the record)
4) Causes of fistula (from the patient)
5) How did you get your information? Sources of information for the patient
6) Do you if you will be able to become pregnant again after successful repair?
7) Where will you like to deliver, if you become pregnant again?
8) Will you seek medical help, if you encounter complication during subsequent pregnancy?
9) Will you seek help such as Caesarean section as the mode of delivery to prevent the fistula?
10) If no to question 9 why?
11) Is there any one you will recommend to be educated about fistula?
12) What is your people’s general view on fistula?
13) Why do you think people still give out their children in marriage despite this issue of fistula?