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Lived Experience Of Rape Survivors In War Affected Areas: A Case of Nefas Mewucha Town, South Gondar Zone, Amhara Region

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BAHIR DAR UNIVERSITY
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF GENDER AND DEVELOPMENT STUDIES



**Lived Experience of Rape Survivors in War Affected Areas: A Case
of Nefas Mewucha Town, South Gondar Zone, Amhara Region**

**A Thesis Submitted for the Partial Fulfillment of the Master of Art
in Gender & Development Studies**

By
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Bahir Dar, Ethiopia

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Approval of Thesis for Defense Result

I hereby certify that I have supervised, read and evaluated this thesis titled “Lived Experience of Rape Survivors in War Affected Area of Nefas Mewucha Town, South Gondar Zone, Amhara Region” by Tirualem Asmamaw prepared under my guidance. I recommend the thesis to be submitted for oral defense.

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As a member of the board of examiners, we examined this thesis entitled “Lived Experience of Rape Survivors in War Affected Area of Nefas Mewucha Town, South Gondar Zone, Amhara Region” by Tirualem Asmamaw. We hereby certify that the thesis is accepted for the fulfillment of the requirements for the award of the degree of “Masters of Art in Gender and Development Studies”

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ABSTRACT

War rape becomes consistent aspect of political and conflict related violence. Globally including Africa, women and girls were raped and victimized by the group of militaries or soldiers. Ethiopia also faced conflict on the northern part of the country with the Tigray People Liberation Front (TPLF). The TPLF invaded and controlled many areas of Amhara region including Nefas Mewucha town, Ethiopia. The gang groups raped more than 70 women and girls in Nefas Mewucha within 9 days from 12-21 August 2021. This study was, therefore, aimed to investigate the lived experience of conflict rape survivors of women and girls by taking Nefas Mewucha town as a case in point to fill the gaps. The study employed a qualitative approach and a phenomenological design. Purposive sampling technique was deployed to select 14 study participants. The data was collected from 22-25 May 2022 through in-depth interview. Thematic qualitative data analysis technique was employed to analyze the data. In doing so, the collected data was transcribed, coded, organized and finally analyzed and interpreted qualitatively. The findings of this study showed that there were different natures and ways of war rapes. The gang groups intimidated, beat, humiliated, and raped women at homes, forests, and unoccupied courtyards. The motivation and purposes the war rape perpetrated against girl/women were mostly to revenge, humiliate, cause pain and fear to the people of Amhara. Rape survivors also faced multifaceted and complicated problems and challenges including psychological, health, physical, social, and economic problems. The war rape survivors took coping mechanism to solve their physical, psychological and health problems and survive. They usually go to churches in the morning and evening to reduce their stresses, anxieties, and depressions. In general, the finding of this study revealed that the lived experiences of war rape survivors were very traumatic, tragic, and complicated one. Women and girls lost their hopes and self-confidences and got marginalized and alienated by the community members. Holistic and comprehensive rehabilitation services need to be provided to war rape survivors by the government, NGOs, and the community.

Key words: Rape, War rape, Rape survivors, Lived experiences and Nefas Mewucha town

ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
BA	Bachelor of Art
BoWCSA	Women, Children and Social Affairs
HIV	Human Immunodeficiency Virus
NGOs	Non-Governmental Organizations
PTSD	Post-Traumatic Stress Disorder
TPLF	Tigray People Liberation Front
UN	United Nation

CHAPTER ONE: INTRODUCTION

1.1 Background

War rape against women and girls is the devastating global phenomena and problem. Conflict-related sexual violence refers to rape, sexual slavery, forced pregnancy, forced abortion, and any other form of sexual violence of comparable gravity perpetrated against women, girls, that is directly or indirectly linked to a conflict (UN, 2021). War rape becomes prominent aspect of political and conflict related violence (Gottschall, 2011). It has been used to intimidate and punish political opponents, their family members, and women human rights defenders, as witnessed over the years in the context of contested political processes (UN, 2019). In World War II, there were mass rapes and rapes were seen as a sort of ethnic pollution and method for further the establishment of their own master race by damaging the ethnic purity (Neill, Kevin Gerard, 2000). It also been used to terrorize, demoralize, humiliate, oppress, and dehumanize groups of people for political gain (Mukwege, 2004 and Nordstrom, 1996). In Bosnia–Herzegovina, Serbian soldiers committed rapes and many Muslim and Croatian women were raped during the war in the early 1990s which might vary from 10,000 to 60,000 (Charlotte Bunch and Niamh Reilly, 1994). War rape has been used to terrorize, demoralize, humiliate, oppress, and dehumanize groups of people for political social and economic gain across countries (Gottschall, 2011, Mukwege, 2004 and Nordstrom, 1996). It has been used to humiliate opponents, to drive communities and groups off land and to willfully spread HIV (UN, 2006 and Amnesty International, 2004). It was seen as a way either an unavoidable aspect of warring or simply as a weapon of war (Enloe, 2000).

In Africa, war rape against women and girls is also a widespread in conflict and used as a war tactic (Amnesty International, 2004). It is a common phenomenon during armed conflict in different parts of Africa (African Rights, 2004). For instance, during the genocidal conflict in Rwanda, many thousands of women were subjected to sexual violence (UN, 2000). Reports from the Democratic Republic of the Congo on the extent of conflict-related sexual violence range from 18 to 40 per cent among women and girls (UN Women, 2014). War rape in Darfur was also committed to humiliate, punish, control, inflict fear and displace their communities (Amnesty

International, 2004). Hutu soldiers raped women of Tutsi as a political weapon during the Rwandan genocide (Lisa Sharlach, 2000).

Ethiopia has also faced conflict crises in the northern part of the country. The Tigray People Liberation Front (TPLF) Special Forces started a war against the national defense of the Northern division on 4th November 2020. Following this, the national defense has executed law enforcement measures against TPLF Special forces in all areas of Tigray region. However, after 8 months of war and humanitarian crisis in Ethiopia's northern region of Tigray, the Ethiopian government unilaterally declared a humanitarian cease-fire on June 28, 2021 (Amhara BoWCSA, 2021). According to Ethiopian government sources, the main objectives of the unilateral cease-fire were to allow farmers to till their land and aid groups to operate without the presence of military troops. However, the TPLF invaded and took control of different border areas of Amhara and Afar regions following the withdrawal of the national defense force from Tigray region of Ethiopia. The TPLF group controlled and affected 87 woredas including towns in Amhara region for some months. That is, 3 woredas in North Gondar, 16 woredas in North Shiwa, 21 woredas in North Wollo, 9 woredas in Oromia special zone, 24 woredas in South Wollo, 11 woredas in Waghimira and 3 woredas in South Gondar were under the control of TPLF (Amhara BoWCSA, 2021). The internal data collected by Amhara bureau of Women, Children and Social Affairs in three woredas showed that 124 rape cases in which 70 rape cases in Nefas Mewucha and 50 cases in Dabat and Debark woredas (Amhara BoWCSA, 2021). This might create different consequences and problems on the lives of rape survivors during and in post-war periods in war affected areas of Amahra region, Ethiopia.

1.2 Statement of the Problem

Globally, women and girls were raped by a group of rebels and soldiers in front of their family and the villagers at homes, streets and camps to humiliate, punish, inflict fear and displace communities through brutality (Tompkins, 1995; Vlachova and Biason, 2005; Amnesty International, 2004 and African Rights, 2004). Rape against women and girls during armed war is a global problem that has severe consequences for rape survivors (García-Moreno et al., 2005). It caused rape survivors to face physical, psychological and health problems during and in the post armed conflict (Josse, E. (2010). Survivors might face tortures and other cruel, inhuman, or degrading treatments or punishments (Mukamana and Brysiewicz, 2008), rape and sexual

exploitation (UN, 2019). They also faced physical injuries such as gunshots to the genital areas (Vlachova and BIASON, 2005) and suffered from post-traumatic stress disorder, forgetting (Quing, K. A., 2021), anxiety, phobias, insomnia, flashbacks, nightmares, grief, and depression (Joachim, 2004, Kivlahan and Ewigman, 2010). In addition, victims of rape faced serious health problems such as fistula, HIV/AIDS (Amnesty International, 2004, Jina, R., and Thomas, L. S., 2013), forgetting and sleeping disorder (African Rights, 2004, Mukamana, D., and Brysiewicz, P., 2008). Moreover, rape survivors lost their values, dignities, and respects in the post wars (Mukamana and Brysiewicz, 2008) and got stigmatized and shamed by the societies (Vlachova and BIASON, 2005). All these facts show that rape against women and girls during war is a global phenomenon which negatively affected the lives of survivor in terms of psychological, physical and health, social relationships, and economic activities (Longombe et al., 2008, Johnson et al. 2010 and Dumke et al. 2021)

In Ethiopia, there are different studies on the prevalence of gender-based violence including rape. Domestic violence against women and girls is the most pervasive and common violence in the country (Yigzaw T, Yibrie A, Kebede Y, 2004). Many women and girls faced sexual violence including rape by their intimate partners (Worku A, Addisie M, 2002). However, as the best of the researcher knowledge, research which explored the lived experiences of war rape survivors are rare in Amhara region, Ethiopia.

Currently, Ethiopia has faced war in the northern part of the country with the Tigray People Liberation Front (TPLF). The TPLF invaded and controlled some areas of Amhara and Afar regions for a number of months (Amnesty International, 2021). During the invasion, the TPLF groups raped women and girls, looted properties and equipment of the community and also destroyed the infrastructures. For instance, reports showed that the TPLF groups gang raped more than 70 women and girls and destroyed infrastructures and properties of the society between August 12 and 21, 2021 in Nefas Mewucha town of Amhara region, Ethiopia (Amnesty International, 2021). The government and scholars give due attention for rehabilitation of destroyed of institutions, properties and infrastructures. However, the challenges and problems of war rape survivors are overlooked in the post war in Amhara region of Ethiopia. Thus, the experiences and challenges of rape survivors need to be captured and documented so as to understand and take coping mechanisms and actions for them. This study was therefore

conducted in Nefas Mewuch town because TPLF gang first invaded Nefas Mewuch town and raped many women and girls within a shortest period of time (only for 9 days) as compared to other invaded areas such as areas of Amhara region, Ethiopia which was more than 5 months (Amhara BoWCSA, 2021). Taking into account of the aforementioned empirical gaps, this study aimed to investigate the lived experience of war rape survivors of women and girls by taking Nefas Mewucha town as a case in point.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study was to explore the lived experience of conflict rape survivors in Nefas Mewcha town, Amhara regional state, Ethiopia.

1.3.2 Specific Objectives

The specific objectives of the study were:

- To investigate the nature of rape against women and girl during the war in Nefas Mewcha town.
- To explore the intention of perpetrator in inflicting war rape against women and girls
- To investigate the consequences of rape upon the lives of rape survivors in Nefas Mewcha town.
- To explore the coping mechanisms employed by rape survivors to overcome their problems.

1.4 Significance of the Study

The finding of this study can be used as a good entry and source information for researchers who are interested to study on war-caused rape perpetrated against women and girl in Amhara region in particular and Ethiopia in general. Historically, the next generation will never forget the history the TPLF war, especially the rape of women and girls, and will also identify the perpetrators without distorting the fact. Practically, it will also be very helpful for the government and partners to make informed decisions on the services and supports need to women and girl survivors of rape.

1.5 Scope of the Study

Notwithstanding the TPLF armed group had invaded and raped women/girls in different woredas and towns of Amhara region, this study was conducted only in Nefas Mewucha town which is one of the woreda of South Gondar zone, Amhara region, Ethiopia. The researcher only investigated the lived experiences of women and girl survivors in the town. The study was framed only to explore the rape cases from the voice of the survivors, not from other parties. Methodologically, it was delimited to only use qualitative method. Conceptually, the study focused on the nature and ways, consequences and coping mechanisms associated with rape that inflicted during and in the post-war time.

1.6 Limitation of the Study

This study was a phenomenological one which focused on the lived experiences of war rape survivors in the case of Nefas Mewucha town, Amhara region, Ethiopia. Therefore, the results of this study cannot be generalized because of the methodology and small sample sizes. Translation might also be a limitation because some words might lose their original meaning when it was translated from Amharic language to English.

1.7 Operational Definition

Rape survivors mean that the situation of raped women and girls who have been surviving after the war conflict.

Armed conflict means that an army who has a modern weapon and begins conflict with the other counterparts.

Gang rape means a group of individuals who raped a woman and/or girl at different places.

CHAPTER TWO: LITERATURE REVIEW

2.1. A Short Glimpse About Rape

2.1.1. Rape

Rape is one of the most serious crimes against society as well as individuals. It is the ravishment of women, with or without, her consent, by force; fear or fraud or the carnal knowledge of women against her will (Prمود S., Rajiv S. and Tanya S., 2015). The UN also broadly defines rape as the insertion of any apparatus, not limited to the penis, into any opening, not limited to the vagina, of the victim “under conditions of force, coercion, or duress (Farwell, 2011).

2.1.2. War Rape

War rape is rape committed by soldiers, other combatants or civilians during armed conflict or war, or during military occupation, and rape committed amongst troops in military service to terrorize, demoralize, humiliate, oppress, and dehumanize groups of people for political, social, and economic gain (Farwell, 2004). Conflict-related sexual violence is sexual violence by armed organizations during armed conflict. Armed organizations include both state forces such as military, police, government- sponsored militias and non-state actors such rebels and militias (Wood, 2014).

2.2. Rape Theories

Globally, there are different rape theories. Some of the most common rape theories include feminist rape theory, biosocial rape theory and strategic rape theory which are presented as follows:

2.2.1. Feminist Rape Theory

According to the feminist rape theory, war rape is the desire of a man to exert dominance over a woman, which manifests itself as sexual violence especially in due to intense misogyny found in patriarchal societies that eventually leads to sexual violence. Wartime rape also proposes that men take advantage of the chaos found in war and conflict to rape and perpetuate their dominance over women and power inequalities in society (Gottschall, J., 2011).

2.2.2. Biosocial Rape Theory

Biosocial rape theory combines biological theory with an awareness of sociocultural influences. Biological theory explains that wartime rape may be explained by biological factors and determined by biological dispositions. Taken on its own, biosocial theory argues that men are more aggressive and, in turn, have a more aggressive sexual disposition than women due to higher levels of testosterone, making them genetically more aggressive. The theory explains that men are simply unable to fight the “urge” to rape and use violence in a sexual setting (Seifert, Ruth, 1996). This theory is biologically deterministic in that it argues all men are likely to rape in some contexts where it would be biologically advantageous to do so and that all men subconsciously want to rape due to a primal drive to pass on their genes and be reproductively successful (Gottschall, Jonathan, 2011).

2.2.3. Strategic Rape Theory

Strategic rape theory is arguably the most influential theory of rape in modern times. This theory expresses that rape can be used as a tool to achieve certain political, social, and economic goals. Gottschall (2011) states rape as a tactic executed by soldiers in the service of larger strategic objectives. This strategic use of rape as a weapon to achieve a desired outcome by one group against another. This theory recognizes that war rape is rape with the intention of destabilizing and destroying the enemy. Under strategic rape theory, rape is used to terrorize, demoralize, humiliate, oppress, and dehumanize groups of people for political, social, and economic gain (Gottschall, 2011, Mukwege, 2004 and Nordstrom, 1996).

2.3. Nature of War Rape

War rapes are committed by gang groups in private settings or public areas including streets, in front of family or community members and can be used as weapon of war (Elisabeth, W., 2006). The nature of war rapes is summarized and presented as follows:

2.3.1. Brutality

Brutality is the common nature and phenomena during armed rapes in the globe (Amnesty International, 2004). For instance, in Sudan, women and girls faced brutality with the infliction of physical injuries such as breaking of their legs, cutting off their breasts or gunshots to the

genital areas and were repeatedly raped (Amnesty International, 2004 and Vlachova & Biason, 2005). Soldiers and rebels commonly used different instruments such as sharpened sticks and guns to threaten, hit and rape women and girls during war rapes (Hagen, K. T., Yohani, S. C., 2010).

2.3.2. Gang rape

Gang rape is the most common type of rape during war in the globe. Most of the time (90%), rape in war is gang rape that has been happened within the presence of other soldiers (Vlachova and Biason, 2005). For instance, Serbian soldier involved in the mass rape of Muslim women in Bosnia-Herzegovina (Stiglmeier, 1994). The study conducted in Democratic republic Congo also found that there were gang rapes during the armed conflicts (Kelly et al, 2011).

2.3.3. Rape in front of families

War rape has been used to humiliate and destabilize the societies. Women and girls were raped by a group of people in front of their family, and the villagers (Tompkins, 1995). For instance, in Darfur, South Sudan, soldiers raped women in front of their family members in order to humiliate, punish, control, inflict fear and displace their communities (Amnesty International, 2004 and African Rights, 2004).

2.3.4. Rape As a Weapon of war

Globally including Africa, different studies were conducted on the war raped victimized women and girls by a group of militaries or soldiers. For instance, in Bosnia in Europe, 60,000 women raped (1992-1995), in Rwanda, up to 500,000 women raped during the 1994 genocide, in Sierra Leone 60,000 women raped during the civil war from 1991-2002, in Liberia, 40,000 women raped (1989-2003), in Nanking, more than 20,000 women raped (1937) and in Democratic Republic of the Congo, more than 200,000 women raped in a decade of conflict (Hague, G., 2016, Lisa Sharlach 2000 and Susan McKay 1998). Literatures show that war rape has been acknowledged as a weapon of war or conflict, often used to control and intimidate a population (UN, 2014). It is often intended to terrorize the population, break up families, destroy communities, and, in some instances, change the ethnic make-up of the next generation (Mukwege, 2004 and Nordstrom, 1996). War rape has been used during armed conflict for many

different reasons, including as a form of torture, to inflict injury, to extract information, to degrade and intimidate, and to destroy communities (Gottschall, 2011). War rape has been used to terrorize, demoralize, humiliate, oppress, and dehumanize groups of people for political social and economic gain across countries (Gottschall, 2011, Mukwege, 2004 and Nordstrom, 1996). It has been used to humiliate opponents, to drive communities and groups off land and to willfully spread HIV (UN, 2006 and Amnesty International, 2004). It was seen as a way either an unavoidable aspect of warring or simply as a weapon of war (Enloe, 2000). Hutu soldiers raped women of Tutsi as a political weapon during the Rwandan genocide (Lisa Sharlach, 2000).

2.3.5. Settings of the Rape

Women and girls have been raped in different places by the gang soldiers. The majority of wartime rapes are often committed in social settings such as streets, private homes, or public buildings (Farr 2009; Pipkin 2009). Women were also raped at refugee camps and other places (African Rights (2004). In Bosnia–Herzegovina, Serbian soldiers committed rapes against Muslim and Croatian women. Soldiers raped women in the streets, in their homes and they also took to concentration camps (Amnesty International, 1993).

2.4. Consequences of War Rape

War rape has negatively affected the lives of survivor women and girls in terms of psychological, physical and health, social relationships, and economic activities (Longombe et al., 2008, Johnson et al. 2010 and Dumke et al. 2021). War rape has multidimensional impacts and consequences on the lives of the survivors. The major consequences of war rape include psychological, health, physical, social and economic effects and are presented as follows:

2.4.1. Psychological Effects

War rape survivors faced psychological problems after the situation. They became stressed, depressed, and mentally disordered. They couldn't sleep well and spend good nights. Psychologically women experienced post-traumatic stress disorder, generalized anxiety, phobias, insomnia, flashbacks, nightmares, grief, and depression (Joachim, 2004 and African Rights, 2004). Rape survivors usually develop a fear of intimacy, sleep disorders, shame, depression, and anxiety, suffer from nightmares of their rapes and experience post-traumatic stress disorder and

psychosomatic disorders (Kivlahan and Ewigman, 2010). Similar literature found that the most common emotional responses displayed by rape survivors are fear, anxiety, anguish, depression, shame, guilt, anger, euphoria, and apathy (Josse, E., 2010).

2.4.2. Health Effects

Rape survivors might face complicated health consequences. Women might face both short- and long-term health problems which include severe pain, bleeding, acute urinary retention, trauma to adjacent structures such as the urethra and bladder, painful sexual intercourse, strain during urination, recto vaginal fistulas, hypersensitivity of the genital area and increased risk of sexually transmitted infections and HIV (Jina, R., & Thomas, L. S., 2013). Health consequences of rape can include sexually transmitted infections such as HIV/AIDS, sexual dysfunction, bleeding, vaginal discharge, back pain, headaches, fatigue, dizziness, fainting, disturbed sleep, chronic pelvic pain, gastrointestinal pain, and eating disorders (African Rights, 2004, Joachim, 2004; Vlachova and Biason, 2005). Rape survivors were exposed to HIV/AIDS, and other sexual transmitted diseases and they also developed fistula due to brutal rapes (Kelly et al, 2011).

2.4.3. Social Effects

Survivors of rape might face challenges including stigma, embarrassment, loss of dignity and respect from their communities. Women lost their values, dignities, and respects after rapes (Mukamana and Brysiewicz, 2008). Rape survivors usually face stigma, embarrassment, and alienation (African Rights, 2004). Victims are likely to suffer a lot because of the shame and the stigma associated to it (Amnesty International, 2004). In traditional societies, rape survivors were rejected by both their husbands and communities. Many husband usually reject their wives through divorce or abandon after they have been raped by the armed soldiers (Josse, E., 2010). For instance, in Democratic Republic Congo community stigmatized the rape survivors through gossip or finger pointing and their husbands divorced them which made and increased survivors' feeling of shame and humiliation (Kelly et al, 2011).

2.4.4. Economic Effects

Rape also affects the economic and well-being of survivors. Findings showed that rape and related trauma can affect survivors' employment in several ways, including time off, diminished

performance, job loss, and inability to work. It can disrupt their incomes or reduce earning power and have negative economic consequences on the survivors' economic well-being (Rebecca M. Loya, 2014).

2.5. Coping Mechanisms and Strategies of Rape Survivors

Coping is a dynamic process of constantly changing cognitive and behavioral efforts to manage specific problems and demands by individuals (Lazarus and Folkman, 1984). There are different kinds of coping mechanisms and strategies for sexual violence including war rape. However, Lazarus and Folkman (1984) categorized coping strategies into emotion focused and problem focused coping strategies. Coping strategies which aim to alter the situation, can reduce the presence of anxiety and depression (Ubillos-Landa et al., 2019).

In emotion-focused coping strategies, victims attempt to manage emotional responses to stressors. This attempt to manage emotional stressors could lead to a passive style of coping to avoid potential problems like, over-indulging behaviors. During war or post-conflict periods, survivors usually tend to use coping strategies based on avoidance and/or silence (Lazarus and Folkman,1984).

Victims used more passive coping strategies, such as giving up, waiting for things to resolve by themselves, or religion (Hewitt Ramírez et al.,2014). It is a silence which comes from the guilt and shame they feel. Whereas problem-focused coping strategies are directed to dealing with the problems by learning new skills or removing barriers (Zeidner, Matthews, & Shemesh, 2015). Survivors sought and received medical and mental health and justice supports from government and private sectors in during and post rapes (Yusof, M.et al, 2022 and Ubillos-Landa et al., 2019).

CHAPTER THREE: RESEARCH METHOD

3.1 Description of the Study Area

This research was conducted in Nefas Mewuch town from 22-25 May 2022. Nefas Mewucha is the town of Lay Gaynit District in the northern part of Ethiopia. The town is located in the South Gondar zone of Amhara region with a latitude of 11°44'N and longitude 38°28'E and an elevation of 3120 meters above sea level. This town is chosen for this study because it was the place that the conflict affected it and women and girls were raped by TPLF gang groups. In addition, the town was recaptured by the government earlier within a short period of time and the rape survivors were already identified by the government (Amhara BoWCSA, 2021). Thus, the researcher had access to war rape survivors in the town through Women, Children and Social Affairs office.

3.2 Research Approach

This research employed a qualitative approach as it explores detailed information about individual experiences. Qualitative research is an approach used to explore and understand the meaning individuals or groups ascribe to social or human problems. It focuses on the philosophical world view of interpretive. Interpretive worldview believes that there is a variety of reality in the world, so individual experiences are varying from society to society (Creswell, J.W, 2013). This approach was chosen because it often addresses the processes of interaction among individuals, indicating that the researcher ought to be interact with rape survivors so as to dig out their real feeling and hidden experience.

3.3 Research Design/ strategy

This study employed a phenomenological design. Because this design allowed the researcher to gather data that focuses on what happened in the lived experience of individuals and what was important about their experiences in the phenomena. It also helped to understand and explore the views, feelings, and experiences of participants from their point of views (Creswell, 2007). As the topic and subject of this study is a very sensitive, hidden, and private issue, it can only be explored through phenomenological design since this strategy is a best suited strategy to explore the experiences of individuals about the phenomena.

3.4 Sampling Design and Sample size

To select the study participants, the non-probability sampling technique was employed. From the different types of non-probability sampling techniques, only purposive sampling technique was employed for this study. The researcher first set selection criteria such as age, marital status, educations, religion, and jobs to select study participants. Then, the researcher discussed with the Nefas Mewucha Town Women, Children and Social Affairs office on the selection criteria and how to find study participants. Concerning to the sample size, the researcher was more reflexive of sample sizes until the point of data saturation. Based on the criteria and discussion, the researcher together Nefas Mewucha Town Women, Children and Social Affairs office purposively selected rape survivors and went home to home for the in-depth interview. Finally, the researcher selected 14 participants (3 participants based on their ages, 3 participants based on their marital status, 3 participants based on their education status, 3 participants based on their jobs and 2 participants based on their religion) to explore and come up with different lived experiences.

3.4.1 The Inclusion and Exclusion Criteria in This Study

The inclusion criteria of this research were only women and girls who were raped by the TPLF groups during the war and currently who has lived in Nefas Mewucha towns were included for the study. However, women and girls who were raped by intimate partners were also excluded for this study.

3.5. Data Sources and Data Collection Instruments

The data were collected from individuals who experienced rape during the armed conflict. Thus, the primary source of this study was rape survivor girls and women who live in Nefas Mewucha town. In order to collect the data, the researcher used an in-depth interview data collection tool. In using this data collection instrument, interview guide (see annex I) was developed by focusing on issues that linked with the lived experiences of rape survivors. Then, the data was collected from war rape survivors of women and girls through face-to-face interviews from 22-25 May 2022.

3.6 Data Analysis

Thematic qualitative data analysis technique was employed to analyze the collected data. The researcher followed five steps to analyze the data. First, the collected data through recording was transcribed from the audio version into text form. Second, the transcribed data was translated from the local Amharic language into English. Third, the translated raw data was coded and organized based on its similar dimensions. Fourth, the categorized data was then converted into themes. Finally, it was analyzed and interpreted qualitatively.

3.7 Trustworthiness of the Study

To ensure the quality of the data, the prepared in-depth interview guideline was given for experts to comment on the contents, language and overall patterns of the tool. Based on the would-be comments, improvements were made on the tool. As the phenomenology study focuses on the lived experience of individuals, the data were exclusively collected through interview method. However, this kind of study has an innate limitation to cross check information by using different qualitative data collection instruments. To minimize such limitation, member checking system was utilized. To this end, I had met again the participants of the study after the data was analyzed and I informed them about the analyzed data just to cross check whether their real voices were properly written in the research paper or not.

3.8 Ethical Consideration

Since the issue under investigation was very serious, so the researcher followed the following key procedures. First, the researcher got a supportive letter from Bahir Dar University and then, provided it to Amhara National Regional State Bureau of Women, Children and Social Affairs to obtain the bureau's support letter. Secondly, the researcher gave the regional bureau's support letter to Nefas Mewucha Town Administration Women, Children and Social Affairs (WCSA) Office to get their support. Thirdly, the researcher together with the Nefas Mewucha Town administration WCSA office selected study participants based on the criteria (age, marital status, education, religion, and jobs) and went to house to house for the in-depth interview. Fourthly, participants were informed about their right not to participate or share their lived experiences if they don't want and can terminate the interview at any time and all participants signed written consent prior to data collection. Lastly, written consent was obtained from each study participant by explaining the objective of the study.

CHAPTER FOUR: RESULT AND DISCUSSION

4.1. Result

4.1.1. Socio-Demographic Characteristics of Study Participants

A total of 14 war rape survivors were participated in this phenomenology study in Nefas Mewucha town, Amhara region, Ethiopia. The table (1) clearly shows that war rape survivors were from different age groups such as girl (16 years old girl), adult women and elder woman (50 years old). In terms of educational status, most of them are illiterate. However, there is one BA degree holder and another grade 10th student. Most of rape survivors engaged in a mini business such as tea, coffee, local beer and “Injera” selling. Almost all survivors are Orthodox Christianity followers. However, one rape survivor is a Muslim follower.

Table 1: socio-demographic characteristics of study participants, Nefas Mewucha town, 2022

No	Code	Age	Marital status	Educational status	Religion	Job
1	01	30	Divorced	Illiterate	Orthodox Christian	Tea and coffee seller
2	02	47	Widowed	Illiterate	Orthodox Christian	Tella and Injera seller
3	03	30	Unmarried	Illiterate	Orthodox Christian	Tella and Injera seller
4	04	28	Divorced	Illiterate	Orthodox Christian	Tella and Injera seller
5	05	25	Divorced	9 th grade	Orthodox Christian	Unemployed
6	06	16	Unmarried	10 th grade	Orthodox Christian	Student
7	07	37	Married	Illiterate	Orthodox Christian	Tella and Injera seller
8	08	27	Married	8 th grade	Orthodox Christian	Lottery seller
9	09	50	Widowed	Illiterate	Orthodox Christian	Kollo, Tella and Injera seller
10	010	35	Unmarried	Illiterate	Orthodox Christian	Tella and Injera seller
11	011	35	Married	Illiterate	Orthodox Christian	Spices seller
12	012	30	Unmarried	10 th grade	Orthodox Christian	Tella and Injera seller
13	013	31	Married	BA degree in Management	Orthodox Christian	Clothes trader
14	014	35	Divorced	4 th grade	Muslim	Eggs and hen merchant

4.1.2. The Situation of War and Rape

The study participants mentioned that most of the town residents who have money were able to leave the town when the TPLF approached except the pauper. The poor women couldn't have a choice to go to the other areas. Even, they didn't expect the TPLF rebels could invade their town

during the night and rape them brutally. The situation was unexpected and very shocking for many of rape survivors. One of the participants shared the situation as follows:

It was 1 o'clock in the evening. I was making coffee at home and was picking up the cup. A little very young person (junta) went through the door to my house. He will be my son. I did not even think that he would rape me, because he is very young, and we never get along with him (in years old). He has a clutch, a knife, and a bomb. I have gotten trembling. I said, what is wrong with me? Don't you have a weak mother like me? He got angry and slapped and raped me in my bed. (Participant II)

Similarly, the other participants expressed the incidents:

The TPLF Junta entered Nefas Mewucha town on August 12, 2021. When the TPLF Junita approached the town, most residents left the town and fled to other safe areas. The rest of us are poor and have no transportation to leave within that instant (Participant IV).

The above stories clearly illustrated that poor women were more vulnerable to war rapes by the TPLF gang groups. It is clearly understood from the above table (1) and stories, those women who were poor, divorced and widowed were unable to leave the town and became vulnerable to war rapes.

4.1.3. Nature of War Rapes

The participants of the study faced different violence and abuses by the TPLF Junita while they got raped. The nature of rape are categorized as seven sub-themes and presented as follows:

Rape with intimidation

Almost all participants disclosed that the TPLF rebels intimidated them through guns and knives. The rebels threatened women and girls through weapons to rape them. The situation of rapes is well articulated by the verbal account of the following participant:

One soldier came to my home in the night. He threatened to kill me with his gun and a knife. He dragged me to the bed and raped me. (Participant X)

The above stories of the survivors show that women were highly intimidated by the TPLF gang groups. The rebels threatened and intimidated women and girls through their guns and weapons when they raped them. This might cause psychological problems for the victims.

Rape with beating/hitting

Participants of the study said that they were beaten by the TPLF soldiers. The soldiers repeatedly hit them through boxing, shoes, slaps, and forearms and raped them. One of the participants said:

...they repeatedly hit my womb and face with their slaps, forearms, and shoes while they wanted to rape me. One also strangled out my neck, and the other raped me. (Participant IX)

Similarly, the other participant told:

...he punched my left eye with his left hand who has a thick and very sharp razor ring in his hand, everything turned around and I fell in the ground, and they raped me turn by turn. (Participant V)

The above narrations clearly revealed that women and girls faced very hardship situations. They were slapped and hit by the TPLF gang rebels. The rebels beat the faces and eyes of the women brutally through slaps, shoes, and forearms. They also blocked and strangled the throat/necks of the women. It can be concluded that the soldiers were extremely cruel and inhuman.

Rape in front of family members

Participants confirmed that the TPLF gang groups raped them in front of their family members. Mostly women raped in front of their children. One of the participants said that:

The invading forces of Tigray entered into our town at 6 p.m and five TPLF gang soldiers asked me for something to eat right away. I gave them pepper and shrimp with “Injera”. I have one 10-year-old and one 3-year-old daughters. When they finished eating, the four juntas left. But one of them stabbed my left arm with his knife. He slapped my face. When I fell, he raped me, crying in front of my two children. (participant III)

In the same vein, another woman said:

...from that day onwards (from August 13 to August 19), the Tigrian People Liberation Front soldiers came and raped me in front of my daughter. (Participant VIII)

The above stories show that the soldiers raped girls and women in front of their family members. Mostly, women raped by the gang groups in front of their children. These clearly indicate that not only women were affected by the situation, but also children were highly impacted by the war rapes. Children might face and develop post-traumatic mental disorder such as stress, anxiety, fear, and uncontrolled thoughts.

Rape in alone

Some participants of the study said that they got raped in alone by the TPLF junta groups. One of the participants said:

It was a kebele house where I lived alone. I was living alone because I have no husband and children. TPLF soldier came to my house and raped me. He raped me three times. (Participant I).

Similarly, a girl told her experience of rape as follows:

While I was on my way to my aunt's second home, one junta stopped me and dragged me into an unfamiliar compound. He then raped me in a small and closed courtyard. (Participant VI)

The above stories show that some girls and women were also raped alone. Here we can understand that women and girls were raped alone because either they don't have families, or they were raped outside their homes. Otherwise, they couldn't be alone when they got raped.

Repeating rape

The participants of the study confirmed that they were raped many times by the TPLF gang groups. The gang rebels raped women and girls repeatedly in their houses. One of the rape survivors said:

On the night of 12 August 2021, I was raped 3 times in my house though I tried to hide myself. From August 13 to 19 2021, the TPLF gang groups raped me in my own house for 6 consecutive days. (Participant VIII).

As indicated in the above story, rape survivors were raped frequently by the TPLF gang groups in their houses. The rebels raped women and girls many times during their stay at Nefas Mewucha town. This might cause both psychological and health problems to the victims.

Raping and then forcing to give food and drinks and wash their clothes

As per the result of the study, the TPLF gang groups forced women to give them food and drink. Women were also forced to wash the soldiers' clothes. One of the participants told:

After they raped me, they forced me to cook the stolen chicken and give them food and drink until they left town (participant I).

In the same token, another participant shared her experiences as follows:

Till they left the town, they raped me and forced to prepare food and wash their clothes. They forced me to prepare pasta, macaroni, and other food that they had stolen from the shops and the hotels. They also forced me to prepare chicken that they had stolen from each house. They also forced me to wash their clothes. But I didn't wash their clothes as there was no water for some days. (Participant II)

As it is clearly indicated in the above stories, the TPLF gang groups forced women to prepare food and drink for them. It also informs us the rebels had stolen pastas, macaroni and chicken from the communities and forced women to cook and give them the food. They also forced women and girls to wash their clothes though there was no water during their stay in the town.

Raping and forcing to steal properties from other houses

The participants of the study shared that the TPLF gang groups forced women to steal and bring different properties and alcohol from other houses and then took photos and videos. One of the participants shared the following experiences:

They forced me to steal and bring different alcoholic drinks from the hotels and shops. Though I wanted not to bring the properties of other, they repeatedly hit and tortured me

to do so. When the pain and torture was excruciating, I started to steal and bring alcoholic drinking for them. However, they took a photo and video of it and posted it on their facebook page. (Participant VIII)

The above reflection reveals that the TPLF gang groups forced women with tortures to steal and bring different materials, properties, and alcohols from the community members' houses. Surprisingly, the TPLF rebels took photos and videos while tortured women took these materials and alcohols. These clearly show that the soldiers were aiming to do politics by cheating the national and international communities.

Settings or Places of the Rapes

Participants of the study got raped at different places. The TPLF rebels raped women and girls forcefully in their beds, unoccupied courtyards, and forests. The places of the rapes are categorized into two sub-themes and presented as follows:

Outdoors

Based on the finding of this study, some women and girls were raped in outdoors. They were raped in unoccupied courtyard and forest while they traveled and hide themselves from the TPLF gang groups. One of the rape survivors said:

I left the house on Friday and went to the forest called "Alhua" (name of the local forest). We escaped from the forest with 30 women and 3 sons, and they killed all three sons immediately. Many were killed; then they came down from where I fell under a bush called Anbacho and they said showed us a woman who was hiding with you. Is your husband a cabinet, tell me where he is fighting? They beat me with a rifle butt. They warned me to show where the police, the Special Forces, the authorities, the cabinets and neighbors are otherwise they would kill me. I told them I didn't know where the police, special forces, cabinet or government official are and that I was a poor corn seller. But they could not leave me. They beat me severely. I told them that my husband had died of HIV and that I was sick, but one of them raped me in the forest. (Participant IX)

Other participants also informed:

It has been more than a week since the invading forces of TPLF entered into our town. I am 10th grade; I live with my aunt, and I was on my way to our second home as she sent me to see it. A junta paved the way for me. He then dragged me into an unoccupied courtyard. After that, he raped me in a small dorm. He then released me. (Participant VI)

As it is clearly seen in the above stories, the TPLF gang groups couldn't choose comfortable places to rape women and girls. They raped women and girls everywhere. The rebels raped them in the forests, a closed compound, and dorms. This shows the TPLF groups are very brutal and inhuman.

At home

Most rape survivors were raped brutally in their homes. The rebels broke and opened their homes' doors forcefully and raped women. One of the participants explained that:

It was about 6 o'clock on 13 August 2021 when juntas entered into my house. I lived in a rented house with my children. Four juntas raped me in group in my house. (Participant XI)

The above story indicates that the rebels also raped women and girls in their homes. This shows the soldiers didn't care for the victims and family members.

Types of War Rape

Participants of the study confirmed that they were raped both by individuals and groups of TPLF rebels. The types of rapes are categorized in two sub-themes and presented as follows:

Gang rapes

Most study participants disclosed that they were raped by TPLF gang of groups. They confirmed that the rebels attached and raped them turn by turn in a group in their homes. One of the participants said:

As soon as they finished drinking local alcohol, one of the soldiers twisted my arm. The other hit my side and dragged me into the bedroom. I cried and cried. I said "please leave me, you have no mother and sister. They said, "shut up, you, Amhara donkey". They

continued beating and raping me in a group with shifts. I cried and said, "please, leave me I am sick, and am HIV/ADIS positive." But they said, we came here about to die. (Participant I)

Similarly, another participant shared:

I was living in a rented house with my children when the TPLF juntas invaded the Nefas Mewucha town on 12 August 2021. Four juntas came to my house and raped me in a group in my house in front of my four years old daughter. (Participant VIII)

The above stories inform us most women and girls were raped by the gangs/groups. The TPLF rebels were also hopeless and desperate. They didn't care about their future lives. They raped HIV/ADIS positive women without using condoms while the women told them about their HIV cases.

Individual rapes

Few participants of the study told that they were raped by individual TPLF soldiers. One of the participants said the situation as follows:

I live alone in a rented kebele house. Because I am poor and have no husband and children. After the invasion of the town by the TPLF, one soldier came to my house and raped me three times. (Participant II).

In the same token, a girl said:

While I was traveling to see my aunt's house, one soldier pulled and dragged me into an unoccupied courtyard. And then, he raped me in a closed dorm. (Participant VI)

The above stories revealed that there were also individual rapes. Individual TPLF groups raped women and girls in their houses and unoccupied courtyards.

4.1.4. Intentions of the Perpetrator in Inflicting War Rape Against Girls/Women

Study participants confirmed that the purposes of the rape were more complex than the usual perceptions. The motivations of rapists include the desire to punish, gain revenge, cause pain and humiliation, and control the people through fear.

Rape as revenge

Many of the war rape survivors confirmed that the TPLF rebels beat, insulted, and raped them to revenge the people of Amhara. One of the participants told:

Each of the 4 TPLF juntas raped me turn by turn. The soldier who first raped me said, “we have revenge on Amhara women”. We didn't have any special sex with you. You are the mother of your children (sons). (Participant XI).

Similarly, the other rape survivor said:

one of the TPLF soldier repeatedly (3 times) raped me in front of my 13-year-old daughter in a horrific and brutal manner. It was very disgusting. (Participant XIII)

As it is clearly reflected in the above case stories, the purpose of the rape was to revenge the people of Amhara. TPLF groups raped women and girls forcefully and in a horrific and brutal manner. The soldiers committed these kinds of rapes in front of family members even by telling word by word “we came here to revenge the Amhara people”.

Rape as a weapon for humiliation and causing fear

The TPLF junta raped women of Amhara to humiliate them and create fear among the society members. They humiliated many women when they raped them. War rape survivors confirmed that the TPLF soldiers used to insult, beat, drag and humiliate them. One of the rape survivors said:

Amhara, our mother has been grinding with her hand for 8 months. They insulted me, you donkey and stomachness (“hodam”) Amhara and they beat, trampled and raped me in groups. They didn't have sex interests and motivations but humiliate and fear us. (Participant XII)

Similarly, another rape survivor shared her story as:

they put the baby in front of me and raped me in groups with shifts. When they raped me, they insulted me by saying Amhara donkey, Amhara is not human being, Amhara hodam (stomachness). They also insulted my child, Amhara “gint” (scorpion). The child is still scared and worried when he sees someone with a weapon (crying). (Participant VIII)

From the above case stories of the rape survivors, the TPLF groups humiliated many women and girls to feel ashamed and lose their respects by injuring their prides and dignities through insulting and raping. They also tried to cause mass fear to the people of Amhara so as to invade many areas of the Amhara region of Ethiopia. In general, it can be concluded that the war rape is not a crime against the individual women, but it is the deliberate crime against the people of Amhara for the intention of destabilizing.

Rape as punishment and creation of long-lasting pain/scar

The TPLF junta groups repeatedly hit and tortured women to cause pain and punish as part of their revenge to the Amhara people. One of the rape survivors told the following:

The soldiers beat and tortured me. They asked, “are you a spy sent by Abby Ahmed (the prime minister of Ethiopia? Are you a member of Fano? How much did they pay? Find out the truth?” I thought they would leave me, so I said, I am a lottery broker, a street vendor, and a prostitute. However, they could not believe me and raped me many times. I was exposed to the HIV/AIDS because of those situations. (Participant VIII)

As indicated in the above story, the women and girls were suffered a lot by the torture and beating of TPLF soldiers. The soldiers purposely punished and caused pain on different parts of the victims’ bodies. They tortured and hit women severally while they rape. Even they exposed women and girls to HIV/AIDS. It can be concluded that all the tortures, beatings and rapes were aimed at causing severe pains and punishments as part of their revenges of the Amhara people.

4.1.5. Consequences of the War Rape on the Lives of Survivors

Rape survivors faced multifaceted and complicated problems and challenges during and the post-war rape in Nefas Mewucha. The effects and consequences of war rape are categorized into psychological, health, physical, social and economic effect themes and presented as follows.

Psychological effect for survivors

All rape survivors have faced psychologic problems during and in the post-war. The most psychosocial consequences of the war rape survivors are categorized into six sub-themes and presented as follows:

Fear and stresses

All participants of the study said that they have fears and stresses in the post war. They usually stress and become fearful in day to day lives. One of the participants told:

*My mind would explode when I thought about my children, husband and how I get along with people. My mind also becomes stressed and troubled when I see a soldier.
(Participant I)*

In the same token, another participant said:

*I was overcome by fear for a long time. I still remember and hear gunfire and the sight of a soldier. I was so scared that I would urinate for days without thinking about it.
(Participant II)*

As it is clearly shared in the above case stories, many rape survivors are feared and stressed a lot. Specially, they usually stress and fear when night comes as many of them were raped during the night. The result reveals rape survivors face phobia of soldiers.

Anxiety

The participants of the study have anxieties in the post war-rapes. They always worry a lot about the situation. Survivors have been suffered from the continuous day and night anxieties of the war rapes. One of the participants shared her experiences as follows:

My mind wanders every night and day. The action, the knife-wielding, their voices, the cries of my children and everything come to mind. It worries me so much. I can't forget the situation (crying). Now I hate to see a man. (Participant III)

Similarly, another rape survivor told:

*I always worry when the sun goes down. When I go to bed, the gun and knife all come to my mind. At that time, I wished the lord had given me a son or girl to sleep with me.
(Participant II)*

The above narrations show that survivors face extreme mental disorders. Every day and night they usually think a lot and remember every action of the gang rebels including intimidating them through guns and knives and the voices and cries of their children too. And night becomes

a worrying and horrible time for survivors. Given this situation, it can be concluded that the lives of rape survivors are endangered unless remedy actions are taken.

Loss of self confidence

The study result shows that all most all rape survivors lost their self-confidences. They felt inferior and worthless in their community. Survivors don't give values for themselves and don't feel worthy. One of the study participants said:

I try to pretend that nothing happened to me, but sometimes I get overwhelmed. I thought I am not a human being as I am the one who got raped by Junita? I have been humiliated in my life. I feel inferior and worthless when I think about it. (Participant VI)

Similarly, other rape survivor also told:

Do you like me when you see me? I am not a human being, because I have lost my body, and I have lost many things. When I was with someone, I asked myself, who am I now? I feel I shouldn't be standing with people. I don't want anyone to sleep next to me (female or boy or adult). I suffer terribly. All of this was a traumatic experience for me after the rape. (Participant V)

The above case stories tell us rape survivors have been hesitating and worrying about themselves. They lost their confidence even to live with people in their communities. It also shows that victims are no longer trusting their humanity as they felt very extreme inferiority and worthlessness. Generally, it can be concluded that survivors do not have positive views about themselves. This might lead to complicated mental health problems for them.

Feeling sad

Participants of the study felt very sad during and in the post-rape. They said we are sad because the TPLF raped us in front of their family members. One the rape survivors told:

Apart from my injuries and rapes, I felt sad for my children. Because I was unconscious for a week after TPLF gang groups rape in front of my three children. Children finds it difficult to see their mother being raped and to hear bad words from their friends. (Participant XI)

Similarly, another rape survivor said the following:

All things become dark to me; because I have no family, no relatives, and no friends to care for me after the tragedy. As a result, I hate being created. I felt sad and cursed the day I was born. (Participant VIII)

The above reflections reveal that rape survivors are sad and unconscious because they were raped in front of their family members specially in their children. In addition, the study shows that those who don't have families, relatives, and friend around them felt very sad. This implies that the need to provide psychological supports for victims.

Loss of hope

The study participants lost their hopes for their future. They gave up about their lives and future due to rapes committed by the TPLF gang groups. Most of the study participants thought as if they are no longer human beings. One of the rape survivors shared:

I am no longer a human being. I am standing dead. I do not want to live. Sometimes I even want to commit suicide, but I must live for my children. (Participant I)

Another rape survivor also expressed:

I hate myself due to the rape, beatings and cruelty inflicted on me by the invading forces of TPLF. I don't think I am human. I am dead. I am spoiled. After my husband's death, I took the Eucharist ("korbiayalehu") at church; but at the age of 50, I was raped and disgusted. I stay indoors. I don't want anyone to see me. I go to church alone without anyone seeing me. (Participant IX)

The above stories show that war rape survivors become hopeless and desperate for their future. They gave up about their lives and future and want to commit suicide. They also hide themselves and don't want to meet and see anyone. Generally, we can conclude that survivors lost their hopes.

Psychological impacts of war rape on survivors' children

Fear and phobias of children

Participants of the study shared children, who saw their rapes, also developed fears and phobias. They said that children were feared and worried a lot when night came. Most rape survivors confirmed this and have worried about the lives of their children. One rape survivor said:

Whenever there are gunshots, my daughter says junta has come. Let us run before they rape you. Even when she woke up in the morning, she said, "has junta come?" I said, no, they had gone. (Participant VIII)

Similarly, another woman also shared her child's phobia for soldiers:

When any person with weapons came to my house to drink "tella" (local beer) and coffee, my son said, "don't go to bed", because he assumed they would pull and drag me to the bed like the TPLF Junita did." (Participant I)

The above cases and experiences show that many children have faced fear and phobias. Children became fearful when they heard gunshots and night came. They also developed a phobia for rebels who wear uniforms. These needs urgent action such as mental health and counseling for children in Nefas Mewucha town so as to avoid such phobias.

Depression and craziness

Participants of the study disclosed that their children became crazy and depressed in the post war rapes. Children who saw their mothers' rapes became depressed and crazy. They became disobedient and numb. One of the rape survivors shared about her children as follows:

The TPLF soldier raped me in front of my two children (my first child is 10 years old, and my second child is 3 years old). Now my eldest daughter is numb. She does not obey. She doesn't really listen to me. School teachers also say, "she is crazy, she's like a rock." (Participant III)

As it is indicated in the above story, children became depressed and crazy as their mothers were raped in front of them. The story shows us children can't listen to their families and teachers at

school too. They also became disobedient to their families. Generally, it can be concluded that children were highly psychologically affected by actions and rapes of the TPLF gangs.

Health effect

Many war rape survivors faced serious health problems during and after the war-rape. The health effects of rape are summarized as the following sub-themes:

Bleeding

Participants of the study said that they were injured and facing bleeding by the TPLF group perpetrators. The TPLF groups cut and beat different parts of rape survivors' bodies and made them bleeding. One of the rape survivors said:

They raped me all the night, and they left me in the morning. I was shocked and didn't remember what they did after some hours. In the morning, I was walking to my aunt's house, but there was bleeding profusely. While walking, another junta said. Stop! I said I won't stop." I was desperate and so frustrated. They pulled and took me to an unoccupied compound. They wanted to rape me, but they saw much blood in my bodies. He spat at me and said, "you Amhara donkey (wodeharki in Tigregna). Then one of the soldiers pierced my womb through the muzzle of the gun. After that incident, I did not remember everything that happened. Days later I found myself in my aunt's house. Although I used a baby diaper, my womb couldn't stop bleeding. I didn't know myself for days. (Participant V)

In the same token, another rape survivor shared:

One night I was raped by two TPLF soldiers. I lost my mind, and I didn't remember how many times they did it. It was early in the morning when I found myself in an empty room with blood on my womb, hands, and other parts of my body. (Participant II)

The above stories show that the rebels brutally pierced the womb of the woman through the muzzle of his gun. It also clearly shows that there were bleedings in different body parts rape survivors including in their wombs. Most of the survivors lost their minds and were able to see the bleeding and blood for some hours and a day. This indicates that the soldiers were very brutal and inhuman.

Vulnerability to HIV/AIDS and other sexual transmitted diseases

Rape survivors are vulnerable to HIV/AIDS and other sexual transmitted diseases (STDs) as the TPLF gang groups raped them without using condoms. Survivors worried about HIV/AIDS. One of the participants said:

I am not pregnant yet. But when it comes to sexual transmitted diseases including HIV/AIDS, I don't know whether I have it or not. Because I was not examined. I am still focusing on my relationships and with my God. I gave everything to God (she cries). I do not know if the virus is present or not in my blood. I am worried if I have the virus. (Participant III)

Similarly, another rape survivor said:

I was tested and treated by health officers in Felege Hiwot Comprehensive Referral hospital, Bahir Dar, and my HIV test results showed that I was exposed to HIV/AIDS. (Participant VIII)

From the above reflections, victims were vulnerable and exposed to HIV/AIDS and other STDs. We can comprehend that some survivors were unable to get examinations for HIV/AIDS. This might be due to fear of the result or absence of information. This will affect both their psychological health conditions. However, some victims got HIV tests and became HIV/AIDS positive. This clearly indicates the need to provide information and mental health and counseling services for rape survivors.

Fistula

Participants of the study confirmed that they have faced fistula. They said the TPLF rebels raped them repeatedly in groups and caused difficulties to control their urinates. One of the rape survivors shared her experiences as follows:

I was raped repeatedly by a group of four soldiers without time gaps. They also came out and trampled on my back. They beat me with a rifle butt. So, my uterus came out. I had really difficulties in controlling my urine. My elder son pushed my uterus inside with clean cloth and tied my legs and feet. I was not able to control my urine for 15 days. I also lost

my consciousness. My brother sent me money from Quara and I was treated at Debre Tabor Hospital (Participant XI)

Similarly, another rape survivor said:

I was raped by three juntas for long hours. I did not know myself for 1 month and 10 days. And I could not control my urine. One woman gave me Birr 100 and I took medicine from a private pharmacy at Debrezebit kebele (Participant VII).

The above case stories reveal rape survivors developed fistula due the frequent gang rapes and attacks through guns. The TPLF gang groups raped women repeatedly without time gaps resulting in women became unable to control their urinates for weeks and months. It also shows that women lost their consciousness when they were raped frequently. This implies that soldiers were stupid and senseless.

Insomnia/sleeping disorder

Study participants have disclosed that they have insomnia problems in the post war rapes. Rape survivors faced sleeping disorder after they got raped by the TPLF gang groups. They couldn't spend good nights due to flashbacks. One of the participants told:

After they raped me, I couldn't sleep well. I usually get up at night and pray to God to get better sleep. I bow down. I also went to the holy water and got baptized to improve my sleeping disorder. (Participant III)

As it is reflected in the above story, sleeping disorder become a great problem for rape survivors. Victims couldn't sleep rather they usually wake up with fears. The above story clearly shows that rape survivors used different coping mechanism such as praying and visiting to the holly water when they couldn't find sleeps at nights. It can be concluded that survivors can't get enough sleeps.

Nightmare and flashback

The result of the study shows that rape survivors faced post-traumatic stress disorder. Some survivors experienced nightmares and uncontrolled thoughts about the situation of the event. They couldn't spend good nights due to nightmares. One of the participants said:

I am very worried because I don't know whether I am infected by HIV/AIDS or not. I am so worried about it. No one knows about it except me and my family. No one knows in the school. I do not want to be exposed to it until I finish my education. When I remember the situation, I usually have nightmares and wake up anxiously waiting for the results of HIV. (Participant VI)

As it is reflected in the above case story, survivors are extremely worried and in nightmares. The girls especially become in uncontrolled thoughts and flashbacks when they think about their vulnerability to HIV/AIDS. Many women and girls still live with discomforts. They were not either diagnosed or receiving good treatment. In general, it can be concluded that medical health and counseling support are too late to the victims.

Fainting

Many rape survivors fainted during and post war rape periods. Because they were repeatedly and brutally beaten, injured and raped by the TPLF junta groups. One of the participants shared her experiences as follows:

I was beaten, injured, blindfolded, and raped by TPLF gang groups. The soldiers also inserted the muzzle of the rifle into my womb. As a result, I was unconscious for several days (15 days) and there was bleeding profusely. (Participant V)

The above story informs us that many women survivors lost their consciousness during and for some post war periods. It also shows women and girls were attacked and injured which resulted in fainting. It can be concluded that brutal beatings and injuries together with the gang rapes led survivors to fainting for some days.

Forgetting

Participants of study disclosed that they can't remember things easily. They faced forgetting problems after they got raped by the TPLF groups. One of the participants said:

As a result of the beatings, rape and trauma, my ability to concentrate and remember things was greatly diminished. Because I can only think 24 hours a day about the injustice that has befallen me. (Participant V)

As it is reflected in the above story, survivors can't properly remember things and their concentration abilities have been reduced. Therefore, it can be concluded that survivors faced chronic forgetting problems which need mental health and psychological treatments.

Physical effect

War rape survivors faced different physical problems by the TPLF junta groups. The victims were injured, broken and lost different parts of their bodies. The major physical effects of the war rape are categorized into three sub-themes and are presented as follows:

Injury and broken

Rape survivors were seriously injured at different parts of their bodies such as legs, ankles and backs. Their hands were also broken by the rebels. The TPLF gang groups used their weapons and knives to attack and beat women when they raped them. One of the participants said:

When they raped me one by one, they hung my legs and feet up. As a result, my ankles, and legs still hurt. My back was bruised, and I felt pain in my bladder. (Participant IV)

Similarly, another participant shared the following experiences:

They beat my hands and back through their weapons and knives and raped me. My hand got broken. It is still broken, and my back is also wounded. They are very cruel. (Participant XI)

The above stories reveal that women and girls were injured at different parts of their bodies by the rebels. The gang groups hit women's hands and backs through their guns and knives. They also hanged the legs of women while they raped them. This clearly shows the TPLF rebels were cruel and brutal, and the purposes of the rape were not for sexual interest.

Loss of eyes

Rape survivors lost their eyes by the attacks and beatings of TPLF gang groups. The gang groups slapped faces and hit the eyes of women when they forced to rape them. One of the rape survivors shared her experience as follows:

I don't see much because the soldier hit my left with the edge of the gun and lost it. After the TPLF soldiers left the town, I went to Debre Tabor and received medical treatment by

the help of woreda's and kebele's women children and social affairs, but I could not get better. I was also referred to Addis Ababa because it was beyond the capacity of the doctors though I couldn't go there due to lack of money. (Participant V)

As it is shown in the above story, women have lost their eyes though they received medical treatments from higher health provider services. It is clear that the TPLF soldiers aimed at attacking the health of women.

Social effect

The war rape caused different types of social impacts to rape survivors. Some of the social effects are divorces, loss of dignity and respect, stigma, and embarrassment and are presented as follows:

Divorce

Participants of the study confirmed that they got separated with their husbands after the rape. War rape caused divorces for many survivors. Husbands divorced their wives when they heard about the rapes. One of the rape survivors informed:

My husband was a national defensive soldier. When he heard that I had been raped by the invading forces of Tigray, he warned me that he did not want to see me again, leaving me with three children. He warned me not to call and then we got divorced. Now he is married to another woman. (Participants XI)

Similarly, another rape survivor said:

I sent my husband to Lalibela because he was sick before the incident. However, when he heard about my rape, he left me alone. We are now separated. (Participant I)

As it is reflected in the above narrations, many women got divorced and separated in the post war rape. Husbands warned rape survivors not to communicate and see them. It also shows that husbands left their children and got married with other women. It can be concluded that divorce is one of social consequences of the war rapes.

Loss of dignity and respect

The community members discriminated and marginalized war rape survivors. The members of the community laughed at rape survivors. They also hate and marginalize rape survivors. Rape survivors lost their dignity and respects. One of the participants said:

I am the only Muslim in the neighborhood. I went to worship during the Eid, and I was told to come back. They asked me, why did you declare your rape? I hate it when I go to the mosque to pray. It is disgusting to live in this country. (Participant XIV)

Similarly, the other rape survivors told:

The community is very hostile to me. They say to me, eat dust, why did you say I was raped? Why don't you keep your mouth shut? You sold your country for money (the community assumed that survivors disclosed the rape information to find fund support). When they met me on the street, they laughed at me and said, they (TPLF groups) raped you. When they passed through the road, they called me "the house they raped." (Participant I)

The above narrations clearly show that rape survivors lost their dignities and respects. The community members marginalized the survivors in different social activities including worship. As a result, victims hate to go to religious places to worship. We can conclude that survivors are discredited and disgraced in their society.

Stigma

Rape survivors have faced stigmas from the community members. Almost all participants of the study said that they are stigmatized and alienated by their community members. They lost their dignity and respect from the community members. One of the participants shared her lived experiences as follows:

I was ostracized by the community. The community doesn't see me as a human being. They excluded me from meetings, "Idir" (local association for grief supports), church and other social issues like grief house. They hate me. I can't even participate in church in peace. Because they think that I am polluting the church. I can understand them with their negative facial expressions. Before that rape situation, I used to live and freely participate

with everyone. But now I stopped going to church and shopping. I usually send my eldest son for shopping. I do not attend meetings and don't meet with neighbors. I am isolated and live alone. (Participant III)

As it is shown in the above narration, rape survivors were marginalized and lost their respects by the community members. The stigma and alienation experiences of the rape survivors shows very challenging environment for their lives. It also reveals that rape survivors faced difficulties to participate in social activities and gatherings.

Embarrassment

Participants of the study disclosed that they have faced embarrassment from their communities. The community members have embarrassed rape survivors. They insulted them and also laughed at them. One of the participants shared the following:

At the funeral home, they whisper about me. They think as if I will defile the church when I go to church. They talk about me, and they laugh at me. They mock me and say, "how much money did you get when you were raped?" As they passed around my house, they also said: "hi raped! Are you okay?" (Participant III)

Similarly, another rape survivor shared her experiences as follows:

Residents said, "If you were raped, why did you disclose yourself? You would not hold back your mouth. "Whose son, is he? Is she a raped woman?" They embarrass me. "Is this the home of a raped woman?" They mock me. They said, "if there is another invasion, we will give you priority to the TPLF Junta." (Participant I)

The above stories reflect that rape survivors are embarrassed by the community members. The community members laughed at and whispered about rape survivors while they saw them. They also ridiculed victim women. In general, it can be concluded that survivors are very ashamed of the community members.

Economic effect

The war rape economically affected the poor women survivors. Women faced economic problems after war rapes. The economic impacts of the war rape on the lives of survivors are categorized into three sub-themes and presented as follows:

Loss of market

War rape survivors lost their markets in Nefas Mewucha. The community members marginalized rape survivors and couldn't buy goods and services from them. One of the participants told the situation as follows:

I am a fashion designer. I was selling modern clothes on the porch. I had many urban and rural clients. But after I was raped by the invading forces of Tigray, there was no market. My previous customers are also missed. Only rural farmers buy my clothes because they have no information about my rape cases by TPLF Junta. (Participant XIII)

Similarly, the other participant said:

I used to sell tea and coffee, but now I don't sell anything. However, only those, who bought me previously from the countryside and did not know that I had been raped by TPLF Junta, buys tea and coffee from me. (Participant XII)

As it is shown in the above stories, most rape survivors couldn't find enough markets for their goods and services in the post-rape. Because urban clients marginalized them and can't buy their commodities including their services. The above result also shows that survivors could sell their local alcohols, clothes, tea and coffee for only rural area customers and farmers as these people didn't know the cases. Generally, it can be concluded that survivors lost their markets after war rape.

Poverty

Rape survivors faced extreme poverty after the war rape as no one wants to buy their mini businesses. Most rape survivors were engaged in a mini-income generating activities and could lead their lives. However, they lost their properties and incomes by the gang groups. One of the participants mentioned that:

In addition to being raped by the invading forces of Tigray, they took all my incomes and properties without leaving anything. They also smashed all my belongings. And I am very hurt and have no income except for some assistance. I have nothing now. I am in an empty house. (Participant IIV)

Similarly, another rape survivor said:

In the past, I could prepare and sell “Tella (local bear) and “Injera” to feed and support my children. My children don’t have a father. I have no relatives, and no one helps me except the Trinity. But now the community can’t buy “tella” and “Injera” from me after I got raped by the TPLF soldiers. So, I have suffered terribly from extreme poverty. (Participant III)

The above stories clearly show that many rape survivors lost their incomes and properties and belongings. The TPLF groups took their incomes and broke their properties and materials. It also reveals that survivors missed their customers because of the rapes. In general, we can comprehend that war rape affected survivors’ jobs and lives, and they became very poor.

4.1.6. Coping Mechanism and Strategies of War Rape Survivors

Rape survivors have used different coping mechanisms and strategies for their different problems and challenges they faced. The coping mechanisms used by rape survivors are categorized into three sub-themes and presented as follows:

Coping strategies for psychological and social problems

Rape survivors used different coping mechanism for the psychological and social problems. They usually go to churches in early morning and evening to pray and they also play with kids and elders to reduce their stresses, anxieties, and stigmas. One of the participants told:

I went to church in the morning and in the evening to get rid of the depression and stress. However, when I return to my home, all will come back to me. (Participant II)

Similarly, another participant shared the following:

I usually go to church to forget the problem and to stop my anxiety, worries, and stresses. I also play football with my kids. In addition, I used to walk with the elder woman who lived around me. (Participant III)

The above stories clearly reveal that rape survivors employed different mechanisms to cure their psychological and social impacts. Churches become very useful for them to avoid anxieties, stresses, and depressions. In addition, rape survivors were able to get relief when they play and

walk with kids and very old women. In general, it can be concluded that the spiritual aspects, playing with kids and going out with old women helped them to forget their negative experience.

Coping mechanisms for health and physical problems

Rape survivors took some coping mechanisms/ actions to cure from their health and physical problems. They had visited health service posts by themselves or with government office support. One of the rape survivors shared her experiences as follows:

one of the soldiers pierced my womb through the muzzle of the gun. I did not remember everything that happened to me after that. I used a baby diaper to stop the bleeding of my womb. However, woreda's administration and other supporters took me to Bahir Dar to get treatment. My womb is now recovered. But my left eye has not recovered. I was referred to Addis Ababa because I had lost one of my eyesight (Participant V)

Another rape survivor also told:

As soon as I was raped, I went to the health center to protect myself from unwanted and accidental pregnant. I found no one was there and every medicine was dispersed in the ground by the TPLF. Since I knew about family planning services from the girls' club, I took birth control pills which were dispersed on the land. (Participant XI)

As it is reflected in the above case stories, rape survivors were able to visit health care providers to get health services through other supports and themselves. Some received treatment from health institutions and recovered from some of their physical injuries. But the already lost eye couldn't be replaced. Family planning and life skill education in girls' clubs of the schools were very helpful to protect accidents and unwanted pregnancies of girls. We can conclude that victims used strategies medical treatments with support of government bodies and by themselves.

Coping strategies and mechanisms for economic problems

Rape survivors engaged in small income generating activities. However, they couldn't sell and earn enough money to survive due to alienation and stigmas of the community members. One of the rape survivors shared the following experiences:

I still make “Injera and Tella” (local beer) to earn money. However, I can’t sell it and find enough markets. Only those people who don’t have information about my rape can buy my business. In this way I am living my life. (Participant IX)

As it is unveiled in the above story, war rape highly affected the living of the poor rape survivors. Women attempted to engage in small income generating activities to earn money. However, they couldn’t find enough market and sales. This needs collaborative efforts of stakeholders to work on both awareness creation for the society and economical support for the survivors.

4.2. Discussion

This study explored the lived experience of conflict rape survivors in Nefas Mewcha town, Amhara region, Ethiopia. It investigated the nature and intention of rapes against women and girl during the armed conflict in Nefas Mewcha town. It also identified the consequences of rape upon the lives of rape survivors and explored their coping mechanisms employed to overcome their problems.

This study found that brutality is the common nature of the war rape against women girls in Nefas Mewucha town. The TPLF rebels hit, intimidated, and raped women girls with brutality. Similarly, in South Sudan, soldiers and rebels commonly used different instruments such as sharpened sticks and guns to threaten, hit and rape women and girls during war rapes (Amnesty International, 2004 and Vlachova & Biason, 2005).

The study showed that most women and girls were raped by the gang groups in different places including forests, homes, and closed compounds of Nefas Mewucha town. Similarly, Serbian soldiers involved in the mass rape of Muslim women in Bosnia-Herzegovina at different areas (Stiglmayer, 1994). The Serbian soldiers raped women in the streets, in their homes and they also took to concentration camps (Amnesty International, 1993). This study also showed that the TPLF soldiers intimated and beat brutally through their weapons, knives, boxing, and shoes while they raped women. They also raped women frequently in front of their children in their houses. Similarly, women and girls were raped many times in front of their family, and villagers (Tompkins, 1995 and African Rights, 2004). Another study found that war rapes in Bosnia and

Sierra Leone were committed by gang groups in private settings and public areas in front of family or community members (Elisabeth, W., 2006).

The result of this study found that the intentions of inflicting rape were to humiliate, revenge, cause pain and fear to the people of Amhara. Amnesty International (2004) also reported that rape in Darfur was committed to humiliate, punish, control, inflict fear and displace community members. According to the strategic rape theory, war rape is used to terrorize, demoralize, humiliate, oppress, and dehumanize groups of people for political gain (Gottschall, 2011, Mukwege, 2004 and Nordstrom, 1996).

The present study revealed that war rape survivors developed post-traumatic stress disorder (PTSD) such as extreme anxiety, fear, depression, and uncontrolled thought. Similar studies found out that women experienced post-traumatic stress disorder, generalized anxiety, phobias, insomnia, flashbacks, nightmares, grief, and depression (Joachim, 2004, Josse, E., 2010, Kivlahan and Ewigman, 2010). The result of this study is also consistent with the study conducted in Filipino (Quing, K. A., 2021) in which victims felt depressed and engaged in suicidal behaviors. Rape survivor also lost self-confidence and hope for the future. Similarly, Mukamana and Brysiewicz (2008) reported that rape survivors lost hope for the future as they became HIV/AIDs positive.

The results of this study found that rape survivors have faced serious health problems such as bleeding, fistula, HIV/ADIS, forgetting, sleeping disorder and fainting. The survivors became exposed and vulnerable to HIV/AIDs and developed fistula. In line with these, Amnesty International (2004) reported that in Darfur women faced fistula when the wall between the vagina and the bladder was ruptured. Similarly, women were also infected with HIV/AIDs in the Rwandan genocide (African Rights, 2004 and Mukamana, D., and Brysiewicz, P., 2008) and they experienced sleeping disorder and forgetting problems in Filipino (Quing, K. A., 2021).

This study reported that women and girls were injured and wounded at different parts of their bodies including in their wombs by the brutal attacks and piercing of TPLF soldiers. They also lost their eyes, and their hands were broken. Similarly, in Darfur women's and young girl's legs were broken and faced other physical injuries such as gunshots to the genital areas (Amnesty International, 2004, African Rights, 2004 and Vlachova and Biason, 2005).

The result of this study found that the war rape caused different types of social effects to the survivors such as divorces, loss of dignity and respect, stigma, and embarrassment. They lost their dignity and respect in their communities. This is consistent with the study conducted in Rwanda (Mukamana and Brysiewicz, 2008) which reported women lost their values, dignities, and respects after the Rwandan genocide. Similarly, survivors were embarrassed, stigmatized and shamed by the community members (Vlachova & Biason, 2005, Kelly et al, 2011). The study conducted Democratic Republic Congo reported that community stigmatized the rape survivors through gossip or finger pointing and husbands divorced them which increased their feeling of shame and humiliation (Kelly et al, 2011 and Josse, E., 2010). Another finding was also reported in Darfur where rape victims were suffered further because of the shame and the stigma associated to it (Amnesty International, 2004).

The present result also showed that rape survivors have faced serious economic problems. They lost their incomes, properties and markets and now lived with extreme poverty. Similarly, Amnesty International (2004) reported that women faced extreme poverty in South Sudan as their properties and belongings were looted and destroyed by the soldiers. Rebecca M. Loya (2014) also noted that rape and its related trauma might affect survivors' employment through diminished performance, job loss, and inability to work. This might lead to economic instability and gender inequality in economic activities (Kabeer, N., & Natali, L. 2013).

According to this study, war rape survivors usually pray to God and go to churches, play with kids, and walk with old women to reduces their stresses, anxieties, and depressions. Similarly, Yusof, M. et al (2022) reported that sexual victims in Malaysia used spiritual approaches such as praying, reading Quran and mediations. Rape victims spent too much time for leisure activities such as watching movies, doing household chores, reading books, and working just to forget (Quing, K. A., 2021).

This study found out that survivors visited health service providers by themselves to receive medical treatments. According to Amnesty International (2021), victims sought private medical treatment as access to comprehensive post-rape care, including emergency contraception, post emergency prophylaxis for HIV and sexually transmitted infections in public hospitals and health centers were looted and damaged by TPLF soldiers. Similarly, another study reported that victims received social support such as health and justice from government institutions and

private sectors in Malaysia (Yusof, M.et al, 2022). Rape survivors also engaged in a mini-income generating activities to survive though they couldn't find enough market for their goods and services.

CHAPTER FIVE: CONCLUSION AND RECOMENDATION

5.1. Conclusion

Based on the findings of this study, there were different natures and ways of war rapes committed against women and girls. The TPLF gang groups intimidated, beat, humiliated, and raped women and girls at homes, forests, and unoccupied courtyards. The soldiers raped girls (for instance,). Soldiers intimated and beat brutally through their weapons, knives, boxing, and shoes while they raped females including 16 years old girl and 50 years old women. There were both individual and gang rapes in Nefas Mewucha town by the TPLF soldiers. TPLF gang groups forced women to give them food and drink and also their clothes. They were also forced to steal and bring different materials, properties, and alcohols from the community members' houses. The TPLF gang groups raped women frequently and brutally in front of their children in their houses. The motivations of rapists include the desire to punish, gain revenge, cause pain and humiliation, and control the people of Amhara.

War rape survivors suffered from post-traumatic stress disorder, generalized anxiety, phobias, insomnia, flashbacks, nightmares, grief, and depression. They lost self-confidence and hope for the future. Victims of the war rapes were injured and wounded at different parts of their bodies including in their wombs by the brutal attacks and piercing of TPLF soldiers. They lost their eyes, and their hands were broken. They also faced serious health problems such as bleeding, fistula, HIV/ADIS, forgetting, sleeping disorder and fainting. In addition, they became exposed and vulnerable to HIV/AIDs and developed fistula.

The war rape caused different types of socio-economic negative consequences to the survivors. Women got divorced with their husbands and lost their dignity and respect from the community members. They became stigmatized and embarrassed by their community. In addition, survivors lost their markets, customers, and incomes, and lived with extreme poverty in the post war rapes. Rape survivors used different coping mechanisms and strategies to solve their problems. They visited health providers to get medical and health treatment. They usually go to church and pray and play with kids to reduce their stresses and anxieties. In addition, they engaged in small income generating activities though they couldn't find enough markets.

In general, the lived experiences of war rape survivors were very traumatic, tragic and complicated one. Women and girls lost their hopes and self-confidences and got marginalized and alienated by the community members. They also became very destitute which needs a holistic rehabilitation service and support.

5.2. Recommendation

Based on the findings of this study, the researcher strongly suggests a holistic and comprehensive rehabilitation services for war rape survivors in Nefas Mewucha town, Amhara region, Ethiopia. Some of specific actions that should be done by the government, NGOs and the community:

1. Amhara National Regional state Health Bureau, South Gondar zone health department and Nefas Mewuch town health office

- Should provide continuous and strong mental health and counseling services need to be provided to the rape survivors and their children to reduce and avoid post-traumatic stress disorders.
- should invest and provide medical and health services for the physical injuries and health effects including HIV/ADIS test and ART (antiretroviral therapy) services for the survivors.
- Need to follow up the health conditions of survivors of the war rape in Nefas Mewucha town.

2. Amhara National Regional state Bureau of Women, Children and Social Affairs, South Gondar zone Women, Children and Social Affairs department and Nefas Mewuch town Women, Children and Social Affairs

- should provide an awareness raising, education and community dialogues to traditional leaders, religious leaders, and the community members to avoid embarrassment, discrimination, stigma, and alienation of rape survivors.
- Should work closely with Food Security and Disaster Prevention office to facilitate and coordinate comprehensive humanitarian assistances to be provided for war rape survivors in war affected areas.

- Should conduct coordination and follow up meetings for stakeholders and partners so as to ensure survivors receive all the necessary supports and services

3. Amhara National Regional state Bureau Job Creation and Training, South Gondar zone Job Creation and Training Department and Nefas Mewucha Town Job Creation and Training Office

- Need to coordinate and facilitate entrepreneurship training, business development and a revolving fund supports for rape survivors to engage in income generating activities so as solve their economic problems.
- Provide technical supports on business development and market opportunities for rape survivors who engaged in income generating activities.
- They should also review and experiences sharing workshops for those rape survivors who engaged in income generating activities

4. International NGOs and Local CSOs

- should provide comprehensive humanitarian assistances and ensured the supports are in place for war rape survivors in war affected areas.
- should support and provide an awareness raising, education and community dialogues activities to traditional leaders, religious leaders, and the community members to avoid embarrassment, discrimination, stigma, and alienation of rape survivors.
- need to provide entrepreneurship training and a revolving fund supports for rape survivors to engage in income generating activities so as solve their economic problems.
- They should also support financial and technical supports for the survivors and the local government for the coordination meetings.

Reference

- African Rights (2004). Rwanda: broken bodies, torn spirits: living with genocide, rape, and HIV/AIDS. ISBN: 1 899477 45 4
- Amhara Bureau of Women, Children and Social Affairs (2021). Internal data on sexual violence committed by TPLF in Debark, Dabat and Nefas Mewucha.
- Amnesty International (1993). Bosnia–Herzegovina: Rape and Sexual Abuse by Armed Forces Available at: <https://www.amnesty.org/en/documents/eur63/001/1993/en/>. Accessed on 25 June 2022.
- Amnesty International (2021). Survivors of TPLF attack in Amhara describe gang rape, looting and physical assaults. Available at <https://www.amnesty.org/en/latest/news/2021/11/ethiopia-survivors-of-tplf-attack-in-amhara-describe-gang-rape-looting-and-physical-assaults/>, accessed on 10 Dec. 2021.
- Amnesty International. (2004). Darfur: Rape as a weapon of war: sexual violence and its consequences. Available: <https://www.amnesty.org/en/documents/afr54/076/2004/en/>. (11 July 2022)
- Charlotte Bunch and Niamh Reilly (1994). Demanding Accountability: The Global Campaign and Vienna Tribunal for Women’s Human Rights (New York: Center for Women’s Global Leadership and the United Nations Development Fund for Women).
- Cohen D, Green A, Wood E (2013). Wartime Sexual Violence. Misconceptions, Implications, and Ways Forward. Washington, DC. United States Institute of Peace.
- Creswell, J. (2007). Qualitative inquiry and research design: Choosing among five approaches. Second edition, Sage Publications, Inc.

- Creswell, J. W. (2013). *Qualitative Inquiry & Research Design: Choosing among Five Approaches* (3rd ed.). Thousand Oaks, CA: SAGE.
- Dumke, Lars, Roos van der Haer, Carlo Koos, et al. (2021). "Patterns of Conflict-Related Trauma Exposure and Their Relation to Psychopathology: A Person-Centered Analysis in a Population-Based Sample from Eastern DRC." *SSM - Ment Health* 1, December: 100005. Available at: <https://DOI:10.1016/j.ssmmh.2021.100005>
- Enloe, Cynthia (2007). *Globalization and Militarization: Feminists Make the Link*. New York: Rowman and Littlefield.
- García-Moreno, C., Jansen, H. A. F. M., Ellsberg, M., Heise, L., & Watts, C. (2005). WHO multicounty study on women's health and domestic violence against women: Initial results on prevalence, health outcomes and women's responses. World Health Organization. Available at: <https://www.who.int/reproductivehealth/publications/violence/24159358X/en/>
- Hagen, K. T., Yohani, S. C., (2010). The Nature and Psychosocial Consequences of War Rape for Individuals and Communities. *International Journal of Psychological Studies*.
- Jina, Ruxana, and Leena S. Thomas (2013). "Health consequences of sexual violence against women." *Best Pract Res Clin Obstet Gynaecol* 27, 1: 15-26. Available at: <https://DOI:10.1016/j.bpobgyn.2012.08.012>
- Joachim, I. (2004b). Sexualized violence in war and its consequences. In *Medica Mondiale* (Ed.), *Violence against women in war: Handbook for professionals working with traumatized women* (pp. 63-110). Cologne, Germany: Prisma, Saarbrucken.
- Johnson, Kirsten, Jennifer Scott, Bigy Rughita, et al. (2010). "Association of Sexual Violence and Human Rights Violations with Physical and Mental Health in Territories of the

- Eastern Democratic Republic of the Congo.” *Jama* 304, 5: 553-562. Available at: <http://doi:10.1001/jama.2010.1086>
- Josse, E. (2010). ‘They came with two guns’: The consequences of sexual violence for the mental health of women in armed conflicts. *International Review of the Red Cross*, 92(877), 177-195. <https://doi:10.1017/S1816383110000251>
- Kabeer, N., & Natali, L. (2013). Gender equality and economic growth: Is there a win-win? *IDS Working Papers*, 2013(417), 1–58. Available at: <https://doi.org/10.1111/j.2040-0209.2013.00417.x>
- Kelly, Jocelyn T. D., Theresa S. Betancourt, Denis Mukwege, et al. (2011). “Experiences of Female Survivors of Sexual Violence in Eastern Democratic Republic of the Congo: A Mixed- Methods Study.” *Conflict and Health* 5, 1: 25. Available at: <https://DOI:10.1186/1752-1505-5-25>
- Kivlahan, C., and Ewigman, N. (2010). “Rape as a weapon of war in modern conflicts: Families and communities are victims, as well as individuals.” *British Medical Journal*. 341(7771) 2010. 469.
- Lisa Sharlach (2000). *Rape as Genocide: Bangladesh, the Former Yugoslavia, and Rwanda*, New Political Science. Available at: <http://dx.doi.org/10.1080/713687893>
- Longombe, Ahuka Ona, Kasereka Masumbuko. Claude, and Joseph Ruminjo (2008). “Fistula and Traumatic Genital Injury from Sexual Violence in a Conflict Setting in Eastern Congo: Case Studies.” *Reproductive Health Matters* 16, 31: 132-41. Available at: [https://doi.org/10.1016/S0968-8080\(08\)31350-0](https://doi.org/10.1016/S0968-8080(08)31350-0)
- Mukamana, D. and Brysiewicz, P. (2008). The Lived Experience of Genocide Rape Survivors in Rwanda. *Journal of Nursing Scholarship* Fourth Quarter 2008.

- Mukwege, Dr. Denis Mukengere (2010). "Rape as a Strategy of War in the Democratic Republic of Congo." *International Health*.
- Neill, Kevin Gerard (2000). *Duty, Honor, Rape: Sexual Assault Against Women During War*. *Journal of International Women's Studies*. Available at: <https://vc.bridgew.edu/jiws/vol2/iss1/4>
- Nordstrom, Carolyn (1996). "Rape: Politics and theory in war and peace." *Australian Feminist Studies*.
- Pramod Kumar Singh, Rajiv Kumar Singh, Tanya Singh (2015). The concept of 'Rape': Views and counterviews. *Int J Appl Res* 2015;1(4):105-107.
- Quing, K. A. (2021). I am a Survivor: Experiences, Impacts and Coping Mechanisms of Filipino Victims of Sexual Violence, *Journal of Education, Management and Development Studies*, Vol. 1 No. 1.
- Rebecca M. Loya, (2014). Rape as an Economic Crime: The Impact of Sexual Violence on Survivors' Employment and Economic Well-Being. *Journal of Interpersonal Violence*.
- Silvia Ubillos-Landa, Alicia Puente-Martínez, Gina Arias-Rodríguez, Marcela Gracia-Leiva, and José Luis González-Castro (2019). Coping Strategies Used by Female Victims of the Colombian Armed Conflict: The Women in the Colombian Conflict (MUCOCO) Program. Available at: [http:// https://doi.org/10.1177/21582440198940](http://https://doi.org/10.1177/21582440198940)
- Stiglmyer, Alexandra, ed. (1994). *Mass Rape: The War against Women in Bosnia-Herzegovina*. Lincoln, NE: University of Nebraska Press.
- Tompkins, T. (1995). Prosecuting rape as a war crime: Speaking the unspeakable. *Notre Dame Law Review*.70(4), 845 – 890.
- UN (2019). *Conflict Related Sexual Violence Report of the United Nations Secretary-General*.

UN (2021). Conflict-related sexual violence report of the United Nations Secretary-General

UN Women (2014). Women and Armed Conflict. Available at:

<https://www.unwomen.org/en/news/in-focus/end-violence-against-women/2014/conflict>,

Assessed on 4 January 2022.

United Nations (2000). Sexual Violence and Armed Conflict: United Nations Response. United Nations Division for the Advancement of Women Department of Economic and Social Affairs.

United Nations (2006). In-Depth Study on All Forms of Violence against Women. Report of the Secretary-General. UN Document A/61/122/Add.1.

Vlachova, M., & BIASON, L. (Eds.). (2005). Women in an insecure world: Violence against women, facts, figures, and analysis. Geneva, Switzerland: Geneva Centre for the Democratic Control of Armed Forces.

Ward J, Vann B (2002). Gender-based violence in refugee settings.

Wood, Elisabeth (2014). Conflict-Related Sexual Violence and the Policy Implications of Recent Research. International Review of the Red Cross 96, no. 894 : 457–478. Available at: <https://doi:10.1017/S1816383115000077>

Wood, Elisabeth Jean (2006). “Variation in Sexual Violence during War.” Polit Soc 34, 3: 307-342. Available at: <https://DOI:10.1177/0032329206290426>

Worku A, Addisie M (2002). Sexual violence among female high school students debark, North West Ethiopia. East Afr Med J. 79(2):96–9.

Yigzaw T, Yibrie A, Kebede Y (2004). Domestic violence around Gondar in northwest Ethiopia. Ethiop JHealth Dev;18(3):000-000.

Yusof, M.M., Azman, A., Singh, P.S.J. et al. A Qualitative Analysis of the Coping Strategies of Female Victimization After Separation. *J. Hum. Rights Soc. Work* **7**, 84–90 (2022).

<https://doi.org/10.1007/s41134-021-00199-5>

Zeidner, M., Matthews, G., & Shemesh, D. G. (2015). Cognitive-social sources of wellbeing: Differentiating the roles of coping style, social support and emotional intelligence.

Journal of Happiness Studies. Available at: <https://doi.org/10.1007/s10902-015-9703-z>

Annexes

I. Interview Guide

1. Can you tell me about your experience with war rape? How did you get raped? (Prob: the nature and ways of rape, type of rape, place of rape, frequency of rape, how he/they raped you, etc)
2. Please share me the consequences of conflict rape on your life (probe: psychological effect, physical effect, health effect, social effect, and economic effect)
3. How do you cope with the problems you faced? (probe: coping mechanisms for psychological, physical, health, social and economic problems)
4. Can you tell why did they rape you? Did they have different purposes to rape you? If there were, please tell me.
5. Any other issues you want to share with me.

II. Written Ethical Consent Form

In undersigning this form, I am giving my consent to participate in the study entitled as **Lived Experience of Rape Survivors in Conflict Areas: A Case of Nefas Mewucha Town, South Gondar Zone, Amhara Region**". I have been informed about the purpose of the study and understood that participation in this study is entirely voluntarily. I have been told that my lived experiences shared will not be given to anyone else with my identities and/or no reports of this study ever identify me in any way. I have also been informed that my participation or non-participation will have no effect on me. I understood that participation in this study does not involve any risks.

Respondent's signature _____

Interviewer Name _____ Signature _____ Date _____

III. Sample written and signed consent forms

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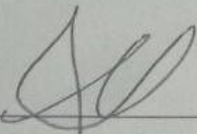
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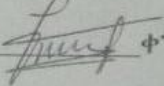
የጥናቱ ተሳታፊ ፊርማ _____

የጠያቂው ስም 349190 / 2014 ፊርማ [Signature] ቀን 16/09/2014

የስምምነት ቅጽ


ግጭት በተከሰተባቸው ለካባቢዎች የተደረገ ሰዎች የህይወት ልምድ፣ በንፋስ መውጫ ከተማ ደቡብ ጎንደር ዞን ለማራ ክልል በሚል ርዕስ ጥናት ላይ ለመሳተፍ ፈቃዱን ሰጥቻለሁ። ስለ ጥናቱ ዓላማ ተነግሮኛል እናም በዚህ ጥናት ውስጥ መሳተፍ፣ ሙሉ በሙሉ በፈቃደኝነት እንደሆነ ተረድቻለሁ። የማካፍላቸውን ወይም የምንግራቸውን የህይወት ልምዶች/ጉዳዮች በሰሜ ተጠቅሶ ለማንም እንደማይሰጡ ተነግሮኛል። የዚህ ጥናት ሪፖርት በምንም መልኩ የእኔን ማንነት እንደማይገልጽ ተነግሮኛል። እንዲሁም የእኔ መሳተፍም ሆነ ስለመሳተፍ በእኔ ላይ ምንም ተጽእኖ እንደሌለው ተገልጾልኛል። በዚህ ጥናት ውስጥ መሳተፍ ምንም እድነት ስጋት ሊያመጣብኝ እንደማይችል ተረድቻለሁ። በመሆኑም በዚህ ጥናት ለመሳተፍ ፈቃደኛ ነኝ።

የጥናቱ ተሳታፊ ፊርማ 

የጠያቂው ስም 342899ም ንግሥት/ግሥት ፊርማ  ቀን 16/09/2014

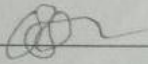
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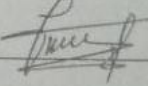
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የጥናቱ ተሳታፊ ፊርማ  _____
የጠያቂው ስም ገሰገሰ ገሰገሰ ፊርማ ገሰገሰ ቀን 14/9/2014

የስምምነት ቅጽ


ግጭት በተከሰተባቸው አካባቢዎች የተደፈሩ ሰዎች የህይወት ልምድ፣ በንፋስ መውጫ ከተማ ደቡብ ጎንደር ዞን አማራ ክልል በሚል ርዕስ ጥናት ላይ ለመሳተፍ ፈቃዴን ሰጥቻለሁ። ስለ ጥናቱ ዓላማ ተነግሮኛል እናም በዚህ ጥናት ውስጥ መሳተፍ ሙሉ በሙሉ በፈቃደኝነት እንደሆነ ተረድቻለሁ። የማካፍላቸውን ወይም የምንግራቸውን የህይወት ልምዶቻችን/ጉዳዮች በስሜ ተጠቅሶ ለማንም እንደማይሰጡ ተነግሮኛል። የዚህ ጥናት ሪፖርት በምንም መልኩ የእኔን ማንነት እንደማይገልጽ ተነግሮኛል። እንዲሁም የእኔ መሳተፍም ሆነ አለመሳተፍ በእኔ ላይ ምንም ተጽእኖ እንደሌለው ተገልጿል። በዚህ ጥናት ውስጥ መሳተፍ ምንም አይነት ስጋት ሊያመጣብኝ እንደማይችል ተረድቻለሁ። በመሆኑም በዚህ ጥናት ለመሳተፍ ፈቃደኛ ነኝ።

የጥናቱ ተሳታፊ ፊርማ 

የጠያቂው ስም ገሰ ገሰ ገሰ ገሰ ፊርማ  ቀን 15/09/2014

የስምምነት ቅጽ

ግጭት በተከሰተባቸው አካባቢዎች የተደረፈ ሰዎች የህይወት ልምድ፣ በንፋስ መውጫ ከተማ ደቡብ ጎንደር ዞን አማራ ክልል በሚል ርዕስ ጥናት ላይ ለመሳተፍ ፈቃዴን ሰጥቻለሁ። ስለ ጥናቱ ዓላማ ተነግሮኛል እናም በዚህ ጥናት ውስጥ መሳተፍ፣ መሎ በመሎ በፈቃደኝነት እንደሆነ ተረድቻለሁ። የማካፍላቸውን ወይም የምንግራቸውን የህይወት ልምዶቹን/ጉዳዮች በስሜ ተጠቅሶ ለማንም እንደማይሰጡ ተነግሮኛል። የዚህ ጥናት ሪፖርት በምንም መልኩ የእኔን ማንነት እንደማይገልጽ ተነግሮኛል። እንዲሁም የእኔ መሳተፍም ሆነ አለመሳተፍ በእኔ ላይ ምንም ተጽእኖ እንደሌለው ተገልጿል። በዚህ ጥናት ውስጥ መሳተፍ ምንም አይነት ስጋት ሊያመጣብኝ እንደማይችል ተረድቻለሁ። በመሆኑም በዚህ ጥናት ለመሳተፍ ፈቃደኛ ነኝ።

የጥናቱ ተሳታፊ ፊርማ  _____
የጠያቂው ስም ግንደገዳ ንጉሠነሽ ፊርማ [Signature] ቀን 17/9/2014

IV. Declaration form

Declaration form

I, the undersigned, declared that this is my original work, has never been presented in this or any other University, and that all the resources and materials used for this thesis, have been fully acknowledged.

Tirualem Asmamaw

Principal investigator

Signature