INTIMATE PARTNER VIOLENCE ANXIETY AND POST-TRAUMATIC STRESS DISORDERS AMONG MARRIED WOMEN IN ETHIOPIA: SUPPORT INTERVENTION STRATEGIES

by

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DEDICATION

Living in patriarchal societies leaves women without equal access to power and decision making. This life has no existence without a strong ally in ‘Woman’ in every stage of life starting from motherhood to wife, from sister and finally a daughter. This research project is dedicated to women who are living under duress.

Student number: 58547355

DECLARATION

I declare that the **INTIMATE PARTNER VIOLENCE ANXIETY AND POST-TRAUMATIC STRESS DISORDERS AMONG MARRIED WOMEN IN ETHIOPIA: SUPPORT INTERVENTION STRATEGIES** is my work and that all the sources that I have used or quoted have been indicated and acknowledged through complete references.

I further declare that I submitted the thesis to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or at any other higher education institution.

12 October 2021

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SIGNATURE **DATE**

Zewdu Shewangizaw Weret

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ABSTRACT

Introduction

Globally, intimate partner violence is a concern that affects the international rights and wellbeing of millions of women.

Aim

The study aimed to assess IPV and the association between anxiety, PTSD symptoms, and IPV perpetration on married women in Ethiopia. Furthermore, support intervention strategies on IPV and mental health outcomes for married women were developed.

Methodology

The study followed a quantitative research method. The researcher viewed the problem on a continuum of cross-sectional study design. The study was conducted in a rural area of Ambo district, Oromia regional state, Ethiopia. Married women aged 18-49 years were selected using a systematic sampling method. An interviewer-administered questionnaire tailored from a WHO multi-country study on women's health and life events, as well as PCL-C and BAI scale, was utilized as a data collection instrument.

Results

According to the findings, 34.5% (n=326) of the study participants experienced IPV considering the past twelve months prevalence. Specifically, psychological violence 25.9% (n=245), physical violence, 20.8% (n=197), and sexual violence 15.3% (n=145) were reported by the study participants. Mental health outcome of IPV, 10.2% (n=96) and 11% (n=104) of the study participants respectively reported anxiety and PTSD symptoms.

The association between anxiety, PTSD symptoms, and IPV perpetration were examined in this study. Psychological violence, 2.86 (95% CI (1.86- 4.41)), physical violence 2.56 (95% CI (1.63-4.11)) and any form of IPV 2.72 (95% CI (1.77-4.18) predicted anxiety symptoms. Whereas, the age group from 28-37 years, 2.18 (95% CI (1.07-4.43)) predict a low level of anxiety. Psychological violence, 2.44 (95% CI 1.60-3.71)), physical violence, 2.23 (95% CI (1.44, 3.46)) and any form of IPV 2.23 (95% CI (1.44- 3.46)) predict an increased PTSD symptom.

Conclusion and recommendations

This research contributed to developing the support intervention strategies on IPV and mental health outcomes for married women. The study proposes that supportive intervention strategies be given at health facilities and the community level.

KEY CONCEPTS

Anxiety symptom; Ethiopia; Intervention strategies; Intimate partner violence; Married women; Post-traumatic stress disorder; Violence Against Women.

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LIST OF ACRONYMS

APA American Psychiatric Association

BAI	Beck Anxiety Inventory
CDC	Centers for Disease Control and Prevention
CEAs	Council of Economic Advisors
CI	Confidence Interval
COVID-19	Corona Virus Disease of 2019
CSA	Central Statistical Agency
DAA	Depression Association of America
DALYs	Disability Adjusted Life Years
DAW	Discrimination against Women
DV	Domestic Violence
EDHS	Ethiopia's Demographic and Health Survey
Epi Info	Epidemiological Information
FDRE	Federal Democratic Republic of Ethiopia
FM	Frequency Modulation
GBV	Gender-Based Violence
HEWs	Health Extension Workers
IMNRC	Institute of Medicine and National Research Council
IPs	Intimate Partners
IPV	Intimate Partner Violence
MoH	Ministry of Health
MoSHE	Ministry of Science and Higher Education
OR	Odds Ratio
PCL-C	Post traumatic stress disorder CheckList-Civilian
PHCU	Primary Health Care Units
PTSD	Posttraumatic Stress Disorder
SDG-5	Sustainable Development Goal-5
SSA	Sub Saharan Africa
UN	United Nations
UNCF	United Nations Children's Fund
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
UNPF	United Nations Population Fund

USAID	United States Agency for International Development
VAW	Violence Against Women
WHO	World Health Organization

CHAPTER 1

ORIENTATION OF THE STUDY

1.1 INTRODUCTION

According to World Health Organization (WHO), violence towards women is a universal phenomenon that causes a substantial threat to human rights and health; around one-quarter of women from poor and developing nations have experienced domestic violence (WHO 2013). According to WHO, as a result of gender stereotypes, most of the violence on women is forcefully inflicted by Intimate Partners (IPs). Domestic violence brings both physical and emotional negative impacts on the victims.

This chapter discusses the following sections, which include: problem statement, the research context, and significance of the research, the aims and objectives of the study, the research's design, and the methodology of the study. The approach and techniques employed in the study are also described. Furthermore, in this introductory chapter of the thesis, it is required to pinpoint some of the technical phrases and concepts. Thus, it is vital to discuss the following concepts before stating the "Statement of the Problem" in this chapter.

The next keywords are vital ones to grasp this research's major focus. The keywords are Intimate Partner Violence (IPV), Violence Against Women (VAW), Domestic Violence (DV), Discrimination Against Women (DAW), and Anxiety and Post Traumatic Stress Disorder (PTSD) and Gender-Based Violence (GBV).

Intimate Partner Violence (IPV) is defined as "any behavior within an intimate relationship that causes physical, sexual, or emotional harm by a current or former intimate partner "(WHO 2013:5; Meekers, Pallin and Hutchinson 2013:17).

Generally speaking, IPV is considered a major human rights threat, which overwhelms the freedom and equal treatment of women in terms of social, economic, and public health contexts (Meekers, Pallin and Hutchinson 2013:12).

According to United Nations (UN) report, “globally a large number of women experience intimate partner violence regardless of income, age or education” (UN, 2015: 150). It is estimated that from 15-71% of women experience either type of IPV once in their lifetime during intimate relationships (Simona, Muchindu and Ntalasha 2015:7; Hansen, Eriksen and Elklit 2014:1).

As scholars and organizations indicates, VAW is a major concern across nations and as it has become a growing human rights violation, impoverishing the freedom and equality of women in socioeconomic, political, and health-related viewpoints (Meekers et al 2013:13; WHO 2014:239). Globally, IPV is a common form of VAW. Besides, it corresponds either to an act of behavior or attitude in the current intimacy that leads to physical, sexual intimidation, emotional abuse, or domestic exploitation; and it would be a pattern of abuse in a relationship to control one another (Fekadu, Yigzaw, Gelaye, Ayele, Minwuye, Geneta and Teshome 2018:5).

As various scholars and organizations including WHO indicate, domestic violence occurs in every country and transcends in various economic, cultural, and social construct of society. Domestic violence to women by men is a partner’s deliberate act that involves physical, sexual, or psychological abuse of women (WHO 2014:2; Breiding, Basile, Smith, Black and Mahendra 2015:11).

According to United Nations Population Fund (UNPF), discrimination against women is indeed the result of gender inequality due to socially defined attitudes, ways of thinking, norms, and cultural traditions concerning acceptable male and female behaviors (UNPF 2016:12).

In Africa, IPV is estimated at 36.6 percent (WHO 2014:14). It seems necessary to be specific and to discuss the case from Africa's context. In Africa, according to WHO's estimation, IPV accounts for 36.6%, and the finding states that there is a higher prevalence of IPV next to Southeast Asia's region (Feseha, Gebremariam and Gerbaba 2012:1; WHO 2013:24). According to WHO (2013:54), the IPV accounts for 38.8%, 65.6%, 29.7%, and 41.75% respectively in Eastern, Central, Southern, and Western Africa. In Kenya, for instance, over half of the women encountered one or more types of IPV once in a lifetime (Meekers et al 2013:13).

According to UN Women's report, in the previous 12-months, the prevalence of IPV increased in many African countries. For example, IPV prevalence increased in Kenya from 25.5% to 40.7%; in Rwanda, from 20.7% to 37.1%; in Uganda, from 30% to 50%; in Ghana, from 19% to 24%; in South Africa, from 8.7% to 21.3%; in Malawi, from 24% to 38%; in Egypt, from 14% to 26%; in Zimbabwe, from 19.9% to 37.6% (UN Women 2016). The finding indicates that the burden of IPV is a major human rights and public problem in Africa and it requires a systematic study to evaluate the effects of intervention and prevention mechanisms.

As the findings by scholars in this field of study indicate, IPV has continued as a human rights and public health problem in most of Africa's regions (Bazargan-Hejazi, Medeiros, Mohammadi, Lin and Dalal 2013:38). To deal with the problem in Ethiopia's context, scholars associated the mental health outcome of IPV with anxiety, depression, and post-traumatic stress disorder (Semahegn and Mengistie 2015:7; Karakurt, Smith and Whiting 2014:2).

In Ethiopia's neighboring country Somalia, IPV is a serious social problem that brings a lifetime consequence on the woman, and the number of victims is reported to be 35.5% (Wirtz, Perrin, Desgroppes, Phipps, Abdi, Ross, Kaburu, Kajue, Kutto, Taniguchi and Glass 2018:4). According to the United Nations Children's Fund (UNCF) report, approximately 76% of the victims are suffering from some form of physical violence (UNCF 2020). Similarly, the United Nations Development Programme (UNDP) (2017)

reported that the prevalence accounts for 72% IPV among women from age 15-49 years. The number of IPV reported incidents from various Africa regions indicates that there is a visible occurrence and increase during the Corona Virus Disease of 2019 (COVID-19) time.

To be specific, intimate partner violence is observed as a national concern in Ethiopia, too. Research findings indicate that, in Ethiopia, many women are experiencing some form of IPV once in a lifetime (Yitbarek, Woldie and Abraham 2019:2). According to the UN Women's (2016) and author (EDHS 2016:53) reports, IPV is a human rights and public health concern in Ethiopia. For instance, IPV victims in the preceding 12-months and a lifetime were reported to be 20% and 28% respectively by UN Women (2016) and author of the survey (2016:53).

According to Ethiopia's Central Statistical Agency (CSA), the national finding varies from place to place. Thus, the burden of IPV in a rural area is much higher than in urban or semi-urban (CSA 2016:53). As Chernet and Cherie (2020:4) indicated "Women living in a rural area experienced intimate partner violence much more often than those in urban or semi-urban areas." According to these scholars, "Gender-based violence is indeed a result of discrimination within a patriarchal power-relation in the society and among gender identity." It is often a common cause of systemic injustice and it occurs in most countries in the world (UNPF 2020:9).

Researchers in the field agree that intimate partner violence is an act of violence. For instance, Bjorktomta (2019:451) describes IPV as "a type of honor-based violent act," that is committed by an intimate partner. Furthermore, as Hardesty and Ogolsky (2020:454) explain, IPV could arise from a social-ecological context, which is individual, relational, communal, and socio-cultural levels. In the most patriarchal culture with few women having authority, intimate partner violence is a burden to married women.

Considering the socio-ecological dimension, IPV could arise due to unequal status, and a dispositional reflection of aggression that to leads to emotional and physical

intimidation (Hardesty and Ogolsky 2020:460). As an individual reflects either a learned social behavior or an experience from his parents and family members, violent behavior at a younger age could result in future trans-generational effects (Ehrensaft, Cohen, Brown, Smailes, Chen and Johnson 2003:747).

To sum up, disputes are normal and unavoidable phenomena between intimate partners (Delatorre and Wagner 2018:229; Igbo, Grace and Christiana 2015:491) which likely arise from the behavioral traits (Fincham 2003:23) of both partners (Blackburn, Martin and Hutchinson 2006:32; McCarthy, Mehta and Haberland 2018:20).

Violence Against Women potentially affects both their physical and mental health, and in some of the most serious situations, it may end with death (UN 2015:139). Epidemiological studies have indicated that prolonged exposure to IPV leads to poor mental health outcomes (Hardesty and Ogolsky 2020:460) for the victims.

1.2 BACKGROUND INFORMATION ABOUT THE RESEARCH PROBLEM

1.2.1 The source of the research problem

Following the frequently occurring IPV on women in Ethiopia, many centres and organizations have been formed in to respond the victims in the capital city-Addis Ababa. The centres include psychological counseling centres and radio programs with various Frequency Modulation (FM) broadcastings to share the emotional experiences. The physical rehabilitation centres and legal services in the capital city involving most famous Ethiopian women lawyers associations. However, in terms of accessibility and addressing the vast majority of Ethiopian women in rural areas, it seems that nothing has been said and done about the mental health of these women. Thus, the major focus of this research is to study rural Ethiopian women's mental health status as a result of intimate partner violence.

1.2.2 Background to the research problem

Ethiopia is among African countries with high rates of IPV (Tiruye, Chojenta, Harris, Holliday and Loxton 2020:2). Throughout the country, the magnitude of IPV was estimated to be from 35.5 to 44% (Muluneh, Stulz, Francis and Agho 2020:12), which is nearly 31-76% as cited in Semahegn and Mengistie (2015:9). Besides, a meta-analysis study by Kassa and Abajobir (2018:11) indicates that IPV accounts for 50% of women of reproductive age. As compared with prevalence in Africa, it was 43.4% (Shamu, Abrahams, Temmerman, Musekiwa and Zarowsky 2011:3). Mental health implications of IPV potentially affecting the wellbeing of women who survived have not yet been addressed (Dillon, Hussain, Loxton and Rahman 2013:11; Ellsberg and Emmelin 2014:2; Karakurt, Smith and Whiting 2014:694).

Scholars argues that, “Social norms in Ethiopian society are predominantly patriarchal” (Cherinet, Mulugeta 2003:11; Thubauville and Gabbert 2014:142) “which leads to a gender discrimination” (Dea 2016:27), and that are not only deeply related to violence towards women but on also impose a substantial burden to women's health (Tiruye et al 2020:2). According to CSA’s (2016:289) report, domestic violence remains a major problem and a potential risk to women's equality in the country.

Most married women aged 15 to 49 years had experienced a polled prevalence of 34% of sexual, physical, or emotional violent acts by their IPs once in their lifetime (Tesfa, Dida, Girma and Aboma 2020:6). The findings from the CSA (2016:255) cited in Baye (2020:5) indicated that 29% of women in rural areas suffered from intimate partner violence.

Women mostly with the highest quintile income are less likely to encounter marital violence (Coll, Ewerling, Moreno, Hellwig and Barros 2020:6). This study is intended to determine the effects of partner violence on anxiety and post-traumatic stress symptoms among married women and propose supportive intervention strategies.

Ethiopia is among the oldest nations in the world and the origin of mankind with ethnically, socially, culturally, and climatically diverse conditions. It is one of the most populous nations in Africa, where around 84% of the people live in rural areas with a phenomenal poverty level (Britannica Academic accessed on 2021). Education is among the most fundamental elements of the social and economic development of a nation. Concerning education, proportionally, 51% of women and 65% of men have attended formal education.

According to the CSA (2016:14), urban dwellers are often more likely to attend school compared with rural communities. In Ethiopia, nearly 54% of women and 39% of men in rural areas are under-educated. The low educational level and/or the low socio-economic position of the women in rural Ethiopia would be predictive of IPV (Lailulo, Susuman and Blignaut 2015:2).

Ethiopian central statistical agency (2016:35) indicates that 33% rural and 88% of urban men are hired to work, whereas 28% of rural women are very unlikely to be employed unlike 50% of urban women. Urban center women with a higher level of education (which accounts for 70%), have a much higher opportunity to be hired. Women who live in the countryside (42%) would have fewer opportunities to work; whereas 71% of males would be engaged in agricultural work (CSA 2016:15). That is even more common when it comes to controlling and accessing assets among African rural communities, where women possess much less than men in having resources, especially farmlands or other available rural resources (Lailulo et al 2015:2).

Patriarchy, which is a theoretical social construct in which the husband, or maybe even the older man, seems to have ultimate power over of the family group and perpetuating male practices with absolute power over its population (Encyclopaedia Britannica 2016, sv "Patriarchy").

As most scholars agreed, a social system which is primarily paternalistic could significantly contributes to domestic violence (Djamba and Kimuna 2015:29). Ethiopia is indeed a patriarchal nation (Thubauville and Gabbert 2014:140) in which men influence society enormously. In predominantly male communities, the position of women has to be seen as subordinate and considerate to their partners. However, if women go against such social conventions, and abuse is orchestrated towards those do not adhere to the socially constructed norm.

Like most other Africans, Ethiopians are socially conditioned by placing women in a lower socio-economic standing when it is compared to men. In most of the Ethiopian ethnic groups, socially accepted behaviors of women are being loyal, an excellent household cook, and being calm (Lailulo et al 2015:2).

In recent studies conducted in Ethiopia, domestic violence during pregnancy accounts for 64.6%. According to the study, physical abuse was reported to be the highest with 44.1% followed by psychological abuse which was 39.1% (Yohannes, Abebe, Kisi, Demeke, Yimer and Feyiso 2019:5). A meta-analysis study finding showed that women of child-bearing age reported experiencing of intimate partner violence. According to the finding, 46.93 % of women reported a lifetime experience of IPV while, 37% of women experienced IPV in the past 12 months. When closely examined in terms of the types of violence, 38.15% experienced physical and 39% of women experienced sexual and psychological violence (Kassa and Abajobir 2018:5). When categorized in terms of place of residence, women in rural areas had a greater risk (19%) of IPV than those in urban areas (Baye 2020:5).

Based on recent studies from the Oromia regional state, 77% and 62.4% of married women respectively experienced IPV in their lifetime and the past twelve months (Tesfa et al 2020:6). IPV is comparatively more prevalent in the Oromia region (38.4%) than any of the other regional states of Ethiopia (CSA 2016:306). According to CSA (2016:306), the demographic data of Oromia's regional state showed nearly 35.2% of rural women experienced domestic violence. Among them, 32.3% of the women were

married; 36.8% of these women had a family of five or more family members, and 35.5% were uneducated and/or completely illiterate.

As Andarge and Shiferaw (2018:5) reported, low literacy, excessive alcohol consumption, and poor living conditions were predictive of an increased risk of recurrent IPV. It is also predictable to have IPV by IP who have alcohol addictions with an Odds Ratio (OR) 5.72 (95% CI, (1.873-11.51)), by IP who have a legal record (OR= 2.59 (95% CI, (1.15-5.88)), as well as IPs' who have a low employment status, like being a farmer (OR= 3.26 (95% CI, (1.29-8.25)) (Yohannes et al 2019:7).

According to Tesfa, Dida, Girma and Aboma (2020:6), spouse illiteracy, (OR=2.30 (95% CI, (1.28-4.15)), occupational status, (OR= 2.04; 95% CI (1.02-4.06)), size of family members, (OR= 4.37; 95% CI (1.40-13.66)), spousal supremacy, (OR=1.74; (95% CI, (1.15-2.63)), history of witnessing domestic violence, (OR= 1.53 (95% CI (1.00-2.35)) and spousal excessive alcohol consumption (OR=1.77 (95% CI (1.12-2.79)) significantly predicted the likelihood of intimate partner violence.

VAW could be prevented and mitigated by strengthening access to quality education, creating free educational opportunities, building a sustainable women's economy, and organizing awareness-raising campaigns aimed at modifying stereotypes associated with gender discrimination (Gebresilassie 2019:1). A study finding by Fonseca-Machado, Monteiro, Haas, Abrao and Gomes-Sponholz (2015:858) indicated that exposure to IPV increased the incidence of post-traumatic stress (51.9%) and anxiety symptoms among the study participants.

As the findings indicate, intimate partner violence has been increasing (Henrie 2014:16) the risk of mental health problems, most importantly, anxiety and PTSD (64%) symptoms (Dokkedahl, Kok, Murphy, Kristensen, Hansen, Elklit 2019:6; Signorelli, Fusar-Poli, Arcidiacono, Caponnetto and Aguglia 2020:48; Chandan, Thomas, Jones, Russell, Bandyopadhyay, Nirantharakumar, Taylor 2020: 564).

1.3 RESEARCH PROBLEM

Although Ethiopia endorsed the UN convention to eradicate all form of discrimination against women and girls, there are still enormous domestic violence and gender-based attacks. Even though the federal government amended the family law and the criminal law to safeguard women's rights, there are a great numbers of domestic abuses. These challenges remain a public issue and still jeopardize the growth of the country (Kedir 2016:22) towards achieving the Sustainable Development Goal-5 (SDG-5) by 2030.

In Ethiopia, among women who had an experience of IPV (72.5%), nearly, 23.3-34.4% had consequently reported anxiety and post-traumatic stress disorder (Semahegn and Mengistie 2015:78) symptoms. According to scholars, IPV is a major public health concern and is prevalent in East African countries including Ethiopia. The region constitutes 38.8% and 44% in the past twelve months and lifetime (Muluneh et al 2020:12) prevalence of intimate partner violence.

As the research findings conclude, the burden of IPV is high in low and middle-income nations (Coll, Ewerling, Moreno, Hellwig and Barros 2020:2). Ethiopia, classified as a low-income country (Serajuddin and Hamadeh 2020), heightened the challenge towards achieving the 2030 SDG and women's rights.

In Ethiopia, the IPV prevalence rate ranges from 20 to 78% (Tiruye et al 2020:2). Findings from different regions in Ethiopia, such as Harari and Oromia, respectively, showed 39.1% and 38% of IPV. As Chernet and Cherie (2020:5) reported, illiteracy, economic hardship, area of residence, and the age of couples were highly associated with IPV.

According to WHO (2013:31), IPV is linked to the risk of mental illness. Recurrent abuse significantly increases the risk of anxiety. Post-traumatic stress disorder was another frequently reported mental health problem, which accounts for 31 to 84.4% (Karakurt et al 2014:3; Sugg 2015:635) of the burden IPV related mental health outcomes.

Issues regarding the adverse mental health consequences of IPV, particularly anxiety and PTSD symptoms are not yet well researched in the Ethiopia. Since the causes, the extent, and the consequences of IPV tend to vary across the regions of Ethiopia, a detailed understanding in this respect is essential before developing support intervention strategies.

1.4 AIM OF THE STUDY

This covers a) the purpose of the study, b) the objectives, and c) the major research questions of this thesis. To begin with, the purpose of the study will be presented.

1.4.1 The purpose of the study

The purpose of this study was to develop intervention strategies for the support of married women who develop anxiety and post-traumatic stress disorder following intimate partner violence. The study was conducted in a rural area of Ambo district which is located in the West Shewa Zone of Oromia regional state, Ethiopia.

1.4.2 Research objectives

The term "research objective" refers to "explain clearly what the research is attempting to achieve and where the researcher intends to get at the end of the study" (Polit and Beck 2017:70). The following objectives guided this study forward.

- to investigate the extent of intimate partner violence (physical, sexual and psychological violence) among married women in Ambo district, Oromia regional state, Ethiopia.

- to examine the association between anxiety, posttraumatic stress disorder symptoms, and IPV perpetration among married women in Ambo district, Oromia regional state, Ethiopia.

- to develop support intervention strategies for women exposed to intimate partner violence and subsequent anxiety and posttraumatic stress disorder symptoms.

1.4.3 Research questions

A research question is often “a brief inquiry which consists of one or more variable(s)” (Cresswell 2014:102) and it is constructed to address research gaps in the area (Yegidis, Weinbach and Myers 2012:22). This is one of the essential parts of the research, focusing upon a research problem which leads to proposed hypotheses. Research questions help to define key study variables, their relationship as well as the population and sampling in the study (Polit and Beck 2017:65). The present study tried to answer the following questions:

- What is the extent of intimate partner violence among married women in Ambo district, Oromia regional state, Ethiopia?

- What is the association between anxiety, posttraumatic stress disorder symptoms, and IPV perpetration among married women in Ambo district, Oromia regional state, Ethiopia?

- What support intervention strategies are appropriate for the prevention and response to IPV perpetration, anxiety and posttraumatic stress disorder in the Ambo district of Oromia regional state, Ethiopia?

1.5 SIGNIFICANCE OF THE STUDY

Even though there are considerable findings on whether IPV is related to mental health issues, the problems are not extensively investigated in low-income countries including Ethiopia (Meekers et al 2013:13). Thus, intense research activity is needed to get a deeper understanding of the relation between IPV victimization and mental health

outcomes, particularly, anxiety and posttraumatic stress disorder symptoms before developing appropriate support intervention strategies.

The findings of the study can be used as a basis to formulate intervention strategies for effective screening and management of mental health outcomes of IPV.
The research could help:

- Healthcare professionals to deal with IPV screening, integrated management and when necessary, an appropriate referral.
- Women's rights activists for evidenced based planning, for evidenced based advocacy of women and girls right and equal treatment in the community. The study also enables, to evidence based women empowerment initiatives.
- Stakeholders, for detail understanding of IPV, risk factors and impacts on women's mental health for sound decision in rural areas.
- Community and community leaders to realize IPV and effects on women, and girls enables them for prevention, locally appropriate interventions and referral.
- Victim women to get legal and mental health support.
- For future research, the study become an input for an in-depth understanding between IPV and adverse mental health effects to promote women's mental health in Ethiopia.

1.6 DEFINITION OF TERMS

Key term definitions are useful to focus on specific issues and to examine the interdependence of research variables (Kivunja 2018:46; Sullivan 2018:125; Flynn and Graham 2010:3). Constructs are the theoretical characterizations of terms in the study (Kumar 2011:72). The terms "IPV", "anxiety", "Ethiopia", "intervention strategies", "Violence Against Women" and "post-traumatic stress symptoms" are important concepts in this research. Thus, they are defined as follows.

Violence Against wWomen is defined as “an act of gender-based abuse which leads to or, attributes to physical, sexual or psychological harm or deprivation in women" (UN 1993).

Intimate partner violence is described as "...any act within the intimate relationship which leads to physical, psychological or sexual damage to others in a relationship (UN 1993). The current research considered IPV as an abuse by intimate partner that cause physical, psychological or sexual harm to married woman.

Intimate partner refers to current spouses of married women.

Sexual violence considered if a woman experienced at least one of the following acts in the past 12 month which includes: acts of abusive sexual contact, forced engagement in sexual acts, attempted or completed sexual acts without her consent, sexual harassment (unwelcome touches, comments and jokes) by intimate partner.

Psychological violence considered if a woman experienced at least one of the following acts in the past 12 month which includes: insulting, humiliation, threatening to hurt, doing things to scare on purpose, isolate her from family and friends, impeded the role of her in decision-making and economic abandonment.

Physical violence considered if a woman experienced at least one of the following acts in the past 12 month which includes: slapping, throwing something that could hurt, pushing or shoving or pulling hair, hitting with fist or something, kicking, biting or dragging, choking or burning, threating with a knife, gun or other weapon and throwing something towards her.

According to American Psychiatric Association (APA), **anxiety** refers to a condition that is characterized by feelings of apprehension, anxious thoughts, or physiological problems, including increased blood pressure. People with anxiety usually experiencing persistent intrusive thoughts or worries and may avoid certain situations (APA

2013:222). **Anxiety** symptoms assessed with Beck Anxiety Inventory (BAI), a 21 item rating scale with cut-off point score greater than or equal to 21, considered as indicative for probable anxiety symptom.

Post-traumatic stress disorder corresponds to re-experience of an intensely traumatic event including symptoms of intense anticipation and the avoidance of stimuli related to exposure to actual, traumatic injury or sexual violence (APA 2013:271). **Post-traumatic stress disorder (PTSD)** symptoms assessed with Post traumatic stress disorder CheckList- Civilian (PCL-C) a 20 item rating scale, score ranges from 20-80 with cut-off point score equal or higher than 33 considered as indicative for PTSD symptom.

Intervention strategies refer to implementation strategies that support the treatment and prevention of domestic violence and even its mental health outcomes. The intervention strategies is an evidence-based are to mitigate IPV and its negative effects through comprehensive law enforcement and enhanced survivor support services (Condino, Tanzilli, Speranza and Lingiardi 2016:81). The current research, view support intervention strategies, an evidenced based approach for screening, appropriate mental health case management and referral for IPV survivors.

Ethiopia is an African nation which is located in the Horn of Africa. The country is found entirely in tropical latitudes and is relatively compact, with similar dimensions of north-south and east-west. The capital city is called Addis Ababa, which is located in the central part of Ethiopia. Ethiopia is one of the most populated nations in Africa (Britannica Academic 2021).

1.7 THEORETICAL FOUNDATIONS OF THE STUDY

The study is founded on a theoretical model to guide or construct the research. Understanding the research questions is a result of the researcher's theoretical perceptions to guide data gathering and interpretation. Researchers must, therefore,

take into consideration the epistemological approach in using the findings to inform other academics and policymakers (Novikov 2013:13).

1.7.1 Research paradigm

Positivism is one of the philosophies recommended to undertake a study of VAW (Ellsberg and Heise 2005: 63). The positivist paradigm is taken into account to understand an existing problem through a quantitative approach (Creswell 2018:243). Thus, this research paper is mainly focusing on a positivist view which intends to get the facts after investigating the factors associated with intimate partner violence within the socio-ecological framework.

1.7.2 Theoretical grounding

Research approaches guide scientific findings following scientific assumptions. Comprehending paradigm-specific premises brings to light the quality of the results which make the scientific study acceptable or its limitations understandable (Park, Konge and Artino 2020:690).

The researcher adopted a positivist approach would better understand the incidence and underlying reasons for violence and its consequences. Furthermore, the link between IPV, anxiety, and post-traumatic stress disorder symptoms was investigated by gathering data from married women in Ambo District, in Oromia regional state, Ethiopia. A quantitative research technique and a cross-sectional study design were used (Kothari 2004:122) to answer the research questions of this study.

1.7.2.1 The social-ecological framework

According to the social-ecological framework, a single cause could not justify why individuals or groups are at high risk for interpersonal violence. To answer the research question, a socio-ecological framework was taken into consideration (Ellsberg and

Heise 2005:24) to understand the interaction of variables across different levels, with importance given to the impact at the individual level.

The researcher was guided by a social-ecological framework to understand the prevalence of IPV and the association between IPV perpetration, anxiety, and PTSD symptoms among married women. This framework also enabled the researcher to develop support intervention strategies for IPV and related mental health outcomes in Ethiopia.

1.8 RESEARCH DESIGN AND METHOD

The study was guided by a cross-sectional design (Kothari 2004:55) to answer the research questions (Hudson, Pope and Glynn 2005:355). Thus, through interviewer-administered data collection technique, the researcher assessed intimate partner violence, determinants, anxiety, and PTSD symptoms among selected married women.

The prevalence of IPV was analyzed using descriptive statistics. Furthermore, the relationship between IPV and anxiety and PTSD symptoms was examined through the logistic regression statistical tests. Accordingly, based on the findings, and existing literature, support intervention strategies were developed to enhance the wellbeing of women in rural areas.

1.9 SCOPE OF THE STUDY

The study was designed to determine the extent of IPV, anxiety, and PTSD and determine the association between IPV exposure, anxiety, and PTSD symptoms among married women in Ambo district, Oromia regional state, Ethiopia. Furthermore, based on the findings, possible intervention strategies were developed to decrease IPV and enhance the health and wellbeing of married women.

1.10 STRUCTURE OF THE THESIS

The research consists of six chapters as follows.

- Chapter 1 Orientation of the study
- Chapter 2 Literature review and theoretical framework
- Chapter 3 Research design and methodology
- Chapter 4 Analysis, presentation, and description of the research findings
- Chapter 5 Proposed support intervention strategies on IPV for married women in Ethiopia
- Chapter 6 Conclusions and recommendations

1.11 CONCLUSION

In this chapter, the researcher has addressed both the background of the problem and the major phenomena related to mental health and IPV. Besides, in this chapter, an attempt is made to introduce the problem and its interrelation with domestic violence on married women.

Intimate partner violence is a global problem and affects the lives of millions of women. Findings from Africa have been illustrated how IPV and its consequences are a burden on women affecting their quality of life. Thus, in this chapter, we have demonstrated that the problem is severe and a result of gender inequalities. Similar to other African countries, the problem is serious in Ethiopia. Therefore, based on the study findings and relevant literature, intervention strategies to address IPV and its mental health outcomes in Ethiopia are suggested. The following chapter deals with the literature review and the theoretical framework of the study.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 INTRODUCTION

In this chapter, it is essential to discuss the typology of violence, gender-based violence, VAW, IPV, anxiety, and PTSD. Consistent with the research questions, the prevalence of IPV, anxiety and PTSD, the relationship between IPV, anxiety, and PTSD are covered in the review. Intervention strategies and approaches consistent with IPV and mental health are reviewed in this chapter. Regarding the coverage and focus of the study, the researcher reviews intimate partner violence by place of residence, in urban and rural settings.

Data source were reviewed from data bases and websites which were UNISA library e-resources, peer reviewed journal articles, statistical data from organization websites, Encyclopedia, SAGE, Public/Publisher Medline, Medline, Global Health and WHO database (preprints) used as source data for review of related literature. Considering the relevance of data, study selection criteria is important during literature review. Population based studies that has recent date of publication with observational, cross sectional and interventional study design were included that assessed IPV, risk factors and mental health adverse effects among married women in rural setting. With key words, studies focus on IPV and anxiety and PTSD symptoms, intervention strategies and VAW reviewed including in study done in Ethiopia. Using post-positivist philosophical framework, quantitative findings were synthesized and critically appraised from the selected quantitative research studies.

2.2 PURPOSE OF A LITERATURE REVIEW

A review of literature is a research chapter illustrating an author's critical evaluation about a specific issue through critical analysis of the existing knowledge (Randolph

2009:3). A review of literature is a critical analysis of credible and reviewed scientific data and information from second-hand sources, such as books, scientific journals, research areas, and hypotheses relevant to particular study (Fink 2014:3; Skaik 2013:680). It is indeed essential for all scholars to understand the concepts, why the research has been conducted, or even what the project would accomplish (Harris 2020:138). By reviewing the literature, the researcher has to, therefore, analyze recent facts carefully in connection with intimate partner violence.

2.3 WOMEN AND THE CONTEMPORARY WORLD

Based on United Nations (2020) report, women's participation in the labor market was below 50%. Men, on the other hand, comprised 74% of the labor market. Worldwide, women spent 4.2 hours on housework compared to 1.7 hours spent by their male counterparts. Childcare and household tasks were indeed unequally performed by women, limiting their commercial viability. Underpaid housework involves caring for children, preparing food, and cleaning. Globally, one in three women reported a history of physical and/or sexual violence during a marital relationship. Domestic violence was indeed fatal in a most severe case. According to the Council of Economic Advisors (CEAs), nearly every day, approximately 137 deaths were caused by IPV (CEA 2020:2).

2.3.1 Sustainable development goal- 5 and IPV

In response to VAW, authorities, politicians, institutions, global financial markets, and decision-makers have also increasingly recognized the need for empowering women. As a result, the UN launched gender equalities and economic empowerment frameworks to eradicate VAW by 2030 as part of achieving the Sustainable Development Goal V (SDG-5) (Chichester, Pluess, Lee and Taylor 2017:6).

Leaders of African nations argue that achievement of SDG-5 was not remarkable. Following this, the African Union declared the years from 2010 and 2020 as the “African

Women's Decade (African Women's Development and Communication Network 2010). Many of the research findings from Sub-Saharan Africa (SSA) show that 87% of human capital development was associated with males. In this region, it is obvious that the women had the lowest economic opportunities, educational access, and lower quality of life. As the above-mentioned research findings show, the Sub-Saharan region requires gender-transformative policy and strategies by achieve the SDG-5 in 2030 (Chichester, Pluess, Lee and Taylor 2017:11).

2.3.2 Stop gender violence

VAW is widely recognized as a major health issue and also an abuse of women's rights. Ban Ki-Moon, the late UN Secretary-General, issued an international call-to-action to keep women safe by unveiling developmental direction to stop gender-based violence. The 57th UN commission meeting on women stressed the urgency of mitigating causal factors of domestic violence. Besides, it emphasized building stronger multi-spectral services, initiatives, and actions for victims of abuse (WHO 2013:4).

Multidisciplinary research and analysis are required to prevent violence and to have an evidence-based intervention to enhance the wellbeing of women (WHO 2013:4). Studies suggest that IPV adversely influences women's health. Anxiety, depression, and stress-related disorders, such as PTSD are common mental health issues (WHO 2013: 5).

2.4 WOMEN IN ETHIOPIA

According to the USAID (2020) report, nearly 80% of Ethiopians live in rural environments; with women constituting 51% of the rural population. As it is reported by USAID, the majority of women play a major role in household work, with limited engagement in farming activities. Their contributions, on the other hand, are unrecognized, and their access to resources, education, public engagement, and financial market participation is unremarkable. Because of limited health access in

Ethiopia, rural women have restricted access to healthcare services. Furthermore, the large proportion of female school dropouts before completing their primary school is a great obstacle to alleviating IPV.

From a historical viewpoint, Ethiopian women have faced socio-cultural and economic inequality, and have less opportunity for career development, education, or gainful employment. Rural women are engrained in the agricultural sector, which is mainly a labor-intensive traditional sector, adding a burden on women and children. It is indeed fundamental to transform the sector and the way of living to enhance the lives of women in rural settings. Constitutional reform did not significantly alter women's subordinate status, which was based on deeply ingrained traditional values and beliefs. Gender equality would benefit from structural reform (Semela, Bekele and Abraham 2019:231). Even though Ethiopia has adopted declarations and ratified legal and regulatory mechanisms to emphasize women's rights, the gap has not been closed yet (Ayele and Teferi 2015:143).

2.5 UNDERSTANDING GENDER-BASED VIOLENCE

Gender-based Violence Against Women ends with physical, psychological, and sexual harm and deprives them of their rrights, and liberty and wellbeing (Djamba and Kimuna 2015:13; Blanchfield, Margesson and Seelke 2009:5). Againstto UNHCR (2020) definition, GBV is a harmful act committed according to one's gender. According to many literary reviews on the topic, GBV stems from gender discrimination, a male-dominated society, the norm, and a disbelief in women's equality. Domestic violence is a major crime against humanity in every country around the world, but as scholars argue, it has so far received very little attention (Djamba and Kimuna 2015:12).

2.5.1 Violence Against Women: International perspective

VAW is recognized by the UN (1993) as "any act of GBV that causes or is likely to cause physical, sexual, or psychological harm to women (UN 2014:11; Loxton, Dolja-

Gore, Anderson and Townsend 2017:2). Notwithstanding the universal declaration, women have faced domestic violence and discrimination while men to enjoy basic rights irrespective of age, race, color, language, religion or any other factor (Chernet and Cherie 2020:1; Kedir 2016:3).

VAW has far reaching consequences since it impacts their health and wellbeing of and the lives of their growing children either in the short term or in long term. According to Krantz and Garcia-Moreno (2005:815), VAW originates from gender stereotypes, attitudes, behavior, systemic and societal disparities which portray and depict women as subordinate to men. The nature, context, and health implications of VAW demonstrate the gender gaps and inequalities.

VAW occurs in both developed and developing countries (WHO 2013:5; UN 2014:11). It affects women's wellness, before empowerment, and causes severe devastation throughout the world (WHO 2013:37). Women who live in extreme financial hardship are far more vulnerable to partner abuse (Semahegn and Mengistie 2015:2).

World health organization (2021b) estimates, recent burden of VAW and girls and nearly 736 million women experienced physical and/or sexual violence at least once in their life. The statistics indicates, 30% of women were aged under 15 year. Following violence, depression and anxiety disorders were repeatedly reported mental health problems. Relevant to age group, 24% of adolescent girls aged 15-19 experience violence. In 2018, women aged 15-24 years encountered 13% of physical and/or sexual violence by husband in the past 12 month. VAW is disproportionately higher among low- and lower-middle-income countries, 37% of women experienced violence, of this 22% of the report from least developed countries. **From the** United Nations Office on Drugs and Crime (2021) report, 81,000 of death of women and girls across the world, 58% (n=47,000) of the death perpetrated by intimate partner or family member. In conclusion, VAW yet continue a major global major problem, affects the lives of many women and girls.

2.5.2 Domestic violence: global human rights perspective

Male supremacy and gender discrimination are a result of unequal gender relations (Kedir 2016:32). Fighting VAW is indeed a human rights issue to be addressed to achieve SDG-5 (Devries, Mak, Garcia-Moreno, Petzold, Child, Falder, Lim, Bacchus, Engell, Rosenfeld, Pallitto, Vos, Abrahams and Watts 2013:1527). Human rights are fundamental to all of humanity. As a result, every woman has the right to live and to be free from any form of violation that deprives of her rights. Furthermore, women have an equal right to access social, health, and legal services, as well as other services equally, irrespective of their gender (UN 1948).

Disregard for women's well-being, along with a high incidence of domestic abuse explain a society's culture, practices, and perceptions of violent acts against women (Kedir 2016:33). Preventing VAW is a global agenda to be achieved by SDG-5 in 2030. Besides, this would require governments, lawmakers, and even organizations to comply with the provisions of declarations, policies or laws to deter VAW by focusing on improving women's well-being in general (Kedir 2016:3).

2.5.3 Domestic violence: Ethiopian perspective

Ethiopia has endorsed and ratified relevant international declarations, conventions, charters, and agreements as part of its government's laws to protect women from violence (Kedir 2016:22). Article 25 of the Federal Democratic Republic of Ethiopia (FDRE) constitution highlights women's right to protection against gender violence and breaches of this article are subject to imprisonment of up to fifteen years (FDRE 1995:7).

According to Article 553 (1) of the revised version of the criminal code of FDRE (2004), women should be free from any act of abuse perpetrated by anyone, including their marital partners. In addition, women have the privilege of being protected from any activity that is harmful to their physical and mental health. In addition, under Article 564,

any act of violence in a conjugal relationship is considered to be a criminal act. Although Ethiopia has domesticated international laws to prevent VAW, violence continues to be a social problem. As a result, of the heavy burden of VAW, the country's record is the worst in terms of gender equality (Kedir 2016:25).

2.6 FRAMEWORK FOR UNDERSTANDING VIOLENCE

2.6.1 Typology of violence

Violence is a leading cause of death worldwide, killing over 1.6 million people each year (WHO 2002:4). The World Health Organization (2002a:4) defines violence as "the intentional use of physical force, power to threaten or attack on, another person, or a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation."

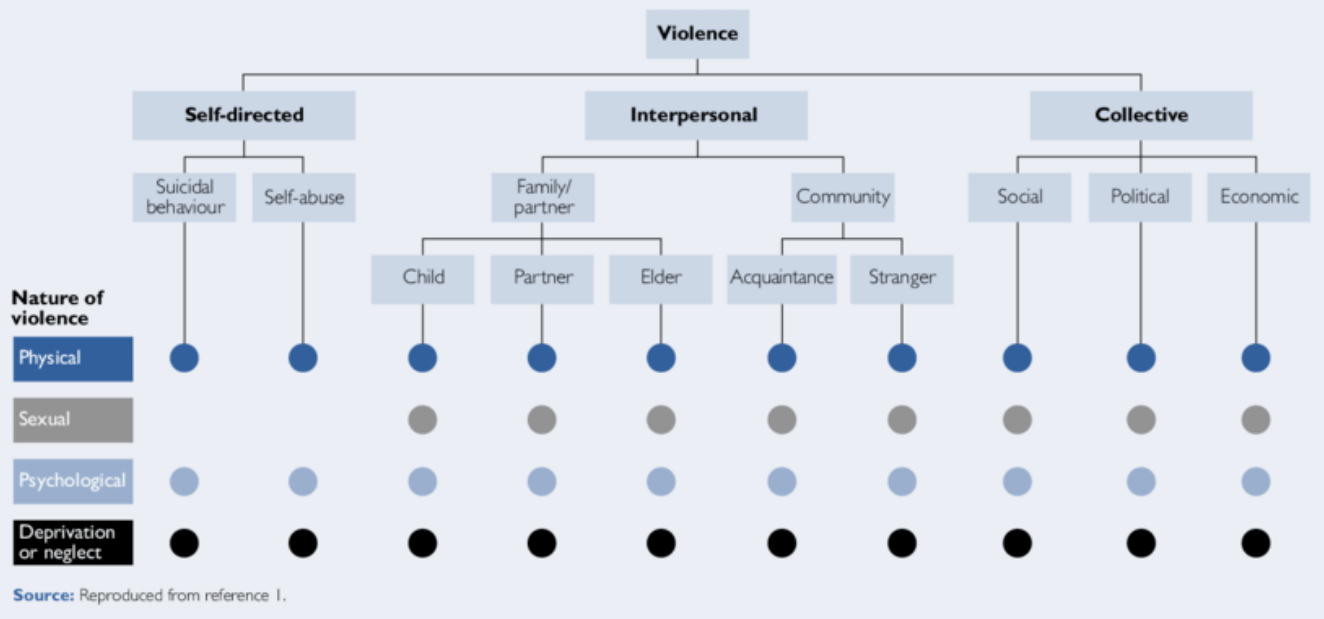
Understanding the types of violence helps to know the pattern of acts inflicted by the intimate partner. This research aimed to review interpersonal violence inflicted by an intimate partner in a marital relationship. Interpersonal violence arises from gender bias (Castner 2020:276; Shumba 2015:33). Community violence can occur outside the home by either a non-intimate partner and or an intimate partner in school, workplace, public space, and prison. This type of abuse includes rape or sexual assault, physical, or psychological attack inflicted by strangers/groups. On the other hand, interpersonal murders occur whenever a conflict arises between family members and partner once in a lifetime of the woman.

Collective violence is further categorized as a social, political, and economic form of violence based on gender identity, the motivated by economic supremacy over women by large groups, and is considered as a war crime. The premise of economic violence is to gain economic supremacy, which leads to lower economic classification, and victimizes the target group (WHO 2002b: 21).

According to research, interpersonal violence is a prevalent type of violence that is exhibited in the form of IPV (Semahegn and Mengistie 2015:2; Shumba 2015:33). This research aimed at assessing the extent of interpersonal violence and the relationship between IPV exposure, anxiety, and PTSD symptoms (WHO 2002a:4). Figure 2.1 indicates that interpersonal violence refers to violence that occurs between individuals, family, IP, and community. Family violence includes child maltreatment, IPV, elder abuse and community violence by acquaintances and stranger violence (WHO 2002a:6).

As indicated in figure 2.1 below, self-directed violence is one type of violence, characterized by suicidal behavior and self-abuse. Globally, it is a leading cause of death and an important public health issue among people in the age group 15-44 years (DeLeo & Krysinska 2017:115). Self-directed violence can be precipitated and escalated by conflict between partners and may lead to IPV (Blosnich, Kopacz, McCarten and Bossarte 2014: 421).

Typology of violence in figure 2.1, initially developed by WHO (2002a:6), cited in Garcia-Moreno, Jansen, Ellsberg, Heise, Watts (2006:1260), shows the nature of self-directed, collective, and interpersonal violence classified in the form physical, sexual, psychological, deprivation and neglect.

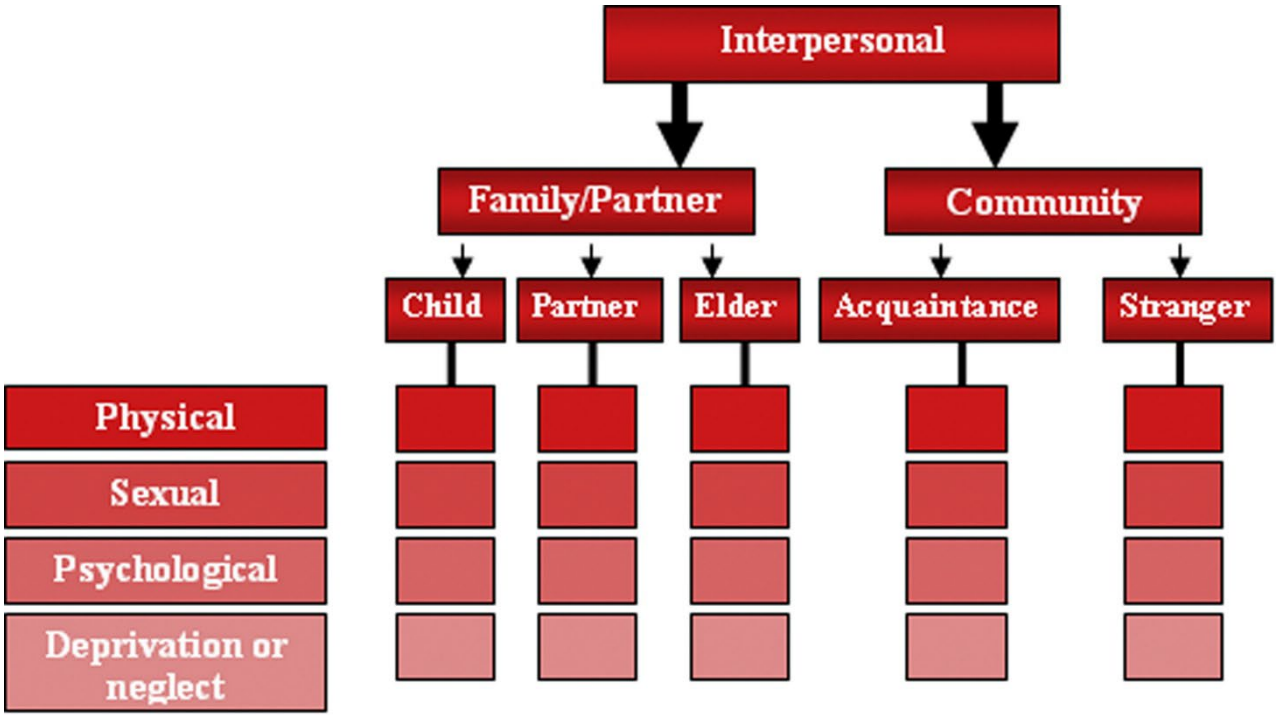


(WHO 2002a:6)

Figure 2.1 Typology of violence

2.6.1.1 Interpersonal violence

According to WHO's (2002a:13) definition, violence committed by family, partner, and community is considered interpersonal violence (Castner 2020:275). Violence could be presented in the form of physical, psychological, or sexual violence or in the form of depriving of the health and wellness of women. Each subcategory of violence could be prevented by knowledge of type of the victims and perpetrators (Figure 2.2). From Figure 2.2, this researcher understands that family or partner violence present in the form of intimate partner violence and manifests as physical, sexual, and psychological violence.



(WHO 2002a:6)

Figure 2.2 Forms of interpersonal violence

2.6.1.2 Intimate partner violence

IPV is characterized as intimidation of one or even more forms using physical, sexual, psychological, or controlling behavior violence committed by an intimate partner (WHO 2013:5; Pico-Alfonso, Garcia-Linares, Celda-Navarro, Blasco-Ros, Echeburua and Martinez 2006:1260). VAW is often seen as a socially constructed act, built over time, with power differences reflecting the interests of the men over the lives of women (Semahegn, Torpey, Manu, Aassefa and Aankomah 2019:65).

Several women experience psychological and physical violence by a close relative or intimate partner which leads to health problems and poor quality of life (Flury, Nyberg and Riecher-Rossler 2010:6). IPV occurs in a range, from a single event with no long-term implications to a chronic and severe type. As a result, by referring to the time of exposure, it might be classified into two: a preceding year experience and a lifetime experience to any act of IPV. Any act committed by a marital partner within the previous 12 months (Al-Atrushi, Al-Tawil, Shabilaand and Al-Hadithi 2013:3) is termed as current

prevalence (Deribe, Beyene, Tolla, Memiah, Biadgilign and Amberbir 2012:2). Several researchers looked at exposure to IPV within the previous 12 months (WHO 2013:9). The researcher tried to assess the past twelve months of exposure to IPV within an intimate relationship. Violence limits women from deciding on their private lives and in the public domain, significantly affecting their financial, social, and political participation (Horn, Puffer, Roesch and Lehmann 2014:2).

2.6.1.2.1 Prevalence of intimate partner violence

This section qualified through peer-reviewed experimental and cross-sectional research that assessed at the prevalence of intimate relationship violence in the previous year. Due to differences in methods, design, data sets, definitions of partner violence, duration of exposure, and type of violent exposure, IPV estimates may vary across the literature. The rates of IPV are greater in research that utilizes broad definitions than in studies that employ narrow definitions of the term (Nyame, Howard, Feder and Trevillion 2013: 537).

IPV is a worldwide challenge, distressing one in three women all over the world (WHO 2013:16; Alvarez, Fedock, Grace and Campbell 2016:479). Of those, over 60% (Mitchell, Wight, Heerden, and Rochat 2016:1) of the reported occurrence came from Africa. Domestic violence is common among women across Asian, South American, and African nations, including Ethiopia (WHO 2013:16). Still, IPV remains a significant health issue, accounting for 15-71% of the global burden (WHO, 2013:16; Stockl, Devries, Rotstein, Abrahams, Campbell, Watts and Moreno 2013:9).

Considering Ethiopian demographic health 2016 national survey, emotional violence accounts 22.70%, Physical violence ,23.30%, Sexual violence, 10.6%, sexual and physical violence, 7.3%, Emotional, physical and sexual violence, 5.60%, Sexual or physical violence, 26.60% and Physical or sexual or emotional violence, 33.70%, respectively constitute reported form of violence shown in table 2.5. From the national

survey, either of form of physical or sexual or emotional violence accounts highest reported act of violence among married woman in Ethiopia.

2.7 FORMS OF INTIMATE PARTNER VIOLENCE

According to the Centers for Disease Control and Prevention (CDC), IPV includes but is not limited to, psychological, physical, and sexual acts of violence, as well as stalking and economic violence (Breiding, Basile, Smith, Black 2015:9; CDC 2015). It is hard to ascertain the presentations, due to the cultural, norms, and perceptions of a society towards partner violence (WHO 2013:5). As a result, WHO proposed a consistent definition for each type of IPV as illustrated in Table 2.1.

Table 2.1 Concept of intimate partner violence

Forms of IPV and its definition	
Physical violence	Deliberate use of lethal punishment capable of inflicting mortality, injury, damage, or harm. Physical violence includes scratching, pushing, shoving, throwing, grabbing, biting, choking, shaking, hair-pulling, slapping, punching, hitting, burning, using a weapon (gun, knife, or other instrument), and using restraints or one's body, or power against another person.
Sexual Violence	Violent abuse is committed by a person without the victim's voluntary cooperation, or even against people who are unable to consent or continue to refuse. This would include: Forced or alcohol/drug-facilitated victim penetration; forced or alcohol/drug-facilitated situations in which the victim was compelled to penetrate a victim or someone else; unwanted penetration; deliberate sexually touching or non-contact pornographic acts, peer or other pressure to engage in sexual acts with the perpetrator.
Psychological Violence	Use of both verbal and nonverbal communication with the purpose to hurt psychologically and try to assert control over another person. In a violent relationship, psychological aggression frequently precedes physical and sexual acts, and it perpetuates other types of IPV.

(UN 2014:15)

The operational definition of a variable seems to be precise and clear. The operational definition gives a clear direction on how to measure a variable in a study (Kumar

2011:71). The following variables are operationalized in the current study as presented in Table 2.2.

Table 2.2 Concepts used in the literature review

Measurement	Labeling
Physical violence	Encountering any one of the 6 items has been taken into account as constituting physical abuse.
Moderate 1. Being smacked or getting some material thrown at one's face 2. Being dragged or kicked	Experiencing either one or both of the first two types of physical violence.
Severe 3. Getting struck with a palm or an item 4. Getting punished, smashed, shoved, or tossed 5. Getting deliberately suffocated or burnt 6. Being attacked with a weapon/knife	If any of the four items were experienced, they were classified as 'severe.'
Sexual violence 1. Being accused of having sex made me fearful. 2. Being made to have demeaning intercourse. 3. Getting physically coerced into sexual activity.	Facing either of the listed items would be classified as sexual abuse.'
Emotional violence 1. Being criticized or embarrassed in the public. 2. Being subjected to fear or intimidation. 3. Being threatened, either you or someone close.	Experiencing any of the three items is considered 'emotional violence' Facing only one item is labelled 'moderate abuse'; Experiencing two or more items is labelled 'severe' emotional violence.
IPV	Having been subjected to any physical, sexual, or emotional violence.
Recent IPV	Any or all physical, sexual, and psychological violence reported in the previous 12 months.
Lifetime experience of IPV	Any or all physical, sexual, and psychological violence they have been experienced over time in their lifetime.
Married women	Someone who has stayed with IPs.

Intimate partner	The male partner who violates a woman physically, sexually, and emotionally.
PTSD Checklist-Civilian Version (PCL-5)	A score of 31-33 or more suggests probable PTSD symptoms.
Beck Anxiety Inventory (BAI)	A score of 0-21, 22-35, and 36 or more indicates low, moderate, and sever level of anxiety symptoms, respectively.

(Deyessa, Berhane, Ellsberg, Emmelin, Kullgren & Hogberg 2010:4; Andarge & Shiferaw 2018:4; Ellsberg & Heise 2005:4; UN 2014:71; Peltzer, Pengpid, Mcfarlane & Banyin 2013: 548; Beck, Epstein, Brown and Steer.1988:895).

2.7.1 Physical violence

From multiple forms of IPV, physical violence accounts for 10% to 69% (WHO 2002b: 89; EU 2014) cited in (Lovestad, Love, Vaez and Krantz 2017:335) among women who have experienced physical violence at some point in their life. The finding concludes that one in every five women has encountered physical violence.

Metadata extracted from large community studies indicate that 30% of women globally suffered from physical or sexual violence once in their lifetime (Devries et al 2013:1527), and accounted for 18.8% of genocide victims in a past twelve months period (Umubyeyi, Mogren, Ntaganira and Krantz 2014:7). 11.6% of women who disclosed physical violence suffered quite significant injuries including knife wounds, missing teeth, or fractured bones (Al-Atrushi et al 2013:37). Data extracts from peer-reviewed studies indicate that among reproductive-age women, physical violence accounts for 31 to 76.5% according to Semahegn and Mengistie (2015:1) and 22.9% Kinyanda, Weiss, Mungherera, Onyango-Mangen, Ngabirano, Kajungu, Kagugube, Muhwezi, Muron and Patel (2016:5).

2.7.2 Sexual violence

Sexual violence is the most pervasive form of violence which causes human rights and public health problems (Al-Atrushi et al 2013:37). Sexual violence could be either an attempt or a deed on the woman by another person without the former's consent to engage in sexual intercourse (Meekers, Pallin and Hutchinson 2013:17; WHO 2014:2; Abramsky, Lees, Stockl, Harvey, Kapinga, Ranganathan, Mshana and Kapiga 2019:4).

Women who have been sexually abused are vulnerable to acts such as exploitative sexual activity, pressured sexual involvement, engaging in sexual acts without knowledge or permission, sexual assault, verbal harassment, intimidation, unwanted touching, and immoral relationships (UN 2014:16; Al-Atrushi et al 2013: 3).

Data extracted from peer-reviewed articles by Semahegn & Mengistie (2015:1) show that lifetime sexual violence ranges from 19.2 to 59%. The findings of other scholars also indicate that sexual violence accounts for 7.8% in a lifetime (Kinyanda et al 2016:5) and ranges between 7.4% in the past twelve months (Umubyeyi et al 2014:7) and 12.1% (Al-Atrushi et al 2013:37).

2.7.3 Psychological violence

During psychological violence a range of behaviors that include insulting, making the victim feel bad and embarrassed in front of others, intentionally frightening or threatening to harm, isolating from family, monitoring overall activities, ignoring or treating indifferently, being jealous, angry and preventing access to social services are used (UN 2014:16). However, fewer items need to be considered to make a study like this one more manageable and focused (Al-Atrushi et al 2013:3).

Psychological violence frequently co-occurs with other forms of IPV and most of the time precedes other forms of IPV; it is precursor to physical and sexual violence, and often determines the degree of physical abuse. Due to recall bias, studies on

psychological abuse should to be undertaken within the time frame of the past twelve months' occurrence (UN 2014:16). Studies by various scholars such as Semahegn and Mengistie (2015:5), Kinyanda et al (2016:5), Al-Atrushi et al (2013:37) indicate that the past 12 months psychological violence accounts for 51.7%, 44.2%, 21.4%, and 38.9%, respectively. Nearly 43.3% of women report emotional abuse in their lifetime (Al-Atrushi et al 2013:37).

2.8 REGIONAL ESTIMATES OF INTIMATE PARTNER VIOLENCE

Studies conducted in 79 countries by WHO (2013:23) estimated physical and/or sexual IPV to be 30%. Africa accounts for 36.6% (WHO 2014:14) of IPV. The lifetime prevalence of physical and/or sexual IPV is summarized in Table 2.3 below.

Table 2.3 WHO regional estimates of physical and/or sexual intimate partner violence among ever-partnered women

WHO region	Prevalence of IPV (95% CI)
Africa	36.6 (32.7 - 40.5)
Americas (Canada, Latin America, and United States)	29.8 (25.8 - 33.9)
Europe	25.4 (20.9 - 30.0)
Eastern Mediterranean	37.0 (30.9 - 43.1)
Southeast Africa	37.7 (32.8 - 42.2)
Western Pacific	24.6 (20.1 - 29.0)
High income countries	23.2 (20.2 - 26.2)

(WHO 2014:14)

Sub-Saharan Africa has a higher rate of ever-married domestic violence (37.7%) than the global (26.4%) prevalence of domestic violence (WHO 2013:23). Central Sub-Saharan African countries account for the highest (65.6%) (WHO 2013:47) prevalence of intimate partner violence (Table 2.4).

Table 2.4 Prevalence of IPV among ever-married women in Africa

WHO Africa region	Prevalence of IPV (95% CI)
Sub-Saharan Africa, Central	65.64 (53.6 - 77.7)
Sub-Saharan Africa, East	38.83 (34.6 - 43.1)
Sub-Saharan Africa, Southern	29.67 (24.3 - 35.1)
Sub-Saharan Africa, West	41.75 (32.9 - 50.6)

(WHO 2013:47)

2.8.1 Intimate partner violence in East Africa

Data collected from East African countries show that nearly half of the women experienced one or many types of IPV (National Institute of Medicine (NIM) 2015:16) and (CSA 2016:3). According to Devries et al (2013:11) find out that women from Sub-Saharan African countries had a high prevalence of IPV.

A mental analysis study by indicates that the region accounts for 44% overall prevalence and 35.5% past year polled prevalence among women. Regional DHS (2008-2019) from 29 Sub-Saharan countries show that physical and or sexual abuse is reported to be 6.4 % to 51%. Emotional violence accounts for 53.1% (NIM 2015:16; CSA 2016:3) of intimate partner violence.

According to the NIM (2015:16), in Uganda 42% of married women experienced physical and emotional violence. According to this report, 27% of them experienced sexual violence. When the past twelve months' prevalence is considered, Kenya to had 39% (National Bureau of Statistics-Kenya and ICF International 2015:291), Tanzania, 61% (Kapiga, Harvey, Muhammad, Stockl, Mshana, Hashim, Hansen, Lees and Watts 2017:4) and Uganda, 43.7% (Kinyanda et al 2016:5) of women who experienced intimate partner violence.

In conclusion, women from East Africa are much more vulnerable to intimate partner violence. As a result, women in this region are at risk of human rights violations and public health problems. Aside from that, the region's cultural construct, weak and ineffective implementation of violence prevention laws, initiatives, and regional and

global declarations, economic hardship, a male-dominated community, a lack of support services, and women's attitudes all contribute to the region's increased risk of VAW.

2.9 INTIMATE PARTNER VIOLENCE: ETHIOPIAN PERSPECTIVE

Multiple forms of domestic violence are common in Ethiopia since the country belongs to the East Africa region. The culture of Ethiopian society gives more power to men over women. Thus, male partners are more violent towards their wives; on the contrary women are passive to resist the behavior of their IP's behavior. According to research findings 88% of rural and 69% of urban women (Semahegn and Mengistie 2015:2) who believed that the abusive behavior of their IPs arises from the sense of love and affection (Kedir 2016:32). Moreover, 49.8% of women in Ethiopia have lower status in terms of socio-economic, political, and educational postion. Therefore, they have a high risk in one way for multiple forms of intimate partner violence (Henok, Tsehaw, Negash, and Negash 2015:17). According to Henok et al (2015:17), South West Ethiopian women experienced 38.58% sexual, 72.22% psychological, and 47.83% physical violence at some point in their life.

In Ethiopia, one-third (Deyessa, Berhane, Alem, Ellsberg, Emmelin, Ulf and Kullgren 2009:13; Kedir 2016:33) of reproductive age women experienced intimate partner violence. According to Ethiopian Central Statistical Agency (CSA) 2016:44), 33.7% of married women reported an experience of intimate partner violence in their lifetime. Emotional, physical, and sexual violence were reported by 22.7%, 23.3%, and 10.6% of married women, respectively.

The magnitude of IPV among the regions of Ethiopia is 39.0%, 38.0%, 30.4%, and 37.0% of ever-married women victims of IPV in Oromia, Harari, South Nation Nationalities Peoples Region (SNNPR), and Amhara, respectively (CSA 2016:44). CSA's study indicates that the prevalence of IPV and its forms vary across the regions in Ethiopia. The following table illustrates the prevalence of IPV and its forms in the regions of Ethiopia (Table 2.5).

Table 2.5 Prevalence of IPV and its forms across the regions of Ethiopia

Variables		Form of intimate partner violence						
		Emotional l	Physical	Sexual	Sexual & physical	Emotional, physical & sexual	Sexual or physical	Physical or sexual or emotional
Marital status: Married		22.7	23.3	10.6	7.3	5.6	26.6	33.7
Residence	Urban	21.3	19.00	7.20	4.8	3.8	21.4	29.4
	Rural	24.6	26.2	12.0	8.8	6.9	29.4	36.4
Region	Tigray	26.7	21.7	13.0	7.0	5.6	27.7	36.5
	Afar	13.4	14.0	3.0	2.4	1.9	14.6	21.7
	Amhara	25.8	24.2	11.4	7.3	5.2	28.3	37.1
	Oromiya	25.4	31.2	14.4	11.9	9.7	33.7	39.2
	Somali	7.1	6.8	0.4	0.4	0.2	6.8	9.4
	Benshagul	25.6	20.4	7.6	4.3	3.4	23.8	32.5
	SNNP	21.8	19.0	6.8	4.2	3.5	21.6	30.4
	Gambella	23.6	26.4	8.6	6.1	4.2	28.9	35.7
	Harari	31.2	26.7	5.2	5.2	4.2	28.7	37.7
	Addis Ababa	18.9	20.7	7.0	5.0	4.2	22.7	27.9
	Dire Dawa	19.2	21.1	8.6	2.3	2.0	27.4	32.0
Education	illiterate	25.9	26.6	12.9	9.3	7.7	30.2	37.3
	Primary	24.2	25.1	9.4	7.3	5.6	27.2	35.1
	Secondary	16.7	18.4	6.0	4.3	2.1	20.1	27.7
	Tertiary	7.8	10.3	4.5	0.6	0.0	14.2	17.5
Total		24.0	24.9	11.1	8.0	6.4	28.0	35.2

(CSA 2016:44)

According to Kedir (2016:35), women who live in rural areas and work as housewives are the most vulnerable to domestic violence. In Ethiopia, 38% of those living in rural areas experienced IPV which is higher than urban women (29.4%). The fact that in a patriarchal community like Ethiopia, most rural women believe that they are responsible to satisfy the sexual needs of their husbands (Mary and Muireann 2013:258). Consequently, though they do not have a sexual desire they would be forced to do so because of the demands of her husband because of fear and cultural dominance (Allen and Raghallaigh 2013:259; Kedir 2016:34).

Married women are not only subjected to physical and sexual violence but also psychological abuse. Allen and Raghallaigh (2013:260) indicate that a male partner psychologically abuses his female partner by preventing her from visiting her family and from going to or working outside the home, by blaming her for any difficulty in the family,

by intimidating (mainly rural women) her if she fails to meet responsibilities ordered by her husband, becomes unable to provide money, refuses to carry out activities delegated by him, or owns or sells properties for herself, and by selling family properties without his knowledge are the common problems of married women in Northern Ethiopia.

Despite that Ethiopia amended and ratified its family and legal laws to protect women's and girls' rights yet domestic violence is still a hindrance to achieving SDG-5 by 2030. Therefore, the country needs concrete and reliable scientific data regarding the dynamics and consequences of IPV for effective preventive and protective strategies (CSA 2016: 45).

2.9.1 Intimate partner violence and Rural-Urban setting

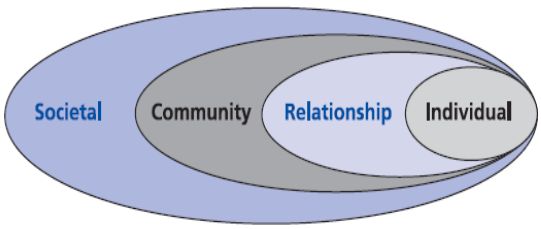
A study conducted by Peek-Asa, Wallis, Harland, Beyer, Dickey and Saftlas (2011:1743) indicated that women in rural areas (22.5%) reportedly experienced more IPV than women in urban areas (15.5%). Peek-Asa and his team indicated that rural areas had limited domestic violence survivor-centered services and even those limited ones were difficult for the victims to access. Their findings indicated that despite common problems, women who lived in urban areas had violence-related services since their availability was much greater than in rural areas (Peek-Asa et al 2011:1743).

In a recent study in Ethiopia, IPV was found to be a high (30%) burden and it is characterstic of rural life and requires appropriate strategies for prevention (Chernet and Cherie 2020:4; Deyessa et al 2009:5), to reduce the increase of exposure to violence. In conclusion, 86% of Ethiopians live in rural areas, where there is a high proportion of IPV. In the country, limited IPV services is added burden for women.

2.10 RISKS OF AND PROTECTIVE FACTORS AGAIST IPV AND MENTAL HEALTH: THE SOCIAL-ECOLOGICAL FRAMEWORK

Heise (1998:265) presents an ecological model that examines the cause of domestic violence from the perspectives of the individual, relationships, community, and societal level. According to him, there are four circles of an ecological framework in which the innermost circle describes the biological and personal history of an individual's characteristics and behaviors they bring into their mutual intimate relationships. The circle next to the innermost circle symbolizes the factors where violence begins between family members or IPs. The third layer illustrates how formal and informal social structures and institutions predict the risk of violence. Lastly, the outermost circle of an ecological framework represents how the societal socio-economic environment and norms positively and negatively affect IPV (Heise 1998:265).

Multiple levels of risk factors predisposed women to intimate partner violence. Even though there is an inconsistency across literature about the risk factors of IPV but there are models to assess risk factors of intimate partner violence (Fletcher 2014:30). The ecological framework argues that there is no single factor that leads to IPV rather it is the result of many factors. Thus, this thesis is guided by an integrative socio-ecological framework to understand risk factors of IPV from a perspectives of individual, family, community, and societal level (Karakurt, Smith and Whiting 2014:2). Lulseged (2018:56) supported Heise (1998:265) that a detailed exploration of determinants using ecological assumptions allows the researcher to understand the burden of IPV and mechanism for intervention. The risk and protective factors are illustrated in Figure 2.3.



(Ellsberg and Heise 2005:26)

Figure 2.3 The social-ecological framework for understanding IPV

Mental health problems vary depending on the type of violence, the situation, the availability of a social support networks, as well as an individual's ability to regulate their emotional reactions (Coker, Smith and Fadden, 2005:832; Mengo 2016:26). According to research, the following factors determine the outcome of intimate partner violence: social support, coping, education (Gebresilassie, 2019:1; Yohannes et al 2019:5) food insecurity (Andarge and Shiferaw 2018:5), socio-economy, marriage arrangement (Gebresilassie 2019:1), occupation (Yohannes et al 2019:5), number of families in the household and IPs education (Tesfa et al 2020:6) cohabitation and growing in an enviroment with domestic violence predicted the degree of violence induced mental health problems. Furthermore, being too young at marriage and decision making capacity (Andarge and Shiferaw 2018:5), optimistic belief towards gender equality, infidelity, childhood maltreatment, having lived in a domestic violence environment, and committing or suffering various types of abuse (Mengo 2016:26) could predict mental wellbeing of victimized women. Age, financial dependency, alcohol, coping strategies, financial condition, and marital relationship were all mentioned as predictive factors for IPV in the literature review.

Study findings show that domestic VAW among Iranian women who were victims of emotional violence is associated with low-level educational status and early marriage(Mohamadian, Hashemian, Bagheri and Direkvand-Moghadam 2016:255). A study on the role of social support indicated that being older, having low educational status, and being unemployed were related to poor mental health (Kamimura, Parekh and Olson 2013:182) (Table 2.6).

Table 2.6 Risk factors of intimate partner violence

Label for	Risk factors
Personal	Women with less wages
	Inadequate academic success
	Age at marriage
	History of mental illness
	alcohol and drug abuse
	Current emotional distress
	Unemployment
	Belief in male dominance
	Family history of mental illness
Relationships	Relational difficulties, conflicts, and stress
	Relational power and restriction
	Financial pressure
Community-level	Unemployment and its ramifications
Societal level	Gender stereotypes

(CDC 2015)

2.10.1 Protective factors for IPV and mental health problems

2.10.1.1 Social support

As a consequence of IPV, women suffer from symptoms of mental illness. To prevent post-exposure mental health symptoms of IPV, women should receive adequate social support to improve coping mechanisms and improving economic wellbeing. These are some of the protective factors regarding mental health outcomes, such as PTSD, anxiety, and depression (Schrag, Ravi and Robinson 2020:86).

Women who did not get support after exposure to IPV could develop mental health symptoms. Therefore, the presence or absence of mental health symptoms depends on the status of the protective factors given to women (Ribeiro, Silva, Alves, Batista, Ribeiro, Schraiber, Bettiol and Barbieri 2017:34). Several studies conclude that mental health consequences of IPV could improve through the provision of appropriate social support and reduce mental health problems. Ribeiro et al (2017:34) state that because

the causal link between social support and IPV is complicated, more research is needed.

2.10.1.2 Economic resources

Financial independence helps to reduce the possibility of intimate partner violence and its mental health consequences (Ribeiro et al 2017:6). According to Abramsky et al (2019:13), having financial independence, a better educational status, having a job, a potential means of income, as well as a fixed asset is associated with a lower risk of intimate partner violence and mental health implications. Intimate partner violence-related mental health problems were strongly associated to support networks at the risk level of 0.27 (p=001), coping methods, 0.25 (p=0.002), economic activities 0.14 (p=0.04), and survivor referral attitude, 0.26 (p=0.001) (Ribeiro et al 2017:6).

2.11 MENTAL HEALTH IN THE GENERAL POPULATION

Mental health is defined by WHO (2003a) as “A state of wellbeing in which an individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and contribute to his or her community” (WHO 2003a:7). According to WHO, “mental health is more than just the absence of mental disorders or disabilities,” (WHO 2003a:7). Optimal mental health entails not only minimizing stressful situations but also emphasizing long-term wellness and positive emotions.

Mental health services receive little attention though they are a universal concern. People with serious mental problems face a wide spectrum of crimes against humanity everywhere in developing countries. Most persons in several nations do not have access to basic mental services.

According to the WHO (2003b:5), 44% and 70% of individuals with mental health problems in developed and developing countries, respectively, do not have access to

treatment. The global prevalence of mental illness in persons has been estimated to range from 12.2 and 48.6%.

According to WHO (2003b:4), over half a billion people worldwide suffer from severe mental health problems, one out of every four people suffering from mental illness. As WHO reports, the burden is huge; and has an enormous impact on the emotional and economic burden on individuals, families, the community and society (WHO 2003b:4).

According to published figures, mental illness accounts for 32.4 percent of disability and 13% of Disability Adjusted Life Years (DALYs) ((Friend, Bradley, Thatcher and Gottman 2011:552; Whiteford, Ferrari, Degenhardt, Feigin and Vos 2015:3). Anxiety disorders account for 14·6% (11·20-18·40) DALYs (Whiteford et al 2015:1575). Mental illness is estimated to account for the greatest proportion of DALYs (56.7%) followed by neurological disorders (28.6%) and drug abuse (14.7%) (Whiteford et al 2015:6).

2.11.1 Anxiety in the general population

Anxiety disorders are a type of mental illness defined by feelings of anxiousness and apprehension (APA 2013:421). The percentage of the global prevalence of anxiety disorders is predicted to be 3.6% and has increased by 14.9% since 2005. Anxiety disorders are common in women (4.6%) than in men (2.6%) globally and the Africa region accounts for 10% of the disease burden (Alonso, Liu, Evans-Lacko, Sadikova, Sampson, Chatterji, Abdulmalik, Aguilar-Gaxiola, Al-Hamzawi, Andrade, Bruffaerts, Cardoso, Cia, Florescu, Girolamo, Gureje, Haro, Jonge, Karam, Kawakami, Kovess-Masfety, Lee, Levinson, Medina-Mora, Navarro-Mateu, Pennell, Piazza, Posada-Villa, Zarkov, Kessler and Thornicroft 2018:202).

According to WHO (2020) globally, 1 in 13 people is affected by an anxiety disorder. The Depression Association of America (2020) report shows that anxiety disorder are the most common form of mental illness. According to a population-based survey by

Bandelow and Michaelis (2015:330) up to 33.7% of the people experienced an anxiety disorder once in a lifetime.

A study conducted by Salari, Hosseinian-Far, Jalali, Vaisi-Raygani, Rasoulpoor, Mohammadi, Rasoulpoor and Khaledi-Paveh (2020:4) shows that exposure to IPV exacerbates previous mental health problems. From their findings, anxiety disorders are estimated to be 8.2-31.9% (Maideen, Sidik, Rampal and Mukhtar 2015:4) among victims of intimate partner violence. According to Maiden et al (2015:4), anxiety is more common among women than men and substantially higher in the elderly.

2.11.2 Posttraumatic stress symptoms in the general population

Posttraumatic stress disorder is defined by the American Psychiatric Association as “a psychiatric disorder that may occur in people who have experienced or witnessed a traumatic event such as a natural disaster, a serious accident, a terrorist act, war/combat, or rape or who have been threatened with death, sexual violence or serious injury” (APA 2013:265).

The global burden of PTSD varies according to the traumatic event types. Research findings from the participants living with HIV/AIDS, self-reported prevalence was 28% (Tang, Goldsamt, Meng, Xiao, Zhang, Williams and Wang 2020:4). In the United States, an estimated lifetime and twelve months prevalence of PTSD is 4.6% and 2.3%, respectively. Treatment gaps account for 57.8% (Pan American Health Organization 2013:3). According to Atwoli, Stein, Koenen and McLaughlin (2015:309), PTSD is much higher among people who were subjected to violence.

Findings of studies in Sub-Saharan Africa countries show that PTSD symptoms are constitute 22%, which is consistent with finding from (Lauren, Stevenson, Kalapurakkel, Hanlon, Seedat, Harerimana, Chiliza and Koenen 2020:14). Findings based on causative factors show that a history of traumatic exposure as a result of living in a conflict zone is estimated to be 30% (Lauren et al 2020: 17). Concerning gender

difference, females (25%) are more likely than males (20%) to develop PTSD (Lauren et al 2020:16).

A community-based study on participants from landslide sites in Addis Ababa found that PTSD is reportedly 37.3%, consistent with the PCL-C scale of 38.7% (Divsalar and Dehesh 2020:1210) and 36.3% (Parvaresh and Bahramnezhad 2009:245). Being female, past psychiatric illness, family history of mental illness, lack of support and stress predicted a risk for PTSD (Asnakew, Shumet, Ginbare, Legas and Haile 2019:4). Study findings from road traffic accident survivors revealed that 22.8% of them were reported to have symptoms of PTSD, of whom 32.4% were females (Yohannes, Gebeyehu, Adera, Ayano and Fekadu 2018:3).

2.12 WOMEN'S MENTAL HEALTH IN ETHIOPIA

According to a population-based study, mental health illness problems were a prominent health issue, accounting for 11.7% and 17.4% in urban and rural areas, respectively. Rural Ethiopia is where approximately 80% of the population resides (Chemali, Borba, Henderson, Tesfaye, 2013:415). In Ethiopia, as in the most low-income nations, mental health has received little attention. According to the Ministry of Health (MoH) of Ethiopia's budget allocation, only 2% of the total healthcare budget (WHO 2006:8) is allocated to mental health services.

Besides, the country has developed a national mental health strategy, yet there is no mental health policy (MoH, 2011:15; Chemali et al 2013:414) to address the burden of mental illness. Furthermore, there are no mental health policies to ensure women's access to adequate mental health services. According to Chemali et al (2013:414) findings, mental illness has continued as a national disease burden and is estimated to be 12% of the burden of diseases.

2.12.1 Anxiety and PTSD: Ethiopian women perspective

The main challenge in Ethiopia that there is no study done about the specific burden of anxiety. Even though some studies focused on specific problems, it would benefit to document the situation of anxiety and PTSD among the female population. A study finding from Yousuf, Musa, Isa and Arifin (2020:62) indicates that 28.9% of women with the diagnosis of HIV had indicative symptoms of anxiety.

Chalachew and Digvijay (2020:2) reported that pregnant women who had a prenatal service visit to hospitals reported 32.2% of anxiety symptoms. According to their study findings, rural residence, lower educational status, and poor social support have been associated with anxiety symptoms. Study findings from migrants indicated that 26.2% reported symptoms of PTSD that are associated with sexual assault (Zewdu, Wonde, Kassaw and Suleyiman 2019:8).

2.12.2 Rural mental health care service

Rural areas have little access to mental health care compared with urban areas (Montfoort and Glasser 2020:1). Rural areas are generally perceived to be underdeveloped, with insufficient and inaccessible mental health services resulting in people residing there unlikely to be treated (Vergunst 2018:1). According to an epidemiologic study, there is a difference in the estimation of mental illness between urban and rural environments (Sartorius and Kua, 2020:1). According to Sartorius and Kua (2020:11) and Vergunst (2018:2), rural areas are at disadvantage for mental health care due to a lack of mental health services.

In addition to limited services, primary health care units are understaffed with mental healthcare practitioners (Hanlon, Alem, Lund, Hailemariam, Assefa, Giorgis, and Chisholm 2019:6), and even those have limited practices in screening and managing people with mental health problems (Vergunst 2018:4). According to Kumar (2011:756), while many developing nations' policies emphasize communicable diseases mental

health services receive very little attention. Sartorius and Kua (2020:12) highlight the need for strengthen mental health services in rural areas, for guide policies and strategies of mental health implementation services and for improving health equality in rural areas.

Montfoort and Glasser (2020:1) and Cyr, Etchin, Guthrie and Benneyan (2019:2) revealed that mental health service integration is an alternative measure to address the mental health needs of rural communities. The cultural concept of the rural community and stigma could affect women's health care seeking (Meyrueix, Durham, Miller, Smalley and Warren 2015:5) practice. Thus, assessing the mental health status of women is paramount (Groh 2013:5) before proposing meaningful intervention strategies.

2.13 MENTAL HEALTH OF MARRIED WOMEN

People who are in unplanned marriages are vulnerable to and at risk of mental health-related problems (Rauf, Saleem, Clawson, Sanghera and Marston 2013:139). As Sharma (2016:20) indicated, the number of married women with mental health problems is considerably high and most are influenced by life dissatisfaction (Kalhor and Olyaie 2016:22) and perceived lack of social support (Riaz, Abid, Ullah and Khalid 2016:3). Thus, in primary health care, health care providers are essential to screen for the risk of mental illness, treat and refer where the service is adequately available (Steelman 2007:154).

2.13.1 Women's mental health and intimate partner violence

Due to the stigma, controlling behaviors as well as inaccessible mental health services, survivors' mental health needs have not been met (APA 2020). According to Casanueva, Smith, Ringeisen, Dolan and Tueller (2014:1683), IPV has significant implications for women's mental illness (Plichta 2007:227; Daniel and Elizabeth 2016:646; Stockl et al 2013:862). According to Hindin, Kishor and Ansara (2008:6),

VAW had predictive power for the declining mental health of victimized women. IPV could induce mental health problems including anxiety, depression, post-traumatic stress disorder, and psychosomatic symptoms (Arroyo, Lundahl, Butters, Vanderloo and Wood 2016:162; Dicola and Spaar 2016:646).

According with statistical data from APA (2020), around 20% of women who had experienced domestic violence exhibited symptoms of anxiety, depression, post-traumatic stress disorder, and substance-related disorders. Al-Atrushi et al (2013:37) and Semahegn and Mengistie (2015:2) argue that mental health consequences of intimate partner abuse are consistently compared to the burden of other chronic health problems.

The Institute of Medicine and National Research Council (IMNRC) (2015:16) indicated that women who were subjected to IPV experienced a wide range of mental health problems. Walby and Olive (2014:37) argue that exposure to intimate partner violence could potentially affect the productivity of the victims.

Although a wide range of mental health outcomes of IPV were indicated in the literature, yet the relationship between IPV perpetration, anxiety, and PTSD symptoms have not been studied in a rural setting, where this research focused on.

2.13.2 Post-traumatic stress disorder

Post-traumatic stress disorder was a common IPV-related mental illness outcome (Lilly, Howell and Graham-bermann 2015:87; Casanueva et al 2014:1683). Post-traumatic stress disorders are assessed using a PCL-C which corresponds to DSM-5 diagnostic criteria (APA 2013:279). According to Kugler, Phares, Salloum and Storch (2015:11) PTSD symptoms influence the functionality with physical health of women. According to the finding cited in Nathanson, Shorey, Tirone and Rhatigan (2012:2), among IPV exposed women 51 to 75% had PTSD symptoms. Peltzer et al (2013:547); Nathanson et al (2012:6) also support Tirone and Rhatigan's (2012:2) findings in that among

women exposed to physical, psychological, and sexual violence, 45-57.4% them reported PTSD symptoms. Recurrent exposure to psychological violence also found to be a predictor of PTSD studied by Nathanson et al (2012:6). From previous research findings, the researcher concludes that a further study is essential to understand the relationship between VAW and its mental health correlates before developing meaningful support intervention strategies.

2.13.3 Anxiety disorder

Anxiety is a prevalent mental health problem linked to intimate partner violence (Casanueva et al 2014:1688). Untreated anxiety symptoms tend to develop into anxiety disorders from which it takes a longer time to recover (APA 2013:223). Lagdon, Armour and Stringer (2014:5) raised concerns about anxiety symptoms among women with exposure to intimate partner violence. In their study, from 1000 IPV victims, 46 of them experienced anxiety disorders (Chandan, Thomas, Bradbury, Russell, Bandyopadhyay, Nirantharakumar and Taylor 2020:564).

As Dillon, Hussain, Loxton and Rahman (2013:8) show, IPV victimization is three times more likely to predict anxiety disorder (Mendonca and Ludermir 2017:2; Lagdon, Armour and Stringer 2014:6). In conclusion, studies suggested that intimate partner violence is associated with anxiety disorder. Hence, further understanding is essential in the field to develop intervention strategies.

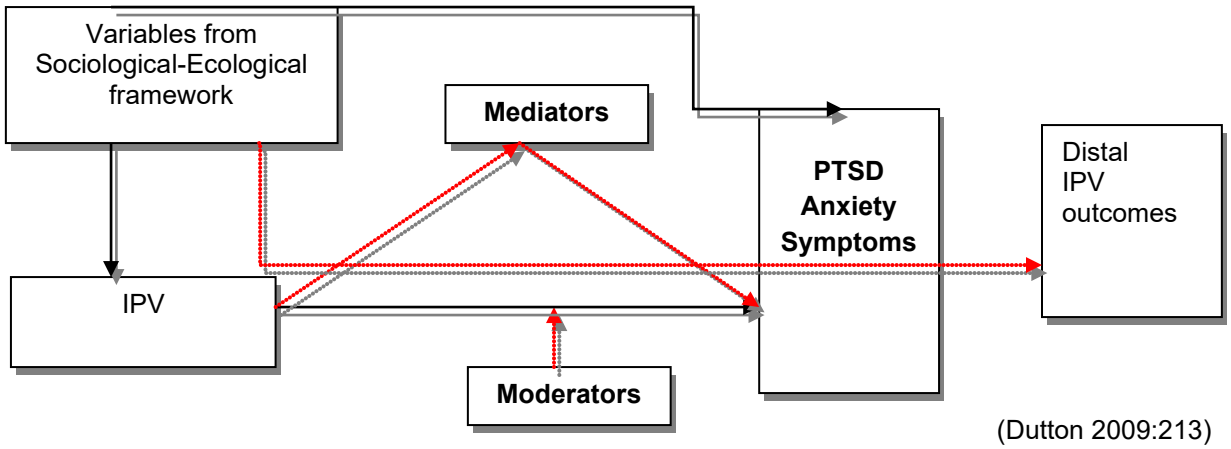
2.14 INTIMATE PARTNER VIOLENCE, ANXIETY AND PTSD SYMPTOMS

The causal interrelationship between IPV and mental health outcomes is complex. Mediatiation variables could negatively affect victims' mental health well-being (WHO 2013:7). According to Kedir's (2016:34) scientific view sourced from to WHO (2013) conclusions, IPV arises from complex orientations and could predict both the incidence and severity of mental illness. According to Dutton (2009:213), the relationship between

IPV and mental health outcomes can be seen from the interrelating factors of the social-ecological framework.

A causal interrelationship between different factors affects mental health service availability, accessibility, survivors' health-seeking behaviors, and survivors' quality of life (Karakurt, Smith and Whiting 2014:2). The psychological impact of IPV is much greater than that of physical abuse and places the victims at a higher risk of anxiety, depression, PTSD, and stress-related disorders (Ellsberg and Heise 2005:21). Poor mental health also adversely increases the recurrence of intimate partner violence. Understanding the association between IPV victimization and mental problems is fundamental to developing supportive intervention strategies (Machisa, Christofides and Jewkes 2017:2).

From reviewed literature on IPV, anxiety, and PTSD the researcher developed an understanding of the interrelationships depicted conceptual figure shown in 2.3. Designing an effective mental health intervention requires understanding the linkage between IPV and mental health outcomes (Babcock, Roseman, Green and Ross 2008:812). Intimate partner violence and personal factors such as self-efficacy, self-stigma, coupled with coping strategies and social factors like attachment and social support are frequently mentioned moderators of IPV and related health outcomes (Clements, Bennett, Hungerford, Clauss and Wait 2018:7). In Figure 2.4, the broken arrow indicates the interrelationship between outcomes and predictive variables, which are not studied in this current research.



(Dutton 2009:213)

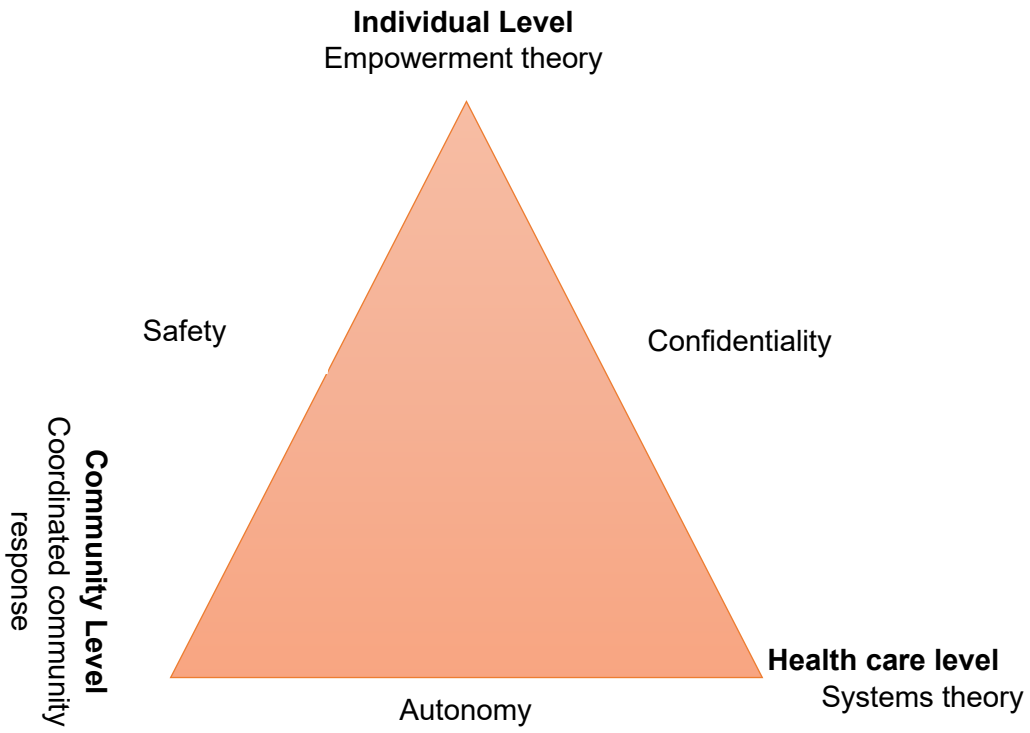
Figure 2.4 Interrelationship between IPV victimization, anxiety and PTSD symptoms

Understanding the interaction between IPV, anxiety, and post-traumatic stress disorder symptoms would provide a framework for developing intervention strategies for mitigating IPV leading to the improvement of women's health (Dutton 2009:211). A structural model which was developed by Dutton (2009:213) indicates that variables at the individual, family, community, and societal levels, affect mental illness. Further, moderating variables (demographic characteristics), mediating variables (coping skills and social support), and distal outcomes (anxiety and PTSD) have the direct and indirect triggering effects of IPV in relationships (Dutton 2009: 220).

2.15 INTERVENTIONS FOR INTIMATE PARTNER VIOLENCE SURVIVOR

2.15.1 Intimate partner violence intervention: Theoretical framework

A framework for partner violence intervention can reflect three levels at which interventions are targeted: the individual, the health care system, and the community (Figure 5.2).



(Ramsay, Rivas and Feder 2005:41)

Figure 2.5 IPV and its mental health outcomes intervention framework

By taking into consideration the above framework, the researcher proposed supportive intervention strategies to respond to intimate partner violence and the mental health of married women. Sapkota (2019:6) developed intervention strategies that help to reduce IPV and its health problems. The proposed intervention strategies focused on women in lower-income countries, with a particular focus on rural women. The proposed intervention strategies were also guided by Sapkota's (2019:6) supportive intervention strategies for married women who experience intimate partner violence in the rural district of Ambo, Oromia regional state, Ethiopia (Figure 2.5).

2.15.2 Mental health care interventions

According to Rondon (2013:275) and Herrman (2016:190), “Integrating psychological health into current programs, promoting gender equality and preventive methods, and increasing health care provider competencies in addressing women's mental health are considered as an intervention method.” Generally, in the primary health care setting IPV disclosure and mental health services are limited and the problem becomes chronic which affects the quality of life (Agenagnew, Tebeje and Tilahun 2020:6).

Therefore, it is important to develop evidence-based intervention strategies for IPV prevention, screening, and treatment to enhance women's mental health. In addition, IPV prevention, screening and treatment to mental illnesses are essential of enhance the well-being of women (Calvete, Corral and Estevez 2008:886; Greene, Rees, Likindikoki, Bonz, Joscelyne, Kaysen, Nixon, Njau, Tankink, Tiwari, Ventevogel, Mbwambo and Tol 2019:4). Kar (2019:293) emphasized the importance of an integrated response to IPV and mental health outcomes to enhance the health of women. Additionally, the American Psychiatric Association emphasizes the importance of routine screening of IPV and mental health problems in a primary health care setting (APA 2019:12).

In support of women who experienced IPV and mental health problems, the problems need to be understood in the setting where the community lives. According to Keynejad, Hanlon and Howard (2020:173), most support strategies developed are based on data derived from high-income countries but there is limited understanding about low-income countries, including Ethiopia. Machisa, Christofides and Jewkes (2017:16) suggested that psychological, cognitive, empowerment, and social support could reduce mental health problems among women who had experiences of IPV.

2.15.3 Counseling

Women who had an experience of intimate partner violence benefit from individual and group counseling. Counseling includes empowerment counseling to help women regain individual control and a sense of self-confidence. Furthermore, cognitive-behavioral and solution-focused counseling could prevent recurrent IPV and mental illness. Counseling can enhance the self-esteem and efficacy of women (Sullivan 2005:201; Ogbe, Harmon, Van den Bergh and Degomme 2020:18; Ryan, Vanessa and Gregory 2014:4).

2.15.4 Support groups

Creating a supportive environment could enhance the self-esteem of survivors. Support networks create an opportunity to share experiences, information, and resources available with other women (Sullivan 2005:201; Ogbe et al 2014:4).

2.15.5 Advocacy

Where the community social construct is primarily patriarchal, gender-based violence is rooted in the community norms. To reduce domestic violence, community-based responses help women by discouraging abusive partners' behavior. Gender advocacy about misunderstandings of gender roles, inequality, and gender stereotypes could reduce IPV and mental health problems. Individual-oriented advocacy could also help survivors to meet their needs and demands as a part of the core component of an IPV intervention program (Sullivan 2005:202; Ogbe et al 2020:22; Ryan, Vanessa and Gregory 2014:4).

2.15.6 Mental health care service

Women who have experienced sexual assault, physical or psychological violence benefit from medical and mental health interventions. Before providing mental treatment, comprehensive assessment, and appropriate referral are important (WHO 2013:19; Ogbe et al 2020:19; Ryan, Vanessa and Gregory 2014:5).

2.15.7 Barriers to accessing mental health services

Before developing support intervention strategies to enhance the mental health of women exposed to IPV, it is important to understand the factors affecting access to mental health services. Hence, the researcher presents the factors associated with access to mental health services in Table 2.7.

Table 2.7 Barriers to accessing mental health services in a primary health care setting

Perspectives	Barriers to accessing mental health service
Women's perspectives	• Knowledge of and attitudes to the existing services. • Frustrating feelings like shame, self-blame, or dread, that could prohibit one from seeking help and treatment. • Failure to recognize a problem as illness due to social conventions or even lack of knowledge as to where to seek counseling services. • In a marital relationship, failure to recognize IPV is a problem. • The educational level of women. • Concerned about being stereotyped and stigmatized in the community.
Health professional perspectives	• Attitudes of healthcare workers. • Inadequate IPV and mental health problem screening. • Untrained health care provider decreases confidence, adequate case identification and management and referral system. • Work overload among healthcare providers hampers routine screening and adequate service provision. • Women presenting as outpatients with an abusive intimate partner
Mental health care provider and community perspectives	• Mental health not being a priority by policy makers. • Lack of standards on integrated violence screening and treatment services in the existing health delivery system. • Uncoordinated healthcare interventions. • Lack of engagement and social interaction. • Inadequate workforce and weak management commitment.

Rodriguez, Valentine, Son & Muhammad 2009:362; Muuo, Muthuri, Mutua, Mcalpine, Bacchus, Ogego, Bangha, Hossain & Izugbara 2020:10; Rees, Zweigenthal & Joyner 2014:4; Ali & Agyapong 2015:6; Colombini, Dockerty & Mayhew 2017:12).

2.16 CONCLUSION

The reviewed literature section shows that the burden of intimate partner violence globally and across the nations needs a further assessment. Its relationship with mental health outcomes should be thoroughly understood arrive at a context-based intervention strategy. Thus, before developing intervention strategies, it is necessary to conduct sound research from diverse socio-economic and cultural settings. To investigate the diverse situations, sound designs, sample sizes and standardized study instruments/tools are important to collect plausible data.

From the review, the author concludes that the complex relationship of IPV has been reviewed to explain women-centered theories and paradigms. The relationship between predictors of IPV, anxiety and PTSD need to be further investigated in a rural setting (Deyessa et al 2010:8). IPV was higher in rural regions than in urban areas. Considering current societal customs and traditions, women living in rural villages have a higher frequency of mental health disorders than urban ones. Furthermore, rural facilities were limited, inaccessible, and sometimes did not integrate IPV and resultant mental health disorders into existing services.

Therefore, this study investigates the prevalence of IPV, anxiety, PTSD symptoms, and the associations of IPV and mental health consequences, particularly, anxiety and PTSD. Findings from the study would extend to designing supportive intervention strategies to improve the wellbeing of women living in rural areas.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter deals with the study design and methodology. Methods to examine the association between IPV perpetration, anxiety, and PTSD symptoms among married women are presented in this chapter. The motive for the research, research design and population of the study, sampling size and sampling strategies, data collection techniques, data collection instrument, and data analysis techniques are presented. In this chapter, an attempt is also made to discuss the validity and trustworthiness of the research. The study had three objectives and utilized quantitative approach to answer the research questions. Thus, data collection, data processing after data collection, processing and interpretation were done in line with the research questions.

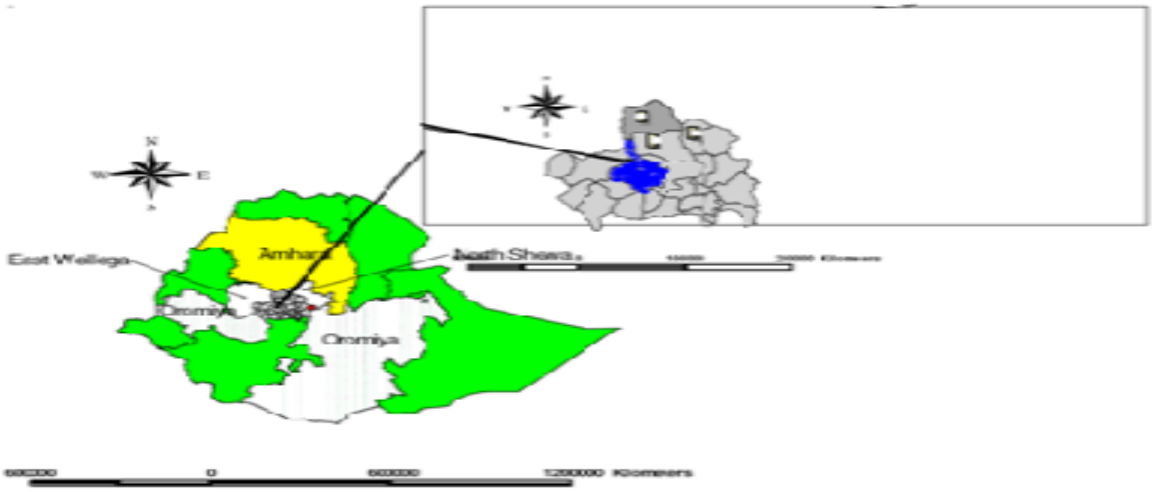
3.2 THE PURPOSE OF THE STUDY

The purpose of this study was to develop intervention strategies for the support of married women who develop anxiety and post-traumatic stress disorder following intimate partner violence in the Ambo district. The study was conducted in a rural area of Ambo district which is located in the Oromia regional state, Ethiopia. Moreover, findings from this research would increase public awareness about the need of to have a practical support intervention strategy to improve survivors' quality of life.

The study investigated the extent of intimate partner violence, anxiety, and PTSD symptoms and the relationship between IPV and symptoms of anxiety and PTSD among married women in Ambo district, Oromia regional state, Ethiopia. Based on the findings of the research and peer-reviewed articles and documents a support intervention strategies for women who were experiencing IPV, anxiety, and PTSD was developed.

3.3 STUDY SETTING

The study was conducted in Ambo district, Oromia regional state, Ethiopia. The setting mainly consists of the ethnic groups of the Oromo people who practice Christianity as their religion. Ambo is one of the 180 districts of the Oromia regional state in Ethiopia. Ambo is found 112 kilometres from Addis Ababa. According to the Ethiopia Central Statistical Agency (2007), Ambo district had a total of 32 rural sub-districts where nearly 70% of the population resides in rural areas.It has a latitude and longitude of 8°59′N 37°51′E / 8.983°N 37.850°E and an elevation of 2101 meters



(Adapted Ogato 2011).

(Google Maps 2022)

3.4 RESEARCH DESIGN

Grove, Burns and Gray (2012:43) and Creswell (2014:42) characterize a study design as a plan of how a research should be carried out to essential aspects that could interfere with intended findings. Polit and Beck (2017:98) characterize a study design as the overarching approach for solving research problems under investigation and for dealing with some of the challenges that can arise during the study process. Creswell (2014:49) stresses that the research approach constitutes a process for data gathering, processing, inference, and communication in a study. Creswell further explains that the research strategy is an illustration of how well the researcher would conduct the study right to its completion.

As stated in the above paragraph, a research design is essential since it allows the numerous activities to flow smoothly, and makes the research more effective. The researcher has to consider a range of factors in choosing which study strategy to use. When choosing an effective study design, the emphasis or purpose of the inquiry, analysis, and the time dimension (Creswell 2018:49) were all taken into account. As Krantz and Garcia-Moreno (2005:18) state, a study conducted with population- based household survey could use a cross-sectional design to assess past and current experiences of IPV and its outcomes (Hudson, Pope and Glynn 2005:355).

As a result, a cross-sectional study has to be employed to determine the burden of IPV and their impacts on the selected population. Following the recruitment of participants, exposure to any form of IPV, symptoms of anxiety and post-traumatic stress disorder, socio-demographic and other factors associated with IPV, anxiety, and PTSD were investigated. The researcher intended to measure the magnitude of IPV and its various forms, symptoms of anxiety and PTSD, and the relationship between the experience of IPV and anxiety and PTSD symptoms. Eventually, based on the findings and related literature, support intervention strategies were developed to enhance the mental health wellbeing of married women.

3.4.1 The research philosophy

The first and most significant part of the research is its philosophy. The term “Research philosophy” refers to a system of beliefs or ideas concerning data collection, inference, and interpretation. The evolution of knowledge in a certain field is referred to as research philosophy. In a study, the researcher takes this philosophy to represent the fundamental understanding of the way s/he interprets the reality and viewpoints (Saunders, Lewis and Thornhill 2019:128). Then, this influences the strategy the researcher employ regarding the research plan or its approach.

As stated previously in chapter one, the researcher choose the positivist paradigm as an outlook. Besides, the researcher's perspective and world view of knowledge and its dissemination process created an influence on the author's choice of the research ethos (Zefeiti and Mohamad 2015:3).

3.4.2 Design of quantitative research

To collect data from currently married women in the selected population, a quantitative research methodology was adopted. Polit and Beck (2017:272) and Creswell (2018) define a quantitative design as a framework for conducting a study that is focused on generating evidence used to explain or examine a given situation. As Polit and Beck (2017:273) state, the quantitative method entails the application of a common context of structured and standardized techniques to obtain evidence. The quantitative study emphasizes objectivity that enables the researcher to make sound inferences beyond a specific set of subjects. Relevant information is gathered through conventional data

collection instruments to generate evidence that is noteworthy for the research design. The data collected are quantitative and statistically analysed to increase the credibility of the research findings (Polit and Beck 2017:512).

A quantitative study by its nature might be experimental or observational, using descriptive, correlational, or cross-sectional data analysis (Polit and Beck 2017:274). The author used a cross-sectional research design to gather data relevant to IPV, anxiety, and PTSD to establish a relationship between exposure to violence, anxiety, and PTSD. Thus, the researcher could explain, describe, understand and predict the relationship between IPV exposure and anxiety and PTSD symptoms from the study participants. Based on the findings, the researcher formulated appropriate intervention strategies for IPV victims.

3.4.3 Descriptive study

According to Creswell (2018:247), “A descriptive study refers to an approach that outlines the features of the population or the topic under investigation.” It focuses more on the “what” of the research subject than the “why” of the research subject (Polit and Beck 2017:304). Descriptive research shows the distribution of one or more characteristics in the absence of any causal hypothesis (Aggarwal and Ranganathan 2019:34).

Descriptive research is used to define the respondent characteristics, to measure the trend of data, making a comparison within the group to validate the existing conditions (Omair 2015:155). Descriptive research could involve collection of quantitative information (Siedlecki 2020:11).

The descriptive study approach is appropriate when the researcher is interested in observational, case studies and survey research (Apuke 2017:41). The characteristics of a descriptive study and its method allow the researcher to investigate the research question (Siedlecki 2020:8). Furthermore, a descriptive study is less costly and easy to

perform, allowing the collection of data from the natural environment using primary data collection methods (Creswell 2018:250).

3.4.4 Survey research

The survey method gives a quantitative analysis of events, trends, sentiments, and beliefs, or examines correlations between variables from a sample (Creswell 2018:244). Prevalence studies would be guided by the survey method to answer the research question.

The researcher utilizes a survey approach to collect quantitative data. A survey is, according to Polit and Beck (2017:314) intended to gather data on the prevalence, distribution, and correlations of characteristics within a community. The goal of the study was to make conclusions from a sample that could be inferred to the target group so that conclusions regarding the group's features can be made. Surveys are most commonly employed in research when the respondents are representative of the reference group (Grove and Gray 2018:258).

Since it is inexpensive and can address a sizable population. The survey research design was used in this study. A survey is an effective approach for collecting information from a large cohort study participants to gather targeted that enable the researcher to draw important conclusion and make important decisions. A survey also enables the author to make recommendations for further inquiry (Saunders, Lewis and Thornhill 2019:179).

3.4.5 Population-based cross-sectional study

According to Creswell (2017:235), "A cross-sectional study design is a commonly used type to know diseases or events in a population setting." In cross-sectional research, the reference population is defined as "All the members of a certain population or a randomly selected subset of such a community." A cross-sectional study is important in

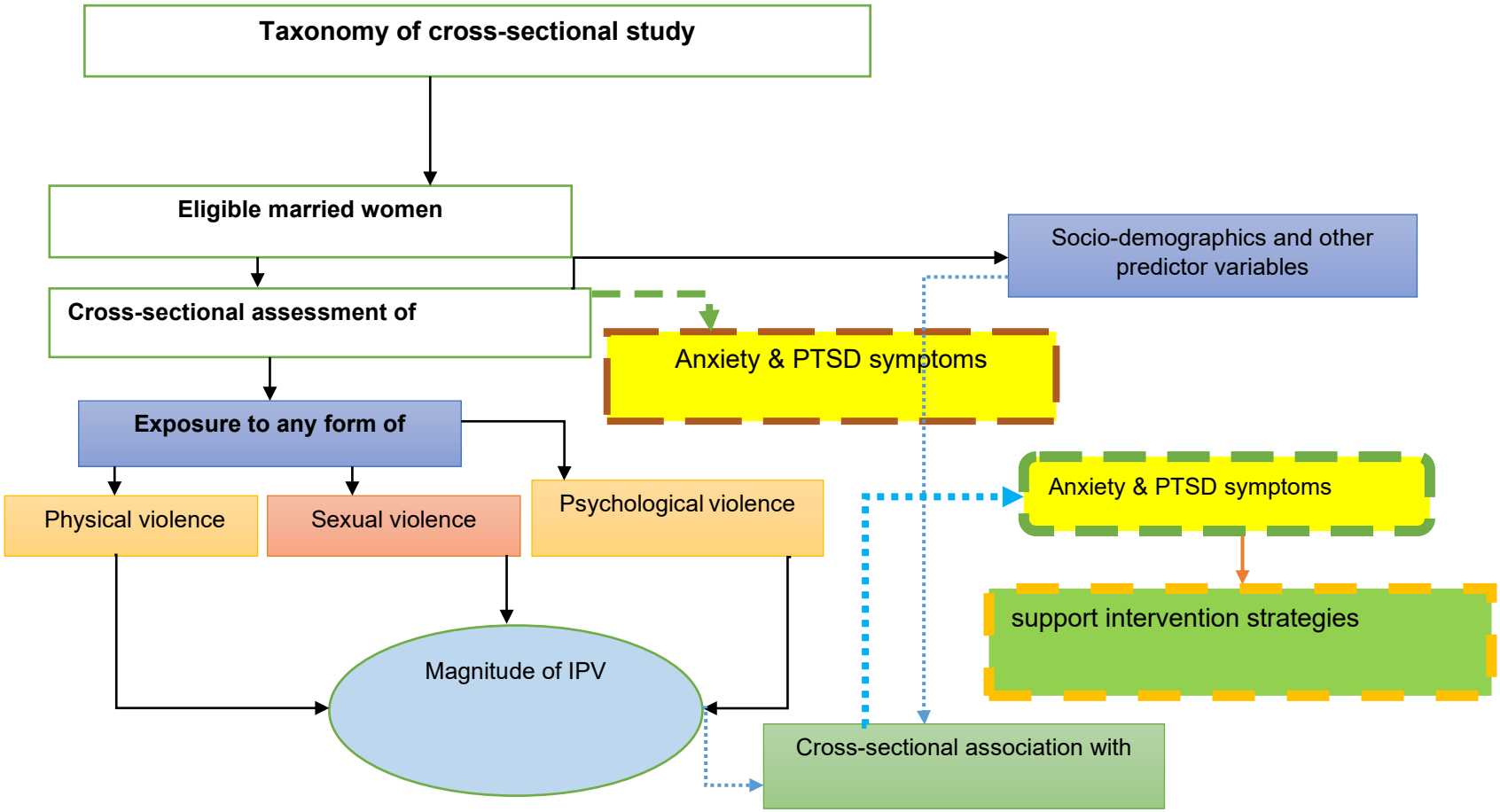
investigating the prevalence and determinants of certain conditions at a given time (Olsen, Christensen, Murray and Ekbom 2010:79).

Cross-sectional assessment included an experience of a certain type of IPV, socio-demographic and other potential confounders, and their association with anxiety and PTSD symptoms. The spectrum of IPV includes physical, sexual, psychological violence, anxiety and PTSD, and other factors associated with the outcome variables. Descriptive and analytical cross-sectional studies can characterize the prevalence of an event and its associations with the predictor variables in a specified population.

Figure 3.1 illustrates how the researcher addressed the study through a cross-sectional study design. Once, the study population was identified from the selected population, eligible married women were assessed through a cross-sectional research design whether any form of physical, sexual, and/or psychological violence was experienced. At the same time, married women who had any symptoms of anxiety and post-traumatic stress disorder were also assessed in the research.

Further, variables related to socio-demographic and other potential confounders were assessed which mediate the relationship between IPV exposure and anxiety and PTSD symptoms. According to our operational definition in the previous chapters, any exposure to physical, sexual, and psychological violence was considered as an experience of IPV.

The association between IPV perpetration, anxiety, and PTSD symptoms was statistically tested. Based on the findings and recommendations from this research, and relevant literature, a possible intervention strategies was developed.



(Adopted from Grove, Burns and Gray 2012:215; Polit and Beck 2017:252)

Figure 3.1 Diagram for cross-sectional study design

3.5 THE RESEARCH METHOD

Creswell (2018:247) describes research techniques as means of collecting, analyzing, and interpreting information to answer research questions. This study was conducted with randomly selected individuals at a community level to make inferences about the findings of the study to the target population (Kelmendi 2013:560).

According to Garcia-Moreno (2005:50), a positivist inquiry is a science-based investigation that starts with a hypothesis and then puts the hypothesis to the test to obtain a conclusion. Cross-sectional research data collection techniques (Polit and Beck 2017:389) were helpful in collecting data from currently married women in the selected districts.

3.5.1 The target population

According to the definition by Grove, Burns and Gray (2012:44), Polit and Beck (2017:365), and Creswell (2018:212) “A target population refers to a collection of individuals who are studied by the researcher to arrive at a certain conclusion.” In this study, the target population were married women who live in the rural area of Ambo district of Oromia regional state in Ethiopia.

3.5.2 Accessible population

Polit and Beck (2017:365) characterize an accessible population as "all aggregation of individuals that meet the specified parameters who are available for investigation." Considering the findings from the accessible population, an inference will be made the target population. The researcher drew a sample of women from currently married women in Ambo district, Oromia regional state in Ethiopia.

3.5.3 Study population

Grove, Burns and Gray (2012:38) characterize a research population as "a group of people who are important to the research topic of a given investigation and who inferences have to be made."

Grove, Burns and Gray (2012:38) characterize a research population as "a group of people who are important to the research topic in a given investigation and where conclusions have to be made." Similarly, Polit and Beck (2017:366) describe a research population as "a set of instances from which a sample is drawn for the research and then generalized to the target audience". As Ellsberg (2005:5) recommends, recruiting a sample population from a community setting gives reliable and credible results. Thus, in this study, women who were currently living at home with their partners in the rural Ambo district of Oromia regional state were used as the study's population.

3.5.4 Sampling and sampling techniques

A sample is a "subset of a set of population, being a fundamental element, where the data are gathered" (Polit and Beck 2017:367). For scientific inference, sample selection should be scientific (Grove, Burns and Gray, 2012:37). Using a sample instead of a census reduces the time and resources involved in the study. Given limited control of the population, sampling delivers reliable and accurate information about the research population.

Even if the researcher employs appropriate statistical procedures, there are fundamental disadvantages of sampling. The samples might not always represent the accessible population when the sample is too small. Furthermore, the characteristics of the target population and the accessible population might not be fully representative of the reference population (Polit and Beck 2017:367). The researcher employed a simple random technique to choose the study participants from a sample of married women's households.

3.5.5 Study participants

Study participants were married women who were currently living with their IPs in Ambo district, Oromia regional state. The following parameters were considered as criteria for participating in the research:

- Who is getting married and living with their partners since the study, aimed at assessing the situation of IPV with in the sphere of marital relationship.
- A participant who has a minimum of six months of regular residence (UN 2014:12) in Ambo district, Oromia regional state, Ethiopia. Minimum period of relationship is important for considering an issue of separation anxiety or stress since both of them needs to adapt the new life within marital relationship.

3.5.6 Procedures on participant selection

Participants were selected based on the information from the database of each sub-district obtained from the Ambo district health office, provided a sampling frame that contained the list of households and a household number. From the sample frame, households were selected using a simple random sampling technique. To assure an equal representation of each sub-district, the sample size was proportionally allocated to the number of women in each sub-district.

3.5.6.1 Site sampling

A study's impact is mainly dependent on the selected location. Establishing a set of standardized site selection criteria which are relevant to the study requires high-quality research (Warden, Trivedi, Greer, Nunes, Grannemann, Horigian, Somoza, Ring, Kyle and Szapocznik 2012:29). To generate high-quality research, it would be impossible to analyze of that follows all of areas that match the set standards. As such, the researcher took a proportional sampling across the different spots and population segments in attempting to reach sound conclusions.

In Ethiopia, the regional extent of IPV is prevalent in the Oromia regional state, the researcher purposively selected Ambo district, Oromia regional state as a study site. After selecting the district, the researcher selected the rural sub-district as a study area where study participants were drawn by using a simple random sampling technique.

The primary criterion for site selection is whether the site had individuals with characteristics relevant to behaviours, observations, or traits that were relevant to the study. The site also had to have a significant number and types of persons as well as a diverse or mixed group of individuals to meet the study's objectives (Polit and Beck 2017:250).

Site where sampling was carried out had to be accessible to the researcher. All accessible study populations were potentially eligible to be part of the study (Grove, Burns and Gray 2012:708:373). The target population of the study were women and the study population was currently married women at a time of data collection and who lived in Ambo district, Oromia regional state, Ethiopia. After excluding the urban sub-district, 32 rural sub-districts were the focus of the study. Of those rural sub-districts, 10 (31%) were randomly selected by lottery method to the study.

3.5.6.2 Participant sampling

Taking a sample from the target population (Polit and Beck 2017:382) requires the selection of participants share similar characteristics to the phenomenon planned to be investigated to answer the research questions (Grove, Burns and Gray 2012:374). When a sample is drawn from the source population in a representative manner, the findings from the sample study are going to be common characteristics to the phenomenon.

As Grove, Burns and Gray (2012:357) suggested the probability sampling method gives equal chance to the target population of being selected into the study. The study was

guided by simple random sampling (Cresswell 2018:233; Polit and Beck 2017:373) to select and interview married women from the selected sample households. According to WHO ethical guidelines (Ellsberg 2005:34), every one in four households (25% of the sampling density) enrolled in the study that interviewed 952 study participants. This minimized the probability of information dissemination which would compromise the quality of the study and helped maintain the confidentiality of the research participants.

In a randomly selected household, if there was more than one eligible participant, the researcher would select one of the participants by lottery method to give an equal chance to be enrolled in the study (Figure 3.2).

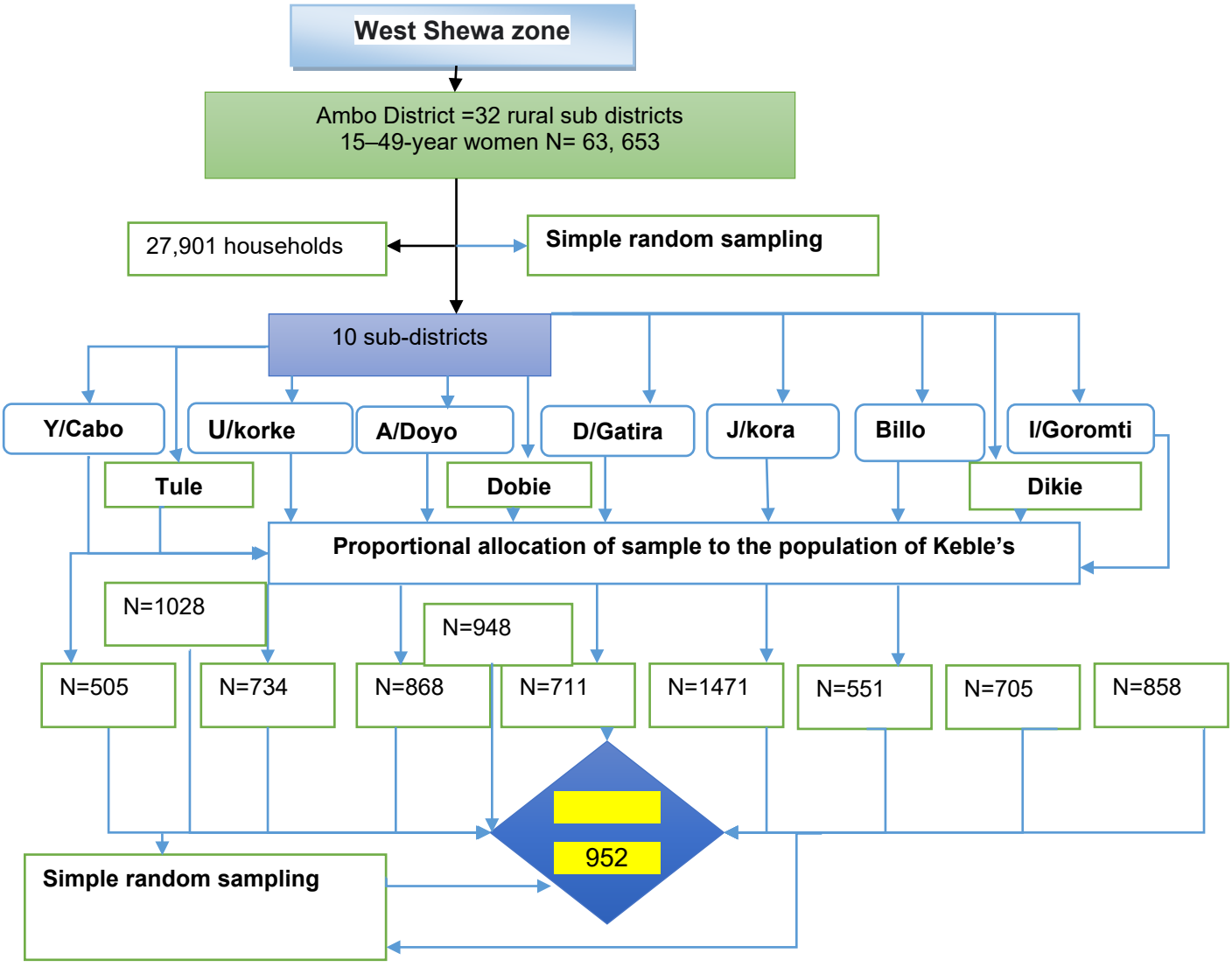


Figure 3.2 Schematic presentation of sampling procedure, data from Ambo district health office

3.5.7 Sample size estimation

In a quantitative study, the sample size is determined through statistical computation by taking into account the source population (Creswell 2018:212). Sample size refers to the "number of observations or participants enrolled or willing to study" (Grove, Burns and Gray 2012:708). During sample size determination, the status of the current phenomenon is required; besides, power and the standard error are required in effective sample size determination (Grove, Burns and Gray 2012:367).

The sample size is a key budgeting component for a scientific investigation and it should be taken into account during samples determination (Grove, Burns and Gray 2012:367). The sample size is an input to determine the required fieldworkers, data management, and research technical team during the study (UN 2014:44). Sound sample size helps to determine the reasonable number in the sample to answer the research questions. Thus, the eventual sample falls between what is desirable and feasible to answer the research question.

The sample size is determined by the level of precision expected and the probability of variance in the sample population. According to Cresswell (2018:219), sampling error can be minimized by taking an adequate sample from the study population. In cross-sectional research, to keep the accuracy of sample size, recommended deviation from the true population would be 1% to 5% at 95% CI (Bacon-Shone 2013:58; Creswell 2018:247).

The research sample size is calculated by Epidemiological information (Epi Info) 2000 manual (Dean, Sullivan, Zubieta and Delhumeau 2000) by considering 80% statistical power and 5% margin of error. The following requirements and assumptions used for

power analysis (Creswell 2018:214), sample size estimation (Polit and Beck 2017:887) at 95% CI and a power of 80% were considered.

- The proportion of married women who had an experience of IPV was 50.5.% (Semahegn and Mengistie 2015:78).
- 21.1 % symptoms of anxiety symptoms in exposed groups.
- 49.5 % of symptoms of PTSD in exposed groups.
- 10% difference in uptake in symptoms of anxiety and PTSD among exposed groups.

The single population proportion formula is proposed to estimate the required number of samples for the study. Estimation of IPV in the rural population and the degree of precision and two or more variables are considered for sample estimation (UN 2014:44).

Hence, the sample for the IPV estimation were

$$n = \frac{(Z_{\alpha/2})^2 \, p \, q}{d^2}$$

n = sample size, Zα⁄2= Z value corresponding to a 95% level of significance = 1.96 p = proportion of past twelve month IV is 50.5% (Semahegn and Mengistie 2015:78) =0. 505 q = (1-p) = (1-0.5) = 0.5 and d = degree of precision (5%). By using the above assumptions, the sample size is 335 prior to considering non response rate (Creswell 2018:252). Accordingly, to get a typical sample for the study, the researcher calculated for the second objective (Table 3.1).

Table 3.1 Sample size determination

Outcome variable	Outcome in unexposed	Expected difference	Unexposed: exposed	1-β	P	Sample Size		
						Exposed	Unexposed	Total
Anxiety symptoms	11.1%	10	2:1	80	.05	146	291	437
PTSD symptoms	39.5%	10	2:1	80	.05	**289**	**577**	**866**

With the above-stated assumption symptoms of anxiety, PTSD, and IPV are considered as the main variables in the study.

Table 3.1 indicates PTSD symptoms yield the largest sample size where the researcher considered 866 as the sample size of the research. According to the UN (2014:43), a study conducted on VAW is sensitive with a high non-response that needs to be factored in during sample size determination. Therefore, the sample size determination considered 10% of the non-response rate. By considering the above assumptions, 952 participants were enrolled in the study.

3.5.8 Data collection

Polit and Beck (2017:389) clearly describe data gathering as “identification of respondents and the precise, systematic gathering of information relevant to the aim, and objectives of the study’’. Similarly, Creswell (2018:262) adds that “it is the gathering of information required to address the research problem’’. The researcher guided data collection with an interviewer-administered questionnaire.

3.5.8.1 Approach to data gathering

The data collection procedure was guided by the positivist approach consistent with the quantitative data collection (Polit and Beck 2017:389). Thus, the data were collected through an interviewer-administered questionnaire (Grove, Burns and Gray 2012:422).

An interviewer-administered data collection are a common method for gathering information from people who are unable to read or write, and they are also a common method for gathering data on domestic abuse. Interviewer-administered data collection survey help in identifying violence-inflicted signs and increase the willingness of the participants to disclose their experiences with partner violence. It is standard practice that interviews conducted in a private setting by a trained female interviewer for the safety and higher rate of disclosure of experiences of violence (Kelmendi 2013:562).

Interviewer-administered data collection approach have advantages, notably in gender-based violence studies. They promote trust, which leads to a stronger intention to cooperate, reduced drop-out levels, greater disclosure of confidential information, experiences, and enhanced belief in the authors of the study. An interviewer-administered study uses nonverbal cues and visual aids that have an opportunity to minimize response bias, facilitate disclosure of sensitive experiences, motivate participants, control the interview environment, and link study participants to appropriate services (UN 2014:33).

The research questions serve as the foundation for the questionnaire and they are directed by the study's conceptual framework. This approach facilitates the development of a valid and trustworthy research instrument, which makes data collection and analysis easier later on (Polit and Beck 2017:389).

Grove, Burn and Gray (2012:425) define a questionnaire as, “a collection of interconnected items used to gather information on the topic examined by the researcher.” A questionnaire needs to be easy to comprehend with questions related to the problem that are purposeful, and encourage the participation of the study participants.

3.5.8.2 Questionnaire construction

A questionnaire could be self and interviewer-administered, consisting of precise, easy, or specific items (Creswell 2014:382). For this study, the researcher adopted a standardized questionnaire which was developed by WHO and experts to assess IPV and PTSD and anxiety outcomes. The research instrument was adapted from WHO multi-country study on women's health and experiences to interpersonal violence Adhena, Oljira, Dessie and Hidru 2020:1; Deyessa et al 2009:2), PCL-C (Weathers, Litz, Herman, Huska and Keane 1993:1), and BAI (Beck et al 1988:893). Question items to multi-country study on women's health and experiences, and PCL-C and BAI are

closed items. WHO's multi-country questionnaire was translated into Amharic and previously used in Ethiopia (Garcia-Moreno Garcia 2005:17).

A uniform questionnaire designed for face-to-face interview technique was used to gather information from women. The questionnaire and measurement scale was designed with the study's purpose, the research problems, and the theoretical framework in mind. The researcher also critically analysed and considered the measurement definition of the outcome and predictive variables appropriate to the objectives. IPV, Anxiety, and PTSD evaluation items were structured, with possible options given to the study participants to choose from alternatives. Structured surveys are simple to analyse and they increase the data's reliability.

3.5.8.2.1 Structure of the questionnaire

The questionnaire were arranged into eight parts. The nature and sensitivity of the question items determine the questioner's arrangement. Less sensitive and basic research questions were presented in the first section, which was then followed by more sensitive ones. Likewise in the previous studies, participants were interviewed about socio-demographic characteristics including spouse, experience, consequences, and coping styles of domestic violence using the WHO multi-country questionnaire of life events for domestic VAW. In the last section, the study participants were asked about anxiety and PTSD symptoms by using BAI and PCL-C symptoms rating scales. The following pieces of information were included:

- Annex A: Information sheet and consent form. Under this section after the interviewer introduced herself to the study participant, she gave a brief explanation made mention that the aim of the study, about participation in the study was entirely voluntary and the participant could also withdraw, stop, postpone, and even skip some of the questions. If the study participant agreed to participate, verbal and written consent were obtained before proceeding to the interview.

- Annex B: Consent form
- Annex C: Questionnaire
- Annex C, section 7: The PCL-C and BAI Likert scale questions. This section is composed of items dealing with anxiety and PTSD symptoms assessment. According to the hypothesis of the study, Likert scale questions help to ask stress and anxiety-related symptoms (Weathers, Litz, Palmieri, Marx and Schnurr 2013:1; Beck et al 1988:893).

PTSD symptom checklist for Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5) aims to assess symptoms of PTSD in response to a stressful experience. It evaluates the severity and symptoms of PTSD. A five-point scale was used to assess how much each symptom bothered the study participants. It utilizes a five point Likert scale in which the study participants specify their level of feelings about symptoms of PTSD. The 5-point Likert scale consists of alternatives which are:

- 1: not at all
- 2: a little bit
- 3: moderately
- 4: quite a bit
- 5: extremely

The total severity scale has 20 items and scores range from 20-80. PCL-C was evaluated in two methods. A total score of more than 33 was considered to have been associated with some PTSD symptoms. 30-44 items score was indicative of moderate for high symptoms severity to PTSD and a score of 50 was considered as a high severity of PTSD symptoms. Considering the DSM-5 PTSD diagnostic criteria, a person is assumed of have PTSD symptoms if the participant has one or even more problems under criterion 'B,' three or many items from criterion 'C,' as well as two more items from criterion 'D' are affirmed, and is a scored as 3 or even above. The lower points are used to detect potential cases.

Using the BAI (Beck et al 1988:893) anxiety symptoms rating scale was used to assess the degree of anxiety symptoms. The onset of anxiousness followed by violence exposure was indeed an important outcome assessment in this study. The BAI was considered to assess anxiety symptoms by calculating symptoms scores. BAI is widely (Bardhoshi, Duncan and Erford 2016:358; Fydrich, Dowdall and Chambless 1992:55) used as an anxiety symptom rating tool, and previous studies checked its validity and reliability in Ethiopia (Abderehim 2019:32).

BAI has four alternatives namely, 0=not at all, 1= mildly, but it did not bother me much, 2= moderately-it was not pleasant at times, 3= severely-it bothered me a lot. PCL-C and BAI do not require expertise for collecting data from the study participants. Thus, they could be used by the interviewer without prior knowledge and experience of PCL-C and BAI data collection instrument.

3.5.8.2.2 Pilot testing of the questionnaire

A pilot test, according to Polit and Beck (2017:264), is "a small-scale preliminary study done to assess acceptance, timing, expenditure, undesirable consequences, and enhance research methodologies before the execution of a complete research study." Piloting allows the researcher to test the trustworthiness of the questions and also allows the researcher to know about the following points:

- Enables to estimate the interview time to finish the list of questions.
- Ensures that the instructions given for each question are clear (Grove, Burns and Gray 2012:46).
- Ensures that there are no critical gaps in the questionnaire.
- Ensures that non-essential items are removed.

The researcher pre-tested the questionnaire with at least 5% of the total study participants (Grove, Burns and Gray 2012:46) that were randomly selected participants from another district.

3.5.8.2.3 Questionnaire administration

After the questionnaire is prepared, piloted, and improved, and the sample had been chosen, the questionnaires is utilized to gather information. The researcher collected information from selected sampled study participants using a cross-sectional approach and retrospective assessment to histories of exposure of IPV, determinants, and outcomes in terms of symptoms of anxiety and PTSD. The questionnaire was administered through face-to-face interviews to get data from the participants by a female interviewer in a safe area.

3.5.8.2.4 Questionnaire validity and reliability

The two most important factors in assessing whether or not a tool may be used for purposes of a research are reliability and validity of the questionnaire. Validity refers to “a tool's appropriateness“, while reliability deals with “the consistency in measuring whatever it is supposed to assess“ (Polit and Beck 2017:439). Polit and Beck (2017:439), argue that validity is the ability to create conclusions that are consistent with the expected or fundamental assumptions. If a survey questionnaire assesses what it is designed to measure, it is considered to be credible. The researcher examined the construct and content validity throughout this investigation.

Construct validity is the degree to which the assessment items accurately assess the characteristics intended to be measured. The construct validity is assured by the researcher through establishing those metrics through a comprehensive content analysis that covers basic concepts of the topic and its features. Furthermore, the researcher would ensure that such concepts apply to realistic situation by assessing how effectively the questions address the study topic. Overall content validity of this study was established by rigorous sample selection and effective construction of the survey questions.

The extent whereby the outcomes of the study can be generalized to the population at large is external validity (Polit and Beck 2017: 669). In the study, random sampling techniques were used to enhance objectivity by having a sufficient representation of women married, through the use of random sampling. The researcher also recruited study participants across the respective sub-districts and kept confidential the information of the study participants.

When the test results effectively depict the situation under investigation, it is referred given by as internal validity (Polit and Beck 2017:629). The research data collection tool was validated by developing questions that corresponded to the study objectives.

Polit and Beck (2017:1043) characterize reliability as “the degree in which information gathering or analysis procedures produce reliable results.” It deals with the researcher's confidence that the measurement is error-free, as well as the instrument's ability to measure the true phenomenon of the problem (Cresswell 2018:235).

Reliability ensures that the research instrument is coherent, accurate, consistent, equivalent, and homogeneous to the constructed items. As a result, if the study items are dependable, they can create comparable measurements in diverse environments for various researchers. The questionnaire's reliability was improved through pretesting. In this study, reliability was consequently defined as the simplicity, integrity, stability, uniformity, appropriateness, and correctness of the research tools. For the context of this research, reliability was verified via pre-testing of the questions to improve the validity and anonymity of the interviewee.

The reliability of survey questions was validated by using Cronbach coefficient alpha (a), which is helps to examine the fundamental uniformity of the research instrument. As a rule of thumb, Alpha (a) should have been at least 0.70 or greater (Polit & Beck, 2017:241). According to many researchers, the PCL-C had the scientific level of sensitivity (82-94%), accuracy (83-86%), and PTSD diagnostic effectiveness (83-90%)

(Lang, Laffaye, Satz, Dresselhaus and Stein 2003:259). BAI scale has a Cronbach's logical consistency of 0.92, the trustworthiness of 0.75 (Beck et al 1988), and a great acceptability level (Bardhoshi, Duncan and Erford 2016:360; Julian 2011:4).

3.5.8.3 Data collection procedures, quality assurance, interviewer selection and training

Forming an effective field team entails locating the right personnel, properly organizing and maintaining the same individuals throughout the whole research study (Ellsberg and Heise 2005:157). A violence study presents specific concerns about participants' security, and the title's psychological impact requires the researcher to establish and maintain a project team (Ellsberg and Heise 2005:155).

Before the data collection, the researcher recruited 15 female interviewers and five supervisors who had completed high school and understood the socio-cultural, language, and demographic characteristics of the community (Kyegombe, Banks, Kelly, Kuper and Devries 2019:9). Moreover, the data collection experience of interviewers and supervisors was taken into account as part of the recruitment criteria.

Training on the research instrument is important for the fidelity of data and an opportunity to build data collection skills for the interviewers (Kyegombe et al 2019:9). Interviewers and supervisors were trained for three days on the research instrument and its administration, ethical considerations, and mechanisms of quality assurance in the field. The training included the purpose and content of the research, its objectives and procedures of building rapport, interview skills, questionnaire administration, matters on intimate partner violence, techniques for sampling and surveying, the technique for conducting interviewer-administered interviews, skills in facilitating recalling of violent experiences and the set of ethical issues to be considered when interviewing a married woman (Ellsberg and Heise 2005:159).

During the data collection, the researcher gave regular guidance and support to the interviewers. During the training session, each interviewer conducted a simulation interview exercise as a pre-test. An interviewer was trained on ethical issues towards the study on VAW. Training primarily focused on the safety, security, privacy, and confidentiality of study participants. The researcher provided supportive supervision to the interviewers to enhance the quality and scientific integrity of data collected from the study participants.

Regarding the research budget (Kyegombe et al 2019:10), the researcher allocated a financial budget as part of the data collection plan to facilitate the data collection. The researcher prepared a contractual agreement for the interviewers which consisted of expected deliverables, transportations mechanisms, and payment modalities. The researcher paid 2,430 Ethiopian Birr to each interviewer for the period of data collection, including the pre-test and training session. Means of transportation were arranged for the interviewers for the period of data collection.

After developing rapport, questions were asked from a less sensitive to a more sensitive level in an unambiguous manner which was followed by recording of responses to each question. To ensure data quality, completed questionnaires were examined for consistency and completeness by the supervisors.

3.5.8.4 COVID-19 and research data collection

VAW occurs across all regions (WHO 2013:16) and is widely under-reported (UN 2015:159). United Nations Women (UN Women) stressed that data collection on VAW during COVID-19 is crucial due to an increased vulnerability and important health concerns which require to be considered a priority (UN Women 2020a:1).

Data were collected through phone, short message service, and web-based studies used for remote information gathering (Bhatia, Peterman and Guedes 2020) and

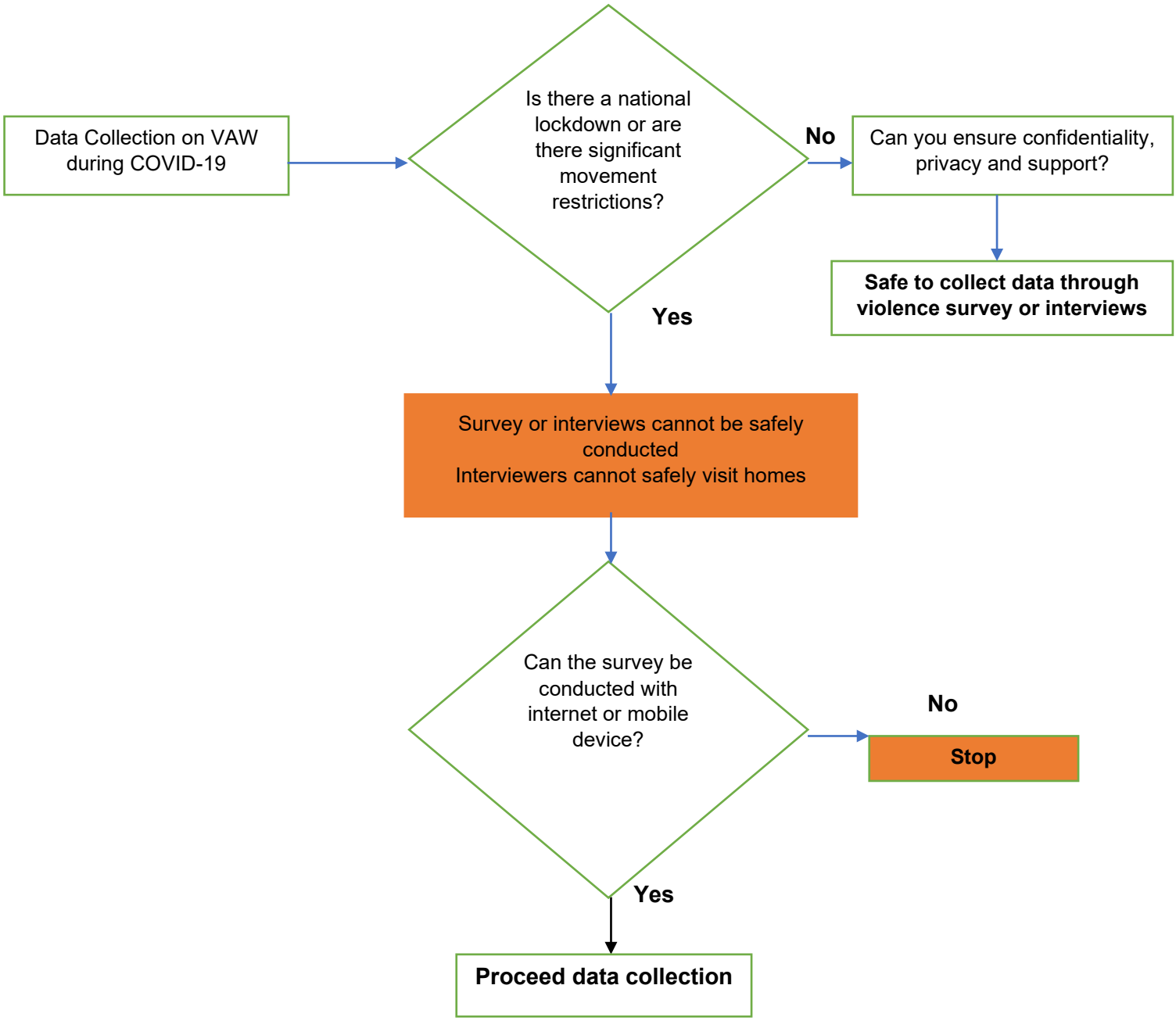
documentation of evidence of VAW during the pandemic of COVID-19 (UN Women 2020b:2).

Studies on GBV are efficiently assessed in developed nations through phone, web-based, and electronic methods, without significant cost and time (Bhatia et al 2021). Even though, conventional data collection methods may not be feasible (UN Women 2020b:2), it is challenging to use remote data collection techniques in Ethiopia. It also has risks and ethical issues regarding the accuracy of the data. Contrary to conventional data collection, use of remote data collection methods on VAWG have serious safety risks (UN Women 2020b:2).

In Ethiopia, the national lockdown went into force on April 10, 2020, with the executive order of the cabinet of ministers, resolution 3/2020, to combat and prevent the spread of COVID-19 and reduce its consequences (Embassy of FDRE London 2021). After a 5-month lockdown, the government of Ethiopia lifted the state of emergency beginning September 8th, 2020 by putting several essential measures including mandatory quarantine periods for all travelers, mandatory facemask, hand washing, sanitizing, banning handshaking and crowding together (Ethiopian public health institute 2020:11; MoH 2020:17).

Following the lifting of the national lockdown, the Ministry of Science and Higher Education (MoSHE) Ethiopia prepare a guideline to resume higher education by putting strict measures including fixing classroom size to not more than 20 students per class (MoSHE 2020:5). Research during COVID-19 ensured no harm to study participants since the researcher gave priority to the protection study participants. During the research, if the researcher had any doubts about risks that could harm the study participants, an interview would not proceed (UN Women 2020c:3) and would either be postponed or stopped. At a minimum, the researcher ensured interviewers and supervisors understood the ethics during research on IPV, implemented strategies to reduce possible distress of data collection, and ensured the availability of services and sources of support for women respondent survivors who as needed them.

By adhering to the COVID-19 prevention protocols and guidelines of Ethiopia, the researcher conducted the population-based study ensured the safety, privacy, and confidentiality of the respondents and the interviewers. Furthermore, the researcher made certain the interviewers and supervisors were carefully selected and received adequate training on the study data collection tool for research (UN 2005:10). Moreover, the researcher provided ongoing support in the field to address difficulties on time (Figure 3.3).



(adopted from UN Women 2020b:1)

Figure 3.3 Decision tree for the data collection on IPV during COVID-19

UN-Women (2020a:1) proposed a decision tree protocol to gather data on VAW. According to the modified and adapted decision tree, in Figure 3.3, when a country passes significant movement restriction or lockdown during the period of data collection is examined before conducting data collection. During the time of data collection from April 2021, at the national or regional level in Ethiopia, there was no movement restriction or lockdown. Thus, by adhering to the COVID-19 prevention protocol and ethical principles to study VAW, the

researcher undertook the study at the community level with interviewer facilitated interviews. Considering the above assumptions, internet or mobile device-based data collection were not selected since there was no restriction, furthermore the participants' unfamiliarity with the phone-based data collection, there was limited communication infrastructure.

3.5.8.5 Interview guide for the study

This study was guided by WHO IPV study protocol cited in Ellsberg (2005:21) and health and safety study Solomon Islands (Secretariat of the Pacific Community 2009:44).

The following interview guidelines were considered which included:

- Study participants and interviewers should wear a facemask, keep recommended distance, and wash hands before conducting the interview.
- Interview was conducted in a private room with the replacement of participants name with codes.
- Establish good rapport.
- Obtaining consent before the study and sign by the interviewer.
- Start interview from less sensitive to questions, and remind their right to pause, skip, postpone, or terminate the interview.
- In the case of interview interruption, when privacy break, move to less sensitive question, reschedule, use dummy question or terminate the session;
- End with a positive note by appreciating the strength of the participant's efforts to address her problem.
- Facilitate and offer a service referral brochure with referral information on relevant health programs and assistance related to violence.

3.5.9 Data processing and analysis

After data collection, and before analysis began, the researcher organized data based on the outline laid down in the research plan. As Grove, Burn and Gray (2012:46) describe

data analysis, it is a way of reducing, organizing and giving meaning to the data. Processing of data is indeed the first stage after the data is collected and transferred to a database for analysis. Transfer of data, encoding, editing and validation, imputation, information analysis, and communication of findings are carried out during this stage (UN 2014:103).

Using Epi Info 2000 manual (Dean et al 2000) the data were transcribed and processed using Statistical Package for the Social Sciences (SPSS). Based on the research objectives, descriptive statistics were used to present the research output. Descriptive statistics are presented in the form of figures, graphs, and tables. An inferential statistical test was performed to test the association between IPV perpetration, anxiety, and PTSD symptoms. The 95% CI was calculated by estimating the degree of certainty of the probability values (Szumilas 2010:227; Andrade 2015:859; Tedeschi 2018:122).

Logistic regression was employed to test the association between IPV perpetration, anxiety, and PTSD symptoms. In addition to IPV perpetration, other predictive variables were included in the bivariate logistic regression model to examine the association among the outcomes of interest. To summarize the results and for ease of interpretation, the number of indicators of anxiety and PTSD symptoms were counted and dichotomized into “none” for those without any symptoms and ‘one or more for those with one or indicators of outcome symptoms.

By using Likert scale questions in the study that gather ordinal data, the mean value were not the right measurement as a measure of central tendency, instead, mode or median and frequency is an appropriate measurement. In each scale of the outcome variable that are negatively phrased items were transformed and computed into the reverse scoring items.

Assumptions considered in the analysis were:

- Items of assessment are complete and have a consistent range of items.
- The questionnaire consists of negatively phrased items that are reversed to the positively framed questions.

3.6 ETHICAL CONSIDERATIONS

According to scholars in the field, ethics are a moral imperatives to determine the root of disputes and to manage the research participants' best interest (Akaranga and Makau 2016:1; Avasthi, Ghosh, Sarkar and Grover 2013:86). Ethics are related to morals and are concerned about rights and misunderstandings across cultures that researchers have to observe to prevent harm (Kemparaj and Kadalur 2018:822) on study participants. This research considered the moral principles by ensuring that study participants were always safeguarded and assured of their rights, safety, security, and benefits (Creswell 2018:286) throughout the study. Polit and Beck (2017:210) further characterize morality as ethical principles that are designed to respect the intellectual, legal, and social concerns of the respondents during the research process.

In the present study, the researcher rigorously adhered to the ethical principles by managing the issues of fairness, disclosing the aim of the investigation, and its advantages, and, ultimately, the participants' liberty to withdraw. In addition, privacy and confidentiality issues were addressed through the study.

3.6.1 Safeguarding the participant

Each person has the right to be safe and treated with respect as basic human rights. During the investigation, the researcher kept respecting the participants by asking them voluntarily participate (Polit and Beck 2017:211). Polit and Beck (2017:211) suggest that explaining the objectives to the study participants and soliciting consent before proceeding with the interview.

By obtaining prior consent of the participants, the researcher also ensured the findings were not shared with the third parties. Respondent identities were not recorded on the questionnaire ensuring that respondents' privacy and anonymity were protected (Polit and Beck 2017:213). Relevant information was gathered to address the study question for the benefit of the participants, as well as to understand phenomenon of intimate partner violence. Before participating, each participant was made aware of the implications of the

research and how the information provided to the researcher would be used to support women.

The WHO safety guidelines emphasized safeguarding participants' and interviewers' safety, security, and quality of data in the research. In this research, there was no further harm inflicted on the study participants and interviewers. Moreover, interviewers respected study participants' autonomy and decisions (Kaiser 2009:1633).

To maintain privacy, an interview is made under the home of women in the absence of other family members, and in case if an individual above four years joined, the interview is shifted to a dummy question. Throughout the research, psychosocial counseling (Deyessa 2010:29) was given to those in need of it.

3.6.2 Maintaining the institution's right

The Research and Ethics Committee of the University of South Africa, Department of Health Studies approved and permitted to the understanding of research. Further, the researcher obtained a letter of permission from Ambo University to conduct the study in the Ambo rural sub-district, Oromia regional state, Ethiopia.

3.6.3 Research's scientific integrity

The findings of prior studies were duly acknowledged by citation, and the authors' ideas were dully acknowledged. The researcher revealed the facts when reporting the findings clearly by discussing the procedures employed and the rationale for using them. The findings is not fabricated and data are not distorted (Polit and Beck 2017:222) and the researcher maintained participants' privacy (Polit and Beck 2017:215).

3.7 CONCLUSION

In chapter three the researcher presented the research design and method relevant to the research. Consistent with the research objectives, a cross-sectional study design was selected by considering the assumptions behind the study. Sampling size determination, sampling technique, research instrument, data quality assurance, the approach to data collection during the COVID-19 pandemic, support intervention strategies, and legal and ethical aspects of the research were discussed.

CHAPTER 4

ANALYSIS, PRESENTATION AND DESCRIPTION OF THE RESEARCH FINDINGS

4.1 INTRODUCTION

This chapter includes statistical analyses, descriptions, and results related to the study objectives. The research aimed at determining the types of IPV and symptomatology of anxiety and PTSD prevalent among the participants and association between IPV, anxiety and PTSD after controlling of confounders. In the end, the study aimed at the developing intervention strategies to promote and support women's mental health wellbeing.

4.2 DATA MANAGEMENT AND ANALYSIS

Under this section, statistical analyses and output of the research findings are presented. Each analysis and interpretation was done consistent with the research questions and objectives. The researcher used SPSS version 20 software both for data entry and analysis. The researcher cleaned data for missing value, transformed, reorganized, checked the model fitness test, and made it ready for analysis. The data were managed and analyzed based on Creswell's (2014:196) recommendation.

The 95% CI was used to determine the extent of IPV and the symptoms of anxiety and post-traumatic stress disorder. The demographic, socioeconomic, mental wellbeing and intimate partner-related variables were computed using descriptive and inferential statistics. In addition to any form of IPV, overall IPV and other women's characteristics included checking the independent relationship with the outcome variable. A logistic regression statistical test was undertaken to test the relationship between IPV, anxiety, and PTSD symptoms.

A cross-tabulation was conducted for each independent variable and the predicted value was also estimated. Of p-value of 0.05 at 95% CI was considered to examine if experience to IPV was correlated with anxiety and post-traumatic stress disorder symptoms.

4.3 RESEARCH RESULTS

4.3.1 Sample characteristics

The sample size for the research was 952 and of these, 945 of the study participants were included in the research with a 99.2% response rate. This investigation assessed the study participants' social, economic, and demographic features including educational status, and the number of family members in the household, monthly income, a problem encountered due to alcohol drinking habits, financial hardship, and marriage type. Intimate partner-related characteristics included age, educational level, occupation, alcohol intake habits, and intimate partner relationships with another woman and having children born out of the wedlock.

The study participants' health-related characteristics with IPV include physical injury due to violence, encounter cuts, punctures and bites, scratches, abrasion, bruises, sprains, and dislocation, and falls during the violence. Coping-related characteristics of women included perceptions of the encountered violence, health-seeking experiences, disclosing the violent incidents to health workers, and hidden incidents of violence when seeking help. The form of IPV and symptomatology of anxiety and PTSD were analyzed, interpreted, and discussed in detail.

4.3.1.1 Social and demographic characteristics

As illustrated in Table 4.1, 43.9% (n=415) of the study participants' age groups fell between 38-47 years. Based on the age group at marriage, the majority 83.5% (n=789) of the respondents got married while they were between 18 and 22 years old. The educational status of the respondents varied with, around 39.3% (n=371) of the participants with having up to primary level, and were able to read and write.

According to the study, the number of family members living with the study participants, 49.1% (n=464) had three members per household. Of the sample, 52.9% (n=500) of the participants worked in the area of agriculture and livestock and 22.9% (n=216) were housewives or unemployed.

Regarding marriage arrangements, there was no great difference in the type of arrangement among the study participants. Around 50.4% (n=476) of the study participants reported their marital union was selected by individuals other than the couple themselves, particularly by family members such as the parents. The average monthly living wage of the households varied from 500 and greater than or equal to 1500 Ethiopian Birr (ETB). 39.4% (n=372) of the study participants reported that their monthly average living wage was nearly equal to 500 ETB.

Table 4.1 Social and demographic characteristics of married women in Ambo rural sub-district, Oromia regional state, Ethiopia, 2021 (n=945)

Variables	Frequency	Percent (%)
Age group [Respondent] in years		
18-27	165	17.5
28-37	365	38.6
38-47	415	43.9
Age group at marriage [Respondent] in years		
<18	68	7.2
18-22	789	83.5
23-27	88	9.3
Education status		
Illiterate	321	34.0
Pre-primary	371	39.3
Primary level	321	26.8
Family Size of the household		
1-3	464	49.1
4-6	426	45.1
>=7	55	5.8
Women's occupation		
Housewife	216	22.9
Daily wage laborer	229	24.2
Agriculture and life stock	500	52.9
Family monthly income in ETB		
Up to 500	372	39.4
501 -1000	179	18.9
1001-1500	115	12.2
1501 and above	279	29.5
Marriage type		
Arranged	476	50.4
Marriage by love	469	49.6

4.3.1.2 Intimate partner socio-demographic characteristics

In this study, married women also reported about their IPs' socio-demographic characteristics which influenced IPV. Unlike the respondents, the age category of the IPs extended beyond 48 years. Most (43.3%, n=409) of participants estimated their IPs age to be in the range of 38-47. On the other side, those IPs' age beyond 48 years were 11.5% (n=109). As shown in Table 4.2 below, the educational status of the spouses extended up to the primary level. Illiteracy rate was higher (45.7%, n=427) than those who had primary level of education (28.6%, n=270).

Concerning their working status, 72.7% (n=687) of intimate partners were working in the area of agriculture which included farming and animal husbandry. The remaining were working as non-permanent workers on a daily wage, nearly 27.3% (n=258) of them are laborers. Of the sample, 45.7% (n=432) of married women reported that their intimate partners drank alcohol every day, or at least once or twice a week whereas, 29.3% (n=277) of the participants disclosed that their IPs never drank alcohol in the last twelve months of their marital relationship.

Living with alcoholic IPs affected women's health. Married women with alcoholic IPs of 20.7% (n=196) who responded those who encountered problems related to financial issues comprised 6.7% (n=63), those who had relationship problems with other family members, 7.4% (n=70) were while transient broken marital relationships were reported by 6.7% (n=63). Of the married women 4% (n=51) reported that they knew that their IPs had a relationship with another woman. Among the participants, 5% (n=47) reported that their IPs had children born out of wedlock.

Table 4.2 Socio-demographic characteristics of IPs in Ambo rural sub-district, Oromia regional state, Ethiopia, 2021 (n=945)

Variables	Frequency	Percent (%)
Age groups [spouse] in years		
18-27	47	5.0
28-37	380	40.2
38-47	409	43.3
>=48	109	11.5
Education status[spouse)		
Illiterate	427	45.2
Pre-primary	248	26.2
Primary level	270	28.6
Occupation [spouse]		
Agriculture/Mixed Farming	687	72.7
Daily Wage laborer	258	27.3
Alcohol drinking habit [spouse]		
Frequent (Everyday-once or twice a week)	196	20.7
Sometimes (1-3 times monthly/occasionally)	472	49.9
Never	277	29.3
Children born out of wedlock		
Yes	47	5.0
No	898	95.0
Infidelity		
Yes	51	5.4
No	894	94.6
Encountered alcohol problem		
Yes	196	20.7
No	749	79.3
Effects of living with an alcoholic spouse		
Financial	63	6.7
Relationship [Family]	70	7.4
Relationship [Marital]	63	6.7
Not encountered violence	749	79.3

4.3.2 Experience of intimate partner violence

Under this section, the researcher presents the past twelve months' exposure to any form of IPV as presented in Table 4.4.

4.3.2.1 Intimate partner violence prevalence

The study findings revealed that 34.5% (n=326) of the study participants had exposure to IPV once in the past twelve months (Figure 4.1). From the viewpoint of any types of IPV, emotional violence was experienced by 25.9% (n=245) and accounted for a high prevalence.

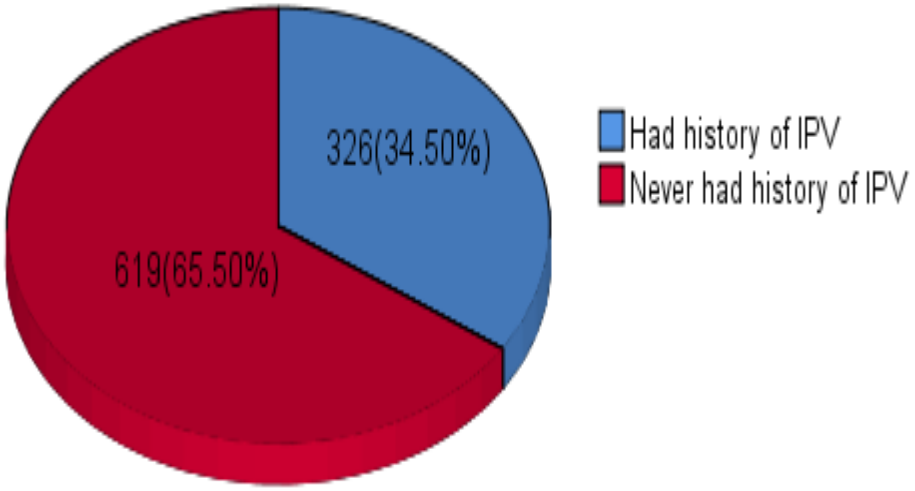


Figure 4.1 Prevalence of self-reported IPV among study participants in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021

4.3.2.1.1 Prevalence of psychological violence

This finding of the study indicates the number of last year's reported psychological violence differs from that of other types of intimate partner violence. Among the study participants, 25.9% (n=245) reported that they had experienced psychological violence from their intimate partners. Of those types, insulted to feel vexation (21.1% (n=199)) had a higher item score than any of the other emotional violence item scores. Something has been deliberately done towards the respondent by an intimate partner to make her feel bad, ashamed, and feel inferior in the eyes of others 15.3% (n=145) was also a commonly reported item of psychological violence as shown in Table 4.3.

Table 4.3 Psychological violence and related types among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Types and acts of IPV in the past twelve months			Incidence of types of violence (Frequency) n (%)		
	Frequency (n)	Percent (%)	One	Few	Many
Psychological violence	**245**	**25.9**			
Insulted/Make you feel bad	199	21.1	134 (78.9)	55 (14.2)	10 (1.1)
Belittled or humiliated to feel bad	145	15.3	62 (6.6)	67 (7.1)	16 (1.7)
With being threatened to hurt	105	11.1	55 (5.8)	57 (6.0)	16 (1.7)
Scared/Intimidated	87	9.2	24 (2.5)	47 (5.0)	17 (1.8)

4.3.2.1.2 Prevalence of physical violence

The study participants reported that in the past twelve months they experienced physical violence. From the participants, nearly 20.8% (n=197) of them experienced physical violence in the past twelve months within their marital relationships.

On the scoring of physical violence, the commonly reported types were slapping or throwing object to intentionally hurt, 16% (n=151), pushing, 7.3% (n=69) and hitting with a fist to harm them by physical force, 6.2% (n=59) (Table 4.4).

Table 4.4 Reported types of physical violence among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Reported types of physical violence in the past twelve months			**Incidence of types of violence (Frequency) n (%)**		
	Frequency (n)	Percent (%)	One	Few	Many
Physical violence	**197**	**20.8**			
Choke or burn	21	2.2	9 (1.0)	10 (1.1)	2 (0.2)
Threaten or with a dangerous object	30	3.2	16 (1.7)	14 (1.5)	-
Slapped/thrown	151	16.0	105 (11.1)	38 (4.0)	8 (0.8)
Pushed/pulled until you feel pain	69	7.3	49 (5.2)	16 (1.7)	4 (0.4)
Kicked/dragged or beaten	27	2.9	10 (1.1)	21 (2.2)	-
Hit with a fist to harm physically	59	6.2	36 (3.8)	19 (2.0)	3 (0.3)

4.3.2.1.3 Prevalence of sexual violence

Concerning the experience of sexual violence, 15.3% (n=145) of the study participants responded that they had experienced at least one type of violent act by an intimate partner. The fact is that no there significant difference across the violent acts. Using physical force, was reported by 9.3% (n=88) to have sexual intercourse was a minimally higher reported act of sexual violence. Having sex, because of fear of their intimate partner was also another type reported by the study participants (Table 4.5).

Table 4.5 Reported types of sexual violence in the past twelve months among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Reported types of sexual violence			Incidence of types of violence (Frequency) n (%)		
	Frequency (n)	Percent (%)	One	Few	Many
Sexual violence	**145**	**15.3**			
Physically forced to do sex	88	9.3	60 (6.3)	28 (3.0)	-
Undergoes sex due to afraid	79	8.4	52 (5.5)	21 (2.2)	6(0.6)
Sex due to fear of humiliating	56	5.9	36 (3.8)	20 (2.1)	-

4.3.2.2 Recurrence of self-reported types of any types of IPV

Under this section, the researcher asked the study participants how many times each self-reported violence type happened in the past twelve months.

4.3.2.2.1 Recurrence of the self-reported type of psychological violence

According to the response of the participants, most of them (78.9%, n=134) had been insulted at least once before the reporting period. Study participants recalled and responded about the recurrence of violent behavior in a few times that they were belittled 7.1% (n=67) and threatened with being hurt 6%, (n=57) (Table 4.6).

Table 4.6 Recurrence of self-reported types of psychological violence in the past twelve months among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Recurrence of self-reported types of psychological violence	Incidence of types of violence (Frequency) n (%)		
	One	Few	Many
Insulted/made to feel bad	134 (78.9)	55 (14.2)	10 (1.1)
Belittled or humiliated to feel bad	62 (6.6)	67 (7.1)	16 (1.7)
With being threatened to hurt	55 (5.8)	57 (6.0)	16 (1.7)
Scared/Intimidated	24 (2.5)	47 (5.0)	1 (1.8)

4.3.2.2.2 Recurrence of self-reported types of physical violence

Under this section, the common recurrent self-reported types of physical violence were being slapped, threatened, and things thrown at them to hurt, rated to be few 4%, (n=38) and 0.8%, (n=8) reported that it occurred several times in the twelve months before data collection. Being hit with a fist with the aim to harm physically was reported by 2% (n=19) and kicked or dragged 2.2% (n=21) were self-reported types of physical violence (Table 4.7).

Table 4.7 Recurrence of self-reported types of physical violence in the past twelve months among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Recurrence of self-reported types of physical violence	Incidence of types of violence Frequency n (%)		
	One	Few	Many
Choke or burn	9 (1.0)	10 (1.1)	2 (0.2)
Threaten or to be harmed using a dangerous object	16 (1.7)	14 (1.5)	-
Slapped or throw material	105 (11.1)	38 (4.0)	8 (0.8)
Pushed or pulled to feel bad	49 (5.2)	16 (1.7)	4 (0.4)
Kicked, dragged, or beat	10 (1.1)	21(2.2)	-
Hit with a fist to harm physically	36 (3.8)	19 2.0)	1 (0.3)

4.3.2.2.3 Recurrence of self-reported types of sexual violence

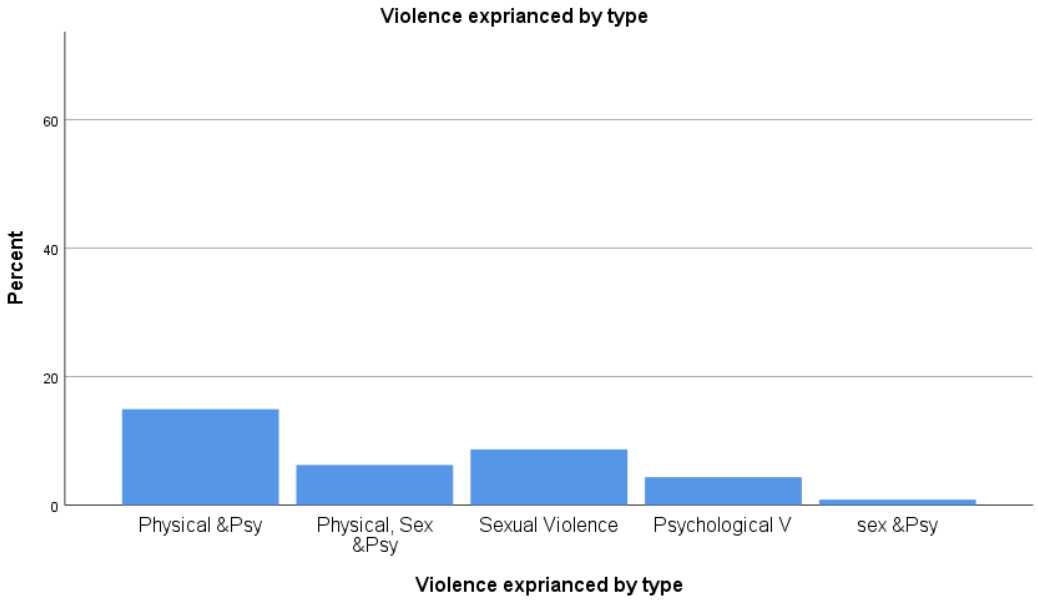
Sexual violence was reported as one types of intimate partner violence. The common types of violent acts inflicted on participants included being physically forced to have sexual intercourse, 3% (n=28) engaging in sex due to fear of the husband and as a result of cultural dominance (2.2%, n=21) and having sex with spouse due to fear of intimidation or humiliation, 2.1% (n=20) were disclosed by participants (Table 4.8).

Table 4.8 Recurrence of self-reported types of sexual violence in the past twelve months among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Recurrence of self-reported types of sexual violence	Incidence of types of violence Frequency) n (%)		
	One	Few	Many
Physically forced to do sex	60 (6.3)	28 (3.0)	-
Engages in sex due to fear	52 (5.5)	21 (2.2)	6 (0.6)
Sex due to fear of humiliating	36 (3.8)	1 (0.1)	-

4.3.3 Patterns of intimate partner violence in close relationships

The research addressed the co-occurrence of each type of IPV by an intimate partner. According to the statistics illustrated in Figure 4.2, 14.9% (n=141) of married women had reported overlapping of physical and psychological abuse in the past twelve months before the study. Of the participants, 6.2% (n=59) reported they experienced physical, psychological, and sexual violence. Nevertheless, sexual violence, 8.7% (n=82)) and psychological violence, 4.3% (n=41) were also reported by the participants in the absence of other types of violence. The degree to which the type of IPV overlapped indicated the intensity and severity of violent acts.



Where Physical & Psy = Physical and Psychological violence; Physical, Sex & Psy=Physical, Sexual and Psychological violence; Psychological V=Psychological violence; sex & Psy= Sexual and Psychological violence

Figure 4.2 Patterns of IPV in the past twelve months among married women

4.3.4 Traumatic physical health consequence of intimate partner violence

Women affected by their spouse's, physical violence were far more likely to experience physical injury. Of those women who reported physical violence, 4.2% (n=40) of the disclosed their injuries history. A higher proportion of injuries consisted of scratches, abrasions, and bruises (2.3%, n=22). From the findings other reported physical injuries included sprains and or dislocations (0.8%, n=8) but constituted the lowest proportion as illustrated in Table 4.9.

Table 4.9 Physical health consequence of IPV among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021

Variables		Frequency	Percent (%)
Physical injury due to violence			
No history of violence		748	79.2
Injured		40	4.2
Not injured		157	16.6
Encountered cuts, punctures, and bites			
No history of violence		748	79.2
Injured (n=40)	Yes	17	1.8
	No	23	2.4
Not Injured		157	16.6
Encountered scratches, abrasions, and bruises			
No history of violence		748	79.2
Injured (n=40)	Yes	22	2.3
	No	18	1.9
Not Injured		157	16.6
Encountered sprains and or dislocations			
No history of violence		748	79.2
Injured (n=40)	Yes	8	0.8
	No	32	3.4
Not Injured		157	16.6

4.3.5 Intimate partner violence and help-seeking practices

Under this section, the researcher summarizes the responses of participants regarding feelings about injuries they encountered at the time, whether they visited a health center for treatment or not and which type of help-seeking behavior they engaged in following IPV. Thus, among the study participants, 1.6% (n=15) of suffered injuries physical abuse, and 3.1% (n=29) of the participants received care from health facilities immediately for physical injury (Table 4.10).

Table 4.10 IPV and help-seeking practices of married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021

Variables		Frequency	Percent (%)
Suffered injuries			
No history of violence		748	79.2
Injured (n=40)	Yes	15	1.6
	No	25	2.6
Not injured		157	16.6
Receive care for injury			
No history of violence		748	79.2
Injured (n=40)	Yes	29	3.1
	No	10	1.0
Not injured		158	16.7
Seeking help following violence			
No history of violence		700	74.1
Yes		111	11.7
No		134	14.2

4.3.6 Anxiety and posttraumatic stress symptoms in married women

Under this section, the researcher used the BAI scale on the study participants to measure the intensity of physical and cognitive symptoms. Consequently, participants were assessed about PTSD symptoms through PCL-C.

4.3.6.1 Anxiety symptoms

The 21- item BAI scale, measures the extent of the symptoms of anxiety through a direct coding strategy. A majority, 89.8% (n=849), of study participants reported the low-level anxiety which did not suggest symptomatic anxiety. Around 8.6% (n=81) of the study participants reported to moderate and the remaining 1.6% (n=15) were in the category of potentially high level anxiety.

By dichotomizing according to the cut- off point and symptoms score, probable symptom for anxiety are considered when there was a score greater than or equal to twenty-one. Hence, with probable level, 10.2% (n=96) of the respondents were predicted to be of the risk of potential anxiety which needed to be referred to clinical health facilities for further assessment (Figure 4.3).

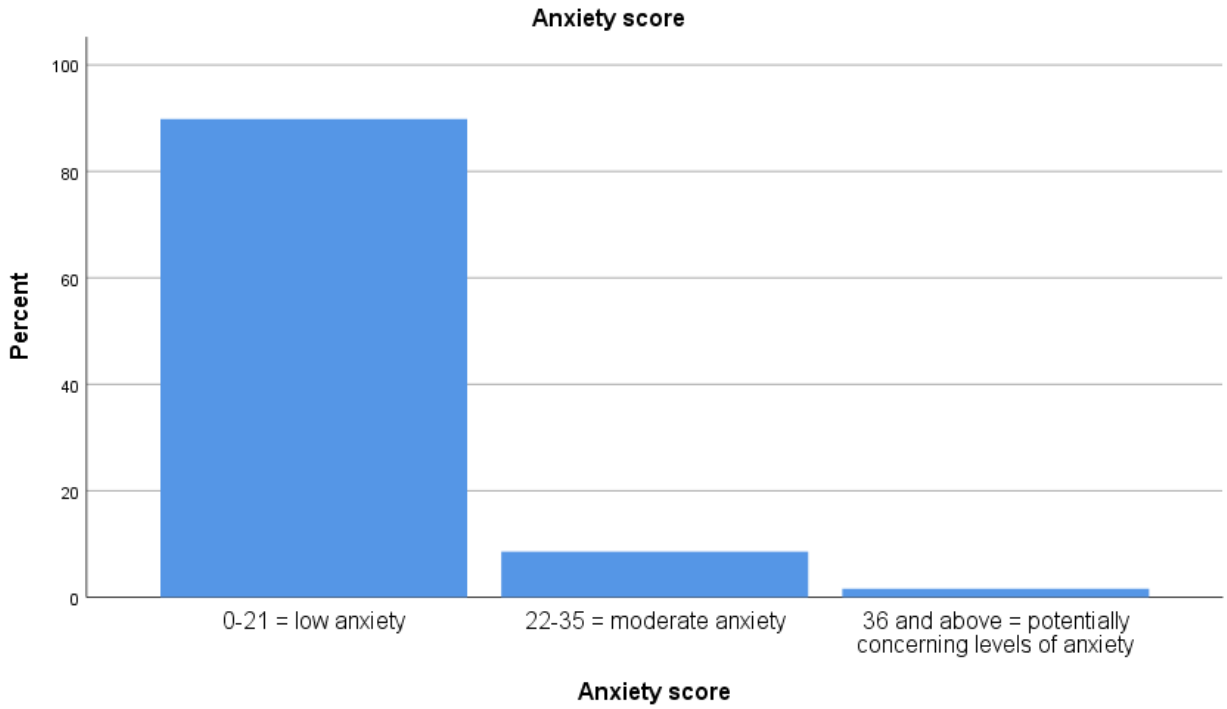


Figure 4.3 Self-reported anxiety symptoms among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021

4.3.6.2 Post-traumatic stress disorder symptoms

The study assessed the symptoms of PTSD through PCL-C which was widely used to assess symptoms after exposure to stressful life events experiences that included IPV (Weathers, Litz, Palmieri, Marx and Schnurr 2013:1). The tool was designed both for clinical and research settings to screen for symptoms of PTSD.

The fact that PCL-C used to rate symptoms and screen study participants for PTSD, with a cut-off point of 33 from the total symptom severity score which ranges from 0-80 cut- off point for provisional diagnosis. Thus, a score higher than 33 was taken as indicative symptoms for PTSD and participants with such scores were referred for further assessment and diagnosis. Of those 945 participants, 11% (n=104) reported probable symptoms of PTSD (Figure 4.4).

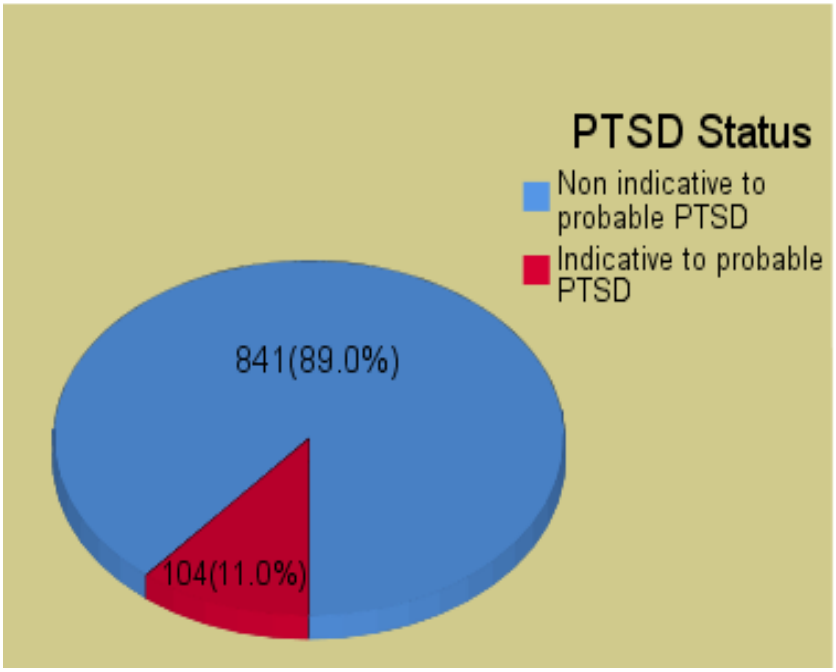


Figure 4.4 Self-reported symptoms of PTSD among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021

4.3.7 IPV and anxiety symptoms among married women

Under this section, the findings focus on assessing symptoms of anxiety with the BAI scale as an indicator for severity and probable symptom for further evaluation. Study participants were interviewed using a structured interview. Considering the type of IPV, 18.4% (n=45) of study participants had anxiety symptoms as a result of emotional violence.

Likewise, exposure to physical violence had a greater risk of anxiety symptoms. Considering the prevalence of anxiety and PTSD symptoms by any type of IPV, sexual violence had a greater percentage. Being exposed to any type of violence showed 16.6% (n=54) of participants at risk of having symptoms of anxiety (Table 4.11).

Table 4.11 Intimate partner violence and anxiety symptoms among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Variable	Anxiety symptom	
	Indicative= n (%)	Non-indicative= n (%)
Psychological violence		
Ever	45 (18.4)	200 (81.6)
Never	51 (7.3)	649 (92.70=)
Physical violence		
Ever	36 (18.3)	161 (81.7)
Never	60 (8.0)	688 (92.0)
Sexual violence		
Ever	21 (14.5)	124 (85.5)
Never	75 (9.4)	725 (90.6)
Any type of IPV		
Ever	54 (16.6)	272 (83.4)
Never	42 (6.8)	577 (93.2)

4.3.8 IPV and PTSD symptoms among married women

PTSD symptoms vary by type of IPV from the responses of study participants. Participants with an incident of psychological violence with a self-reported score for DSM-5 symptom of PTSD indicates probable PTSD symptoms for provisional diagnosis. Of, the study participants reporting psychological violence, 18.4% (n=45) had probable PTSD symptoms.

Physical violence is also a common type of intimate partner violence, which shows indicative symptoms of 18.3% (n=36) of PTSD. Following sexual violence, 14.5% (n=21) of the participants had a probable level of PTSD symptoms. Thus, by considering reports of IPV, the highest percentage reported a probable level of PTSD symptoms among married women occurred in those who experienced psychological violence.

On the other hand, exposure to either physical, sexual, or psychological violence, 16.6% (n=54) had a probable level of PTSD symptoms. Therefore, consistent with screening and provisional diagnosis, using the PTSD symptoms checklist, the participants need further evaluation for the diagnostic criteria of PTSD (Table 4.12).

Table 4.12 Intimate partner violence and PTSD symptoms among married women in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Characteristics	PTSD symptoms	
	Indicative= n (%)	Non-indicative= n (%)
Psychological violence		
Ever	45 (18.4)	200 (81.6)
Never	59 (77.0)	641 (91.6)
Physical violence		
Ever	36 (18.3)	161 (81.7)
Never	68 (9.1)	680 (90.9)
Sexual violence		
Ever	21 (14.5)	124 (85.5)
Never	83 (10.4)	124 (85.5)
Any type of IPV		
Ever	54 (16.6)	272 (83.4)
Never	50 (8.1)	569 (91.9)

4.3.9 Recurrent IPV, PTSD, and anxiety symptoms

Under this section, the temporal relationship between anxiety symptoms and different types of physical, sexual, and emotional violence rating types are presented (Table 4.15). The author attempted to investigate the relationship of recurrent emotional violence with reported symptoms of anxiety and PTSD.

The findings indicated that most of the study participants reported minor emotional violence with moderate anxiety and PTSD symptoms (Table 4.15). Likewise, in psychological violence, study participants reported recurrent incidents of sexual and physical abuse. Incidents of sexual and physical violence were showed a temporal relationship with probable symptoms of PTSD and anxiety disorder (Table 4.13 to 4.15).

4.3.9.1 Recurrent psychological violence, PTSD, and anxiety symptoms

Table 4.13 indicates the relationship between the recurrent experience of psychological violence, anxiety, and PTSD symptoms among study participants. The study shows that the likelihood of recurrent attacks by each type of psychological violence increases the risk of anxiety and PTSD.

Table 4.13 Recurrent psychological violence, PTSD and anxiety symptoms among married women, in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Type of psychological violence		Symptom of			
		Anxiety		PTSD	
	Recurrence	Indicative =n (%)	Non-indicative =n (%)	Indicative =n (%)	Non-indicative =n (%)
Insulted/made to feel bad					
	One	27 (20.1)	107 (79.9)	29 (21.6)	105 (78.4)
	Few	8 (14.5)	47 (85.5)	10 (18.2)	45 (81.9)
	Many	1 (10.0)	9 (90.0)	1 (10.0)	9 (8.9)
	Never	60 (8.0)	686 (92.0)	64 (82.1)	682 (91.4)
Belittled or humiliated to feel bad					
	One	14 (22.6)	48 (77.4)	14 (22.6)	48 (77.4)
	Few	12 (17.9)	55 (82.1)	14 (20.9)	53 (79.1)
	Many	3 (18.8)	13 (81.3)	3 (18.8)	13 (81.3)
	Never	67 (8.4)	733 (91.6)	73 (9.1)	727 (90.9)
Scared/intimidated					
	One	7 (29.2)	17 (70.8)	7 (29.2)	17 (70.8)
	Few	8 (17.0)	39 (83.0)	8 (17.0)	39 (83.0)
	Many	1 (5.9)	16 (94.1)	1 (5.9)	16 (94.1)
	Never	80 (9.3)	777 (90.7)	88 (10.3)	769 (89.7)
Threatened to with being harmed					
	One	8 (14.5)	47 (85.5)	2 (22.2)	7 (77.8)
	Few	12 (21.1)	45 (78.9)	-	10 (100.0)
	Many	1 (6.3)	15 (93.8)	-	2 (100.0)
	Never	75 (9.2)	742 (90.8)	102 (11.0)	822 (89.0)

4.3.9.2 Recurrent physical violence, anxiety, and PTSD symptoms

Like psychological violence, Table 4.14 presents the relationship between recurrent attack by an intimate partner with physical violent acts, PTSD, and anxiety symptoms. Taking into account the statistical data from Table 4.14, the frequency of physical attacks is poses a potential risk to the mental health wellbeing of married women.

Table 4.14 Recurrent physical violence, anxiety and PTSD symptoms among married women, in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Item of physical violence		Symptom of			
		Anxiety		PTSD	
	Recurrence	Indicative =n (%)	Non-indicative =n (%)	Indicative =n (%)	Non-indicative =n (%)
Choke or burn					
	Never	94 (10.2)	830 (89.8)	102 (11.0)	822 (89.0)
	One	2 (22.2)	7 (77.8)	2 (22.2)	7 (77.8)
	Few	-	10 (100.0)	-	10 (100.0)
	Many	-	2 (100.0)	-	2 (100.0)
Threaten or hurt using a dangerous object					
	Never	92 (10.1)	823 (89.9)	100 (10.9)	815 (89.1)
	One	2 (12.5)	14 (87.5)	2 (12.5)	14 (87.5)
	Few	2 (14.30)	12 (85.7)	2 (14.3)	12 (85.7)
Slapped/Thrown					
	Never	70 (8.8)	724 (91.2)	78 (9.8)	716 (90.2)
	One	5 (14.3)	90 (85.7)	15 (14.3)	90 (85.7)
	Few	9 (23.7)	29 (76.3)	9 (23.7)	29 (76.3)
	Many	2 (25.0)	6 (75.0)	2 (25.0)	6 (75.0)
Pushed/pulled you					
	Never	86 (9.8)	790 (90.2)	94 (10.7)	782 (89.3)
	One	6 (12.2)	43 (87.8)	6 (12.2)	43 (87.8)
	Few	4 (25.0)	12 (75.0)	4 (25.0)	12 (75.0)
	Many	-	4 (100.0)	-	4(100.0)
Kicked/dragged or beaten					
	Never	91 (10.0)	823 (90.0)	99 (10.8)	815 (89.2)
	One	-	10 (100.0)	-	10 (100.0)
	Few	5(23.80)	16 (76.2)	5 (23.8)	16 (76.2)
Hit with fist to harm physically					
	Never	86 (9.7)	801 (90.3)	94 (10.6)	793 (89.4)
	One	7 (19.4)	29 (80.6)	7 (19.4)	29 (80.6)
	Few	3 (15.8)	16 (84.2)	3 (15.8)	16 (84.2)
	Many	-	3 (100.0)	-	3 (100.0)

4.3.9.3 Recurrent sexual violence, anxiety, and PTSD symptoms

Similar to psychological and physical violence, Table 4.15 shows how much the frequent act of women sexual violence affects the mental health of victims. Table 4.15 indicates the temporal relationship between sexual violence, anxiety, and PTSD symptoms among married women.

Table 4.15 Recurrent sexual violence, anxiety and PTSD symptoms among married women, in Ambo rural sub-districts, Oromia regional state, Ethiopia, 2021 (n=945)

Types of sexual violence		Symptom of			
		Anxiety		PTSD	
	recurrence	Indicative =n (%)	Non-indicative =n (%)	Indicative =n (%)	Non-indicative =n (%)
Physically forced for sex					
	Never	86 (10.0)	771 (90.0)	94 (11.0)	763 (89.0)
	One	8 (13.3)	52 (86.7)	8 (13.3)	52 (86.7)
	Few	2 (7.1)	26 (92.9)	2 (7.1)	26 (92.9)
Engages in sex due to fear					
	Never	81 (9.4)	785 (90.6)	89 (10.3)	777 (89.7)
	One	8 (15.4)	44 (84.6)	8 (15.4)	44 (46.3)
	Few	7 (33.3)	14 (66.7)	7 (33.3)	14 (66.7)
	Many	-	6 (100.00)	-	6 (100.0)
Sex because of fear of humiliation					
	Never	89 (10.0)	800 (90.0)	97 (10.9)	792 (89.1)
	One	4 (11.1)	32 (88.9)	4 (11.1)	32 (88.9)
	Few	3 (15.0)	17 (85.0)	3 (15.0)	17 (85.0)

4.3.10 Intimate partner violence and subsequent anxiety symptoms

The second research question of the study was to examine the temporal relationship between IPV and anxiety symptoms among married women. To identify factors associated with anxiety symptoms, a regression test was carried out and a p-value less than 0.05 was taken as predictive for the association.

In this sub-section, the researcher conducted a logistic regression analysis relating to the outcome variable with indicators variable that was reflecting symptoms of anxiety and selected covariate. Taking into account the findings from the logistic regression analysis, history of psychological violence increases the likelihood of having anxiety symptoms (OR = 2.86 (95% CI, 1.86-4.41)).

Anxiety symptoms in the past twelve months linked with all types of IPV (OR=2.72 (95% CI, 1.77-4.18)). An episode of anxiety symptoms was two times more likely increased with a history of physical violence (OR = 2.56 (95% CI, 1.63-4.11)). By taking the age range 18-27 years as reference, those women between the age of 28-37 years were found that they are protected from anxiety symptoms (OR = 2.18 (95% CI, 1.07-4.43)) as shown in Table 4.16.

Table 4.16 Relationship between anxiety symptoms, socio-demographic characteristics, health, and IPV among married women

Variable	Anxiety symptom		
	Indicative =n (%)	Non indicative =n (%)	**OR (95% CI)**
Age groups (years)			
18-27(ref)	27 (12.5)	189 (87.5)	1.00
28-37	57 (10.7)	477 (89.3)	2.18 (1.07-4.43) *
38-47	12 (6.2)	183 (93.8)	0.48 (0.23-099)
Education status			
Illiterate (ref)	47(14.6)	274 (85.4)	1.00
Pre-primary	24 (6.5)	347 (93.5)	1.56 (0.93-2.62)
Primary	25 (9.9)	228 (90.1)	0.63 (0.52-1.13)
Number of family members in the household			
1-3 (ref)	49 (10.6)	415 (89.4)	1.00
4-6	41 (9.6)	385 (90.4)	0.96 (0.39-2.36)
>=7	6 (10.9)	49 (89.1)	0.87(0.35-2.15)
Women's occupation			
House wife(ref)	23 (10.6)	193 (89.4)	1.00
Daily Wage Laborer	18 (7.9)	211 (92.1)	0.96 (0.57-1.61)
Agriculture and livestock	55 (11.0)	445 (89.0)	0.69 (0.3-1.20)
Monthly income (ETB)			
Up to 500 (ref)	35 (9.4)	337 (90.6)	1.00
501 -1000	21 (11.7)	158 (88.3)	0.93 (0.55-1.57)
1001-1500	12 (10.4)	103 (89.6)	1.19 (0.65-2.17)
1501 and above	28 (10.0)	251 (90.0)	1.04 (0.51-2.13)
Marriage type			
Arranged	47 (9.9)	429 (90.1)	0.93 (0.61-1.43)
Marriage by love(ref)	49 (10.4)	420 (89.6)	1.00
Alcohol drinking habit (spouse)			
Never (ref)	19 (9.7)	177 (90.3)	1.00
Sometimes	49 (10.4)	423 (89.8)	0.95 (0.5-1.76)
Frequent	28 (10.1)	249 (89.9)	1.03 (0.63-1.68)
Had children born out of wedlock (spouse)			
Yes	6 (12.8)	41 (87.2)	1.31 (0.54-3.18)
No (ref)	90 (10.0)	808 (90.0)	1.00
Infidelity (spouse)			
Yes	8 (15.7)	43 (84.3)	1.70 (0.77-3.74)
No (ref)	88 (9.8)	806 (90.2)	1.00
Alcoholism			
Yes	26 (13.3)	170 (86.7)	1.48 (0.91-2.39)
No (ref)	70 (9.3)	679 (90.7)	1.00
Psychological violence			
Ever	45 (18.4)	200 (81.6)	2.86 (1.86-4.41) *
Never (ref)	51 (7.3)	649 (92.7)	1.00
Physical violence			
Ever	36 (18.3)	161 (81.7)	2.56(1.63-4.11) *
Never (ref)	60 (8.0)	688 (92.0)	1.00
Sexual violence			
Ever	21 (14.5)	124 (85.5)	1.63(0.97-2.75)
Never (ref)	75 (9.4)	725 (90.6)	1.00
Any type of IPV			
Ever	54 (16.6)	272 (83.4)	2.72 (1.77-4.18) *
Never (ref)	42 (6.8)	577 (93.2)	1.00

Where; ref means reference variable

4.3.11 Intimate partner violence and subsequent PTSD symptoms

In this section, the association between the past twelve months' prevalence of PTSD symptoms with the history of any type of IPV was analyzed by logistic regression statistical test. The probability of PTSD symptoms increased with participants' history of emotional violence (OR=2.44 (95% CI, 1.60-3.71)).

In the past twelve months, physical violence increased the odd of PTSD symptoms (OR = 2.23 (95% CI 1.44-3.46) compared to those without experience of physical violence. Self-reported experience to each type of intimate partner violence by spouse also increased the symptoms of PTSD (OR = 2.23 (95% CI, 1.44, 3.46)).

The other factor, which had a statistically significant association with PTSD symptoms was primarily the education status of the married women. The respondents who had primary (OR = 0.53 (95% CI, 0.30-0.94)) education status were 0.53 times more likely to be protected from PTSD symptoms (Table 4.17).

Table 4.17 Relationship between PTSD symptoms, socio-demographic characteristics, health, and IPV among married women

Variable	PTSD Symptom		P-value	OR (95% CI)
	Indicative=n (%)	Non indicative =n (%)		
Age groups (years)				
18-27	27 (12.5)	189 (87.5)	0.15	1.59 (0.83-3.06)
28-37	61 (58.8)	473 (88.6)	0.21	1.44 (0.81-2.57)
38-47(ref)	16 (8.2)	179 (91.8)		1.00
Education status				
Illiterate	51 (15.9)	270 (84.1)	0.00	1.00
Up to primary	24 (6.5)	347 (93.5)	0.13	1.45 (0.89-2.37)
Primary	29 (11.5)	224 (88.5)	0.30	0.53 (0.30-0.94)
Number of families in the household				
1-3	54 (11.6)	410 (88.4)	0.00	1.00
4-6	44 (10.3)	382 (89.7)	0.87	1.07 (0.44-2.63)
>=7	6 (10.9)	49 (89.1)	0.89	0.94 (0.38-2.33)
Occupation of women				
House wife	25 (11.6)	191 (88.4)	0.00	1.00
Daily wage laborer	21 (9.2)	208 (90.8)	0.99	0.99 (0.60-1.64)
Agriculture and life stock	58 (11.6)	442 (88.4)	0.32	0.76 (0.45-1.30)
Monthly income (ETB)				
Up to 500	38 (10.2)	334 (89.8)	0.94	0.98 (0.58-1.63)
501 -1000	24 (13.4)	155 (86.6)	0.32	1.33 (0.75-2.37)
1001-1500	13 (11.3)	102 (88.7)	0.79	1.09 (0.54-2.19)
1501 and above	29 (10.4)	250 (89.6)	0.00	1.00
Marriage type				
Arranged	52 (10.9)	424 (89.1)	0.93	0.98 (0.65-1.47)
Marriage by love	52 (11.1)	417(88.9)	0.00	1.00
Alcohol drinking habit (spouse)				
Never (ref)	28 (10.1)	249 (89.9)	-	1.00
Sometimes	56 (11.9)	416 (88.1)	0.97	1.01 (0.55-1.85)
Frequent	20 (10.2)	176 (89.8)	0.46	1.19 (0.74-1.93)
Had child born out of wedlock (spouse)				
Yes	6 (12.8)	41(87.2)	0.69	1.19 (0.49-2.88)
No(ref)	98 (10.9)	800 (89.1)	-	1.00
Infidelity (spouse)				
Yes	8 (15.7)	43 (84.3)	0.27	1.54 (0.71-3.38)
No (ref)	96 (10.7)	798 (89.3)	-	1.00
Alcoholism (spouse)				
Yes	28 (14.3)	168 (85.7)	0.10	1.47 (0.92-2.35)
No (ref)	76 (10.1)	673 (89.9)	0.00	1.00
Psychological violence				
Ever	45 (18.4)	200 (81.6)	0.00	2.44 (1.6-3.71)
Never	59 (8.4)	641 (91.6)	-	1.00
Physical violence				
Ever	36 (18.3)	161 (81.7)	0.00	2.23 (1.44-3.46)
Never (ref)	68 (9.1)	680 (90.9)	-	1.00
Sexual violence				
Ever	21(14.5)	124 (85.5)	0.14	1.46 (0.87-2.44)
Never (ref)	83 (10.4)	717 (89.6)	-	1.00
Any type of IPV				
Ever	54 (16.6)	272 (83.4)	0.00	2.25 (1.49-3.40
Never (ref)	50 (8.1)	569 (91.9)		1.00

Variable	PTSD Symptom		P-value	OR (95% CI)
Injury from physical violence				
Not encountered violence	94 (12.6)	654 (87.4)		1.00
Yes	5 (12.5)	35 (87.5)	0.99	0.99 (0.38-2.60)
No	5 (3.2)	152 (96.8)	0.02	0.22(0.09-0.57)
Seeking help following violence				
No history of violence (ref)	87 (12.4)	613 (87.6)		1.00
Yes	7 (6.3)	104 (93.7)	0.06	0.47 (0.21-1.05)
No	10 (7.5)	124 (92.5)	00.10	0.56 0.28-1.12)

4.4 OVERVIEW OF THE RESEARCH FINDINGS

Of the 945 participants, 34.5% (n=326) reported experiencing intimate partner violence within twelve months that is before data collection. Regarding specific IPV, 25.9% (n=245) of had psychological violence, 15.3% (n=145) sexual violence and 20.8% (n=197) had physical violence. The common type of victimization emotional, followed by physical and sexual assault. Of those women who had an experience of physical violence, the common type of abuse was occurred through slapping or by throwing objects towards the victim.

Many of the participants, 21.1% (n=199) who had a history of psychological violence were insulted by their IPs by humiliation. The common type of sexual violence was being physically forced to engage in sexual activities with the intimate partner. Many, 14.9% (n=141), respondents experienced physical and psychological abuse, with 6.2% (n=59) disclosing physical, mental, and sexual violence.

Regarding self-reported symptoms of PTSD, of those (n=945) study participants, 11% (n=104) reported indicative probable symptoms of PTSD. This study found that the prevalence of predictive self-reported anxiety symptoms was 10.2% (n=96) among the married women in the past twelve months in Ambo, Oromia regional state, Ethiopia. With sexual violence, a self-reported PTSD symptom, 14.5% (n=21) and which was indicative of probable PTSD symptoms. Having psychological violence (OR = 2.86 (95% CI, 1.86-4.41)), any type of IPV (OR = 2.72 (95% CI, 1.77-4.18)) and physical violence (OR = 2.56 (95% CI, 1.63-4.11)) were associated with indicative symptoms of anxiety disorder.

Women whose ages were within the range of 28-37 years substantially developed anxiety symptoms (OR = 2.18 (95% CI, 1.07-4.43)). Psychological violence (OR=2.44 (95% CI,

1.60-3.71)), physical violence (OR = 2.23 (95% CI, 1.44-3.46)) and any type of IPV (OR = 2.23 (95% CI, 1.44-3.46)) were associated with PTSD symptoms. Having primary education level helped the married women to be protected from PTSD symptoms (OR = 0.53 (95% CI, 0.30-0.94)).

4.5 CONCLUSION

In this chapter, the researcher presented the research findings in line with the research objectives. The chapter presented women's and IPs' social and demographic characteristics including the prevalence of any type of IPV. Furthermore, anxiety and PTSD symptoms, severity, frequency of any type of IPV acts, the association of IPV, subsequent anxiety, and PTSD symptoms were presented. The next chapter, chapter five, discusses proposed support intervention strategies for intimate partner violence to married women in Ethiopia.

CHAPTER 5

PROPOSED SUPPORT INTERVENTION STRATEGIES FOR INTIMATE PARTNER VIOLENCE AGAINST MARRIED WOMEN IN ETHIOPIA

5.1 INTRODUCTION

This chapter proposes support intervention strategies by reducing the symptoms of mental illness, and it aims to improve the mental wellbeing of survivors of domestic violence. This chapter presents support intervention strategies on IPV and mental health consequences of IPV based on both the study's findings and the relevant literature reviews.

IPV is public health challenge and needs a preventive intervention to reduce its prevalence and health consequences which affect the quality of life (Leight, Deyessa, Veranil, Tewolde and Sharma 2020:2). The study findings indicated the current prevalence of IPV was 34.5%. The findings suggest that IPV is a major problem with long-term and harmful consequences for the victim. Finding from a randomized control trial in Ethiopia indicates that intervention to IPV survivors, indicated the reduction of risk of mental health problems (Leight et al 2020:4).

Globally, Intimate partner violence prevention is a challenge and had long-term health and wellbeing implications for women (Leight et al 2020:3). Thus, support intervention strategies require the participation of individuals, families, communities, stakeholders, and health care providers in enhancing the health and wellbeing of married women (IPV and abusive relationship 2021).

Healthcare providers have a significant role in the management of IPV-related mental health outcomes. Contemporary healthcare workers need to do more than just provide medical assistance; they also collaborate to promote for individuals who need it, which is critical to shatter the pattern of violence. Nursing staff and other healthcare providers, more

than family members and friends, have to be trained to recognize signs of violence and understand how to get support in a safe environment (IPV and abusive relationship 2021).

5.2 SCOPE OF THE PROPOSED STRATEGIES

The proposed support strategies are seen from community and health facility-based intervention to provide alternative ways of providing optimal mental health service using the available resources in the Ambo district. Efforts to improve the mental wellbeing of women who have been exposed to IPV require a victim-centered approach.

5.3 AIM OF THE STRATEGIES

The strategies are aimed at improving the mental health well-being of women who had experienced IPV. Addressing women mental health requires strategies to:

- Improve the capacity of health workers to perform ongoing routine IPV and mental illness assessments and appropriate treatment to enhance women's living standards.
- Enhance the capacity of community and religious leaders to provide appropriate support for couple counseling within the norm of the community.
- Develop and optimize access to services for women with domestic violence.
- Reinforce a gender paradigm shift through the Ethiopian coffee festivities.
- Strengthen women's social interaction and social engagement which can enhance the mental health of women suffering from IPV.
- Provide ongoing support and follow-up.
- Enhance the links with available resources for women (e.g., coffee ceremony), health extension program packages, and religious and community leaders for counseling onsite.

5.4 BASIS FOR THE DEVELOPMENT OF SUPPORT INTERVENTION STRATEGIES

Findings from this study, the literature review, the national mental health strategy of Ethiopia, and the legal framework on domestic violence in Ethiopia are the basis for the development of these support intervention strategies.

5.4.1 Strategy context

The foundation for these intervention strategies was inaccessible, unavailable, and poorly integrated mental health services to women who experienced IPV.

5.4.2 Research context

Findings from a meta-analysis on the effect of rural residence and educational status towards IPV shows IPV is higher on women with lower educational status (RR = 1.12 (95% CI, 1.07-1.22)) and who lived in rural regions have an increased risk of IPV (RR = 1.13 (95% CI, 1.07-1.22)) (Nabaggala, Reddy & Manda 2021:8).

Pragmatic supportive strategies are required for the improvement of women's health through IPV is preventable, elimination is incredibly difficult, and it is a socio-cultural issue that needs a wider range of changes. Intervention’s strategies include integrating mental health into existing services and strengthening health extension programs to access the service to women. This could reduce maternal mental health inequalities and enhance maternal mental health wellbeing.

5.5 INTERVENTION STRATEGIES DEVELOPMENT

The researcher used Clayton's (2019) concept of strategic management principle to propose alternative support intervention strategies of providing optimal mental health service using the available resources. Thus, from Clayton’s (2019) concept of strategy development, the researcher considered framing the objective of the intervention, problems

to be addressed by the intervention, and developing alternative intervention mechanisms to address the problems that were taken into account in the study.

Before drafting intervention strategies, this researcher was reviewed other scientific findings from contemporary study findings on IPV, predictive variables, symptoms of anxiety, and PTSD. In addition, the researcher undertook a literature review, examined the availability of mental health services, existing intervention strategies to address the health needs of women. After a rigorous review of finding from this study and the existing literature, this researcher has drafted possible intervention strategies to enhance the mental wellbeing of married women who had an experience of IPV.

Draft intervention strategies were sent to gender experts who were working in women, children, and youth affairs bureau, GBV program managers, mental health professionals, health extension workers, health bureau, who are in dealing with gender-based violence prevention and survivors' treatment for comment. Based on their feedback, the researcher revised the support intervention strategies.

Implementation of the intervention strategies would be initiated immediately after the end of this study and it requires measuring the results, effectiveness, and impacts through regular monitoring and an end evaluation. Considering the finding and relevant scientific literature and working documents, the researcher proposed the following intervention strategies after being classified with seven themes in response to IPV in Ambo district, Oromia regional state, Ethiopia.

5.5.1 Strategies for theme 1: IPV functional referral system

Referring victim women with IPV to the health center by isolating them from the community setting to ensure early intervention and for the sake of reducing the risk of physical, psychological, and mental health problems and psychological distresses play a huge impact on the victim's recovery (Nyamtema, Mwakatundu, Dominico, Mohamed, Pemba, Rumanyika, Kairuki, Kassiga, Shayo, Issa, Nzabuhakwa, Lyimo, Van Roosmalen 2016:12).

To enhance referral from the community by their representatives, key religious leaders, and health extension workers, after providing first-line treatment, requires continuous capacity development training. In this area, the training requires focusing on IPV case identification, therapeutic interviewing skills, ethical considerations and first-line treatment, and appropriate referral for a coordinated response. Considering the study finding and relevant literature, the figure summarized proposed support intervention strategies that are relevant to survivor referral.

5.5.1.1 The identified problems

- Inadequate survivor referral to the primary health care unit.

5.5.1.2 The strategic objective is to

- Strengthen the referral system and link with the Primary Health Care Units (PHCU) and the community.

5.5.1.3 Specific actions include to

- Establish case referral, evaluation and communication, reporting system between health post, community structure and PHCU and district women, child and youth affairs bureau.
- Establish safety procedures for women's referrals within and between healthcare institutions and communities.
- Improve referral communication and service delivery both before and after referring people in need.
- Enable connections between public health care facilities, health care providers, and the public's health extension workers.
- Establish IPV case referral protocol between health post, community structure, PHCU and district women, child and youth affairs bureau.
- Schedule and conduct joint referral performance and outcome evaluation.

- Arrange a short-term waiting room as part of a one-stop center for IPV survivors.
- Appoint trained focal person for IPV referral liaison among the community to district PHCU and within PHCU departments,
- Enhance the capacity of Health Extension Workers (HEWs) for inter-referral within the community and district PHCU for early intervention.
- Strengthen linkage between community, district PHCU, HEWs, women, child and youth affairs, and relevant stakeholders.
- Arrange suggestion box for feedback at the sub-district, health center, health post, and district women, child and youth affairs on service quality and the problem encountered.
- Plan and evaluate quality improvements to enhance cross-reference for appropriate service.
- Establish standard IPV victim-cantered infrastructure at the district PHCU level.
- Reinforce on-site care or referral to additional specialist care by a health extension worker and a community leader (Rees, Zweigenthal & Joyner 2014:3).

5.5.1.4 Implementing stakeholder/s

This action would be implemented by:

- District level health posts, along with HEWs
- District health facilities
- District women, children, and youth affairs
- Sub-district administrations

5.5.1.5 Time frame

The starting period would be at the end of this study, while, they will communicate to the relevant body/bodies and, it depends on the operational plan of the stakeholder/s.

5.5.1.6 Evaluation

These proposed support intervention strategies will be evaluated quarterly as performance evaluation during the midterm and the end of the operational fiscal budget year. Meanwhile, the impact would be assessed at the end of their strategic plan year.

5.5.2 Strategies for theme 2: Maximize response to IPV

Under this section: the following issues were addressed and they include,

5.5.2.1 Identified problems

- Inadequately skilled staff/ high workload/lack of experience.
- Lack of awareness on burden and consequences of IPV, normalizing, and negligence.

5.5.2.2 Strategic objective

- Increase IPV victim's skill service providers in district health facilities, health posts, and community key leaders.
- Enhance the knowledge of community leaders, HEWs, district health facilities health care providers on the universal right of women and equality.

5.5.2.3 Specific Action

- Taking into account the staff development plan by type and numbers, considering relevant staff in response to IPV.
- Consider IPV response team during recruitment and training, including mental health, social workers, and psychologists.

- Plan and arrange continuous professional development and in-service training for district health facilities staff and HEWs on screening, diagnosis, holistic management of IPV victims.
- Provide training on IPV and women's right to the community leaders.
- Strengthen community-based health programs including health promotion, prevention, screening, and management of IPV and its outcome with the available community resource.
- Plan and provide in-service training on mental health intervention including therapeutic counseling to survivors to reduce stress, improve the ability to cope, and enhance their health.
- Strengthen women-centered practice.
- Develop a reward system, relevant to women-centered case identification, referral, and treatment to district health facilities staff, HEWs, and community leaders.
- Ensure IPV case management provides by skilled and trained personnel with comprehensive women-friendly care at health facility and health post level.
- Provide training to the provider on communication and ethical protocol relevant to women-centered care.
- Setting minimum skills level on therapeutic communication, code of ethical protocols, screening, and comprehensive management and inter and cross-referral system dealing with IPV by district health facilities and health post staff.
- The health provider should respect all women and treat them with dignity in health facilities and health posts.
- The health provider should communicate with victims easy to understand.
- Treat equally regardless of gender identity.
- Address women's concerns in a respectful manner without judgment.
- Considering women-friendly care as part of performance appraisal.
- Establish compliance mechanisms by women and disciplinary protocol to protect clients from harassment, maltreatment, and further abuse.

5.5.2.4 Implementing stakeholder/s

This action would be implemented by:

- District health facilities
- District women, children, and youth affairs
- District health bureau
- Health care providers

5.5.2.5 Time frame

- At the end of this study, but it depends on the implementing agency.

5.5.2.6 Evaluation

- These proposed support intervention strategies will be evaluated quarterly as performance evaluation, during the midterm and the end of the operational budget year. Meanwhile, the impact would be assessed at the end of their strategic plan year.

5.5.3 Strategies for theme 3: system-level response to IPV

Under this section, the following issues were addressed which were,

5.5.3.1 Identified problem

- Inadequate enactment of laws, guidelines, and safety standards relevant to IPV prevention and response.
- Insufficient awareness of laws, guidelines, and safety standards relevant to IPV, its prevention, and response.

5.5.3.2 Strategic objective

- Ensure the implementation of relevant regional, national, and ratified laws, guidelines, and standard protocols in prevention and response of IPV by district health and women, child and youth affairs bureau, and health facilities.
- Advocate relevant regional, national, and ratified laws, guidelines, and standard protocols in prevention and the women-centred response of IPV.

5.5.3.3 Specific action

- Establish and maintain a procedure for detecting and managing the demands of domestic violence survivors.
- Integrate IPV case management, mentoring, and reporting, evaluation into the PHCU and health post.
- Establish screening, management, referral, documentation regulatory mechanism by district health bureau.
- Revise district health bureau and health facilities plan, which restricting integrating IPV response.
- Creating a positive environment in the health facilities to disclose IPV.
- Appropriate violence and service-related information to de-escalate intimate partner violence.
- Advocate health workers to be aware of the incidence rate of domestic abuse consequently, the need for screening and intervention (Meyer, Rege, Avalaskar, Deosthali, Garcia -Moreno & Amin 2020:3).
- Provide rural-focused training to the community, religious leaders, and other key community members on IPV, prevention and screening, management, and referral including first-line counseling as part of the comprehensive intervention.
- Strengthen the social network of the community for disclosing and preventing IPV
- Improve efficacy towards gender-empowered community-focused interventions for changing gender stereotypes (Leight et al 2020:3).
- Launch and strengthen supportive community-based initiatives.

- Strengthen existing community-based protection mechanisms.
- Strengthen community self-help and resilience cultures.
- Support for gender equality (WHO 2017:8).

5.5.3.4 Implementing stakeholders/s

This action would be implemented by:

- District health facilities
- District women, child and youth affairs bureaus
- District health bureau
- District administration
- Sub-district administrations
- Sub-district leaders

5.5.3.5 Time frame

- At the end of this study, but it depends on the implementing agency.

5.5.3.6 Evaluation

- Annually

5.5.4 Strategies for theme 4: Coordinated response to IPV

This section is consistent with,

5.5.4.1 Identified problem

- Poorly integrated mental health services in the district health facilities.

5.5.4.2 Strategic objectives

- Strengthen IPV service integration to the existing health facilities.

5.5.4.3 Specific action

- Integrate IPV intervention including mental health into the established service (Rees, Zweigenthal & Joyner.2014:4) to decrease mental health problems.
- Strengthen IPV prevention and intervention to rural health extension programs.
- Incorporating appropriate indicators into routine reporting (Rees, Zweigenthal & Joyner 2014:4) system of the health facilities.
- Establish standard operating procedures for service delivery.
- Assess health service providers' readiness to provide IPV-related service.

5.5.4.4 Implementing stakeholder/s

These strategies would be implemented by:

- District health facilities and,
- District health bureau

5.5.4.5 Time frame

- At the end of this study

5.5.4.6 Evaluation

- It will be evaluated quarterly as performance evaluation, midterm, and end of the budget year.

5.5.5 Strategies for theme 5: Mental health interventions

Under theme 5, the following issues were addressed which are:

5.5.5.1 Identified problem

- Poor mental health and counselling service at the district PHCU level.

5.5.5.2 Strategic objective

- Establish and provide IPV victims-centred mental health service.

5.5.5.3 Specific action

- Provide in-service training to the staff on Mental Health Gap Action Program (MHGAP) intervention guide, counseling, and psychological support skills relevant to IPV response.
- Provide mental health and counseling service by trained staff to IPV victims.
- Provides sympathetic care to women.

5.5.5.4 Implementing stakeholder/s

- District health facilities

5.5.5.5 Time frame

- At the end of this study, but it depends on the implementing agency.

5.5.5.6 Evaluation

- It will be evaluated quarterly as performance evaluation, midterm, and end of the operational fiscal budget year.

5.5.6 Strategies for theme 6: IPV victim screening

This section also discussed the following points which are:

5.5.6.1 Identified problems

- Insufficient IPV victim screening at the district health facilities level.

5.5.6.2 Strategic objectives

- Enhance IPV victim screening within the existing service.

5.5.6.3 Specific action

- Establish screening procedures in primary health care primarily in ANC, family planning, post-natal, pediatrics, emergency, and outpatient department.
- Enhance the staff's skill in screening or identification of women experiencing IPV.
- Routinely assess any danger, risk, and contextual factors (Ramsay, Rivas and Feder 2005:155).
- Ensuring privacy and confidentiality of women who have been subjected to violence.

5.5.6.4 Implementing stakeholder/s

- District health facilities
- District women, children, and youth affairs bureaus
- Health extension workers

- Health facilities clinical staff and,
- Community leaders

5.5.6.5 Time frame

- At the end of this study, but it depends on the implementing agency

5.5.6.6 Evaluation

- It will be evaluated quarterly as performance evaluation, midterm, and end of the operational fiscal budget year.

5.5.7 Strategies for theme 7: victim-centered interventions

Under this section,

5.5.7.1 Identified problem

- Insufficient IPV victim-centered interventions.

5.5.7.2 Strategic objective

- Advocate women's rights, equality, and self-determination, availabilities of regional and national laws.

5.5.7.3 Specific action

- Provide advice, support, and information, and liaison with other organizations on behalf of women.
- Negotiate to access community resources (Ramsay et al 2005:155).
- Empower women to understand their situation (Rees, Zweigenthal and Joyner 2014:4).

- Help women to report any annoying incidents and physical abuse.
- Provides information to women and assists them in making informed decisions (Colombini, Dockerty and Mayhew 2017:9).
- Empower women to participate in their care.
- Advice on the available alternatives of service at the community and (Ramsay, Rivas and Feder 2005:156) service at the health facility setting.
- Strengthen discussion with abused women by coffee ceremony, to share experiences from groups who had an experience of IPV.
- Help to cope and start working through her emotions and feelings (Ramsay et al 2005:155).
- Facilitate and advocate the involvement of women in social, community-level representation and participation.

5.5.7.4 Implementing stakeholder/s

- District health facilities
- District women, children, and youth affairs bureau
- Health extension workers
- Health facilities clinical staff
- Community leaders

5.5.7.5 Time frame

- At the end of this study, but it depends on the implementing agency.

5.5.7.6 Evaluation

- It will be evaluated, monthly and quarterly as a performance evaluation, midterm, and end of the operational fiscal budget year.

5.6 IMPLEMENTATION OF THE STRATEGIES

This study aims to develop alternative support intervention strategies in response to intimate partner violence. Therefore, these support intervention strategies would be sent to health facilities in the district, health posts, women, children, and youth affairs in the district, and other stakeholders for appropriate measures to decrease IPV enhancing the mental health of married women. Furthermore, the relevant stakeholders that are mentioned above, could take an action taking into account the stated time frame for implementation and evaluation.

5.7 CONCLUSION

In Chapter five we have discussed possible intervention strategies to promote the health and wellbeing of women by reducing IPV. The support intervention strategies were developed based on the current findings, existing literature, and WHO recommendations. Support intervention strategies were focused on three major areas, which were individual, community and health care level intervention. Each category had a focus and proposed interventions for implementation. The next chapter, (chapter 6) will summarize the study's findings and provides suggestions for intervention and further researches.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter presents the conclusions from the research findings, which are consistent with the study purpose. Furthermore, the recommendations, the discipline's contribution, and the study's limitations are addressed.

6.2 REALIZATION OF STUDY SAMPLE

A research design is a strategy for attempting to investigate the study hypothesis whereas research methods are the procedures for carrying out that strategy. Study designs and methods are distinct but interrelated, and a good design ensures that the data gathered effectively address the research questions (Research…2018). According to Creswell (2018:58), a study design refers to "strategies for gathering, examining, evaluating, and presenting study findings."

A study design specifies the process for collecting the information, the techniques that would be used to carry out research, and also how it will be used to analyze and interpret the data. After describing the purpose of the research, the researcher used a cross-sectional study design to understand IPV and its mental health consequences. Based on the findings, an attempt was made against propose possible intervention strategies for intimate partner violence to married women in Ethiopia.

The research study participants were interviewed using PTSD checklist-civilian version (PCL-C) questions, BAI rating scale, and health and life events for IPV questionnaires. The research was community-based targeting married women from the rural sub-district of Ambo, Oromia regional state, Ethiopia. The sample size was proportionally allocated to the population for each sub-district. Regarding calculating the sample size of the study, it was calculated for each specific objective and the large sample size was considered as a

sample for possible study by taking into account 10% of the non-response rate. A study dealing with IPV needs to assure the ethical integrity to avoid further violence on women. Thus, the WHO ethical guidelines while conducting a study on IPV were adhered to. In this study, all ethical principles were accordingly considered. Ethical clearance and a letter of permission were granted by UNISA and Ambo University, Ethiopia.

6.3 CONCLUSIONS

6.3.1 Prevalence of intimate partner violence

Analysis of current findings, as well as the review literature, conclude that the burden of IPV is a worldwide women's rights and health issue. One in three women experienced at least one type of IPV. The current study findings are consistent with those of WHO in 2021 report. Globally, IPV is a serious human rights and health problem and the problem is much worse in resource-limited countries including Ethiopia.

Among the types of IPV, psychological violence is more prevalent (25.9%) as reported by married women. Of the other types of IPV, physical and sexual violence in the past twelve months accounted for 20.8% and 15.3%, respectively. Comparing with the findings from a large-scale study, the Ethiopian health demographic survey of 2016, IPV is a key health and human rights problem. In conclusion, the findings highlight the need for addressing IPV at national and regional levels.

6.3.2 Anxiety and PTSD symptoms among married women

The research findings indicate that 10.2% (n=96) of the married women had an experience of indicative symptoms of anxiety. Of those, 8.6% (n=81) had an indicative level of anxiety symptoms. PTSD had a prevalence rate of 11% (n=104) among the study participants. The findings are suggestive of organized and collective collaboration at the systems level by local and regional governments, community members and women who were experiencing IPV to design supportive actions to enhance the wellness of married women.

6.3.3 Intimate partner violence and mental health outcomes

In reviewing the preceding participants' exposure to IPV, the study found that the twelve months of experience of IPV increased the likelihood of anxiety and PTSD symptoms. With any type of IPV, anxiety and PTSD symptoms increased. However, occurrence of anxiety and PTSD symptoms is higher with psychological violence. The current finding is consistent with the literature and it highlights the importance of women-friendly mental health interventions in a rural setting.

6.4 RECOMMENDATIONS

Based on the current research findings, the researcher proposes the following recommendations.

6.4.1 Recommendation to women, youth, and children affairs

- Understanding the context of violence will help to design an evidence-based intervention.
- Empowering women
- Strengthening, implementing, and evaluating local operational and strategic plans towards gender equality at district and sub-district level of the rural areas.
- Strengthening means of communication and community engagement in highlighting the potential impact of IPV, the rights of women, and the system of reporting.

6.4.2 Recommendation to the regional health office

- Integrating women-friendly mental health and IPV-related services at the district health care facilities.
- Enhancing the capacity of district-level health professionals to screen, treat and refer IPV and IPV-induced mental health problems.
- Integrating IPV screening and reports in the reporting system.

6.4.3 Recommendation to district health care practitioners

- Routinely screen for any sign of IPV perpetration and mental health problems.

6.4.4 Recommendation for future research

Under this section, the following recommendations are proposed by the researcher. Which include:

- Investigate the problem with robust research design and methodologies which include longitudinal and randomized control trial studies with a large sample and diverse geographic areas.
- Investigate the bidirectional causal pathway, mediators, effect modifiers of IPV, and mental health outcomes.

6.5 CONTRIBUTIONS OF THE STUDY

This research's findings could be an input for further scientific studies on the area of mental health since there are limited findings on anxiety and PTSD symptoms. Furthermore, it will be an input for the respective health office and/or bureau to consider integrating mental health services on a regular basis as part of the initial assessment in all health care facilities. It could enrich content for in-service training to increase the knowledge, change attitudes, and practices towards IPV and mental health outcome management.

Furthermore, the findings will enable institutions and policymakers to revise health extension workers' training curriculum to enable them to provide regular advocacy, screening, management, and referral to appropriate health institutions. The study also assisted in the development of support intervention strategies for IPV and its mental health outcomes.

6.6 LIMITATIONS OF THE STUDY

Since the research was guided by a quantitative approach, there is a need to also qualitatively explore the situation of IPV in a rural setting. An understanding of the causal relationship between IPV, anxiety, and PTSD symptoms, requires another design which includes randomized control trials. Before recommending sound support intervention strategies, the alternatives should be tested through repeated controlled trial studies.

6.7 CONCLUDING REMARKS

IPV is a major universal human rights violation and a great health concern. The challenges are worse in resource-limited countries and male-dominated communities. The low educational level and the low socio-economic status of the women in the community coupled with cultural barriers originating from patriarchal society increase the risks of IPV. In Ethiopia, 85% of the people live in rural areas, and 51% of the population are women, IIPV is a human rights problem. Thus, the government and stakeholders should take women's rights and equality as a priority national agenda to achieve the SDG-5 goal by 2030.

LIST OF REFERENCES

Abderehim, S. 2019. *Depression, anxiety, and stress among non-communicable disease patients: Diabetes mellitus and hypertension as paradigmatic illnesses.* Unpublished Master's thesis. Addis Ababa University, Addis Ababa.

Abramsky, T, Lees, S, Stockl, H, Harvey, S, Kapinga, M, Mshana, G and Kapiga, S. 2019. Women's income and risk of intimate partner violence: secondary findings from the Maisha cluster-randomized trial in North-Western Tanzania. *BMC Public Health,* 19 (1108): 1-15.

Adhena, G, Oljira, L, Dessie, Y and Hidru, HD. 2020. The magnitude of intimate partner violence and associated factors among pregnant women in Ethiopia. *Advances in Public Health*, 2020:1-9.

African Women's Development and Communication Network. 2010. The African women's decade (2010-2020): A call for action, action and more action. *The African Women's Journal,* 1(1): 27.

Agenagnew, L, Tebeje, B and Tilahun, R. 2020. Research article disclosure of intimate partner violence and associated factors among victimized women, Ethiopia. *Hindawi,* (July):1-10.

Aggarwal, R and Ranganathan, P. 2019. Study design: Descriptive studies. *Perspectives in Clinical Research,* 10(1):34-36.

Semahegn, A and Mengistie, B .2015. Domestic violence against women and associated factors in Ethiopia. *Reproductive Health,* 12 (78):1-12.

Akaranga, SI and Makau, BK 2016. Ethical considerations and their applications to research .*Journal of Educational Policy and Entrepreneurial Research,* 3 (12):1-9.

Al-Atrushi, HH, Al-Tawil, NG, Shabila, NP and Al-Hadithi, TS. 2013. Intimate partner violence against women in the Erbil city of the Kurdistan region, Iraq. *BMC Women's Health,* 13 (37):1-9.

Allen, M and Raghallaigh, MN. 2013. Domestic violence in a developing context*:* The perspectives of women in Northern Ethiopia*. Journal of Women and Social Work,* 28(3):256-272*.*

Alonso, J, Liu, Z, Evans-Lacko, S, Sadikova, E, Sampson, N, Chatterji, S, Abdulmalik, J, Aguilar-Gaxiola, S, Al-Hamzawi, A, Andrade, LH., Bruffaerts, R, Cardoso, G, Cia, A, Florescu, S, de Girolamo, G, Gureje, O, Haro, JM, He, Y, de Jonge, P, Karam, EG, Kawakami, N, Kovess-Masfety, V, Lee, S, Levinson, D, Medina-Mora, M.E, Navarro-Mateu, F, Pennell, BE, Piazza, M, Posada-Villa, J, Ten Have, M, Zarkov, Z, Kessler, RC and Thornicroft, G: WHO world mental health survey collaborators. 2018. The treatment gap for anxiety disorders is global: results of the world mental health surveys in 21 countries. *Depression and anxiety*, *35*(3):195-208.

Ali, SH, and Agyapong, VI. 2015. Barriers to mental health service utilization in Sudan - perspectives of careers and psychiatrists. *BMC Health Services Research*, 16(31):1-10.

Alvarez, C, Fedock, G, Grace, KT and Campbell, J. 2016. Provider screening and counseling for intimate partner violence: a systematic review of practices and influencing factors. *Trauma, Violence, & Abuse,* 18(5):479-495.

American Psychiatric Association (APA). 2013. *Diagnostic and Statistical Manual of Mental Disorders*. 5th edition. Arlington: American Psychiatric Publishing.

American Psychiatric Association (APA): Division of Diversity and Health Equity Treating. 2019. Women who have experienced intimate partner violence. Arlington. APA

American Psychiatric Association. 2019. *Intimate Partner Violence: A Guide for Psychiatrists Treating IPV Survivors*. From: https://www.psychiatry.org/psychiatrists /cultural-competency/education/intimate-partner-violence (accessed 6 December 2020).

Andarge, E and Shiferaw, Y. 2018. Disparities in intimate partner violence among currently married women from food secure and insecure urban households in South Ethiopia. *BioMed Research International,* (2018):1-13.

Andrade, C. 2015. Understanding relative risk, odds ratio, and related terms : as simple as it can get. *Clinical and Practical Psychopharmacology,* 76(7):857-861.

Dean, AG, Sullivan, K.M, Zubieta, J and Delhumeau, C. 2000. *Epi Info 2000: a database, and statistics program for public health professionals*. Atlanta, Georgia, USA: Centres for Disease Control and Prevention:1-302.

Apuke, OD. 2017. Quantitative research methods : a synopsis approach. *Arabian Journal of Business and Management Review,* 6(10):40-47.

Arroyo, K, Lundahl, B, Butters, R, Vanderloo, M and Wood, DS. 2016. Short-term interventions for survivors of intimate partner violence. *Trauma, Violence, & Abuse*, 18(2): 155-171.

Asnakew, S, Shumet, S, Ginbare, W, Legas, G, and Haile, K. 2019. Prevalence of post-traumatic stress disorder and associated factors among Koshe landslide survivors, Addis Ababa, Ethiopia: a community-based, cross-sectional study*. BMJ Open, 9(6):1-8.*

Atwoli, L, Stein, DJ, Koenen, KC, and McLaughlin, KA. 2015. Epidemiology of posttraumatic stress disorder*. Current Opinion in Psychiatry,* 28(4)*:* 307-311

Avasthi, A, Ghosh, A, Sarkar, S and Grover, S. 2013. Ethics in medical research: General principles with special reference to psychiatry research*. Indian Journal of Psychiatry,* 55(1)*:* 86-91.

Ayele, G and Teferi, A. 2015. *Women and justice in SNNPR*. Hawasa University. Hawassa.

Babcock, JC, Roseman, A., Green, CE, and Ross, JM. 2008. Intimate partner abuse and PTSD symptomatology: Examining mediators and moderators of the abuse-trauma link. *Journal of Family Psychology,* 22(6): 809-818.

Bacon-Shone, J. 2013. *Introduction to Quantitative Research Methods: A guide for research postgraduate students*. The University of Hong Kong. Hong Kong.

Bandelow, B and Michaelis, S. 2015. Epidemiology of anxiety disorders in the 21st century. *Dialogues in Clinical Neuroscience,* 17(3):327-335.

Bardhoshi, G, Duncan, K and Erford, BT. 2016. Psychometric meta-analysis of the English version of the beck anxiety inventory. *Journal of Counselling & Development,* 94(3):356-373.

Baye, K. 2020. *COVID-19 prevention measures in Ethiopia. ESSP working paper -Ethiopia strategy support program*. From :http://lebrary.ifpri.org/utils/getfile/collection/ p15738coll2 /id/133729/filename/133940.pdf (accessed 5 March 2021).

Bazargan-Hejazi, S, Medeiros, S, Mohammadi, R, Lin, J and Dalal, K. 2013. Patterns of intimate partner violence: a study of female victims in Malawi. *Journal of injury & violence research*, 5(1):38-50.

Beck, AT, Epstein, N, Brown, G and Steer, RA. 1988. An inventory for measuring clinical anxiety: Psychometric properties. J*ournal of Consulting and Clinical Psychology,* 56(1): 893-897.

Bhatia, A, Peterman, A and Guedes, A. 2020. *Remote data collection on violence against children during COVID-19: A conversation with experts on research priorities, measurement and ethics*, *Office of research-Innocenti discussion paper: Unicef*. From:

https://www.unicef-irc.org/article/2004-collecting-remote-data-on-violence-against-children-during-covid-19-a-conversation.html (accessed: 17 February 2021).

Bjorktomta, SB. 2019. Honor-based violence in Sweden -norms of honor and chastity. *Journal of Family Violence,* 34(5):449-460.

Blackburn, CH, Martin, BN and Hutchinson, S. 2006. The role of gender and how it relates to conflict. *Journal of Women in Educational Leadership,* 204(1):32-41.

Blanchfield, L, Margesson, R and Seelke, CR. 2009. *International violence against women*. New York: Nova science publishers. From: http://www.novapublishers.com (accessed 5 March 2021).

Blosnich, JR, Kopacz, MS, McCarten, J & Bossarte, RM. 2014. *Mental health and self-directed violence among student service members/Veterans in postsecondary education. Journal of American College Health, 63(7): 418-426.*

Breiding, MJ, Basile, KC, Smith SG, Black, MC and Mahendra, RR. 2015. Intimate partner violence surveillance: Uniform definitions and recommended data elements, Version 2.0. Atlanta (GA): National Centre for injury prevention and control, centers for disease control and prevention. From: http://www.pubmedcentral.nih.gov/ article render (accessed 5 March 2021).

Britannica Academic. 2021. *Ethiopia*. From:https://academic-eb-com.eres.qnl.qa/levels/collegiate/article/Ethiopia/108373#article-contributors (accessed: 4 March 2021).

Calvete, E, Corral, S and Estevez, A. 2008. Coping as a mediator and moderator between intimate partner violence and symptoms of anxiety and depression. *Violence Against Women,* 14(8):886-904.

Casanueva, C. E., Smith, K. R., Ringeisen, H., Dolan, M. M., & Tueller, S. J. 2014. Families in need of domestic violence services reported to the child welfare system:

Changes in the National Survey of Child and Adolescent Well-Being between 1999–2000 and 2008–2009. *Child Abuse and Neglect*, 38(10), 1683–1693.

Castner, J. 2020. Typology of interpersonal violence model with applications in emergency nursing: forensics and interpersonal violence special issue. *Journal of emergency nursing,* 46(3):275-282.

Central Statistical Authority (CSA). 2007. *Population and housing census of Ethiopia*. Addis Ababa.

Central Statistical Agency (CSA) and ICF. 2016. *Ethiopia demographic and health survey*. Addis Ababa and Rockville. Maryland, USA.

Chandan, JS, Thomas, T, Bradbury-Jones, C, Russell, R, Bandyopadhyay, S, Nirantharakumar, K and Taylor, J. 2020. Female survivors of intimate partner violence and risk of depression, anxiety, and serious mental illness. *The British journal of psychiatry: the journal of mental science*, *217* (4): 562-567.

Charara, R. et al. 2017. The burden of mental disorders in the Eastern Mediterranean region, 1990-2013. *PloS One*, *12*(1):1-17.

Chemali, ZN, Borba, CP, Henderson, TE and Tesfaye, M. 2013. Making strides in women's mental health care delivery in rural Ethiopia: demographics of a female outpatient psychiatric cohort at Jimma University Specialized Hospital (2006-2008). *International journal of women's health*, (*5)*:413-419.

Cherinet, M and Mulugeta, E. 2003. *Towards gender equality in Ethiopia*. Stockholm Sweden.

Chernet, AG and Cherie, KT. 2020. Prevalence of intimate partner violence against women and associated factors in Ethiopia. *BMC Women's Health,* 20 (22):1-7.

Chichester, O, Pluess, JD, Lee, M and Taylor, A. 2017. *Women's economic empowerment in Sub-Saharan Africa: Recommendations for business action*, *the business of world* https://internationalwim.org/iwim-reports/womens-economic-empowerment-in-sub-saharan-africa / (accessed 4 March 2021).

Clements, CM, Bennett, VE, Hungerford, A, Clauss, K. and Wait, SK. 2018. Psychopathology and coping in survivors of intimate partner violence: Associations with Race and Abuse Severity*. Journal of Aggression, Maltreatment & Trauma,* 28 (2):1-17.

Coker, AL, Smith, PH & Fadden, MK. 2005. Intimate partner violence and disabilities among women attending family practice clinics. *Journal of women's health, 14*(9): 829-838.

Coll, C, Ewerling, F, Garcia-Moreno, C, Hellwig, F and Barros, A. 2020. Intimate partner violence in 46 low-income and middle-income countries: an appraisal of the most vulnerable groups of women using national health surveys. *BMJ global health*, *5*(1):1-10.

Colombini, M, Dockerty, C & Mayhew, SH. 2017. Barriers and facilitators to integrating health service responses to intimate partner violence in low and middle-income countries: comparative health systems and service analysis. *Studies in Family Planning, 48(2):*179-200.

Condino, V, Tanzilli, A, Speranza, AM & Lingiardi, V. 2016. Therapeutic interventions in intimate partner violence: an overview. Research in psychotherapy*: Psychopathology, Process and Outcome*, 19(2):79-88.

Council of Economic Advisers. 2020. *The W-GDP index: empowering women's economic activity through addressing legal barriers*.

Creswell, JW and Creswell, JD. 2018. *Research design: qualitative, quantitative, and mixed methods approach*. 5th edition. London: SAGE Publications.

Cyr, ME, Etchin, AG, Guthrie, BJ and Benneyan, JC. 2019. Access to specialty healthcare in urban versus rural US populations: a systematic literature review*. BMC Health Services Research,* 19(974):1-17.

Dea, M. 2016. The prospectus, challenges, and causes of gender disparity and its implication for Ethiopia's development: qualitative inquiry. *Journal of Education and Practice,* 7(4):24-37.

Delatorre, MZ and Wagner, A. 2018. Marital conflict management of married men and women. *Psico-USF,* 23(2): 229-240.

Deeo, D and Krysinska, K. 2017. Suicide and self-directed violence. In S.R. Quah (Ed.), *International Encyclopedia of Public Health* (2nd ed., pp. 115-123).

Depression Association America. 2020. *Facts and statistics: anxiety disorder*. From: https://adaa.org/about-adaa/press-room/facts-statistics (accessed 5 December 2020).

Deribe, K, Beyene, B.K, Tolla, A, Memiah, P, Biadgilign, S & Amberbir, A. 2012. The magnitude and correlates of intimate partner violence against women and its outcome in Southwest Ethiopia*. PLoS One,* 7(4):1-7*.*

Devries, KM, Mak, JY, Bacchus, LJ, Child, JC, Falder, G, Petzold, M, Astbury, J and Watts, CH. 2013. Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. *PLoS medicine*, *10*(5):1-11.

Devries, KM, Mak, JY, Garcia-Moreno, C, Petzold, M, Child, JC, Falder, G, Lim, S, Bacchus, LJ, Engell, RE, Rosenfeld, L, Pallitto, C, Vos, T, Abrahams, N & Watts, CH. 2013. The global prevalence of intimate partner violence against women. *Science*, *340* (6140): 1527-1528.

Deyessa, N, Berhane, Y, Alem, A, Ellsberg, M, Emmelin, M, Hogberg, U & Kullgren, G. 2009. Intimate partner violence and depression among women in rural Ethiopia: a cross-sectional study. *Clinical practice and epidemiology in mental health, 5*(8):1-10.

Deyessa, N, Berhane, Y, Ellsberg, M, Emmelin, M, Kullgren, G & Hogberg, U. 2010. Violence against women concerning literacy and area of residence in Ethiopia. *Global health action*, *3* (2070):1-10.

Dicola, D and Spaar, E. 2016. Intimate partner violence. *American Family Physician,* 94 (8): 646-651.

Dillon, G, Hussain, R, Loxton, D and Rahman, S. 2013. Mental and physical health and intimate partner violence against women: a review of the literature*. International Journal of Family Medicine, 2013:1-15.*

Divsalar, P and Dehesh, T. 2020. Prevalence and predictors of post-traumatic stress disorder and depression among survivors over 12 years after the Bam earthquake. *Neuropsychiatric Disease and Treatment,* 16 (1):1207-1216.

Djamba, YK and Kimuna, SR. 2015. *Gender-based violence: a perspective from Africa, the Middle East, and India*. New York: Springer.

Dokkedahl, S, Kok, RN, Murphy, S, Kristensen, TR, Bech-Hansen, D & Elklit, A. 2019. The psychological subtype of intimate partner violence and its effect on mental health: protocol for a systematic review and meta-analysis*. Systematic Reviews, 8(198):*1-10.

Dutton, MA. 2009. Pathways linking intimate partner violence and posttraumatic disorder. *Trauma Violence & Abuse,* 10(3): 211-224.

Ehrensaft, MK, Cohen, P, Brown, J, Smailes, E, Chen, H and Johnson, JG. 2003. Intergenerational transmission of partner violence: a 20-year prospective study. *Journal of consulting and clinical psychology*, *71* (4): 741-753.

Ellsberg, M and Emmelin, M. 2014. Intimate partner violence and mental health. *Global Health Action* 7(256):1-3.

Ellsberg, M and Heise, L. 2005. *Researching violence against women: a practical guide for researchers and activists*, *World Health Organization*. Washington DC, United States: World Health Organization.

Embassy of the federal democratic republic of Ethiopia, London. 2021. *Ethiopia declares a State of Emergency to curb transmission of Coronavirus*. From: https://www. ethioembassy.org.uk/ethiopia-declares-state-of-emergency-to-curb-transmission-of-coronavirus (accessed: 17 February 2021).

FDRE. 2004. The criminal code of the Federal Democratic Republic of Ethiopia. *Negarita Gazeta* (414):182-183.

Federal Democratic Republic of Ethiopia.1995. Constitution. *Federal Negarit Gazeta*.1-40.
Federal Ministry of Health. 2011. *National Mental Health Strategy 2012/13-2015/16.* Addis Ababa. Government Printer.

Fekadu, E, Yigzaw, G, Gelaye, KA, Ayele, TA, Minwuye, T, Geneta, T & Teshome, DF. 2018. Prevalence of domestic violence and associated factors among pregnant women attending antenatal care service at University of Gondar Referral Hospital, Northwest Ethiopia. *BMC women's health*, *18*(138):1-8.

Ferrari, G, Agnew-Davies, R, Bailey, J, Howard, L, Howarth, E, Peters, TJ, Sardinha, L, and Feder, GS. 2016. Domestic violence and mental health: a cross-sectional survey of women seeking help from domestic violence support services. *Global health action*, *9* (29890):1-10.

Feseha, G, Gmariam, A and Gerbaba, M. 2012. Intimate partner physical violence among women in Shimelba refugee camp, Northern Ethiopia. *BMC Public Health*, 12(125):1-10.

Fincham, FD. 2003. Marital conflict: Correlates, structure, and context. *Current Directions in Psychological Science,* 12(23):23-27.

Fink, A. 2014. *Book and media reviews: Conducting research literature reviews: from the internet to paper*. *New horizons in adult education and human resource development*. 54th edition. Los Angeles: SAGE Publications.

Flury, M, Nyberg, E and Riecher-Rossler, A. 2010. Domestic violence against women: Definitions, epidemiology, risk factors, and consequences. *Swiss Medical Weekly,*140:23-27.

Flynn, A and Graham, K. 2010. Why did it happen? A review and conceptual framework for research on perpetrators and victims, explanations for intimate partner violence: *Aggression and Violent Behavior* 15(3):1-25.

FMOH. 2020. *National comprehensive COVID-19 management handbook*. Addis Ababa: FMOH, Ethiopia:FMOH 1-162.

Fonseca-Machado, M, Monteiro, J.C, Haas, VJ, Abrao, AC & Gomes-Sponholz, F. 2015. Intimate partner violence and anxiety disorders in pregnancy: the importance of vocational training of the nursing staff in facing them. *Revista latino-americana de enfermagem*, 23(5): 855-864.

Friend, DJ, Cleary Bradley, RP, Thatcher, R and Gottman, JM. 2011. Typologies of intimate partner violence: evaluation of a screening instrument for differentiation. *Journal of Family Violence, 26(7): 551-563.*\

Fydrich, T, Dowdall, D & Chambless, DL. 1992. *Reliability and validity of the Beck Anxiety Inventory. Journal of Anxiety Disorders, 6(1): 55-61.*

Garcia-Moreno, C, Jansen, HA, Ellsberg, M, Heise, L, Watts, CH. 2006. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *Lancet*, *368*(9543):1260-1269.

Garcia-Moreno, C. 2005. Who multi-country study on women's health and domestic violence against women. *WHO Press*:1-118.

Gebrselassie, HK. 2019. Empirical analysis on potential risk factors for domestic violence against women in Ethiopia. *Journal of Scientific Research and Reports,* 24(2):1-11.

Google Maps. 2022. *Ambo district.* Google Maps [online] Available through: https://mapcarta.com/13016254 [Accessed 15 May 2022].

Greene, MC, Rees, S, Likindikoki, S, Bonz, AG, Joscelyne, A, Kaysen, D, Nixon, R, Njau, T, Tankink, M, Tiwari, A, Ventevogel, P, Mbwambo, J and Tol, WA. 2019. Developing an integrated intervention to address intimate partner violence and psychological distress in Congolese refugee women in Tanzania. *Conflict and health*, *13*(38):1-16.

Groh, CJ. 2013. Depression in rural women: Implications for nurse practitioners in primary care settings. *Journal of the American Academy of Nurse Practitioners,* 25(2):1-7.

Grove, SK, Burns, N and Gray, JR. 2012. *Designs for quantitative nursing research : quick-access chart descriptive study designs correlational study designs quasi-experimental study designs*. 7th edition. St. Louis, Missouri: Elsevier Saunders.

Grove, SK and Gray, JR. 2018. *Understanding nursing research building an evidence-based practice*. 7th edition. Louis, Missouri: Saunders/Elsevier.

Hanlon, C, Alem, A, Lund, C, Hailemariam, D, Assefa, E, Giorgis, TW and Chisholm, D. 2019. Moving towards universal health coverage for mental disorders in Ethiopia. *International journal of mental health systems*, *13*(11):1-16.

Hansen, NB, Eriksen, SB and Elklit, A. 2014. Effects of an intervention program for female victims of intimate partner violence on psychological symptoms and perceived social support. *European Journal of Psychotraumatology,* 5(1):1-10.

Hardesty, JL and Ogolsky, BG. 2020. A socioecological perspective on intimate partner violence research: a decade in review. *Journal of Marriage and Family,* 82(1):454-477.

Harris, D. 2020. *Literature review and research design*. 1st edition. New York: Routledge.

Heise, LL. 1998. Violence against women: An integrated, ecological framework. *Violence Against Woman,* 4(3):262-290.

Henok, A, Tsehaw, A, Negash, M and Negash, S. 2015. Prevalence and consequences of domestic violence among married women in Sheybench Town, Bench Maji Zone. *Journal of Biology, Agriculture and Healthcare, 5*(13):168-176.

Henrie, JL. 2014. *The posttraumatic outcome of intimate partner violence: An examination of risk factors*. *Dissertations*. The University of Arkansas. Arkansas.

Herrman, H. 2016. Improving the mental health of women and girls : psychiatrists as partners for change WPA Scientific Sections. *World Psychiatry,* 15(2):190-191.

Hindin, MJ, Kishor, S and Ansara, DL. 2008. *Intimate partner violence among couples in 10 DHS countries: Predictors and health outcomes: DHS Analytical Studies*. Calverton, Maryland, USA: Macro International Inc.

Horn, R, Puffer, ES, Roesch, E & Lehmann, H. 2014. Women's perceptions of effects of war on intimate partner violence and gender roles in two post-conflict West African Countries: consequences and unexpected opportunities. *Conflict and health*, *8*(12):1-13.

Hudson, JI, Pope, HG and Glynn, RJ 2005. The cross-sectional cohort study: An underutilized design. *Epidemiology,* 16(3):355-359.

Igbo, HI, Grace, AR and Christiana, EO. 2015. Relationship between duration of the marriage, personality trait, gender, and conflict resolution strategies of spouses. *Social and Behavioral Sciences,* 190(1):490-496.

Institute of Medicine and National Research Council. 2015. *Preventing intimate partner violence in Uganda, Kenya, and Tanzania: Summary of a joint workshop by the institute of medicine, the national research council, and the Uganda national academy of sciences*. Washington, DC: National Academies Press.

Intimate partner violence and abusive relationships: A guide to prevention and intervention. 2021. Rider University. From: https: // online.rider.edu/online-bachelors-degrees/nursing/ intimate-partner-violence-guide (accessed June 5, 2021).

Julian, LJ. 2011. Measures of anxiety: State-Trait Anxiety Inventory, Beck Anxiety Inventory, Hospital Anxiety, and Depression Scale-Anxiety. *Arthritis Care and Research,* 63(11):467-472.

Kaiser, K. 2009. Protecting respondent confidentiality in qualitative research. *Qual Health Research,* 19(11):1632-1641.

Kalhor, M and Olyaie, N. 2016. Relationship between marital satisfaction and mental health of married women referring to health centers in Sanandaj, Iran in 2014. *Global Journal of Health Science,* 9(1):1-19.

Kamimura, A, Parekh, A and Olson, LM. 2013. Health indicators, social support, and intimate partner violence among women utilizing services at a community organization. *Women's Health Issues,* 23(3):179-185.

Kapiga, S, Harvey, S, Muhammad, AK, Stockl, H, Mshana, G, Hashim, R, Christian Hansen, C, Lees, S and Watts, C. 2017. Prevalence of intimate partner violence and abuse

and associated factors among women enrolled into a cluster-randomized trial in northwestern Tanzania*. BMC Public Health, 17(190):1-11.*

Kar, HL. 2019. Acknowledging the victim to perpetrator trajectory: Integrating mental health-focused trauma-based approach into global violence programs. *Aggression and Violent Behavior,* 47:293-297.

Karakurt, G, Smith, D and Whiting, J. 2014. Impact of intimate partner violence on women's mental health. *Journal of Family Violence,* 29(7):1-11.

Kassa, GM and Abajobir, A.A. 2018. Prevalence of violence against women in Ethiopia: a meta-analysis. *Trauma, Violence, & Abuse,* XX(X):1-14.

Kedir, E. 2016. *Major gaps in the rights of women in Ethiopia*. Lund University. *Sweden.*
Kelmendi, K. 2013. Violence against Women: Methodological and ethical issues. *Psychology,* 4(7):559-565.

Kemparaj, VM and Kadalur, UG. 2018. Understanding the principles of ethics in health care : A systematic analysis of qualitative information. *International Journal of Community Medicine and Public Health,* 5(3):822-828.

National Bureau of Statistics-Kenya and ICF International. 2015. *2014 KDHS Key Findings.* Rockville, Maryland, USA: KNBS and ICF International.

Keynejad, RC, Hanlon, C and Howard, LM. 2020. Psychological interventions for common mental disorders in women experiencing intimate partner violence in low-income and middle-income countries: A systematic review and meta-analysis. *Lancet Psychiatry,* 7(2):173-190.

Kinyanda, E, Weiss, HA, Mungherera, M, Onyango-Mangen, P, Ngabirano, E, Kajungu, R, Kagugube, J, Muhwezi, W, Muron, J and Patel, V. 2016. Intimate partner violence as seen

in post-conflict eastern Uganda: Prevalence, risk factors, and mental health consequences. *BMC international health and human rights*, *16*(5):1-11.

Kivunja, C. 2018. Distinguishing between theory, theoretical framework and conceptual framework : A systematic review of lessons from the field. *International Journal of Higher Education,* 7(6):44-53.

Kothari, CR. 2004. *Research methodology : Methods and techniques*. New Delhi: New Age international.

Krantz, G and Garcia-Moreno, C. 2005. Violence against women. *Journal of Epidemiology and Community Health,* 59(10):818-821.

Kugler, BB, Phares, V, Salloum, A & Storch, EA. 2015. The role of anxiety sensitivity in the relationship between posttraumatic stress symptoms and negative outcomes in trauma-exposed adults*. Anxiety, Stress, & Coping, 29(2):187-201.*

Kumar, A. 2011. Mental health services in rural India: challenges and prospects. *Health*, 3(12):757-761.

Kumar, R. 2011. *Research methodology : a step-by-step guide for beginners*. 3rd edition. New Delhi: SAGE Publications.

Kyegombe, N, Banks, LM, Kelly, S, Kuper, H and Devries, KM. 2019. How to conduct good quality research on violence against children with disabilities: Key ethical, measurement, and research principles*. BMC Public Health, 19(1133):1-14.*

Lagdon, S, Armour, C, and Stringer, M. 2014. Adult experience of mental health outcomes as a result of intimate partner violence victimization: A systematic review. *European Journal of Psycho-traumatology*, 5(24794):1-12.

Lailulo, Y.A, Susuman, AS and Blignaut, R. 2015. Correlates of gender characteristics, health, and empowerment of women in Ethiopia. *BMC Women's Health*, 15(116):1-9.

Lang, AJ, Laffaye, C, Satz, LE, Dresselhaus, TR and Stein, MB. 2003. Sensitivity and specificity of the PTSD checklist in detecting PTSD in female veterans in primary care. *Journal of traumatic stress*, *16*(3):257-264.

Leight, J, Deyessa, N, Veranil, F, Tewolde, S and Sharma, V. 2021. An intimate partner violence prevention intervention for men, women, and couples in Ethiopia: Additional findings on substance use and depressive symptoms from a cluster randomized controlled trial. *PLoS Med, 17 (8*): 1-20.

Lilly, MM, Howell, KH and Graham-Bermann, S. 2015. World assumptions, religiosity, and PTSD in survivors of intimate partner violence. *Violence against women, 21*(1): 87-104.

Lovestad, S, Love, J, Vaez, M and Krantz, G. 2017. Prevalence of intimate partner violence and its association with symptoms of depression; a cross-sectional study based on a female population sample in Sweden. *BMC Public Health,* 17(335): 1-11.

Loxton, D, Dolja-Gore, X, Anderson, A.E and Townsend, N. 2017. Intimate partner violence adversely impacts health over 16 years and across generations: A longitudinal cohort study. *PLoS ONE,* 12(6):1-10.

Lulseged, S. 2018. Editorial intimate partner violence: does our response tally with the available evidence?. *Ethiopia Medical,* 56(1):56-57.

Machisa, MT, Christofides, N and Jewkes, R. 2017. Mental ill-health in structural pathways to women's experiences of intimate partner violence. *PLoS One,* 12(4):1-19.

Maiden, KSF, MohdSidik, S, Rampal, L and Mukhtar, F. 2015. Prevalence, associated factors and predictors of anxiety: A community survey in Selangor, Malaysia. *BMC psychiatry*, *15*(262):1-12.

McCarthy, KJ, Mehta, R and Haberland, NA. 2018. Gender, power, and violence: A systematic review of measures and their association with male perpetration of IPV. *PLoS One,* 13(11):1-27.

Meekers, D, Pallin, SC and Hutchinson, P. 2013. Intimate partner violence and mental health in Bolivia. *BMC Women's Health,* 13(28):1-16.

Mendonca, MFS. and Ludermir, AB. 2017. Intimate partner violence and incidence of common mental disorder. *Revista de saude publica,* 51(32):1-7.

Mengo, C. 2016. *The impact of intimate partner violence on mental health well-being among women seeking help from a police station*. The University of Texas. Arlington.

Meyrueix, L, Durham, G, Miller, J, Smalley, KB and Warren, JC. 2015. Association between Depression and aggression in rural women. *Journal of health disparities research and practice*, *8*(4):136-144.

Meyer, SR, Rege, S, Avalaskar, P, Deosthali, P, Garcia-Moreno, C & Amin, A. 2020. Strengthening health systems response to violence against women: protocol to test approaches to train health workers in India. *Pilot and Feasibility Studies,* 6(63):1-13.

Ministry of health and Ethiopian public health institute. 2020. Rational use of personal protective equipment for coronavirus disease 2019. Addis Ababa: Ethiopian Public health institute.

Ministry of science and higher education. 2020. Higher education teaching-learning and community service guideline during COVID 19 pandemic. (Based on regulation, 2020). Addis Ababa: MoSHE.

Mitchell, J, Wight, M, Van Heerden, A and Rochat, TJ. 2016. Intimate partner violence, HIV, and mental health: a triple epidemic of global proportions. *International review of psychiatry*, *28*(5): 452-463.

Mohamadian, F, Hashemian, A, Bagheri, M and Direkvand-Moghadam, A. 2016. Prevalence and risk factors of domestic violence against Iranian women: a cross-sectional study. *Korean Journal of family medicine*, *37*(4):253-258.

Montfoort, AV and Glasser, M. 2020. Rural women ’s mental health : status and need for services. *Journal of Depression and Anxiety,* 9(361):1-7.

Muluneh, MD, Stulz, V, Francis, L and Agho, K. 2020. Gender-based violence against women in sub-Saharan Africa: A systematic review and meta-analysis of cross-sectional studies*. International journal of environmental research and public health*, 17(903):1-21.

Muuo, S, Muthuri, SK, Mutua, MK, McAlpine, A, Bacchus, LJ, Ogego, H, Bangha, M, Hossain, M, Izugbara, C. 2020. Barriers and facilitators to care-seeking among survivors of gender-based violence in the Dadaab refugee complex. *Sexual and Reproductive Health Matters*, 28 (1):1-16.

Nabaggala, MS, Reddy, T & Manda, S. 2021. Effects of rural-urban residence and education on intimate partner violence among women in Sub-Saharan Africa: a meta-analysis of health survey data. *BMC Women's Health* 21(149):1-23.

Nathanson, AM, Shorey, RC, Tirone, V and Rhatigan, DL. 2012. The prevalence of mental health disorders in a community sample of female victims of intimate partner violence*. Partner Abuse,* 3(1): 59-75.

Lauren C.NG, Stevenson, A, Kalapurakkel, SS, Hanlon, C, Seedat, S, Harerimana, B, Chiliza, B and Koenen, KC. 2020. National and regional prevalence of posttraumatic stress disorder in sub-Saharan Africa: A systematic review and meta-analysis. *PLoS medicine*, *17*(5):1-30.

Novikov, AM and Novikov, DA. 2013. *Research methodology from philosophy of science to research design*. 3rd edition. London: Taylor & Francis Group.

Ogato, GS. 2011. Gendered knowledge and innovation in crop production and management practices: a case study of three rural communities in Ambo district, Ethiopia. *Journal of Research in Peace, Gender and Development,* 1(7): 216-228.

Ogbe, E, Harmon, S, Van den Bergh, R and Degomme, O. 2020. A systematic review of intimate partner violence interventions focused on improving social support and/ mental health outcomes of survivors*. PLoS One,* 15(6):1-27.

Olsen**,** J**,** Christensen**,** K**,** Murray**,** J, Ekbom**,** A. 2010. *An introduction to epidemiology for health professionals*. 1st edtion. London: Springer.

Omair, A. 2015. Selecting the appropriate study design for your research: Descriptive study designs. *Journal of Health Specialties*, 3(3):153-156.

Pan American Health Organization. 2013. *The treatment gap in the Americas: technical document*. Washington, D.C.

Park, YS, Konge, L and Artino, AR. 2020. The positivism paradigm of research. *Academic Medicine,* 95(5):690-694.

Parvaresh, N and Bahramnezhad, A. 2009. Post-traumatic stress disorder in Bam-survived students who immigrated to Kerman, four months after the earthquake. *Archives of Iranian Medicine,* 12(3):244-249.

Peek-Asa, C, Wallis, A, Harland, K, Beyer, K, Dickey, P and Saftlas, A. 2011. The rural disparity in domestic violence prevalence and access to resources*. Journal of Women's Health,* 20(11):1743-1749.

Peltzer, K, Pengpid, S, McFarlane, J and Banyini, M. 2013. Mental health consequences of IPV in Vhembe district, South Africa. *General hospital psychiatry*, *35*(5):545-550.

Pico-Alfonso, MA, Garcia-Linares, MI, Celda-Navarro, N, Blasco-Ros, C, Echeburua, E & Martinez, M. 2006. The impact of physical, psychological, and sexual intimate male partner violence on women's mental health: depressive symptoms, posttraumatic stress disorder, state anxiety, and suicide. *Journal of women's health*, *15*(5):599-611.

Plichta, SB. 2007. Interactions between victims of intimate partner violence against women and the health care system policy and practice implications. *Trauma, Violence & Abuse,* 8(2):226-239.

Polit, DF and Beck, CT. 2017. *Nursing Research: Generating and assessing evidence for nursing practice*. 10th edition. Philadelphia: Lippincott.

Ramsay, J, Rivas, C and Feder, G. 2005. Intervention to reduce violence and promote the physical and psychosocial well-being of women who experience partner violence. A systematic review of the controlled evaluation. Report. Funded by the policy research program, UK department health. Centre for health science. *Queen Mary's school of Medicine & Dentistry. London*.

Randolph, J. 2009. guide to writing the dissertation literature review. *Practical Assessment, Research and Evaluation,* 14(13):1-14.

Rauf, B, Saleem, N, Clawson, R, Sanghera, M & Marston, G. 2013. Forced marriage: Implications for mental health and intellectual disability services. *Advances in Psychiatric Treatment*,19(2):135-142.

Rees, K, Zweigenthal, V & Joyner, K. 2014. Health sector responses to initiate partner violence: A literature review*. African Journal of Primary Health Care & Family Medicine, 6 (1):1-8.*

Riaz, M, Abid, M, Ullah, N, Khalid, S and Abid, M. 2016. A study on social support and stress among married women school teachers. *International Journal of Emergency Mental Health,* 18(4):1-3.

Ribeiro, MR, Silva, AA, Alves, MT, Batista, RF, Ribeiro, CC, Schraiber, LB, Bettiol, H, and Barbieri, MA. 2017. Effects of socioeconomic status and social support on violence against pregnant women: a structural equation modeling analysis. *PloS one*, *12*(1):1-16.

Rodriguez, M, Valentine, JM, Son, JB & Muhammad, M. 2009. Intimate partner violence and barriers to mental health care for ethnically diverse populations of women. *Trauma, Violence & Abuse*, 10(4):358-374.

Rondon, MB. 2013. Priority issues in women's mental health. *World Psychiatry,* 12(3):275-276.

Ryan, CS, Vanessa, T and Gregory, LS. 2014. *Coordinated community response components for victims of intimate partner violence: a review of the literature*. *Aggress Violent Behavior, 19(4):363-371.*

Salari, N, Hosseinian-Far, A, Jalali, R, Vaisi-Raygani, A, Rasoulpoor, S, Mohammadi, M, Rasoulpoor, S, and Khaledi-Paveh, B. 2020. Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. *Globalization and health*, *16*(57):1-11.

Sapkota, D, Baird, K, Saito, A & Anderson, D. 2019. Interventions for reducing and/or controlling domestic violence among pregnant women in low and middle-income countries: a systematic review. *Systematic Reviews,* 8(79):1-11.

Nyame, S, Howard, LM, Feder, G and Trevillion, K. 2013. A survey of mental health professionals' knowledge, attitudes and preparedness to respond to domestic violence. *Journal of mental health*, *22*(6):536-543.

Sartorius, N and Kua, EH. 2020. *Mental health and Illness in the rural World*. series. Singapore: Springer.

Saunders, MK, Lewis, P and Thornhill, A. 2019. *Research methods for business students*. 8th edition. New York: Pearson Professional Limited.

Schrag, RV, Ravi, KE and Robinson, SR. 2020. The role of social support in the link between economic abuse and economic hardship. *Journal of Family Violence,* 35(1): 85-93.

Secretariat of the Pacific Community. 2009. *Solomon Islands Family Health and Safety Study: A study on violence against women and children*. The Solomon Islands.

Semahegn, A, Torpey, K, Manu, A, Assefa, N and Ankomah, A. 2019. Adapted tool for the assessment of domestic violence against women in a low-income country setting: a reliability analysis. *International journal of women's health*, (*11)*: 65-73.

Semahegn, A and Mengistie, B. 2015. Domestic violence against women and associated factors in Ethiopia. *Reproductive Health,* 12(78):1-13.

Semela, T, Bekele, H and Abraham, R. 2019. Women and development in Ethiopia: a sociohistorical analysis. *Journal of Developing Societies,* 35(2):230-255.

Serajuddin, U and Hamadeh, N. 2020. *New world bank country classifications by income level: 2020-2021*. Available at: https://www.bing.com/search? q=list+ income+ coutries &cvid=4d34037360e64f8192932079107a08c6&aqs (Accessed:25 September 2021).

Shamu, S, Abrahams, N, Temmerman, M, Musekiwa, A and Zarowsky C. 2011. A systematic review of African studies on intimate partner violence against pregnant women: prevalence and risk factors. *PloS One*, *6*(3):1-10.

Sharma, I. 2016. Marriage of women with mental illness: An overview. *Psychology Psychotherapy,* 6(5):1-20.

Shumba, CS. 2015. *Experiences of intimate partner violence and the health needs of women living in urban slums in Kampala, Uganda*. Unpublished. Unisa. Pretoria.

Siedlecki, SL. 2020. Understanding descriptive research designs and methods. *Clinical Nurse Specialist,* 34(1):8-12.

Signorelli, MS, Fusar-Pol, L, Arcidiacono, E, Caponnetto, P and Aguglia, E. 2020. Depression, PTSD, and alexithymia in victims of intimate partner violence. Archives of Clinical Psychiatry, 47(2):45-50.

Simona, SJ, Muchindu, M and Ntalasha, H. 2015. *Intimate partner violence in Zambia: Sociodemographic determinants and association with the use of maternal health care. DHS working papers No. 121*. Rockville, Maryland, USA.

Skaik, Y. 2013. Medical literature review: Search or perish. *Pakistan Journal of Medical Sciences,* 29(2):680-682.

Steelman, JR. 2007. Relationship dynamics: understanding married women's mental health. *Advances in Nursing Science,* 30(2):151-158.

Stockl, H, Devries, K, Rotstein, A, Abrahams, N, Campbell, J, Watts, C & Moreno, CG. 2013. The global prevalence of intimate partner homicide: a systematic review. *Lancet 382(9895):*859-865.

Sugg, N. 2015. Intimate partner violence: Prevalence, health consequences, and intervention. *Medical Clinics of North America,* 99 (3):629-649.

Sullivan, CM. 2018. Understanding how domestic violence support services promote survivor well-being : a conceptual model. *Journal of Family Violence,* 33(1):123-131.

Sullivan, CM. 2005. Interventions to address intimate partner violence: The current state of the field. In JR. Lutzker (Ed.), Preventing violence: Research and evidence-based intervention strategies Atlanta, Georgia: Centers for Disease Control and Prevention: 195-212.

Szumilas, M. 2010. Explaining odds ratios. *Journal of the Canadian Academy of Child and Adolescent Psychiatry,* 19(3):227-229.

Tang, C, Goldsamt, L, Meng, J, Xiao, X, Zhang, L, Williams, AB and Wang, H. 2020. Global estimate of the prevalence of post-traumatic stress disorder among adults living with HIV: a systematic review and meta-analysis. *BMJ Open*, *10*(4):1-11.

Tedeschi, F. 2018. Explaining odds ratios as conditional risk ratios. *Journal of Clinical Epidemiology,* 97(123-124).

Tesfa, A, Dida, N, Girma, T and Aboma, M. 2020. Intimate partner violence, its sociocultural practice, and its associated factors among women in Central Ethiopia. *Risk management and healthcare policy*, *13(x)*: 1-10.

Yohannes, K, Abebe, L, Kisi, T, Demeke, W, Yimer, S, Feyiso, M and Ayano, G. 2019. The prevalence and predictors of domestic violence among pregnant women in Southeast Oromia, Ethiopia. *Reproductive health*, *16*(37):1-10.

Thubauville, S and Gabbert, EC. 2014. Gender and identification in patrilineal and patriarchal societies: case studies from Southern Ethiopia. *Paideuma: Mitteilungen zur Kulturkunde,* 60(1):139-154.

Tiruye, TY, Chojenta, C, Harris, ML, Holliday, E and Loxton, D. 2020. Intimate partner violence against women and its association with pregnancy loss in Ethiopia: evidence from a national survey. *BMC Women's Health,* 20(192):1-11.

Umubyeyi, A, Mogren, I, Ntaganira, J, and Krantz, G. 2014. Intimate partner violence and its contribution to mental disorders in men and women in the post-genocide Rwanda: findings from a population-based study. *BMC Psychiatry,* 14(315):1-12.

UN Women. 2020a. *Violence against women and girls data collection during COVID 19*.From:https://www.unwomen.org/en/digital-library/publications/2020/04/issue-brief (accessed 6 March 2021).

UN Women. 2020b. Data collection on violence against women and covid-19 : decision tree. Jeneva: UN Women headquarters.

United Nation. 2020c. *The world's women 2020: Trends and statistics*. From: https:// www.un.org/en/desa/world's-women-2020 (accessed 3 December 2020).
United Nation. 2015. *The world's women 2015:trends and statistics*. New York: United Nations.

United Nation. 2014. Guidelines for producing statistics on violence against women: a statistical survey. Geneva: *United Nations publication*.

United Nation.1948. *Universal declaration of human rights*. From:https://www.ohchr. org/EN/Issues/Education/Training/Compilation/Pages/Universal Declaration of Human Rights (accessed: 3 December 2020).

United Nation.1993. *Declaration on the elimination of violence against women*. New York.
United Nation. 2005. *Violence against women: A statistical overview, challenges and gaps in data collection and methodology and approaches for overcoming them*. Geneva Switzerland.

United Nations Office on Drugs and Crime. 2021. *Killings of women and girls by their intimate partner or other family members Global estimates 2020.*

United Nations High Commissioner for Refugees (UNHCR). 2020. *Gender-based Violence*. From https://www.unhcr.org/gender-based-violence.html (accessed: 3 December 2020).

United Nations Population Fund (UNPF). 2020. *Gender-based violence : A journalist's handbook. report. Geneva*.

United States Agency for International Development (USAID). 2020. *Gender equality and women's empowerment: Ethiopia*.

UNDP, Somalia. 2017. *Ending gender-based violence in Somalia.* Available at: https://www.so.undp.org/content/somalia/en/home/blog1/2017/11/27/Ending-Gender-Based-Violence-in-Somalia-.html (Accessed: 04 September 2021).

UN Women. 2016. *Global database on violence against women: Prevalence data on different forms of violence against women: Kenya*. Available at: https://evaw-global database.unwomen.org/en/countries/africa/kenya#2 (Accessed: 04 September 2021).

Vergunst, R. 2018. From global-to-local: rural mental health in South Africa. *Global Health Action,* 11(1):1-7.

Walby, S and Olive, P. 2014. *Estimating the costs of violence in the European Union*. Luxembourg.

Warden, D, Trivedi, MH, Greer, T.L, Nunes, E, Grannemann, BD, Horigian, VE, Somoza, E, Ring, K, Kyle, T and Szapocznik, J. 2012. Rationale and methods for site selection for a trial using a novel intervention to treat stimulant abuse. *Contemporary clinical trials*, *33*(1):29-37.

Weathers, FW, Litz, BT, Keane, TM, Palmieri, PA, Marx, BP and Schnurr, P. 2013.The PTSD Checklist for DSM-5 (PCL-5). National Centre for PTSD.

Whiteford, HA, Ferrari, AJ, Degenhardt, L, Feigin, V and Vos, T. 2015. The global burden of mental, neurological and substance use disorders: an analysis from the Global Burden of Disease Study 2010. *PloS One*, *10*(2):1-14.

Wirtz, AL, Perrin, NA, Desgroppes, A, Phipps, V, Abdi, AA, Ross, B, Kaburu, F, Kajue, I, Kutto, E, Taniguchi, E & Glass, N. 2018. Lifetime prevalence correlates and health consequences of gender-based violence victimization and perpetration among men and women in Somalia. *BMJ global health*, *3*(4):1-12.

World Health Organization (WHO). 2021a. Violence against women prevalence estimates, 2018. Global, regional, and national prevalence estimates for intimate partner violence against women and global and non-partner sexual violence against women. Geneva. WHO.

World Health Organization, on behalf of the United Nations Inter-Agency Working Group on Violence Against Women Estimation and Data. 2021b. *Violence against women prevalence estimates, 2018. Global, regional and national prevalence estimates for intimate partner violence against women and global and regional prevalence estimates for non-partner sexual violence against women.*

World Health Organization. 2020. *Mental health.* From:https://www.who.int/ mentalhealth/ advocacy /en/ Factsheets (Accessed: 5 December 2020).

World Health Organization. 2017. Strengthening health systems to respond to women subjected to intimate partner violence or sexual violence: *A manual for health managers. Geneva.*

World Health Organization. 2014. *Global status report on violence prevention*. Geneva.WHO.

World Health Organization. 2013. *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva: WHO.

World Health Organization. 2003a. *Investing in mental health*, *investing in mental health*. Geneva: WHO Press.

World Health Organization. 2003b. *Mental health: A state of well-being.* From:http:// www.who.int/features/factfi les/mental health/en (accessed: 10 December 2020).

World Health Organization. 2002a. *World report on violence and health*. Geneva: World Health Organization.

World Health Organization. 2002b. G*lobal status report on violence prevention. Glossary of key terms. Report. Geneva.*

WHO and MoH. 2006. *WHO-AIMS Report on Mental Health System in Ethiopia*. Report. Addis Ababa. Ethiopia.

Yegidis, BL, Weinbach, RW and Myers, LL. 2012. *Research methods for social workers*. 8th edition. New York: Pearson Education.

Yitbarek, K, Woldie, M and Abraham, G. 2019. Time for action: Intimate partner violence troubles one-third of Ethiopian women. *PLoS One* 14(5):1-13.

Yohannes, K, Gebeyehu, A, Adera, T, Ayano, G and Fekadu, W. 2018. Prevalence and correlates of post-traumatic stress disorder among survivors of road traffic accidents in Ethiopia. *International journal of mental health systems*, *12*(50):1-8.

Yousuf, A, Musa, R, Isa, M and Arifin, S. 2020. Anxiety and depression among women living with HIV: Prevalence and correlations. *Clinical practice and epidemiology in mental health,* 16(1):59-66.

Zefeiti, S.MB and Mohamad, NA. 2015. Methodological considerations in studying transformational leadership and its outcomes. *International Journal of Engineering Business Management,* 7(101):1-11.

Zewdu, A, Wonde, Y, Kassaw, D and Suleyiman, M. 2019. Post-traumatic stress disorder and coping mechanism among migrant returnees from middle east countries in Amhara region, Ethiopia. *Journal of Psychology and Clinical Psychiatry,* 10(1):5-16.

ANNEXURES

Annexure A Clearance certificate from the University of South Africa Health Studies Higher Degrees Committee

UNISA university of south africa

RESEARCH ETHICS COMMITTEE: DEPARTMENT OF HEALTH STUDIES
REC-012714-039 (NHERC)

1 February 2017

HSHDC/586/2017
Mr ZS Weret
Student: 5854-735-5

Supervisor: Prof BL Dolamo
Qualification: D Cur
Joint Supervisor: -

Dear Mr ZS Weret

Decision: Ethics Approval

Name: Mr ZS Weret

Proposal: Intimate partner violence anxiety and post-traumatic stress disorders among married women in Ethiopia: Support intervention strategies.

Qualification: DPCHS04

Thank you for the application for research ethics approval from the Research Ethics Committee: Department of Health Studies, for the above mentioned research. Final approval is granted for the duration of the research period as indicated in your application.

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the Research Ethics Committee: Department of Health Studies on 1 February 2017.

The proposed research may now commence with the proviso that:

1) *The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*

2) *Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Research Ethics Review Committee, Department of Health Studies. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*

Open Rubric

University of South Africa
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Annexure B Letter of permission from Ambo University

The Federal Democratic Republic of Ethiopia
Ambo University

From: The Research, Community service and Institutional Development Vice -President Office, Ambo University, Ambo Ethiopia
Through the research team leader
College of Medicine and Health Science
Ambo University
To: Zewdu Shewangizaw
Re: Letter of permission to undertake the research
Sir,

I am pleased to inform you that, the research proposal entitled "Intimate Partner Violence Anxiety and Post-Traumatic Stress Disorders among Married Women in Ethiopia: Support Intervention Strategies "was approved by the research office to undertake in Ambo district, Oromia, Ethiopia.

The validity of this letter of permission is one year effective since from the date of approval. You will be required to apply for renewal of ethical clearance on a yearly basis if the study is not competed at the end of this clearance. You will be expected to provide six monthly progress reports and final report upon completion of your study.

Sincerely,

Bizunesh Mideksa Borena (PhD)
Research, Community Service and Institutional Development Vice-Presid

Annexure C Information sheet for the study participant

My name is_____ a research assistant working for the UNISA research team on the study entitled **INTIMATE PARTNER VIOLENCE ANXIETY AND POST-TRAUMATIC STRESS DISORDERS AMONG MARRIED WOMEN IN ETHIOPIA: SUPPORT INTERVENTION STRATEGIES**. The purpose of the study was to estimate IPV magnitude and the relationship between IPV exposure, anxiety, and PTSD symptoms to establish supportive intervention strategies for women who lived at a rural sub-district in Ambo district, Oromia regional state, Ethiopia. You were chosen at random to take part in the study.

The study would benefit married women in rural areas of the country who had experienced IPV, IPV-related anxiety, and PTSD. I can confidently tell you that each of your responses would be kept safe and secure. In the questioner or elsewhere, I did not mention your personal identification information unless it was important to the study, and it had been kept anonymous. Your participation was entirely voluntary, but it would've been valuable to many other Ethiopian women living in rural areas. The interview would have been entirely based on your goodwill; you could withdraw, postpone, or skip whatever questions if you didn't wish to give a response. There were no correct or incorrect answers, and there were no repercussions for refusing to participate in the study. Meanwhile, I would appreciate your participation for a better understanding of the situation that most women face.

Participating in the study, you may have minimum discomfort to disclose your painful experience, though; it would have been helpful to women suffering from violence. The questionnaire takes about an hour to complete all of the questions. There is no direct payment being participated in the study. We would also refer to psychological intervention or counseling service at a health center in case you get discomfort. We the research team would also provide counseling at the end of the interview. The study helps to generate local evidence to assist with the initiation and implementation of programs to address IPV-related mental health problems. At the end of the interview, participants were got feedback based on the strength they have and possibly what they would do and give you pamphlets that have service referral linkage.

The research was accepted by UNISA, Research Ethics Committee: Department of Health Studies Ethics Committee (approval number: REC-012714-039(NHERC).

Due to the covid-19 pandemic, the interviewer informed participants about precautions to avoid virus transmission. The researcher assured the respondents and interviewers that they should wear a face mask, keep the recommended physical distance, and wash their hands.

In case if you had questions, you could communicate the researcher, Mr. Weret contact: phone: (+251) 0913749690: email address: hweret@gmail.com or the UNISA, Research Ethics Committee: Department of Health Studies Ethics Committee, contact information is as follows:

UNISA, Preller Street, Muckleneuk ridge. City of Tshwane

PO Box 392 UNISA 0003 South Africa
Tel: +27 12 429 31 11 Facsimile: +27 12 429 41 50. https://www.unisa.ac.za/

Annexure D Consent form for participation

I (----------) have been made aware of the research titled **INTIMATE PARTNER VIOLENCE ANXIETY AND POST-TRAUMATIC STRESS DISORDERS AMONG MARRIED WOMEN IN ETHIOPIA: SUPPORT INTERVENTION STRATEGIES**. I fully comprehend the research's goal and techniques. I agreed that I would have answered the research question without any pressure.

I hereby confirmed that my participation was with my interest. I was aware, I could able to cancel, postpone, or bypass participation at any time without affecting my jurisdiction. If I had any questions, I was fully cognizant to contact the researcher at UNISA's health studies department.

Would you have any inquiries?

Were you truly prepared to take part in the study?

Please note that the participant did the interview.

[ ] Not agreed for participation ⇒ acknowledge the participant and end the session

[ ] Agreed for participation, acknowledge the participant, take signature and go down ⇓ for interview.

Completed with by the interviewer

I declare that I give the information to the study participant and agreed to take part in the study.

Signature: _____

Filled by the interviewee

I declare that the interviewer discuss the consent information sheet and I agreed with voluntary participation.

Signature: _____

Could the interview be carried out?

Was it a good place that is safe for you to start an interview or would you prefer any other area to start an interview?

Annexure E Questionnaire English version

Part I: Socio-demographic information of women

Interview date: Day [ ] Month [April] Year [2021]				
100. Recording time		H _____M_____		
Questions & Filters		**Option**	**Code**	
If you don't mind, I would like to start by asking you a little about yourself				
101	How old are you?	Age (years)		
102	How old were you when you married?	Age (years)		
103	What is your religion?	Protestant	1	
		Orthodox	2	
		Muslim	3	
		Others	4	
104	Family size of the household			
105	What is your level of education?	Illiterate	1	
		Up to primary/informal education	2	
		Primary level	3	
		School leaving certificate or more	4	
106	What is your occupation?	Housewife or student	1	
		Daily wage labourer	2	
		Agriculture and livestock	3	
		Business/small business	4	
107	What is the family/household/ approximated monthly income?	_____ *(ETB)*		
108	What is your approximated monthly income?	_____ *(ETB)*		
109	What is the family main source of income	Agriculture	1	
		Small business	2	
		Daily wage labourer	3	
		Other	4	
		No	2	
110	Who invented the marriage?	Arranged marriage	1	
		Love marriage	2	

Part II: Socio-demographic information of women's intimate partner

S. N	Question	Option	Code	
201	What is your husband's age?	Age (years)..... [ ]		
202	What is the greatest level of education he has?	Illiterate	1	
		Up to primary/ informal education	2	
		Primary	3	
		Secondary or more	4	
		Don't know	5	
203	What is his occupation?	Agriculture/animal husbandry	1	
		Agriculture/ mixed: farming and animal husbandry		
		Daily wage laborer	2	
		Business/small scale	3	
		Others	4	
	What is his monthly income?	_____ (ETB)		
205	How often your IPs did drink alcohol?	Every day or nearly every day	1	
		Once or twice a week.	2	
		1-3 times in a month	3	
		Less than once a month	4	
		Rarely	5	
		Never	6	
		Refused to answer	88	
207	Have you had problems with your husband's drinking in the previous 12 months of your marriage?		Yes	No
		Financial	1	2
		Relationship (family)	1	2
		Marital (love)	1	2
		Other	1	2
208	Has your husband had in love with other women while being with you?	Yes	1	
		No	2	
		Refuse to answer	88	
209	Has your husband had children with other women while he was married to you?	Yes	1	
		No	2	
		Refuse to answer	88	

Part II: Respondent and her partner

When two people marry or continue living together, they experience both pleasant and bad events. I'd want to inquire about how your boyfriend treats you. If somebody enters the room and disturbs us. I'd alter the topic of the conversation. I'd like to assure you once again that your responses were likewise kept secret, and that you are not forced to answer any questions which you do not would want to. May I proceed?						
301	Has your current husband	Is there anything that has happened in the last year?		How many times has that occurred in the previous year?		
		Yes	No	One	Few	Many
	Has anybody ever insulted you or made you feel awful about yourself?	1	2	1	2	3
	Belittled or humiliated you in front of other people?	1	2	1	2	3
	Something did on purpose to scare or intimidate you (for example, the way he stared at you, shouting and smashing things)?	1	2	1	2	3
	Have you been threatened to harm yourself or anyone you care about?	1	2	1	2	3
303	The recency of exposure (Ferrari, Davies, Bailey, Howard, Howarth, Peters, Sardinha and Feder, 2016:3)		12 months ago,			1
			In the past month			2
			Others			3
304	Has your husband/partner ever	Is there anything that has happened in the last year?		How many times has that occurred in the previous year?		
		Yes	No	One	Few	Many
	Slapped you or thrown something at you that could hurt you?	1	2	1	2	3
	Pushed you or shoved you or pulled your hair?	1	2	1	2	3
	Did he hit you with a fist or something else that may harm you?	1	2	1	2	3
	Have you been kicked, dragged, or beaten up?	1	2	1	2	3
	Choked or burned you on purpose?	1	2	1	2	3
	Threatened or used a weapon, knife, or other material on you?	1	2	1	2	3
305	Recency of exposure(Ferrari et al 2016:3)		12 months ago,			1
			In the past month			2
			Others			3
306	Has your Husband/partner ever….	Is there anything that has happened in the last year?		How many times has that occurred in the previous year?		

		Yes	No	One	Few	Many
	Forcing you to have sex when you don't want to?	1	2	1	2	3
	Have you ever engaged in sexual activities that you didn't want because you were scared of your husband?	1	2	1	2	3
	Forced you to do a sexual act that you felt embarrassed or humiliating?	1	2	1	2	3
307	The recency of exposure (Ferrari et al 2016:3)	12 months ago,				1
		In the past month				2
		Others				3

	Any reported IPV	Yes	No	
308	Verify physical violence	1	2	
309	Verify sexual violence	1	2	
319	Verify emotional violence	1	2	

Part IV: Consequence of IPV, impact, coping mechanism, and financial autonomy of women

Women with experience of physical or sexual violence				
401	In the past 12 months, have you ever been injured as a result of violence by your husband?	Yes		1
		No		2
402	What type of injury happened to you in the past 12 months?		Yes	No
		Cuts, punctures, bites	1	2
		Scratch, abrasion, bruises	1	2
		Sprains, dislocations	1	2
		Burns	1	2
		Penetrating injury, deep cuts	1	2
		The broken eardrum, eye injuries	1	2
		Fractures, broken bones	1	2
		Broken teeth	1	2
		Internal injuries	1	2
		Other (specify): _____		
403	In the past 12 months, were you hurt badly by your husband that you needed health care (even if you did not receive it)?	Yes		1
		No		2
404	In the past 12 months, did you receive health care for an injury caused by your husband?	Yes		1
		No		2
405	Did you tell a health worker the real cause of your injury?	Yes		1
		No		2
406	Does the following situation affect the behavior of your husband?	When he is drunk		1
		Financial problems		2
		Difficulties at his work		3
		When he is unemployed		4
		No food at home		5
		Problems with his or her family		6
		He is jealous of her		7
		She refuses sex		8
		She is disobedient		9

		Other (specify): _____	
407	During the times that you were hit, did you ever fight back physically or to defend yourself?	Yes	1
		No	2
408	What was the effect of you fighting back on the violence at the time?	No change	1
		Violence became worse	2
		Violence became less	3
		Violence stopped	4
409	If you victim of any form of IPV, Did you ever go to any of the following for help?	Court	1
		Women's organization	2
		Police station	3
		Health center	4
		Priest/Pastor	5
		Other specify	
410	What were the reasons that you did not go to any of these?	Don't know	1
		Afraid would end the relationship	2
		Fear of more violence	3
		Violence not serious	4
		Afraid would lose children	5
		Other specify	

			Yes	No
411	Had you ever experienced financial difficulty?		1	2

			Yes	No
412	Would you tell me about the property do you owned?	Land for farming	1	2
		House	1	2
		Cows	1	2
		Chicken	1	2
		Goats and sheep's	1	2
		Others		

413	Tell me what you contribute in the household compared with your husband?	More than IPs	1
		Less than IPs	2
		Both equally	3
414	Does your husband ever refuse to give you money for household expenses, even when he has money for other things?	Yes	1
		No	2

Part V: PTSD symptoms screening scale

Directions: The following is a list of issues that people may have as a result of an extremely stressful situation. Please carefully listen to the question and then mark one of a number to indicate how many you have felt disturbed in the previous month (Weathers, Litz, Keane, Palmieri, Marx and Schnurr 2013).

	Question	**Not at all**	**A little bit**	**mode rately**	**Quite a bit**	**Extremely**
701	Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
702	Repeated, disturbing dreams of the stressful	0	1	2	3	4

	experience?					
703	Suddenly feeling or acting as if the stressful experience were happening again (as if you were back there reliving it)?	0	1	2	3	4
704	Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
705	Have strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
706	Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
707	Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
708	Trouble remembering important parts of the stressful experience?	0	1	2	3	4
709	Have strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as I am bad, there is something seriously wrong with me, no one can be trusted, and the world is completely dangerous)?	0	1	2	3	4
710	Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
711	Have strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
712	Loss of interest in activities that you used to enjoy?	0	1	2	3	4
713	Feeling distant or cut off from other people?	0	1	2	3	4
714	Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
715	Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
716	Taking too many risks leads to harm?	0	1	2	3	4

717	Being super alert or watchful or on guard?	0	1	2	3	4
718	Feeling jumpy or easily startled?	0	1	2	3	4
719	Having difficulty concentrating?	0	1	2	3	4
720	Trouble falling or staying asleep?	0	1	2	3	4

Part VI: Anxiety disorder symptoms screening scale

Instructions: The following is a list of frequent anxiety symptoms. Please carefully read each item on the list. Note how much you have been disturbed by such a condition the previous month, including now. Marking the number in the appropriate place inside the box in front of each symptom.

S. N	**Question**	Not At All **(0)**	Mildly but it didn't bother me much **(1)**	Moderately - it wasn't pleasant at times **(2)**	Severely – it bothered me a lot **(3)**
1	Numbness or tingling				
2	Feeling hot				
3	Wobbliness in legs				
4	Unable to relax				
5	Fear of worst happening				
6	Dizzy or lightheaded				
7	Heart pounding/racing				
8	Unsteady				
9	Terrified				
10	Nervous				
11	Feeling of choking				
12	Hands trembling				
13	Shaky/unsteady				
14	Fear of losing control				
15	Difficulty in breathing				
16	Fear of dying				
17	Scared				
18	Indigestion				
19	Faint/lightheaded				
20	Face flushed				
21	Hot/cold sweats				

Annexure F Letter of certificate for formatting

Daniel Tiruneh Consultancy on Education **2021**

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This is to certify that the document entitled:

Intimate partner violence anxiety and post-traumatic stress disorders among married women in Ethiopia: Support intervention strategies

By the Author:

Zewdu Shewangizaw Weret

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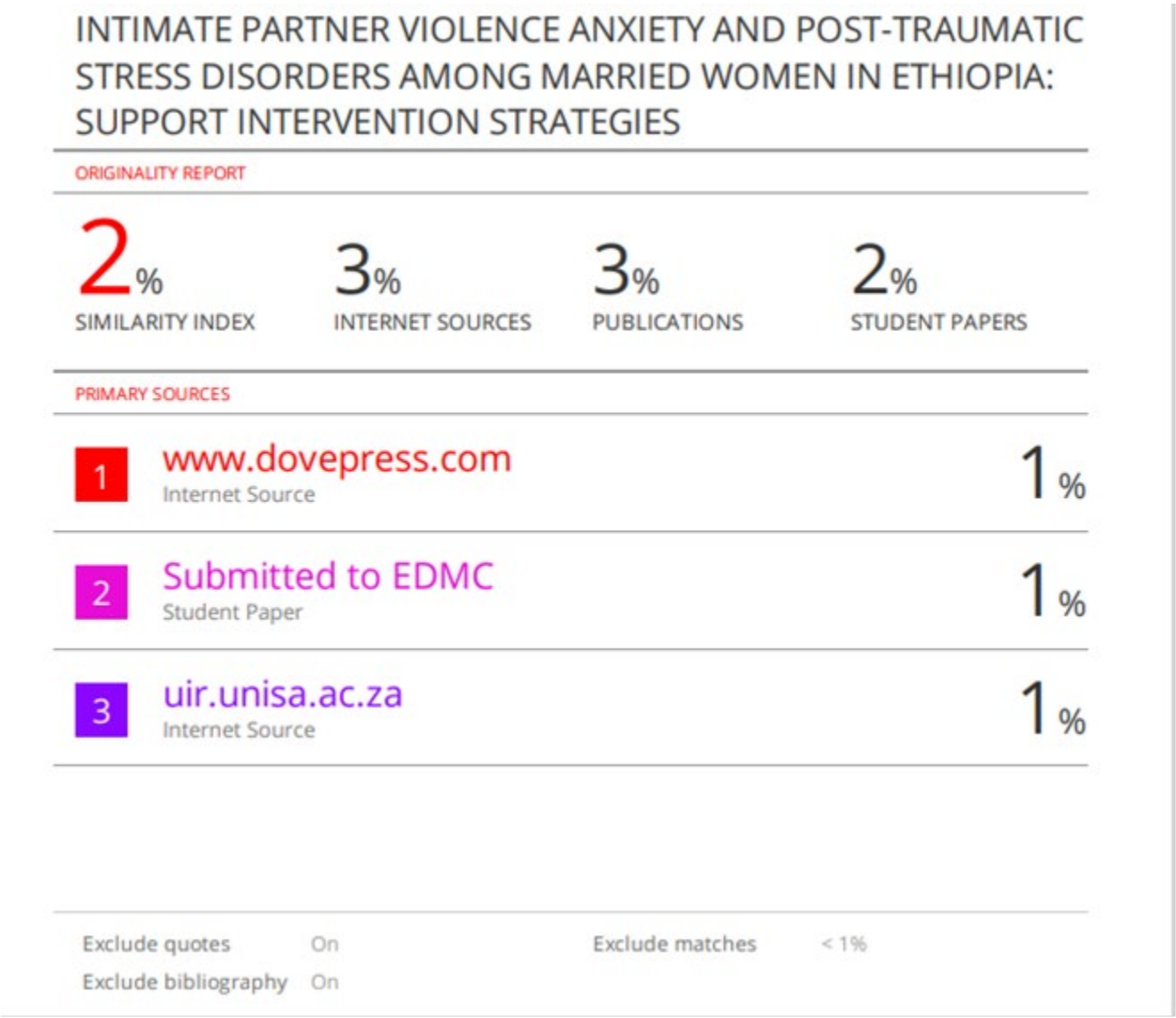

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