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SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA

COMMUNITY-BASED INTERVENTION TO PREVENT DOMESTIC VIOLENCE AGAINST WOMEN IN THE REPRODUCTIVE AGE IN NORTHWESTERN ETHIOPIA: A QUASI-EXPERIMENTAL IMPLEMENTATION RESEARCH

BY

AGUMASIE SEMAHEGN DEMISIE
(10587765)

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DECLARATION

I verify that this thesis is the product of my original independent research work and it has not been submitted in whole or in part for any degree. The thesis has been under gone through supervising by Professor Augustine Ankomah, Professor Kwasi Torpey, Dr. Adom Manu and Dr. Nega Assefa. I also certify that the thesis has been written by me and any help received in writing this thesis, and all resources used in this thesis have been acknowledged.

Agumasie Semahegn Demisie	……..	……..……
(PhD Candidate)	Signature	Date

TEAM OF SUPERVISORS

Professor Augustine Ankomah	**…….……**	**…..……..**
(Principal Supervisor)	Signature	Date
Professor Kwasi Torpey	**…..……**	**…..…….**
(Supervisor)	Signature	Date
Dr. Adom Manu	**…..……..**	**...……**
(Supervisor)	Signature	Date
Dr. Nega Assefa	**…..……**	**…..……**
(Supervisor)	Signature	Date

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ABSTRACT

Background: Violence against women is a devastating public health challenge and a pervasive human rights abuse. Worldwide, a third of women experience domestic violence from either intimate or non-intimate partner in their lifetime. In sub-Saharan Africa region, the prevalence of domestic violence against women is similar with the global picture (36.6%). In Ethiopia, domestic violence against women is a common phenomenon and forms part of women's life experiences ranging from 19% to 78%. However, there is paucity of translation of existing evidence into community-based intervention, and piloting its implementation applicability and effectiveness in preventing domestic violence against women in Ethiopia.

Objective: Assessed the implementation and outcome of a community-based intervention on the prevention of domestic violence against women and its associated factors in Awi Zone, Northwestern Ethiopia.

Methods: A community-based quasi-experimental study was conducted using mixed methods to assess domestic violence against women in the Northwestern Ethiopia. Complex probability sampling design and purposive methods were used to recruit study participants for quantitative and qualitative study, respectively. Study participants were assigned into three groups; Intervention, Active comparator, and Control and given the intervention packages. The women in the intervention group received all the intervention packages. These consisted of stakeholder advocacy workshop, community mobilization, training of community agents, house-to-house women's awareness-creation and participating partners. In the active comparator group, only partners' participating component was not implemented. The control group were sustained on standard services. A sequential explanatory data collection method was applied for both pre and post intervention surveys. Gathered data were entered into EpiData software and exported

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into SPSS version 23.0 for analysis. Descriptive, Generalized Linear Models and Difference in Differences (DID) statistical analysis methods were carried out. Statistical associations were reported using adjusted prevalence ratio at 95% confidence interval (CI) and p-value less than 0.05. The qualitative data were transcribed, coded, and thematically analyzed using Nvivo 11. The study protocol was registered on trial registry platform (ClinicalTrials.gov: NCT03265626).

Results: The level of domestic violence against women reduced from pre-intervention 48.3% to 40.1% at post-intervention survey. Women's receptive attitudes towards justified wife-beating reduced from 69.9% to 59.0%. Likewise, women's receptive attitudes towards inequitable gender-norms between wives and partners declined from 67.6% to 55.9%. In the DID analysis, women's experience of sexual violence declined by 10% among women in the active comparator group than the control group (DID, -0.10; 95% CI: -0.19, -0.02). Women's receptive attitude towards justified wife-beating reduced by 17% in the active comparator group compared to the control group (DID, -0.17; 95% CI: -0.26, -0.08). Likewise, women's receptive attitude towards inequitable gender-norms reduced by 17% in the intervention as compared with the control group (DID, -0.17, 95% CI: -0.26, -0.08). Furthermore, budget constraints, lack of commitment, having community-traditional gender-norms, poor planning, lack of integration and inter-sectoral collaboration were barriers to existing policy implementation to prevent domestic violence against women. The existing community health extension program, women development 'army' group, existing policy frameworks, government's political willingness, presence of school-based gender clubs and development partners were some of the enabling conditions for ensuring the sustainable implementation of domestic violence prevention programs in the study area.

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Conclusions: The community-based piloted intervention was effective in preventing domestic violence, receptive attitudes towards justified wife-beating and inequity-norms. However, the prevalence of the different forms of domestic VAW were still high. Both women's receptive attitude towards justified wife-beating and inequitable gender-norms were interlinked factors associated with persistently high domestic violence against women. The community's receptive attitude is also exhibited by local politicians and or implementers. Community-based intervention was found to be effective, feasible and applicable in reducing domestic violence and its receptive attitudes. The implementation of existing policies to prevent domestic violence against women was poor due to lack of inter-sectoral collaboration, poor integration and stakeholders having competing priorities among others. It is suggested that programs focus on intersectoral collaboration and service integration with existing programs to sustain and synergize domestic violence prevention intervention.

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DEDICATION

This research work is dedicated to: my mother, Worknesh Assegu, for her caring, supporting, motivating, determination and source of an inspiration in my life and to my beloved wife, Wbalem Amare and adorable baby Mariamawit Agumasie. This thesis is also dedicated to all women and girls whose life experiences have been on tough responsibility and caring their families to have a better life.

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LIST OF ACRONYMS/ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
APR	Adjusted Prevalence Ratio
CI	Confidence Interval
DHS	Demographic and Health Survey
DID	Difference in Differences
FGD	Focus Group Discussion
GBV	Gender Based Violence
GDG	Group Discussion Group
GLMs	Generalized Linear Models
HEP	Health Extension Program
HEW	Health Extension Worker
HIV	Human Immunodeficiency Virus
IDI	In-depth Interview
KII	Key informant Interview
LLMICs	Low and Lower Middle Income Countries
LMICS	Low and Middle Income Countries
NGO	Nongovernmental Organization
VAW	Violence against Women
WHO	World Health Organization

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OPERATIONAL DEFINITION OF TERMS

Married: A person whose relationship or marriage is endorsed by the law, community tradition/culture, or religious institutions, and who is living together during the study period.

Cohabitating: A relationship that is not legalized by the law, community norm/culture and or religious institutions, but has been both partners living together as a couple.

Partner: Is used for both married as well as a cohabitating relationship.

Domestic (intimate partner) violence against women: Women's experience of at least one form of psychological, physical and or sexual violence by their current partners in the last 12 months from pretest and posttest assessments accordingly.

Physical violence: The act of perpetrators considered as physical violence if the victims reports of at least one of the following such as grabbing, pushing, shaking, kicking, slapping, pulling of hair, shoving, hitting with the fist or something else, dragging or beating, choking, burning, attacking using knife or gun etc. by the partner in the last 12 months preceding the study for pretest and posttest assessments accordingly.

Psychological violence: The act of perpetrators considered as psychological violence, this involving at least one of the following such as intentionally insisting, scolding, jealousy or expression of suspicion, anger, insulting, restrictions, threatening with weapons, ignoring, depriving privilege or basic needs, belittling or humiliating, intimidating etc. by the partner in the last 12 months preceding the study for pretest and posttest assessment accordingly.

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Sexual violence: The act of perpetrators considered as sexual violence if (the victim reports of) one of the following being forced sexual acts such as, intentionally denying or avoiding sex, having sex without wife's interest, sexual acts that humiliate or degrade the wife (unusual sexual orientation) by the partner during the last 12 months preceding the study for pretest and posttest assessments accordingly.

Development 'army': A group of five people who are organized for development transformation activities (applied in Ethiopia context).

Sub-districts: Are the so called Kebele (local name of the sub-district) and the smallest functional structural administrative units in the Federal Democratic Republic of Ethiopia that comprise 1000 to 1500 households (5000 population).

Comprehensive intervention: Is a study group that received all the designed interventions including advocacy meetings, community mobilization, community's representatives training, awareness creation and active participation of partners in the prevention of domestic violence against women.

Active comparator (partial intervention): Is the study group that received intervention includes advocacy meetings, community mobilization, and training of community representatives, awareness creation and active participation of partners in the domestic violence against women prevention intervention.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter depicts the general views about the study focus, on domestic violence against women in relation to the objectives of the study. It covers the following sub-topics such as background of the study, statement of the problem, significance of the study, descriptions and pictorial illustration of the conceptual framework, research questions, and objectives of the study.

1.1 Background

Violence against women (VAW) is increasingly being documented as a serious public health concern, and gross pervasive abuse of human rights worldwide (Oxfam, 2012; PRB & IGWG, 2002; USAID & IGWG, 2010; WHO, 2004, 2005). The United Nations (UN) General Assembly's Declaration of the Conventions on the Elimination of all forms of Discrimination Against Women (CEDAW) 1993, defines VAW as "…*any act of gender-based violence that results in or is likely to result in physical, sexual, or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life."* (PRB & IGWG, 2002; Watts & Zimmerman, 2002). Globally, one in three women experiences VAW from either an intimate or a non-intimate partner in their lifetime (WHO, 2013). Domestic VAW is one of the worst experiences women face at home which, is associated with gender-inequality and imbalance of power in a relationship (Baumgarten & Erdelmann, 2003; Watts & Zimmerman, 2002).

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Research evidence from more than 30 countries has shown that about 8% to 70% of women have ever experienced domestic VAW (PRB & IGWG, 2002). Similarly, findings from studies conducted in fourteen Western Pacific countries (2000 to 2010) among women (15 - 49 years) revealed that lifetime exposure to domestic VAW ranges from 9% to 68% (WHO, 2015b). Likewise, the WHO multi-country study of the seven countries (Ethiopia, Namibia, Bangladeshi, Tanzania, Japan, Peru, and Thailand) showed that domestic VAW has caused physical injury with serious related health consequences ranging from 19% (Ethiopia) to 55% (Peru). Surprisingly, most of the victims could not receive health care, even though it was needed (Ellsberg et al., 2008).

According to the WHO report, domestic VAW is an epidemic that is seen to overlay the global HIV/AIDS pandemic; 10% to 69% of women reported physical domestic VAW at least once in their lifetime (WHO, 2004). Thousands of women are killed at home by their intimate partners every year. In addition, it causes about 20% to 25% of relationships break down. This translates into 5% loss of women's healthy years, 33% of female suicidal cases, and 60% of all female murder in developing countries. In general, an aggregate burden due to malaria, cancer, and emergency conditions of road traffic accidents associated morbidities and mortalities consequences are less than an overall negative impact of domestic VAW. It is a great hazard and a seemingly uncontrollable problem to future public health agenda (Baumgarten & Erdelmann, 2003). According to the WHO's multi-country study (2000 to 2003), experiences of domestic VAW was significantly associated with women's poor health, suicidal thought, or attempted suicides (Ellsberg et al., 2008). Similarly, in another study by Koenig and colleagues, domestic VAW victims suffer from violence-related injuries (Koenig et al., 2003).

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Domestic VAW has different health related consequences. A systematic review showed that, domestic VAW is strongly linked with HIV infection (Kouyoumdjian et al., 2013). A cross-sectional study conducted employed in South Africa has revealed that domestic VAW is significantly associated with gender inequality, which in turn affects discussions on HIV (Jewkes et al., 2003). Analysis from the Bangladesh Demographic and Health Survey (DHS) (2001) showed that antenatal care utilization among women had been reduced by 31% due to physical domestic VAW. Similarly, the utilization of skilled delivery service reduced by 52% due to domestic VAW (Rahman et al, 2012).

Other studies conducted in South Africa (Dunkle et al., 2004) and Kenya DHS (2008 to 2009) (Onsomu et al., 2015; Shi & Dushoff, 2013), have revealed that the survivors of domestic VAW who have lived in a family with male dominance in their relationship, were about two times more likely to acquire HIV. Furthermore, other studies have shown that domestic VAW was strongly associated with mental illness, mainly post traumatic stress disorders, and depression. The co-occurrence of post-traumatic stress disorders and depression were high among physical and psychological domestic VAW victims (Deyessa et al., 2009; Pico-alfonso, 2005; UNIFEM, 2010).

There is evidence to suggest that domestic VAW can be prevented or reduced by applying different comprehensive interventions. Two studies carried out in Uganda have shown that community-based interventions substantially prevented domestic VAW and its related costs (Michaels-igbokwe et al., 2016; Wagman et al., 2015). Though poverty alleviation intervention in Uganda using microenterprise as an economic empowerment tool to prevent domestic violence could not make a significant impact on domestic VAW reduction. However, it brought significant improvements in women's earnings,

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perception on their autonomy, controlling actions, and value of their marriage lives (Green et al., 2015).

Likewise, microfinance-based intervention in Côte d'Ivoire (2010 to 2012) showed that economic deprivation of women decreased by sixty one percent (Falb et al., 2015; Gupta et al., 2013). Furthermore, the financial support promoted safe sex, reduced the incidence of sexual transmitted infections, balanced power in the home, transformed couples' attitude and reduced domestic VAW by about one third (30%). Remarkably, domestic VAW also decreased by more than half (57%) among partners achieved gender equitable power in their relationship (Krishnan et al., 2012).

In addition, there is evidence from research conducted in South Africa that participants allocated in the combined alcohol and HIV prevention group, has shown that domestic VAW declined by 70%. It confirmed that the gender based violence (GBV)/HIV intervention group significantly reduced the risk of physical domestic VAW by 50% compared to the control group (Kalichman et al., 2011). Another study finding in South Africa (2002-2006) has shown that, domestic VAW and power inequity in relationship increased the risk of HIV infection. The chance of HIV acquisition of women who had more than one episode of physical or sexual domestic VAW were increased by 15%. This indicates that intervention should target gender equity and equality concepts to address domestic VAW (Jewkes et al, 2010). A community-based intervention using advocacy sessions and local mass media in Tanzania (2012) revealed that awareness creation programs of women on sexual domestic VAW improved significantly from 57.3% to 80.6% in the intervention group as compared with comparison group from 55.5% to 71.9%. The combined intervention had a substantial effect on awareness of domestic VAW and improved attitudes/norms (Abeid et al., 2015).

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Research evidence has shown that an integrated community-based comprehensive prevention, economic empowerment of the women, transforming the society's gender equality- and equity-norms in relationships. Involving men and advocacy meetings with concerned bodies had an effect to prevent domestic VAW (Green et al., 2015; Jewkes et al., 2010; Kalichman et al., 2011; Kim et al., 2007; Krishnan et al., 2012; Pulerwitz et al., 2015).

The WHO has recommended among others, primary prevention strategies, combining gender equality-norms transformative training, communication and relationship skills, and sensitization through health education as good strategies to prevent domestic VAW (WHO, 2015b). In Ethiopia, however, there is paucity of studies related to domestic VAW. Domestic VAW is a common phenomenon and forms part of women's life experiences. Its prevalence ranged from 19% to 78% (CSA, 2017; Deyessa et al., 2009; Semahegn et al., 2013; Semahegn & Mengistie, 2015; WHO, 2013). A combined community-engagement with group-education has been shown to decrease domestic violence by about 60% (Pulerwitz et al., 2015).

In conclusion, implementation of the existing proven evidence into routine prevention and controlling domestic VAW practice is very limited. Therefore, domestic VAW can be prevented and controlled through interventions that address gender-norms. Gender-norms transformation interventions can go beyond promoting gender equality and protecting women from domestic violence, and ensuring women's equitable participation on the development activities and healthy society in the country.

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1.2 Statement of the problem

Domestic VAW is a major obstacle in achieving development targets. The majority of women experience some form of violence which leads to serious injury, including, death during their lifetime (UNIFEM, 2010; WHO, 2005). Thirty eight percent of all female homicides were committed by intimate partners. In the meantime, one in three women in the reproductive age worldwide has experienced at least one form of domestic VAW (WHO, 2013). A systematic review and meta-analysis revealed that the proportion of current domestic VAW ranged from 17% to 64% (Feder et al., 2012).

The estimated cost of domestic VAW is about four percent of many countries' gross domestic product (GDP), which is comparable to numerous government expenditure on primary education. Nevertheless, domestic VAW is considered as socially minor problem and private matter. Many women have been living in countries where domestic VAW is an outlawed. In the same vein the vast majority of women still live in countries where domestic VAW is not considered as wrongdoing. Weak legal sanctions, and a difficulty to distinguish between a 'public' and 'private' matter have made domestic VAW taken a long time to be recognized as a violation of human rights (Baumgarten & Erdelmann, 2003; Jewkes et al., 2003; WHO, 2005).

The United Nations (UN) identified domestic VAW as a global public health issue that requires urgent action. For this reason, it aimed to establish a supporting household environment to improve women's rights, economic and political empowerment by 2035, which could attract legal sanctions (Jamison et al., 2014). In addition, the Maputo Plan of Action (2016 to 2030), ratified International and Regional Conventions, Charters, and Protocols to implement and promote access to sexual and reproductive health services to prevent domestic VAW (AU, 2016).

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Furthermore, the direct health care cost and indirect loss of productivity due to domestic VAW have serious implications on the victims, family members and the society at large. In the United States of America (USA), the expense associated with domestic VAW exceeds about $6 billion annually. Of this, almost $4 billion was incurred/spent through direct medical and health care services. The remaining $2 billion was incurred due to productivity loss associated with domestic violence. In the United Kingdom, domestic VAW costs approximately £23 billion annually (UNIFEM, 2010; USAID, IGWG, 2010). This indicates that domestic VAW has contributed to acute and chronic health problems.

Domestic VAW is linked with different levels of factors such as, inequity gender-norms, partners' alcohol consumption and others. In three studies, the patriarchal gender-norms, poverty, denied access to education, higher parity, history of violence, alcohol use and women living within norms that recognize domestic VAW as an exclusive family matter, allowing men the authority to control their wives (Das et al., 2013; Pallitto & Campo, 2005; PRB & IGWG, 2002). In addition, the WHO global estimates on domestic VAW associated factors indicated that having deep-rooted inequality gender-norms, poverty, and lack of education create a system of impunity for men to perpetrate violence against their wives (WHO, 2004, 2005, 2015b).

Furthermore, studies conducted in Kansas (Santaularia et al., 2014), India (Agrawal et al., 2015), Tanzania (Laisser et al., 2011) and Zimbabwe (Mukanangana et al., 2014) have indicated that age, no education, low household income, women's lack of autonomy, women's having receptive attitude towards inequitable gender-norm and justified wife-beating, religious views, and poor policy implementation were linked with domestic VAW. Moreover, domestic VAW has been shown to be significantly associated with several negative health consequences such as miscarriage, alcohol use,

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gastrointestinal problems, mental illnesses, injuries, disabilities and chronic illnesses (Das et al., 2013; WHO, 2005, 2013, 2015b).

A systematic review and meta-analysis revealed that women who had experienced domestic VAW were three times more likely to be depressive, four times more likely to be anxious and seven times likely to have post traumatic stress disorders (Feder et al., 2012). Moreover, domestic VAW causes physical and psychological harm to millions of women. Hence, there is a need for medical care and public health service (Baumgarten & Erdelmann, 2003). For instance, women who had experienced emotional domestic violence have a 24% higher risk of developing hypertension than women unexposed according to the National Institute of Health (NIH) violence study (Mason et al., 2012).

Likewise, several studies have reported that domestic VAW significantly increased the risk of acquiring HIV and other sexual transmitted infections (Agrawal et al., 2015; Harling et al., 2010; Baumgerten & Erdelmann, 2003; Li et al., 2014; Maman, 2000; Michele et al., 2009; Mukanangana et al., 2014; WHO, 2004, 2013). Other studies have reported that domestic VAW is associated with survivors having poor reproductive health consequences (WHO, 2005, 2015b; Yigzaw et al., 2004).

Similarly, a finding from Colombia DHS (2000) reported that one-in-five women experienced domestic VAW and this was associated with severe physical injuries or permanent disabilities (Pallitto & Campo, 2004). The finding from analysis of DHSs of the three South Asian countries' (Bangladesh, India, and Nepal) indicated that domestic VAW was significantly associated with secret use of modern contraception (Raj et al., 2015). Contrarily, findings from the DHS of three sub-Saharan Africa countries, Gabon

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(2012), Nigeria (2008), and Zambia (2007) have shown that domestic VAW had significant associations with women's high fertility (Odimegwu et al., 2015).

Some other research findings have confirmed that worldwide women who had experienced domestic VAW were more likely to have unintended pregnancies and induced abortions (Antai & Adaji, 2012; Pallitto & Campo, 2004; Baumgarten & Erdelmann, 2003; Mukanangana et al., 2014; Nguyen et al., 2012; Pallitto & Campo, 2005; Rahman, 2015; WHO, 2005, 2013, 2015b). Unintended pregnancies, however, could be decreased by 5% if domestic VAW was eliminated (Pallitto & Campo, 2004).

The UN has set comprehensive and ambitious targets to end avoidable maternal deaths through universal access to reproductive health care from 2016 to 2030. The years of life lost (YLL) due to reproductive health condition is almost double in Africa (63%) compared to global (37%) (UN, 2015). Similarly, WHO has proposed building responsive health systems to avert domestic VAW by 50%, and use the elimination of discrimination against women as an indicator for tracking the progress to end avoidable maternal mortality from the human rights perspective by 2030 (Jewkes, 2014; WHO, 2015a).

Comprehensive interventions aimed at preventing domestic VAW is recommended to depict the multi-sectoral approach to implement sanctions against perpetrators. It may include training of judiciary, police, health care workers, providing shelters, and psychological support networks (WHO, 2005, 2015b). Nevertheless, almost all of the gender transformative health programs in developing countries are reliant on non-governmental organizations (NGOs). Program integration, owning and scaling up processes are very limited (Muralidharan et al., 2015).

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Domestic VAW is common in women's life, and its prevalence has been reported by different studies ranging from 19% to 78% in Ethiopia (CSA, 2017; Deyessa et al., 2009; Semahegn et al., 2013; Semahegn & Mengistie, 2015; WHO, 2013; Yigzaw et al., 2004). The communities' and women's receptive attitude towards traditional inequitable gender-norms and justified wife-beating are high. The women are expected to be tolerant (keeping silent) (Abeya et al., 2012). Nationally, according to the Ethiopia DHS, women's receptive attitude towards justified wife-beating has been progressively declining that ranged from 81% in 2005 (CSA, 2006), to 68% in 2011 (CSA, 2012), and to 63% in 2016 (CSA, 2017).

The emphasis given to domestic VAW is not commensurate with its impact on human rights, economic and health consequences (CSA, 2017). However, the government of the Federal Democratic Republic of Ethiopia gives legal remedies for all citizens in the constitution (Article 35 and 89(7)) (FDRE, 1994), criminal code under proclamation NO.414/2004 *(*Article 564) (FDRE, 2005), and Revised Family Code Proclamation No. 213/2000) (FDRE, 2000). These policy documents have stated that any form of violence against women by married or a cohabiting partner is prohibited.

Nevertheless, implementation of the existing national law and conventions is limited. In response to this, the Health Ministry in Ethiopia, has developed a binding document on prevention of sexual violence and provision of care for survivors (FMOH, 2016b). Awi Zone is one of the areas that reported the highest domestic VAW in Ethiopia (Semahegn & Mengistie, 2015). Therefore, to address policy implementation gaps as stated by the government of Ethiopia through Ministry of Health (FMOH, 2016b), there is a need to pilot implementation and community mobilization to respond to and prevent domestic VAW.

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1.2.1 Summary of the chapter

Evidence from the international organizations' report, systematic reviews and several primary studies have shown that domestic VAW is a global pandemic. Domestic VAW is significantly associated with societal old-fashion norms. Furthermore, it causes several poor health outcomes to the victims and their families. The domestic VAW studies confined on observational studies, even if some interventional studies found out that domestic VAW can be prevented through implementation of existing evidence. However, implementation of the existing proven evidence into routine prevention and controlling domestic VAW practice is very limited. Therefore, domestic VAW can be prevented and control through interventions that address gender-norms. Gender-norms transformation interventions can go beyond promoting gender equality and protecting women from domestic violence, and ensuring women's equitable participation in the development activities and healthy society in the country.

1.3 Theoretical frameworks for the pilot implementation research

Two pragmatic theoretical frameworks were used to guide this piloted interventional implementation research using mixed methods approach. Both theoretical frameworks are pragmatic and consolidated, which were constructed through a systematical review of existing theories and models.

1.3.1 Integrated ecological conceptual framework

This section discusses the mechanisms through which domestic VAW occurs and how they are linked to different levels of risk factors. The first was used to understand the interrelated risk factors for domestic VAW. The risk factors were categorized as individual, interpersonal, community and society related according to the VAW globalizing the integrated ecological conceptual framework (Fulu & Miedema, 2015;

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Heise, 1998). The four broad level factors are inter-linked with women's experience of domestic violence. Figure 1 illustrates the interrelationship between the individual, relationship/interpersonal, community and societal factors and the women's exposure to the incident of domestic violence at their homes by their married or cohabitating partners. In addition, it presents the influence of program implementation barriers, and designed interventions to alleviate domestic VAW, the outcome of the piloting implementation research carried out during the study period.

1.3.2 Context of the conceptual framework for the study

This conceptual framework has been constructed by adapting the socio-ecological conceptual framework for domestic VAW and its associated factors (Heise, 1998). Overall, the risk and occurrence of domestic VAW have multiple and co-incidental risk factors. These factors range from the general environment that surrounds the women (government policy, politics, media and other macro events) to the individual behavior and socio-demographic characteristics. Furthermore, factors related to the community, religion, neighborhood and couples' relationship have their contribution towards the occurrence of domestic VAW. These factors have been restricted according to the local context and research objective.

1.3.3 Description of framework components

The framework conceptualizes domestic VAW and its link with four major levels of factors that interact in a variety of ways to result in domestic VAW. These are:

- **Societal factors:** Represent the broadest component that interrelates several factors within the system such as policies, laws, constitution, and societal gender-norms;
- **Community factors:** These are linked with the community's culture, norms, and attitudes towards justified wife-beating;

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- **Relationship or interpersonal factors:** These are linked with assigned status, recognized within the relationship such as (head of household, decision-makers), type of marriage and marriage ceremonies, number of children alive for couples, access to and control over the resources, etc.;

- **Individual factors**: These are the characteristics of individuals (wife versus partner) includes age, religion, occupation, educational level, behaviors (alcohol or other substance use), controlling behaviors and others.

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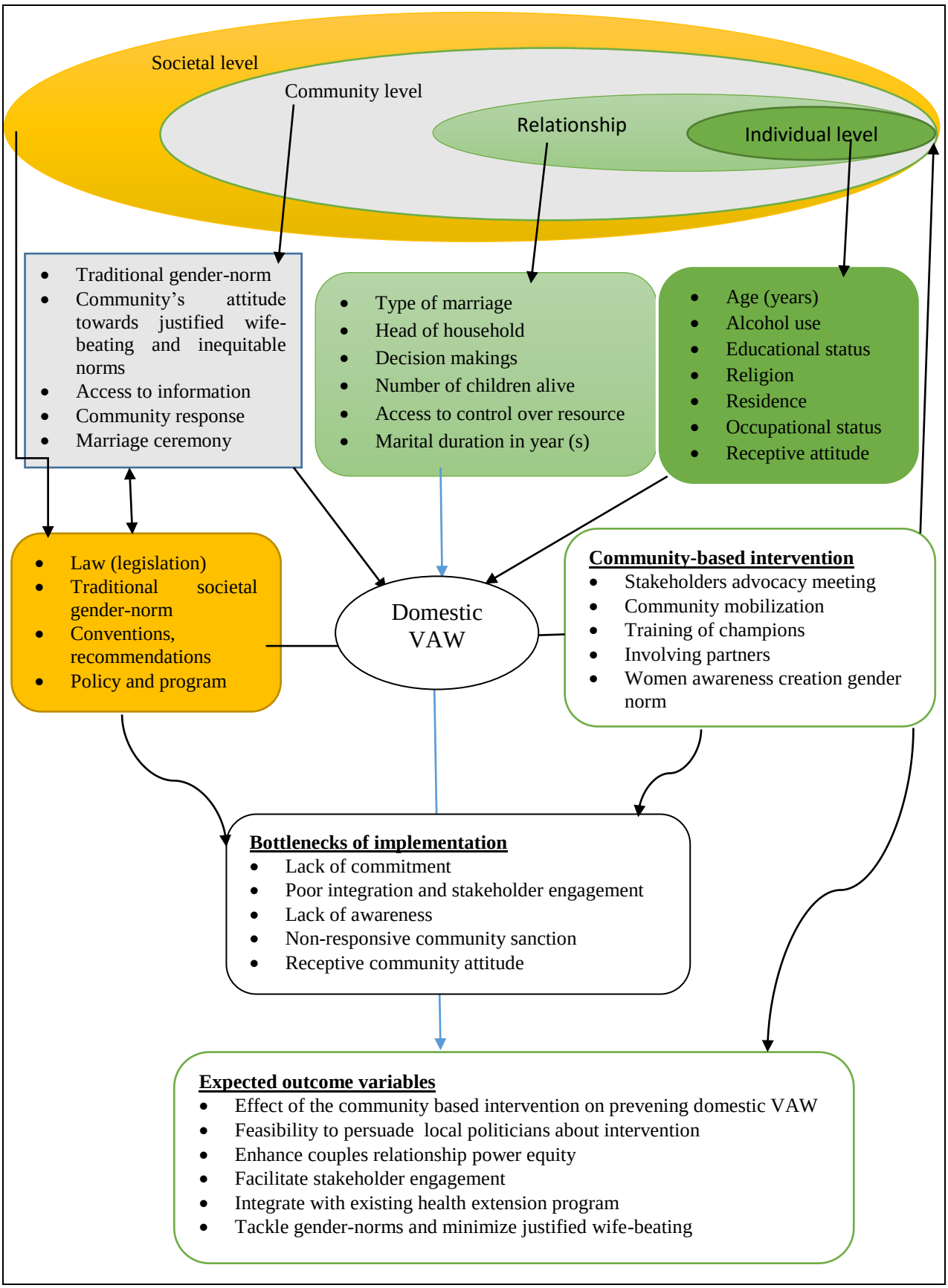


Figure 1: The adapted an Integrated, Ecological Conceptual Framework (Heise, 1998)

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1.3.4 Consolidated framework for implementation research

The second framework was the Consolidated Framework for Implementation Research (CFIR), which used to guide the assessment of intervention barriers and enablers on five established domains (Intervention, Inner setting, Outer setting, Individual behavior setting and Process of implementation setting). As synthesized evidence has documented by Laura and colleagues (Damschroder et al., 2009), consolidated framework for implementation research has been developed through systematically review of more than 19 theoretical frameworks or models used by studies for program and policy implementation. In addition, it has looked at evidence gaps, which has shown that many theories have focused on understating of individual behavior changes. But little research has been done to comprehend the dynamic interrelationship between individual and settings (organization, work place, individuals' behavior). Furthermore, the most frequently cited theories (social cognitive theory and theory of planned behavior) are relied on intention and behavior of individuals. The fact that a comprehensive and consolidated framework is crucial to understand the dynamic, systematic, complex, and context relied on characteristics of the implementation research from initiation to process and impacts.

The WHO especial program of tropical disease research (TDR) program (WHO-TDR Group, 2014), adapt and recommend to apply the CFIR. Therefore, the CFIR is a pragmatic meta-theoretical framework that can be used to complement these theories with its comprehensive classification of key constructs related to the intervention characteristics, inner and outer settings, individual characteristics (behavior) and implementation process. It provides a pragmatic structure for approaching the complex, dynamic, context based using systematically generated and proven solutions to alleviate our real world public health tragedies (Figure 2).

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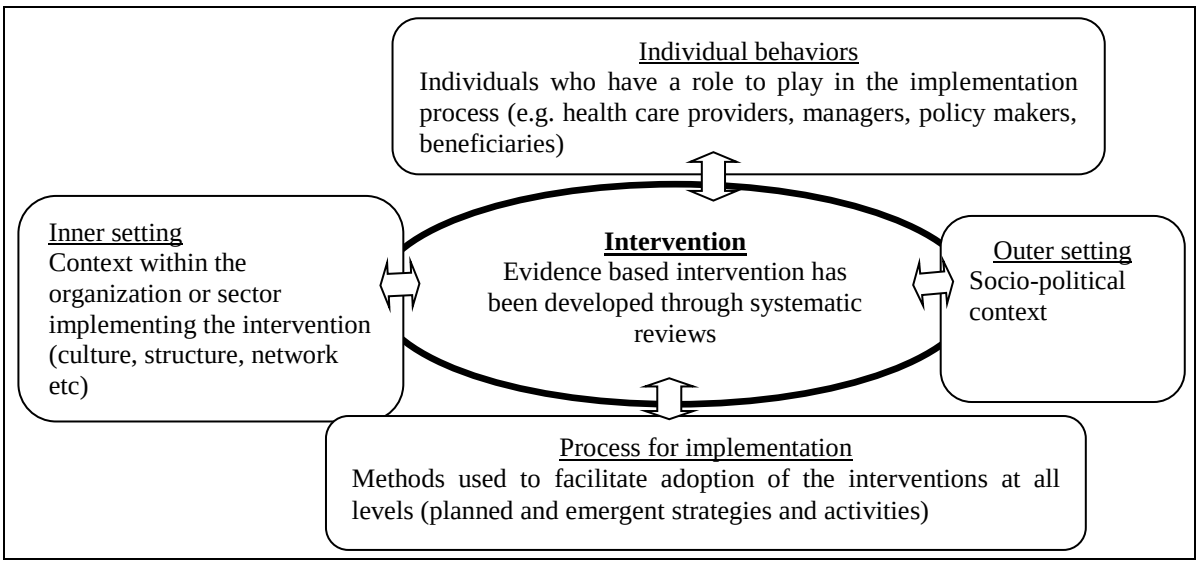


Figure 2: Schematic presentation of interacting domains

1.4 Justifications of the study

As several literature have indicated that VAW is a systematic, serious, and pervasive human rights violation. It has a strong association with poor health, which has incurred a direct and an indirect economic loss or cost. Therefore, this study mainly pointed out the following rationales to carry out an implementation research to prevent domestic VAW.

1.4.1 Human rights rationale

Domestic VAW is a systematic and devastating human rights violation. This is the violation of women's rights to be safe and feel secure from any physical, psychological or emotional harms.

> '…Violence against women and girls is a human rights violation, public health pandemic and serious obstacle to sustainable development goals…It imposes large-scale costs on families, communities and economies…The world cannot afford to pay this price...' (Ban Ki-moon, UN Secretary General, 16th Nov. 2016).

1.4.2 Health rationale

Domestic VAW is now becoming a main health concern and an increasingly unmanageable public health challenge worldwide. Domestic VAW is a contagious

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epidemic, and is well recognized by the WHO. It is linked with different devastating health outcomes and women's poor health service utilization. To respond to this, the WHO's (2016) antenatal care and HIV control guideline recommendations regular screening, and other research findings have made attempts to address domestic VAW issues to prevent different public health problems.

1.4.3 Gender as a cross-cutting rationale

It is mostly disproportionately affecting women due to the huge socio-economic disparity and the presence of traditional societal inequitable gender-norms. Domestic VAW is a cross-cutting issue and avoidable as it negatively affects women's health, diminishes women's role in development being political participation and decision making, access to and utilization of health care services, and other social affairs involvement.

1.4.4 Implementation gap rationale

Although the government of Ethiopia has ratified many international conventions, declarations, platforms for action, and also incorporated these issues into the national policy (constitution, criminal codes, family law and other policy documents, programs and strategies), implementation has been a challenge. Ethiopia is being an example among countries with high domestic violence level worldwide, culturally compatible evidence-based preventive interventions are in high demand to address gender inequality and inequitable-norms. Participatory community-based intervention programs should be designed to mobilize the community, involve different stakeholders and partners, improve community attitude towards gender-norms in response against wife-beating and other violent behaviors.

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Generally, VAW is a common life experience of women in Ethiopia. Ethiopia was one of the multicountry study site in 2005 that reflected one of the highest prevalence, which was 71% (WHO, 2005). In addition, a systematic review from studies conducted from 2000 to 2014 has shown that domestic VAW ranged from 19% to 78%. Majority of the women had receptive to justified wife-beating norms (CSA, 2006, 2012, 2017). As far as the existing knowledge is concerned, this is the first implementation research to pilot interventions on preventing domestic violence against women (15 - 49 years) in Ethiopia. An interventional study to prevent VAW is very crucial to inform programs in Ethiopia. Furthermore, this study is aimed at translation of existing evidence into routine practice or implementation. Therefore, this implementation research is aimed at piloting the effectiveness of implementing existing evidence from studies in different parts of the world is crucial to prevent and control domestic VAW in Ethiopia.

1.5 Significance of the study

This study is intended to raise the level of awareness of the community on the implementation of the national constitution, criminal codes, family laws, country policies, strategies control guidelines and standard operating for responding to and preventing domestic VAW. In addition, proven research evidence has translated into routine practice to prevent and control domestic VAW within the existing policy framework in Awi Zone. The study could provide insight into the activities of different governmental and non-governmental stakeholders who have been working on gender-based violence. Awi Zone, respective Districts in the Zone and other local program planners can benefit from this study's findings and be used as input for future plans to prevent domestic VAW. Furthermore, the community, women and partner's awareness could be improved through community mobilization activities and stakeholders' engagement within the context of the community. The study's findings could be used for

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program planning, advocacy for stakeholder engagement, and intervention integration in preventing domestic VAW. Likewise, the findings of this research can also be used a reference material for additional investigation on the related field.

1.6 Research questions

Given the research gap with respect to implementation of community-based intervention on transforming community's traditional gender-norms to prevent domestic VAW, this study tried to find answers to the following research questions:

1. What is the level of domestic VAW in Awi Zone?
2. What are the factors associated with domestic VAW?
3. Can domestic VAW be prevented through a community-based intervention?
4. What are the bottlenecks of prevention intervention implementation?
5. How can stakeholders be engaged to mobilize community and resources to implement existing evidence based interventions to transform gender-norms?

1.7 Objectives of the study

1.7.1 General objective

The main purpose of this study was to assess the implementation and the outcome of community-based intervention on the prevention of domestic violence against women (15 - 49 years) and its associated factors in Awi Zone, Northwestern Ethiopia.

1.7.2 Specific objectives

1. To assess the level of the different components of domestic VAW
2. To identify associated factors of domestic VAW
3. To implement interventions and identify barriers in VAW programs
4. To determine the effect of community-based interventions on domestic VAW

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1.8 Research hypothesis

- Null hypothesis (Ho): this community-based prevention intervention may not have effect (difference) on the level of domestic VAW as compared with control (standard program).
- Alternative Hypothesis (HA): community-based prevention intervention may have more effect that make difference (improve) on the level of domestic VAW on the intervention groups than control (standard services).

1.9 Philosophical underpinning of the research

In social science research, there are three commonly applied underlying philosophical assumption to understand knowledge and human behavior. Positivism, Interpretitivism and Postmodernism (critical theory) are commonly applied philosophical underpinnings to understand contexts in public health (Jackson, 2013; Scotland, 2012) (Figure 3).

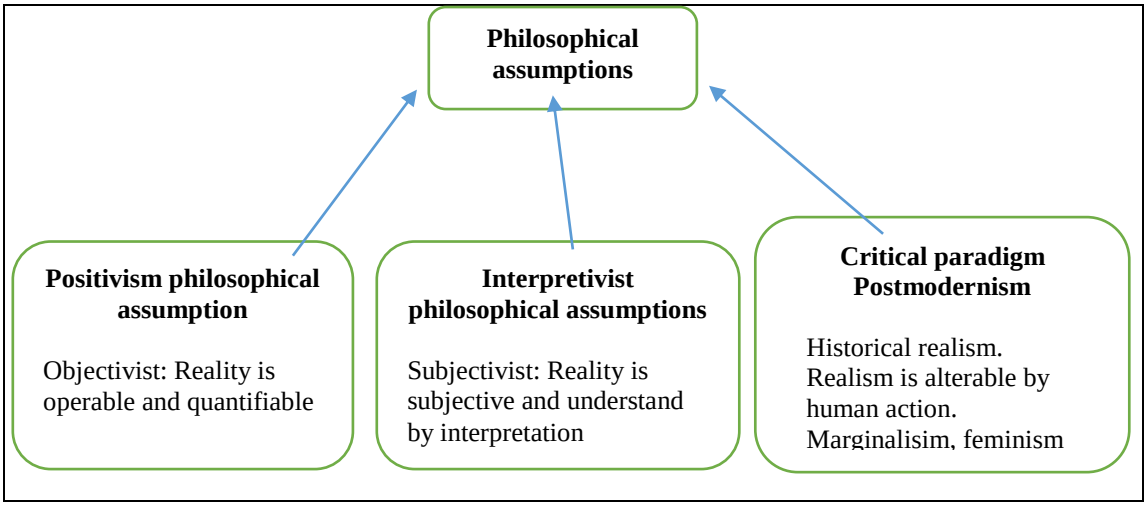


Figure 3: Schematic illustration of the common philosophical underpinnings in research

The positivist researchers assume that the reality is objective, and measurable using instruments. In this school of thought, knowledge is objective and quantifiable. Positivists believe that knowledge cannot be affected by the external environment (Jackson, 2013; Scotland, 2012). Others, Interpretivist and anti-foundationalists believe

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that reality constitutes people's subjective behavior. Reality is affected by external environment or contexts. Interpretivist paradigm is concerned with the understanding of the world in real-setting from subjective experiences and interpretation (Chowdhury, 2014; Jackson, 2013; Scotland, 2012). In critical paradigm (postmodernism), researchers assume that social reality is a historically constituted historical reality that is produced and reproduced. Reality is determined by social, economic, political domination, gender, culture, and other circumstances. Critical researchers believe that reality is altered by human action (Jackson, 2013; Scotland, 2012).

Therefore, this research is relies on the blended philosophical assumptions, the so called pragmatism. The three specific objectives (1, 2, and 4) were quantifiable. The proportion, casual relationship and intervention effects were measured and quantified using quantitative data analysis methods. On the other hand, the specific study objective 3 was assessed using the qualitative or Interpretivist approach. The philosophical underpinning of this research has relied on the pragmatism view, which is using what works.

1.10 Organization of the thesis

This thesis comprises six chapters. Chapter one presents an overview information on the level of domestic violence, consequences due to violence, contributing factors and the gap in the implementation of existing policy in the study area. In addition, the chapter presents the conceptual framework and its descriptions, research questions and study objectives. Chapter two comprises literature reviewed on the magnitude of domestic violence, women's autonomy on decision makings, women's attitude towards justified wife-beating, contributing factors, and the systematic review and meta-analysis.

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Chapter three provide information's on the study area/setting, eligible population, study design, sampling procedure and participants' allocation, description of intervention and implementation, tool, data processing and statistical analysis and ethical considerations. Chapter four discusses on the study output on intervention implementation outcome, the four outcome variables (domestic VAW, justified wife-beating, inequity gender-norms, and women's disclosure), qualitative findings and key summary of the findings. Chapter five provides the discussion section of the thesis including summary of key findings, main discussion sections, generalizability and transferability of findings, strength and limitation, and study contribution to the literature. Chapter six gives a conclusion and recommendation of the study findings (Figure 4).

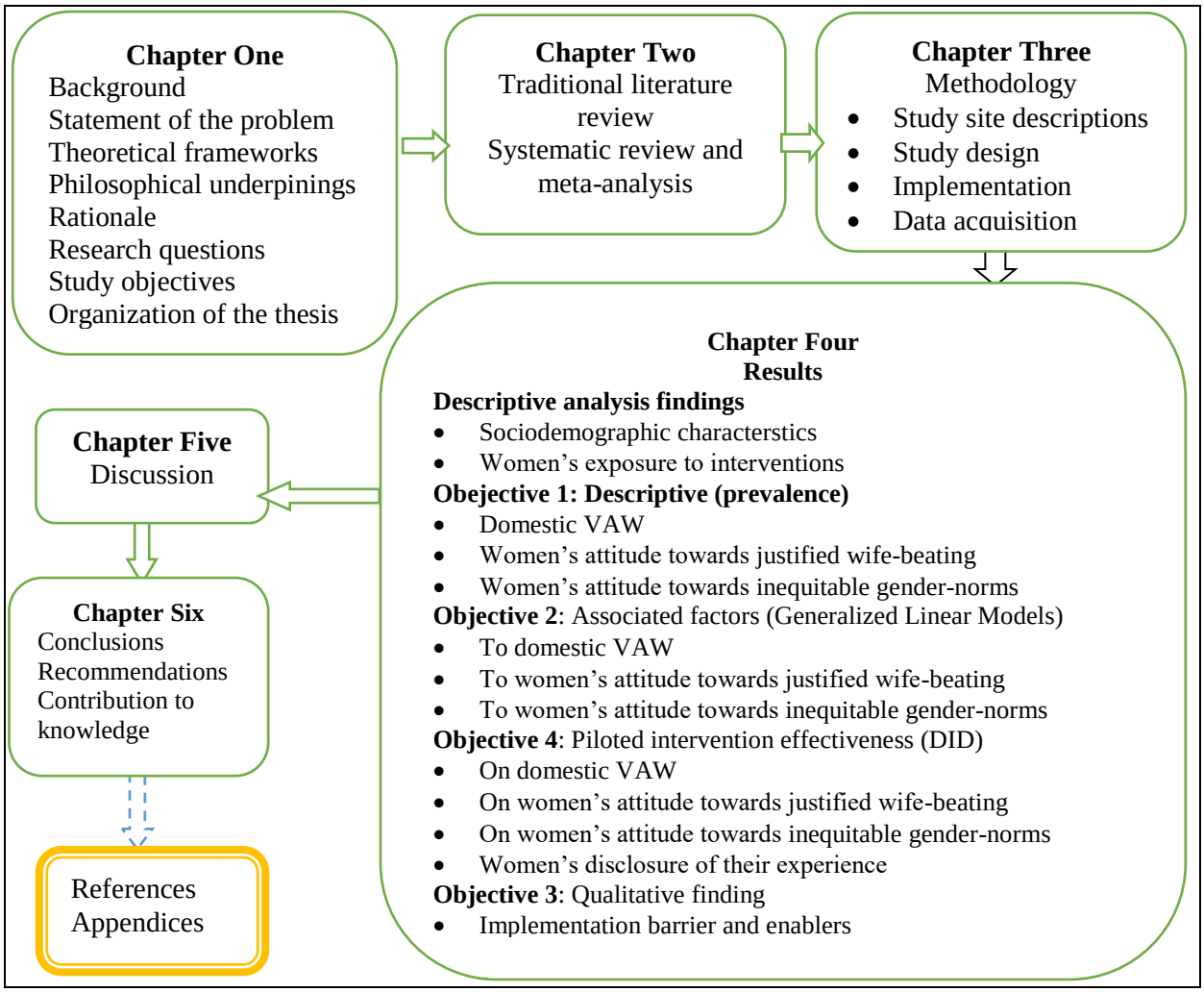


Figure 4: Schematic presentation of the thesis organization

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CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This Chapter discusses relevant literature on domestic VAW in relation to the objectives of the study. It covers, among others, the magnitude of domestic VAW, women's receptive attitude towards justified wife-beating and factors associated with domestic VAW. It also highlights where domestic violence survivors sought help. The Chapter also includes a systematic review and meta-analysis of studies to reduce domestic violence in low- and lower-income countries (LLMICs).

2.1 Magnitude of domestic violence against women

It is evidenced from WHO's multicountry study (2002-2003) among women reported that, prevalence of domestic VAW varied from 15% in Japan to 71% in Ethiopia (Garcia-Moreno et al., 2006). Also the analysis of National Institute of Health (NIH) violence registry indicated that women's experience of physical and sexual domestic VAW were 22% and 10%, respectively (Mason et al., 2012). Another finding from the analysis of twenty four countries' DHS among women indicated that domestic VAW was 36.4%, ranging from 14.9% in Azerbaijan to 70.4% in Uganda (Palermo et al., 2013). In Columbia, findings including DHS (2000) indicated that domestic VAW ranged from 8% to 37.7% among women. Specific types of domestic VAW, such as pushing, slapping, hitting with hand, kick punches and attacks with knives or guns in Columbia ranged from 2% to 33% (Pallitto & Campo, 2004; Das et al., 2013; Pallitto & Campo, 2005).

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According to the analysis of the DHS (2005 - 2007) of three Eastern Europe countries (Azerbaijan, Moldova, and Ukraine), 13% of women had ever experienced physical domestic VAW in both Azerbaijan and Ukraine, and 24% in Moldova. Of these victims of domestic VAW, women who had suffered from physical injuries in Azerbaijan, Moldova and Ukraine were 40%, 60%, and 70%, respectively (Ismayilova, 2013). A cross-sectional study carried out in Turkey among women has reported that domestic VAW was 39.0%. More than quarter of women experienced emotional domestic VAW (Gokler et al., 2014). Approximately two-thirds (63.4%) of the women were victims of domestic VAW in Columbia (Vu et al., 2016).

Evidence from the analysis from the DHS of three South Asian countries DHS (Bangladesh, India, and Nepal) indicated that 37% of women experienced with physical and 23% sexual domestic VAW (Raj et al., 2015). Specifically, studies conducted in Bangladesh, including the analysis from DHSs (2001-2007) revealed that women's experience of domestic VAW ranged from 48% to 53% (Dalal et al., 2013; Rahman et al., 2012; Rahman et al., 2013; Rapp et al., 2012). Meanwhile, physical, sexual and concurrent domestic VAW were 48%, 19% and 14%, respectively (Rahman et al., 2012). Sexual domestic VAW was 11% (Dalal et al., 2013). Findings from studies conducted in India, including Family Health Surveys (2005 - 2006) among women have shown that 36% to 70% of women were victims of domestic violence (Babu & Kar, 2009; Das et al., 2013; Krishnan et al., 2010; Michele et al., 2009; Madhivanan et al., 2014; Rapp et al., 2012). One study (Madhivanan et al., 2014) reported that women who have ever had anal (6%) and oral (5%) sex when they did not want to.

Rates of experiences of domestic VAW ranged from 15% to 36% were reported in studies conducted in Nepal including analysis of Nepal DHS (2011) have reported that

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(Dalal et al., 2014; Dhakal et al., 2014; Lamichhane et al., 2011; Sapkota et al., 2016). According to one of these studies, sexual, physical, and psychological domestic VAW were reported to be 2%, 15%, and 18%, respectively. The concurrent domestic VAW was 12% (Sapkota et al., 2016). Likewise, sexual, and physical domestic VAW were 31% and 17%, respectively (Lamichhane et al., 2011). In addition, sexual, psychological, and physical domestic VAW were 15%, 18%, and 23%, respectively (Dalal et al., 2014).

Several studies have on the prevalence of domestic VAW have been conducted in different countries in Africa. Of these, a cross-sectional study conducted in Egypt among women reported that the prevalence of sexual domestic violence was 6% (Kaplan et al., 2011). In addition, a study conducted in Sudan among women indicated that the levels of sexual, psychological, and physical domestic violence were 17%, 30%, and 34%, respectively (Ali et al., 2014). Likewise, a finding from the analysis of thirty countries' DHS (2005 to 2014) among women revealed that domestic VAW was 29%. Almost one-third (34%) of women in sub-Saharan Africa countries had suffered domestic VAW (Peterman et al., 2015).

Furthermore, findings from a pooled analysis of ten countries' DHS (2003 to 2007) (Dominican Republic, Haiti, India, Kenya, Liberia, Malawi, Mali, Rwanda, Zambia and Zimbabwe) has reported that the prevalence of any type of domestic VAW was 32%. Specifically, sexual and physical domestic VAW were 9% and 30%, respectively. Seven percent of women had concurrent domestic VAW (Harling et al., 2010).

From the analysis of six sub-Saharan Africa countries' DHS, it was revealed that more than one third of the women encountered a form of domestic VAW. Country specific prevalence of domestic VAW were 31% (Nigeria), 43% (Zimbabwe), 45% (Kenya),

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46% (Mozambique), 54% (Zambia) and 58% (Cameroon) (Bamiwuye & Odimegwu, 2014). Moreover, according to a study finding in South Africa (Vhembe), domestic VAW was deemed to be universal. The prevalence of sexual, physical, psychological, and any domestic VAW were 41%, 94%, 94%, and 97%, respectively (Peltzer et al., 2013). Similarly, in a cross-sectional study conducted in Guinea indicated that, physical, sexual, and psychological domestic VAW were 48%, 68%, and 79%, respectively among women. Almost a quarter (24%) of the women experienced concurrent domestic violence (Delamou et al., 2015).

In Nigeria, it is evidenced that 59% of women had ever faced domestic VAW. Again the prevalence of psychological, physical and sexual domestic VAW were reported to be 50%, 28% and 14%, respectively (Owoaje & Olaolorun, 2012). Nevertheless, lower prevalence of domestic VAW has been reported by a finding from the analysis of Nigerian DHS (2008) which has demonstrated that, physical and psychological domestic VAW were 10% and 14%, respectively (Uthman et al., 2011).

A cross-sectional study conducted in two southern African countries, Botswana and Swaziland, (2004 - 2005) has revealed that slightly higher than a quarter (26%) of the women reported experiencing of sexual domestic violence (Shannon et al., 2012). A research evidence from a prevalence study conducted in Mozambique among women indicated that almost three-quarters (70%) of them experienced domestic violence. Of these, more than a quarter (27%) of them were victim of concurrent domestic violence (Zacarias et al., 2012). Likewise, in two consecutive studies conducted in Rwanda, domestic VAW has shown a substantial increment. This is evidenced by a finding from the analysis of Rwanda DHSs (2005 and 2010), which has revealed that domestic VAW doubled from 24% to 50% (Thomson et al., 2015). Similarly, the findings from studies

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conducted in Uganda indicated that physical domestic VAW ranged from 40% to 48%. Approximately, one-third (30%) of women had encountered psychological domestic VAW (Koenig et al., 2003; Tumwesigye et al, 2012). Another evidence from Uganda DHS (2011) have shown that more than a quarter (27%) of women experienced sexual domestic VAW (Wandera et al., 2015).

In Ethiopia, the WHO multi-country study found the prevalence of domestic VAW to be 71.0% (Garcia-Moreno et al., 2006). The recent Ethiopia DHS (2016) has shown that almost one-thirds of women (35%) had encountered domestic VAW (CSA, 2017). An evidence from a systematic review of fifteen studies (2000 - 2014) in Ethiopia revealed that domestic VAW ranged from 20% to 78% (Semahegn & Mengistie, 2015). The rates of domestic VAW in Ethiopia are varied. For instance, domestic VAW ranged from 50 to 78% (Deribe et al., 2012; Semahegn et al., 2013; Yigzaw et al., 2004), 50.6% (Vu et al., 2016), 32% (Deyessa et al., 2010), and 73% (Abeya et al., 2011). In particular, studies in Amhara Region found domestic VAW rate to be ranging from 21% to 36% in Gondar Zuria District (Yigzaw et al., 2004), and 73% in Fagitalekoma District (Semahegn et al., 2013).

Generally, the magnitude of domestic VAW is high across the several countries, evidenced in study findings. Ethiopia is one of the highest as compared with other literatures A process to correct this pervasive problem, this implementation research could contribute guidelines this implementation research may contribute input for designing and implementation of interventions to prevent domestic VAW.

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2.2 Women's autonomy on decision-making

Analysis from the Columbia DHS (2000) revealed that about one-thirds (35%) of women had autonomy over household matters and decision making processes. However, only 30% of women had the final say in decision makings related to their own lives (Pallitto & Campo, 2005). A study conducted in Bangladeshi has revealed that the level of women's decision making regarding economic issues, health care, contraceptive use and freedom of movement were 33%, 38%, 28% and 45%, respectively (Rahman et al., 2013). In Egypt, results from cross-sectional study conducted among women, showed that 59% of women reported that decisions on household issues are made by their partners (Kaplan et al., 2011).

Analysis of DHS data from three sub-Saharan Africa countries showed that women who made financial decision making of women ranged from around 60% in Kenya, and Zambia, 80% plus in Zimbabwe (Singh et al., 2014). Again the analysis of Uganda DHS (2011) also women revealed that almost half (49%) of the women had decision making autonomy regarding they spent their earnings is spent (44%), own health care (59%), large household purchases (56%), visiting to family (58%), and how their partners' earnings are spent (46%) (Wandera et al., 2015).

Evidence from several LMICs show that women's decision making on family issues is still very low. Approximately half of the women had a say on their household issues. There is a paucity of primary study on women's decision making autonomy, which can be linked with domestic VAW. Therefore, an implementation research to improve women's decision making autonomy is very important to prevent domestic VAW the study area.

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2.3 Women's receptive attitude towards wife-beating

Receptive attitude of women regarding justified wife-beating is highly prevalent in several countries. A study conducted in five eastern Europe countries, Azerbaijan, Moldova, Ukraine, Kyrgyzstan and Tajikistan, (2005 – 2012) reported that women accepted at least one reason to justified wife-beating in Tajikistan, Moldova, and Ukraine were 72%, 13%, 6%, respectively (Ismayilova, 2015). In a meta-analysis of seventeen sub-Saharan Africa countries' DHS (2003 - 2007), women reported that to be receptive towards justified wife-beating or domestic VAW with rates ranging from 28% in Madagascar to 74% in Ethiopia (Uthman et al., 2010). Over one-third of women perceived that wife-beating was justified if a woman disrespected her in-laws, argued with her partners, failed to provide good food, ignored housework and childcare, or went out without permission (Das et al., 2013).

It is also a meta-analysis has revealed that women were more likely to justify domestic VAW (wife-beating) than men (Uthman et al., 2009). Women that justified the wife-beating attitude if a wife neglected her household chores, went out without informing her partner, disobeyed the partners or family elders, refused to have sex, burnt food, argued with her partner or was suspected of infidelity ranged between 13% to 48% (Koenig et al., 2003; Wandera et al., 2015). Another finding from the analysis of Nigerian DHS (2008) showed that 32% of women had receptive attitude towards justified wife-beating (Uthman et al., 2011).

Reports from the analysis of Rwanda DHSs (2005 and 2010) likewise revealed that women also believed a man may beat his wife if he had just a justified reason, increased from 46.5% to 57.0% (Thomson et al., 2015). A qualitative study conducted in Ethiopia (2011 - 2012) indicated that almost all the discussants agreed on the justified wife-

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beating and explained, it was accepted in the community in case a partner had extra marital sex, or a woman failed to give birth, and was suspected of infidelity. The traditions of the community's tradition itself expects women to be tolerant, and silent (Abeya et al., 2012). According to the Ethiopia DHS findings, 81% in 2005 (CSA, 2006b), 68% in 2011 (CSA, 2012) and 63% in 2016 (CSA, 2017) of women (15 - 49 years) had receptive to justified wife-beating if their partners have at least one possible reason to.

Women's receptive attitude towards justified wife-beating is very common in many countries. Ethiopia is one of such country, where women who had receptive attitude towards justified wife-beating ranged from 63% to 81%. Generally, the figures are much higher than other studies reported in this literature. Hence, a study aimed at evaluating an interventional outcome is highly needed.

2.4 Contributing factors of domestic violence against women

Several factors contribute to domestic VAW. Evidence from the WHO multi-country study (2002 - 2003) among women indicated that secondary education and formal marriage offered protection and other factors. Cohabitation, being under aged spouse, receptive attitudes towards wife-beating, conflict from having extra marital sex, partners' fight with fellow men, history of childhood abuse, partners controlling behavior and growing up with violent family were reported to increase the risk of domestic VAW (Abramsky et al., 2011; Garcia-Moreno et al., 2006). Some studies conducted in Uganda identified sexual domestic VAW to be significantly associated with women's decision making in relation to their partners' income, length of partnership, and number of children alive. In addition, jealousy expressed by partners if they talked with other men, and did not allow the women to meet female friends, tried to limit her contact with

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family, alcohol consumption, and women's knowledge of her partner's HIV risk were associated (Koenig et al., 2003; Wandera et al., 2015).

Analysis of Serbian (2010) data, extracted from WHO multi-country study indicated that women with secondary education or below were two times more likely to encounter domestic VAW than those women with tertiary education. Partners' fighting with other men, relationship with other women, childhood witness and childhood history of abuse were cited as associated with domestic VAW (Djikanovic et al., 2010). Finding from three countries (Ukraine, Moldova, and Azerbaijan), demonstrated that domestic VAW was significantly associated with women from poorer households and those whose partners were involved in manual labor. In addition, women with secondary education or below whose partners also have a low level of education and unemployed are more likely to experience domestic VAW (Ismayilova, 2013).

Research evidence from a study conducted in Turkey has shown that men's age group (often young men), educational level (particularly secondary education men), form of marriage, number of children and gambling habits were risk factors for domestic VAW (Gokler et al., 2014). Several other risk factors for domestic VAW were reported from findings of five eastern Europe countries'(2005 - 2012) that women whose family origins, empowerment, higher financial autonomy and patriarchal gender-norms, earned more than their partners, partner controlled family income alone, lack of control over family income, household poverty and financial dependency. However, partners' with higher level of education reduced risk of domestic VAW (Ismayilova, 2015).

In Nepal, it was confirmed that women whose partners had controlling behaviors were significantly increased the risk of domestic VAW (Dalal et al., 2014; Sapkota et al.,

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2016). Those women who were afraid of their partners were more likely to be victims of domestic VAW. However, those women who have jointly made decisions on contraceptive use were less likely to report domestic VAW (Dalal et al., 2014).

Finding from a cross-section study in India (2009) reported that educational attainment, household wealth, and religious groupings (especially Muslims) was a protective against domestic VAW (Michele et al., 2009). For instance, in India reported that domestic VAW was significantly associated with women had skilled jobs, women who contributed some household income, who were younger than 18 years at marriage, whose partners had other sexual partners, and whose partners smoked (Madhivanan et al., 2014).

On the other hand, another finding from India reported that women with highly educated partners, wives with higher education than their partners, and equally highly educated couples had significantly lower likelihood of experiencing domestic VAW (Rapp et al., 2012). In a prospective study also conducted in India (2010), the authors found women who were employed, newly employed, and partners who had difficulty finding/keeping jobs, were prone to domestic VAW. Nevertheless, it is reported that women whose partners had stable employment were associated with domestic VAW (Krishnan et al., 2010). It seems people found at the extreme ends; of lowest/highest categories of education and wealth are violent domestically. In addition, women's experience of domestic VAW was associated with age, occupational status, educational status of the women and family monthly income in India (Babu & Kar, 2009).

A follow up study conducted among pregnant women in Indonesia (1996 - 999) revealed that sexual domestic VAW was linked with partners' age ($\leq$ 35 years), women had lower economic status, unfaithful partners, partners who had witnessed domestic VAW during

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childhood, women being unfaithful, and partner fighting with other men. In addition, socially receptive attitude towards justified wife-beating, gender inequality, financially independence for women and traditional patriarchal gender-norms were the factors associated with increased probability of domestic VAW (Hayati et al., 2011).

Domestic VAW was shown to less likely be experienced. Reported from the analysis of Bangladesh DHS (2007) among women who had a high level of self-rule, higher say over economic decision making, living in areas of non-supportive of wife-beating attitudes, and with employed partners. Nevertheless, the risk of domestic VAW was higher among women in a cash paying job and married at an illegal age (Rahman et al., 2013). Another study conducted in Bangladesh reported that women with secondary or higher education, women who are wealthy, and are hold microfinance project memberships increased exposure to domestic VAW (Dalal et al., 2013).

Evidence from studies in Nigeria, including DHS (2008) among women revealed that women who had tolerant attitude towards wife-beating, their partners engaging in physical fight, partners with controlling behaviors and poor decision-making autonomy were more likely to be experienced domestic VAW (Antai, 2011; Antai & Adaji, 2012; Owoaje & Olaolorun, 2012; Uthman et al., 2011). Women who were more educated, and who earned more than their partners, and whose partners did not contribute to household earnings had significantly higher likelihood of domestic VAW. Nevertheless, women with primary education and were unemployed were less likely to report domestic VAW compared to highly educated and employed women (Antai & Adaji, 2012).

Research evidence from a comparative analysis of seventeen sub-Saharan Africa countries showed that increasing wealth status, higher education attainment,

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urbanization, access to media, and joint decision-making were associated with decreased odds of justifying domestic VAW. Though this observation was not consistent across countries (Uthman et al., 2009). Research evidence from study employed in six sub-Saharan Africa countries indicated that experience of violence was significantly linked with socio-economic status but this was not consistent (Bamiwuye & Odimegwu, 2014).

Higher inequity gender-norms was reported increased male controlled sexual decision-making power in study conducted in Botswana and Swaziland. It stated further that this increased women's risk of experiencing domestic VAW (Shannon et al., 2012). Also analysis from the Uganda DHS (2006) indicated that women who achieved higher educational level were unlikely to experience physical domestic VAW (Tumwesigye et al., 2012). Malawian study conducted in among couples highlighted the impact of being relationship and male dominance were silent power factors increase risk to sexual domestic VAW. Educational level were protective elements against physical domestic VAW (Conroy, 2014).

In another study conducted in Mozambique (2012), it was indicated that women whose partners had controlling behaviors, and concurrent victimization was linked to their experience of domestic VAW (Zacarias et al., 2012). Analysis of Rwanda DHSs (2005 - 2010) among couples showed that partners who had witnessed domestic VAW during childhood. Partner or women who believe domestic VAW is justified, partner with extra marital relationships, those on the bottom wealth quintile, producing a male/female children, and having an employed partner, were linked with the risk of domestic VAW. Whereas having a partner with secondary education, woman being involved with her own wealth creation/earnings, and decision making were protective factors against domestic VAW (Thomson et al., 2015).

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Results from a study out in Botswana (2012) revealed that gender inequity norms, women with less than secondary school, lower monthly household income, and resident in rural areas were predictors of domestic VAW (Shannon et al., 2012). A study conducted in Tanzania, it was clearly outlined economic powerlessness, perception of man as powerful partners, societal norms and expectations regarding women's sexual behavior being associated with domestic VAW (Nyamhanga & Frumence, 2014). Physical domestic VAW was also seen to be associated with partners' education and polygamous marriages in Sudan (Ali et al., 2014).

Several studies have reported that partners' alcohol consumption habits were consistently associated with domestic VAW (Abate et al., 2016; Abeya et al., 2011; Abramsky et al., 2011; Ali et al., 2014; Djikanovic et al., 2010; Gokler et al., 2014; Hayati et al., 2011; Ismayilova, 2015; Koenig et al., 2003; Nyamhanga & Frumence, 2014; Owoaje & Olaolorun, 2012; Pitpitan et al., 2013; Madhivanan et al., 2014; Semahegn et al., 2013; Semahegn & Mengistie, 2015; Thomson et al., 2015; Tumwesigye et al., 2012; Wandera et al., 2015; Yigzaw et al., 2004).

An evidence from a systematic review of fifteen studies focused in Ethiopia (2000 - 2014) indicated that domestic VAW was significantly associated with Khat chewing, witnessed violence during childhood, occupational status, educational level, dwelling, decision-making power and religion (Semahegn & Mengistie, 2015). Also associated factors are marriage by abduction, polygamous, and hostile partners (Abeya et al., 2011), women with a family history of violence and equal decision-making regarding household matters (Yigzaw et al., 2004). Again, women whose partners made dowry payment, women who did not undergo recognized marriage ceremonies were more likely to experience domestic VAW (Abate et al., 2016). In another point of Ethiopia, women

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who had low decision-making power, were pregnant, had low annual earnings (Semahegn et al., 2013), gender related norms and attitudes towards wife-beating, illiterate women, and rural areas were more likely to justify wife-beating. Nevertheless, literate women living in rural communities, literate women living with literate spouses, as well as literate women having illiterate spouses had higher odds of experiencing physical domestic VAW (Deyessa et al., 2010).

Domestic VAW was significantly associated with various factors. Most of the studies reported that partner alcohol consumption, men as well as women's educational status, occupation (employment), income contribution, economic empowerment or microfinance support, and wealth index were some of the factors associated with domestic VAW. Similarly, risk factors which were more linked to societal norms, such as women's autonomy, decision-making, receptive attitudes justified wife-beating, partners' controlling behavior, marriage dowry, marriage ceremonies, gender structure, gender equity issues, male domination of society, and fidelity or faithfulness were significantly associated with domestic VAW. Gender inequity and inequality norms was the main issue that linked with different aspects of domestic VAW. Most of the studies recommended that addressing societal norms will be meaningful to prevent domestic VAW.

2.5 Where women seek help

Globally, 40% of domestic VAW victims have ever disclosed their experience to any source (formal or informal) in order to seek help. Of these, a majority (37%) of the victims reported to informal bodies. Nevertheless, 7% of the domestic violence victims sought assistance from formal bodies. The thought of being embarrassed, belief that reporting was of no use, viewing domestic VAW as a normal part of life, being old and

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having low educational attainment were some of the common reason for women not disclosing their experience of domestic VAW. Women from urban areas were more likely than those from rural areas to seek help from someone could assist (Palermo et al., 2013).

Studies conducted in several countries reported domestic VAW victims either sought help or did not seek help. In Nepal (2016), only 20% of domestic violence victims had disclosed to someone. One third (33%) of them preferred reporting to maternal homes, and (37%) to the police. However, 80% plus of the victims did not report to anybody. The most common reason for their silence was that wife-beating (domestic violence) was accepted as a normal part of life (55%) (Sapkota et al., 2016). In India (2013), seeking help to stop domestic VAW was limited (15%). Women did not seek help from friends or neighbors, religious leaders, doctors, lawyers, other helplines or the police (Das et al., 2013). It was found in Zimbabwe (2014) that 89% of victims indicated that they felt ashamed to report spousal rape. Nevertheless, there seems to no intervention (Mukanangana et al., 2014).

A study conducted in Kenya (2014) reported that formal institutions (police, judiciary and local leaders) that address domestic VAW were scarce. While survivors rarely sought help from health facilities. Nevertheless, women attempted to seek help from informal avenues such as family, religious leaders, local leaders, and elders. Most communities seemed to normalize and or often viewed domestic VAW as part of the culture. Logistical challenges, poor linkage of services, under-trained or uncommitted support providers, and very weak legal sanctions, and financial dependency on a partner often hindered domestic violence survivors ability to seek help (Odero et al., 2014).

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Findings from studies done in Ethiopia found out that 31% to 61% of domestic violence victims who sought help from people in position /authority such as, elders, leaders, family, and health care providers, ranged from (Guruge et al., 2012; Semahegn et al., 2013; Yigzaw et al., 2004). Of these, 25% of women resolved it with negotiation, 24% of them divorced their partners, and 12% filed charges at the judiciaries (Yigzaw et al., 2004). The most common reasons for not seeking help were the perceptions of the communities on domestic VAW. They cited some of the perceptions, taking wife-beating as normal, fear of further violence, losing children, bringing shame to the family, fear of being stigmatized due to divorce, and lack of knowledge about laws that safeguard the rights of women (Guruge et al., 2012).

Research evidence shows that majority of the domestic VAW victims have stayed silent in their homes. The predominant reasons for not seeking help were the entrenched traditional gender-norms of justified wife-beating attitude, weak community and legal sanctions, poor service implementation and the lack of power. However, few of the victims sought help from people who were in high positions but did not receive favorable responses. Therefore, this community-based preventive implementation research could play by tremendous role in mobilizing and engaging responsible bodies to tackle domestic VAW. It could also enhance women's response to seek help from appropriate people. It could enhance their ability to disclose their experience of domestic VAW.

2.6 Recommended intervention

The WHO recommended that the need for health sector responsiveness, which include training health care providers and integrating services to take action against domestic VAW. Strengthening multisectoral service to facilitate the implementation of ratified and existing legal and policy frameworks is highly recommended (WHO, 2013). Program to

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prevent domestic VAW should focus on transforming traditional gender-norms and attitudes, and reducing harmful drinking behaviors, ill-defined gender roles and enhance autonomy (Abramsky et al., 2011). It is suggested that, intervention should be designed to target the underlying contributing factors to transform gender-norms, empowering women educationally, economically, and socially in order to reduce domestic VAW (Jewkes, 2002), that is ingrained in the culture.

A recommendation from the systematic review of 101 studies, domestic VAW screening, and intervention linkages with relevant programs and services are needed regardless of their causal association with domestic VAW (Kouyoumdjian et al., 2013). Similarly, another systematic review of thirty six studies suggested that interventions should be focused on addressing women's basic necessities and transforming old-fashioned gender-norms for a broader impact (Remme et al., 2014). In addition, a finding from the analysis of data from twenty four countries in four regions suggested intervention should emphasize dissemination of information on services, strengthening legal frameworks, establishment "one-stop" centre service for survivors, and scale up efforts to reduce stigma associated with reporting domestic VAW (Palermo et al., 2013).

The research evidence from a study conducted in India recommended that interventions to prevent domestic VAW should be gender inclusive and comprehensive targeted at both men and women, families and society to transform gender-norms, inequalities, wife-beating attitudes and promote equitable gender-norms (Agrawal et al., 2015; Babu & Kar, 2009; Krishnan et al., 2010; Madhivanan et al., 2014). In addition, another study conducted in India has recommend that routine screening and treatment program for victims should be launched at primary healthcare institutions. Public health interventions

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are also needed to sensitize the concerned bodies to implement available policy documents or laws to prevent domestic VAW (Babu & Kar, 2009).

Similarly, findings from Bangladesh including analysis from DHS (2007) suggested that intervention programs should place emphasis on promoting gender equitable-norms, psychosocial support, comprehensive and culturally appropriate training for health care professionals to prevent domestic VAW (Rahman, 2015; Rahman et al., 2012, 2013). A study conducted in five Eastern Europe countries indorsed that public health interventions should focus on substance abuse reduction, attitudinal changes, transformation of traditional societal norms and minimization of financial dependency through a comprehensive approach (Ismayilova, 2015).

Findings from the analysis of Colombia DHS (2000) (Pallitto & Campo, 2005) and a study conducted in Vietnam (Nguyen et al., 2012) have proposed that domestic VAW screening, policies and programs should focus on integrating domestic VAW prevention interventions into existing health care delivery, enhancing male engagement and awareness on gender inequality. Similarly, a study conducted in Indonesia suggested that interventions should be designed to transform women's subordination, gender equality-norms, and promoting non-violent masculinity norms to prevent domestic VAW (Hayati et al., 2011). Likewise, culture-based on information, education, communication is the best suggested intervention in Nepal (Sapkota et al., 2016).

An evidence from systematic reviews and meta-analysis suggested that averting domestic VAW should be considered as basic human rights and public health goals. Multidimensional intervention approaches that address policy, program design, behavioral interventions, women empowerment, gender equality, transform social norms,

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establishment of an enabling health care environment and targeting young people are crucial areas be used to reduce domestic VAW (Anderson & Campbell, 2013; Peterman et al., 2015; Uthman et al., 2009, 2010).

A finding from four sub-Saharan Africa countries, Gabon, Nigeria, Zambia, and Zimbabwe, recommended that interventions be implemented to break down the culture of silence through provision of community-based information, education, communication and counselling to prevent domestic VAW and its consequences. In addition, efforts should be made to scale up the implementation of programs within existing policies (Mukanangana et al., 2014; Odimegwu et al., 2015). On the other hand, findings sub-Saharan Africa countries suggested that reducing domestic VAW required a comprehensive approach such as ensuring health promotion, women's empowerment, promotion of gender equality-norms, creating an enabling environment for women to thrive (Bamiwuye & Odimegwu, 2014; Singh et al., 2014).

Some studies conducted in Nigeria concluded that lack of awareness and community norms, and communities with tolerant attitudes towards wife-beating were significant risk factors for domestic VAW. Therefore, greater attention should be paid to women's education, economic empowerment, transformation of individual's attitude, entrenched socio-cultural traditional gender-norms, and advocate for policies that promote gender equality in interventions to reduce the likelihood of domestic VAW. Also, couple-centered approaches, culturally compatible and innovative, integrated interventions are needed to prevent domestic VAW (Antai, 2011; Antai & Adaji, 2012; Owoaje & Olaolorun, 2012; Uthman et al., 2011).

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In Guinea (Delamou et al., 2015), Egypt (Kaplan et al., 2011), Botswana (Shannon et al., 2012), and Malawi (Conroy, 2014) recommendations drawn from the findings suggested the promotion of women's rights, gender equality, addressing male sexual dominance and controlling behavior, patriarchy gender-norms transformation, encouragement of communication and negotiation skills, joint decision-making, policies and laws implementation may bring tremendous change on domestic VAW. Another research findings from studies conducted in Mozambique and Rwanda suggest that intervention that could address controlling behaviors, and understanding the complexity of VAW require stakeholders' involvement, which include integrated health care services, community support campaigns, and the involvement of men to redefine masculinity perceptions (Thomson et al., 2015; Zacarias et al., 2012).

Two studies conducted in Tanzania suggested that domestic VAW prevention should address gender function imbalances, socio-culturally deep rooted gender-norms, justified wife-beating attitudes, women's sexual expectations, awareness creation about human rights, engage men, and integrate social services (Laisser et al., 2011; Nyamhanga & Frumence, 2014). A study employed in Kenya, recommended that domestic VAW programs should address community views on domestic VAW by mobilizing local resources (Odero et al., 2014).

A study conducted in Ethiopia indicated that almost one third of women who were sampled recommended educating men as the most useful intervention. Female empowerment (21.4%), and strict punishment of the perpetrators (5%) were also reliable interventions to prevent VAW (Yigzaw et al., 2004). Similarly, other studies carried out in Ethiopia suggested that interventions should target actions at individual, family, community and societal level. Multidimensional approaches are highly required to raise

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awareness, enhance stakeholders' involvement, eliminate myths, misconceptions, beliefs, attitudes, traditional patriarchal gender-norms, amend and enforce the existing laws (Abate et al., 2016; Abeya et al., 2011; Abeya et al., 2012).

Generally, various researches carried out across the world recommend that interventional research is still needed. Most of the studies suggest that addressing societal traditional gender-norms, reducing the male dominance culture, avoiding justified wife-beating attitudes are the ways to prevent domestic VAW. At the same time, some studies have suggested that service integration into the existing health system to secure access service is needed by the victims. The recommended interventions should be translated and piloted for feasibility and effectiveness in preventing domestic VAW within the exiting global and national policy frameworks. Therefore, this community-based intervention is being implemented to prevent domestic VAW, and will address gender-norms, raise awareness, engage stakeholders, participating partners, integrate with community and routine health care services.

2.7 Evidence from interventional studies

A randomized controlled trial was employed in the USA, which aimed at assessing the outcome of integrated cognitive psycho-behavioral therapy to reduce domestic VAW. Women who had recurrent domestic VAW reduced by 52% in the interventions group (Kiely et al., 2010). In a randomized controlled trial was carried out in Australia (2008-2011) among health care providers and women to assess the effect of brief counselling in response to VAW. Women who were on intervention (training, counselling for relationship, women screening positive for fear of a partner, and emotional issues) had good physical health and safety as compared with the non-interventions group (Hegarty et al., 2013).

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A randomized controlled trial was conducted in Côte d'Ivoire (2010 - 2012) among women who were grouped into combined intervention (Village Savings and Loans Associations (VSLA) plus Gender Dialogue Groups (GDGs) versus control (VSLA only). Those who experienced physical and sexual domestic VAW reduced in the intervention group, though not statistically significant. Domestic VAW which happened because of economic issues reduced by 61% in the combined intervention group than control group. Women's receptive attitude of wife-beating reduced substantially in the combined intervention group (Gupta et al., 2013). Analysis of the trial data in Côte d'Ivoire (2010 - 2012), indicated that emotional domestic VAW reduced by 56% in the combined intervention group compared to control group. Any domestic VAW reduced by 46% in the combined intervention group compared to those women in the control group (Falb et al., 2015).

A quasi-experimental study employed in Tanzania (2012) revealed that women on the mass-media and advocacy meetings, knowledge of sexual domestic violence increased significantly in the intervention (57% to 81%) compared to control group (56% to 72%). Rape incidents' disclosure increased by more than 50% at health facilities. The combined action had a considerable results on awareness creation, and reduced women's tolerant attitudes toward wife-beating norms (Abeid et al., 2015).

A cluster randomized controlled trial conducted in Uganda (SASA: Start, Awareness, Support, Action) has revealed that community activists, traditional marriage counsellors, theatre groups and community-based organizations campaigners have been used to successfully deliver a community-based intervention program. Significant number of physical domestic VAW cases were avoided (Michaels-igbokwe et al., 2016). A quasi-experimental study conducted in South Africa integrated gender based violence (GBV)

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intervention with HIV program versus alcohol with HIV prevention program. It confirmed that the combined intervention (GBV prevention with HIV care support) significantly reduced the risk of physical domestic VAW by 70% compared to the control group (Kalichman et al., 2011).

Another clustered randomized controlled trial was conducted in Uganda (2005 - 2009) aimed at assessing the effectiveness of combined (gender based violence prevention and HIV services) on the prevention of domestic VAW and HIV. Allocation was made for intervention group (standard HIV care and service plus a community level mobilization) to change attitudes, social norms, and behaviors related to domestic VAW) and control group (received only standard of care HIV services). The trial reported that physical domestic VAW was 21% less likely to be reported in the safe homes and respect for everyone (SHARE) intervention than control clusters, and sexual domestic VAW was 13% less likely to be reported in the control and 10% less likely to be reported in the intervention. However, intervention (SHARE) project did not bring a significant change for emotional domestic VAW, and men's behavior (Wagman et al., 2015).

A cluster randomized controlled trial employed in Limpopo, South Africa (2001 - 2005) to assess the effect of the Microfinance for AIDS and Gender Equity (IMAGE) (a loan with a gender integrated meeting) intervention versus the control (standard) on domestic VAW increased economic wellbeing of women improved household's assets by 15%. Economic empowerment and gender integrated meeting interventions did not improved household attitudes towards gender roles. Nevertheless, communication with household members about sexual matters increased by 58%. However, with the women in the Microfinance for AIDS and gender equity program, communication with partner about sexual matters, partners controlling behavior, and progressive attitude towards gender

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based violence were slightly improved, but not statistically significant. A combined economic empowerment trainings reduced domestic VAW (Pronyk et al., 2006).

Another finding from analysis IMAGE data in South Africa (2001 - 2005), focused the intervention on understanding HIV infection, gender roles, norms, domestic violence, cultural beliefs, sexuality, relationships, communication, and community mobilization to help engage, both the youth and older men to strengthen communication skills, critical thinking, and leadership. The finding confirmed that domestic VAW reduced by 61% among women in the intervention than comparison group (Kim et al., 2007; Pronyk et al., 2006). Likewise, community mobilization to enhance gender empowerment averted $13-19 loss per disability adjusted life years (Remme et al., 2014).

A clustered randomized controlled trial was conducted in Uganda (2009 - 2011) among women to assess poverty alleviation through the microenterprise as an economic empowerment tool and partner involvement to prevent domestic VAW. Its finding confirmed that successful poverty alleviation programs through women's empowerment could not bring that much significant impact on domestic VAW reduction. However, this intervention brought significant improvements in earnings, women’s attitude towards their autonomy, and partners control behaviors (Green et al., 2015).

A randomized controlled trial was conducted in Tanzania to evaluate whether conditional cash transfers promoted safe sex to reduce the incidence of sexual transmitted infections associated with sexual violence. Financial support to balance power relationships and transform couple’s attitude were statistically associated with domestic VAW reduction. Women who had ever accepted justified wife-beating were two times more likely to report domestic VAW compared to women in the control group. Domestic VAW was

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reduced by 30% among couples who had shared sexual decision-making compared to partner controlled decision-making. Domestic VAW declined substantially by 57% among couples who had equitable power, than those whose partners wielded more power of the control (Krishnan et al., 2012).

A quasi-experimental trial carried out in Ethiopia (2008), examined the effect of combined interventions (community engagement with group education, community engagement activity alone) on equitable gender-norms and their impact on preventing domestic VAW. Overall, domestic VAW reduced by 60% in the intervention group. Domestic VAW also decreased by 55% in the combined intervention group. In the meantime, physical or sexual domestic VAW in the community engagement only group reduced significantly from 36% to 18%, and any type of domestic VAW reduced from 60% to 37%. However, change was almost null in the control group (Pulerwitz et al., 2015).

Therefore, research evidence helps to conclude that actions have to be taken through integrating, economic women empowerment, promoting equitable gender-norms, and engaging men into existing domestic VAW service. The intervention tremendously reduced domestic VAW (Green et al., 2015; Jewkes et al., 2010; Kalichman et al., 2011; Kim et al., 2007; Krishnan et al., 2012; Pulerwitz et al., 2015). More effective domestic VAW preventive interventions should be integrated, coordinated, engaged community, and multisectoral involvement in LMICs. In addition, interventions should also work towards social norm transformation, systematic exploration of the key drivers for unequal gender power perspective, transforming receptive justified wife-beating attitudes, and men's controlling behavior (García-moreno et al., 2015; Jewkes et al., 2015; Michau et al., 2015).

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In addition, integrating domestic VAW intervention programs into health, civil service and other social sectors has tremendous positive impacts on the fight against domestic VAW. Combined social and women's economic empowerment, community mobilization, focus on male engagements aimed at transforming masculinity norms, and engaging stakeholders in the implementation of recommendation could have strong effects on domestic VAW prevention (García-Moreno et al., 2015; Jewkes et al., 2015). Given all listed research evidence, translation of effective interventions into routine practice and sustainable implementation should help prevent domestic VAW. Implementation of existing evidence and policy frameworks in Ethiopia is also very limited, where, the problem is one of the highest in the world, and domestic VAW is considered as a culture till nowadays.

2.8 Summary of the literature review

Generally, the magnitude of domestic VAW is high across several countries, which has been evidenced in multi-country study finding. The problem is persistently high, which is very informative to suggest corrective measures to be implemented in Ethiopia. Magnitude of domestic VAW is high. Approximately half of the women had a say regarding their household issues. Women's low decision making autonomy can exacerbate domestic VAW. Likewise, women's receptive attitude towards justified wife-beating is also aggravate the problem of domestic VAW in many countries. Therefore, this implementation research may contribute to the design and implementation of intervention to prevent domestic VAW.

Furthermore, domestic VAW was significantly associated with various factors. Partners' alcohol consumption, low educational status, unemployment, economic empowerment or microfinance support, and wealth index were some of the factors associated with

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domestic VAW. In addition, societal norms such as women's autonomy, decision-making, receptive attitudes justified wife-beating, partners' controlling behavior, gender equity issues, male domination of society and others were significantly associated with domestic VAW. Gender inequity and inequality norms were predominantly linked with domestic VAW.

Various researches carried out across the world have recommended that interventional research is still needed. Addressing societal traditional gender-norms, reducing the male dominance culture, avoiding wife-beating attitudes were the most suggested action to be taken to prevent domestic VAW. In addition, integration, engaging partner and influential people, transformation of old fashioned gender-norms, and women's empowerment were suggested/recommended to prevent domestic VAW. These recommended interventions could be translated and piloted for feasibility and effectiveness in preventing domestic VAW within the existing policy frameworks.

Given all listed research evidence with its proven and effective intervention, translation into routine practice and sustainable implementation to prevention domestic VAW is very limited in several LMICs, though the problem is unacceptably high. Implementation of existing evidence and policy frameworks in Ethiopia is also very limited. Domestic VAW is one of the highest in the world, and is considered as an entrenched Ethiopian culture.

2.9 Systematic review and meta-analysis

In addition to the conventional (traditional) literature review, a systematic review and meta-analysis was carried out on the topic "*Are interventions focused on gender-norms effective in preventing domestic violence against women in low and lower-middle income*

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countries? A systematic review and meta-analysis". It is aimed at generating evidence by pooling primary studies' findings to identify effective and well recommended intervention to be implemented in real setting to prevent domestic VAW. This systematic review and meta-analysis work has been published elsewhere (Semahegn et al., 2019).

2.9.1 Introduction

Although many primary studies have been conducted in different parts of the world, there is a paucity of abridged evidence on an aggregated level of domestic VAW. This systematic review and meta-analysis aimed at summarizing existing primary studies in LLMICs to determine the magnitude, associated factors, effective interventions and recommendations to guide the development of intervention materials for the quasi-experimental study. In addition, this finding would provide an insight to inform policy, programs, clinicians, researchers and other stakeholders to make an informed decisions on the issue of domestic VAW.

2.9.2 Protocol development and registration

The protocol for the systematic review and meta-analysis has been registered in the International Prospective Register of Systematic Reviews (PROSPERO) (ID: CRD42017079977). This systematic review and meta-analysis methods was written according to the preferred reporting items for systematic review and meta-analysis (PRISMA) guideline (Moher et al., 2015). The details of the PRISMA checklist, search strategies, selection process, quality appraisals, publication bias assessment (funnel plots), risk of bias, grading of evidence, data abstraction Excel sheet and studies description tables are attached as additional files in the published papers and here as appendix *(*Appendix 1*)*.

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2.9.3 Searching strategies and identifications of studies

Studies were searched using medical subject headings (MeSHs), manual and email methods. Main electronic databases (Medline via PubMed, EMBASE, CINAHL, PopLine and Web of Science), Google Scholar and other relevant sources were used to access studies before December 31st, 2017. In addition, emails were sent to authors whose studies were included to request for full texts. In addition, relevant citations from retrieved studies were searched. Search strings were constructed using keywords and their combinations based on the review questions. However, search strings were adjusted to suit to the databases interface accordingly. All the search results were imported into the Endnote citation manager software (Rutgers, 2017), and duplicate studies were removed.

2.9.4 Inclusion criteria of studies

Both observational and experimental studies were eligible for the systematic review and meta-analysis. The observational studies were systematically reviewed and carried out the meta-analysis to determine the pooled prevalence of domestic VAW, its associated factors and research recommendations. The interventional studies were included to identify evidence-based effective intervention for preventing domestic VAW. In addition, both published and unpublished studies, conducted on women (15 - 49 years), in LLMICs, and were written in English (1994 - 2017) to assess domestic VAW, were eligible for the systematic review. The LLMICs were selected based on the World Bank's country classification (Fantom & Serajuddin, 2016). Commentaries, editorials, life stories, fact sheet reports and case series on domestic VAW were not included.

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2.9.5 Studies selection process

Pre-defined eligibility criteria were used to screen and select studies. The studies selection process passed through four stages for the systematic review and meta-analysis. Primarily, titles and abstracts were screened to proceed for the subsequent evaluation. Then those studies that clearly reported the domestic VAW and its associated factors in the abstracts were selected. Secondly, the studies' core elements such as aims, methods, key findings and concluding remarks in the abstract section were independently screened by the two authors, Agumasie Semahegn (AS) and Gezahegn Tesfaye (GT), to continue to the subsequent stages. Thirdly GT and AS re-assessed the abstract of the selected studies for further evaluation of their full texts. Lastly, selected studies were appraised for final inclusion in the systematic review and meta-analysis. In cases where the authors could not reach a consensus on any of the studies, a third person was involved to appraise using same checklist, in the hope of helping make a final decision. The PRISMA flow diagram was strictly followed during the studies' selection process (Moher et al., 2015) (Figure 5).

2.9.6 Outcome and exposure variables

Domestic VAW and intimate partner violence (IPV) were the two main phrases, which were interchangeably used as an outcome variable in this systematic review process. The outcome was assessed based on the prevalence of domestic VAW, psychological, physical, sexual and concurrent. Domestic VAW was presented in two forms, lifetime versus current. The lifetime and current domestic VAW were assessed using the studies' report of women's experience during their lifetime and or over the last 12 months preceding the studies. Associated factors were categorized on the socio-ecological conceptual framework comprising, individual, interpersonal, community and societal level factors.

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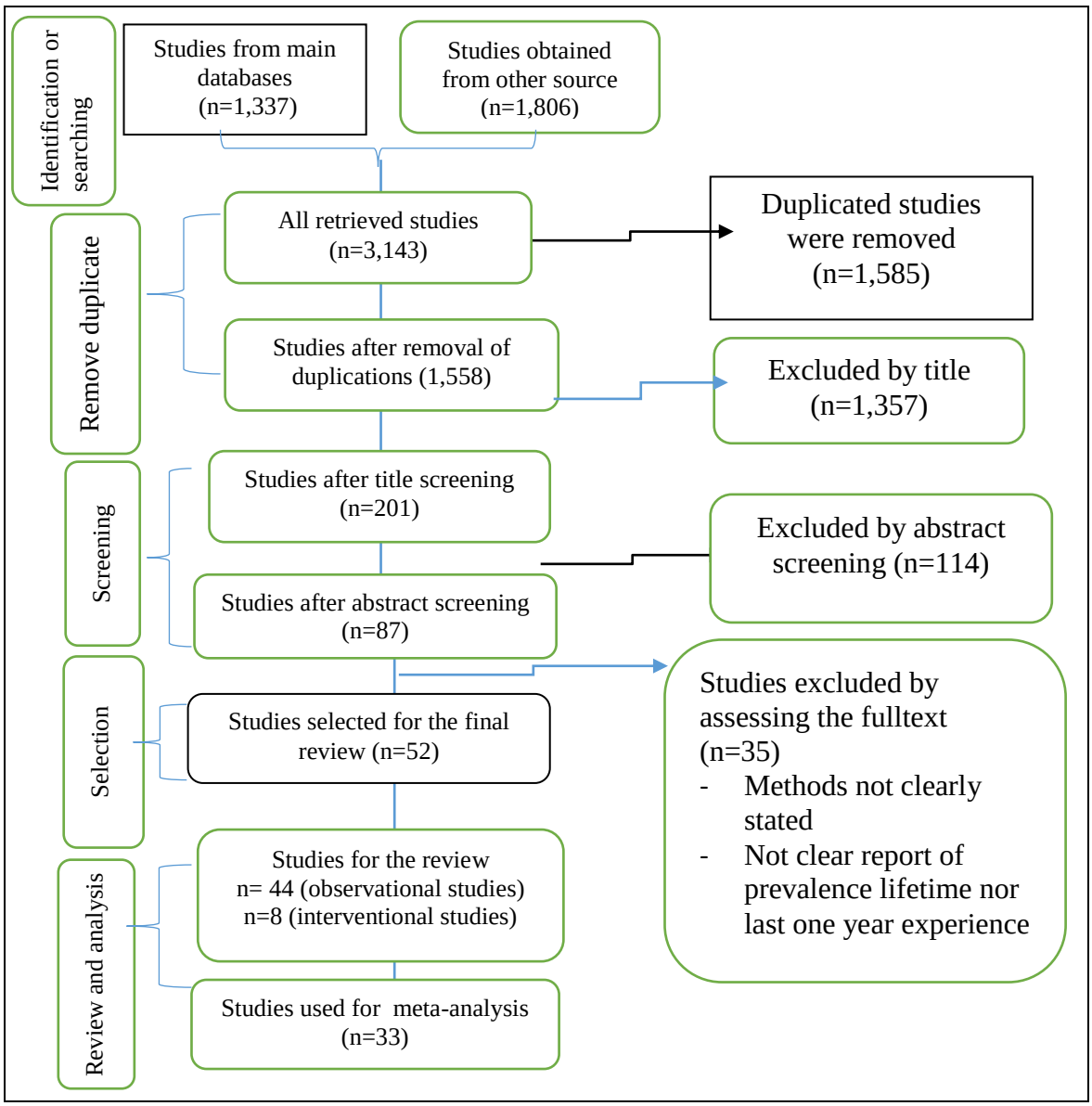


Figure 5: The screening and studies selection based on the flow diagram

2.9.7 Quality assurance measures

Published and unpublished studies were searched for and considered for this systematic review to minimize publication bias. The electronic, manual and email search strategies were carried out to ensure comprehensive retrieval of studies from the main databases and other relevant sources. Eligibility, quality assessment criteria, selection process and data extraction templates were properly designed by the authors to ensure quality. Methodological eminence was assessed using the Joanna Briggs Institute (JBI) critical appraisal checklist (Munn et al., 2015). The data abstraction and selection of studies

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were performed by AS and GT. Any disagreements were resolved through consensus, and sometimes, other authors who were not involved in data abstraction adjudicated to make final decision. Visual inspection of the funnel plots was used to explore publication bias between studies. Sub-group analysis, random effects model and qualitative narration were carried out to minimize the risk of bias.

2.9.8 Data abstractions and synthesis

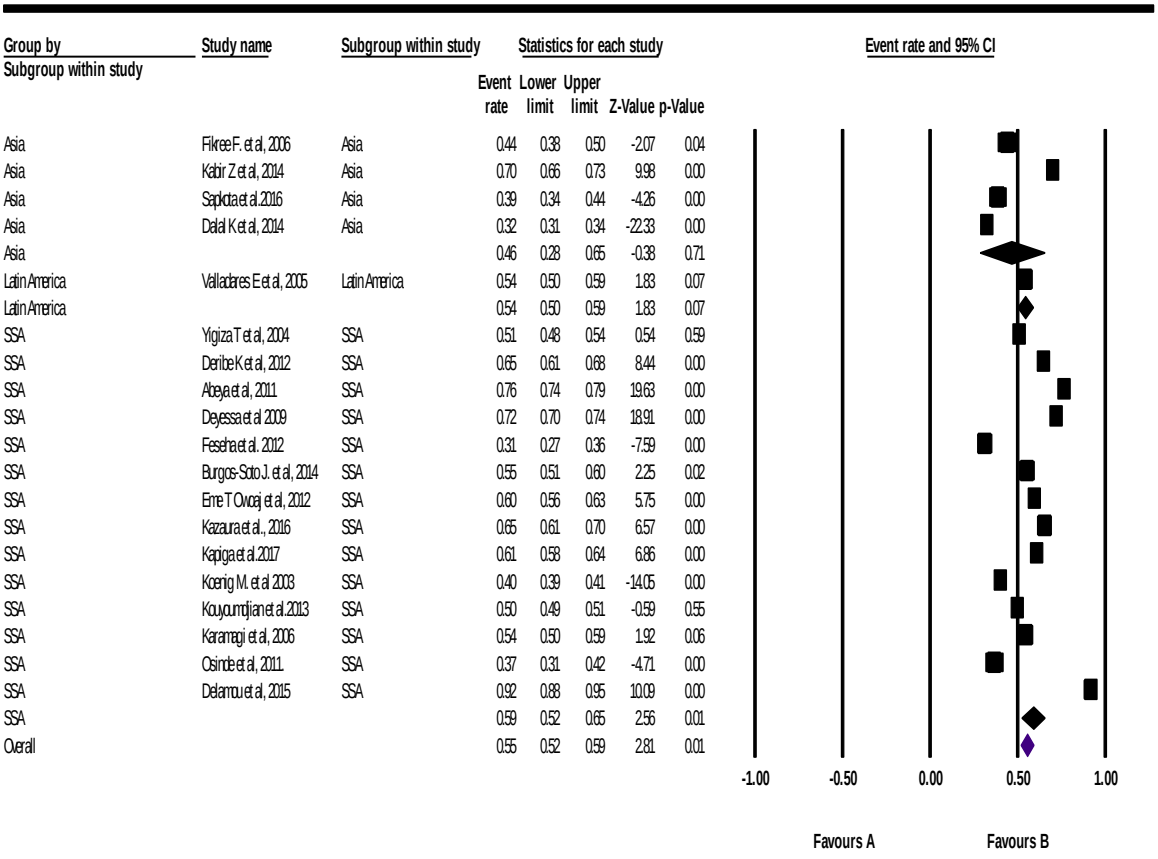
The studies' key component description (author, study area, aims, designs, sample size, sampling procedure, key findings and recommendations) were recorded on a template. AS and GT extracted the data from selected studies and stored in data abstraction template using Microsoft Excel sheet. Quantitative data, number of study participants who had experienced VAW (recorded, 'yes'), and total eligible women (n), were independently stored in a Microsoft Excel ® sheet. Comprehensive Meta-Analysis (CMA) ® software were used to compute the pooled prevalence of domestic VAW (Borenstein et al., 2004). Heterogeneity was expected to be I^2 ≥75% (Higgins et al., 2011; Higgins & Thompson, 2002). Potential publication bias was tested through visual evaluation of the funnel plot and Egger's and Begg's tests (Egger et al., 1997; Shi et al., 2017). The random effects model (DerSimonian & Nan, 2015) was used to moderate the sample size disparity. In addition, sub-group meta-analysis was performed by study settings and types of domestic VAW (lifetime, current, psychological, physical and sexual violence). In addition, the contributing factors of domestic VAW were qualitatively synthesized according to the ecological model (individual, relationship, community and societal level factors) (Heise, 1998).

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2.9.9 Findings of the systematic review and meta-analysis

2.9.9.1 Lifetime domestic violence against women

In nineteen studies, a total of 35,974 women in the reproductive age, the pooled lifetime domestic VAW was 55% (95% CI: 52, 59%). Domestic VAW in sub-Saharan Africa (14 studies) and Asian countries (4 studies) were 59% (95% CI: 52, 65%) and 46% (95% CI: 28, 65%), respectively (Figure 6).



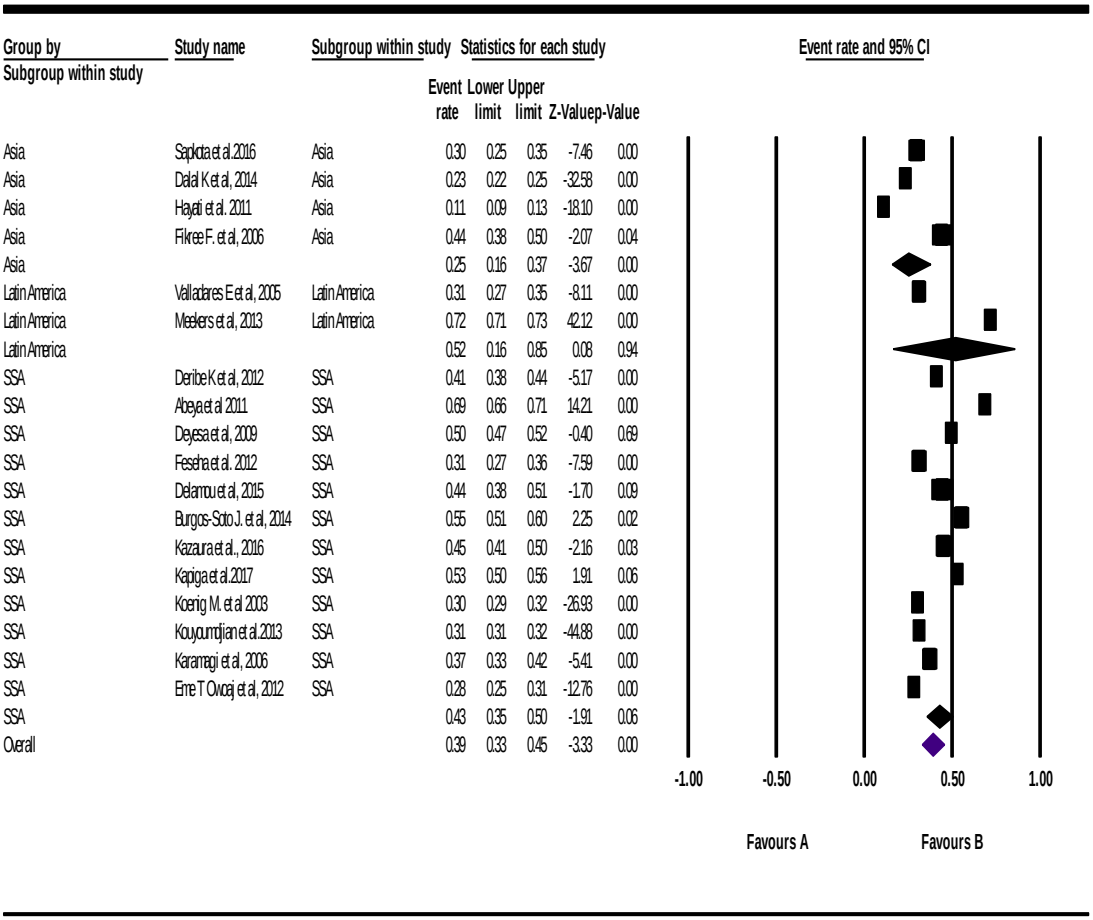
Heterogeneity: Tau^2 =0.30, Standard Error = 0.19, DF =18 (p<0.001); I^2 = 99.08%
Test overall: Z= 2.806 (p<0.005)

Figure 6: Pooled prevalence of the lifetime domestic violence

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2.9.9.2 Lifetime physical violence against women

In eighteen studies, a total of 44,664 women in the reproductive age, the pooled prevalence of lifetime physical VAW was 39% (95% CI: 33, 45%). In additions, lifetime VAW in sub-Saharan Africa was 43% (95% CI: 35, 50%) (Figure 7).



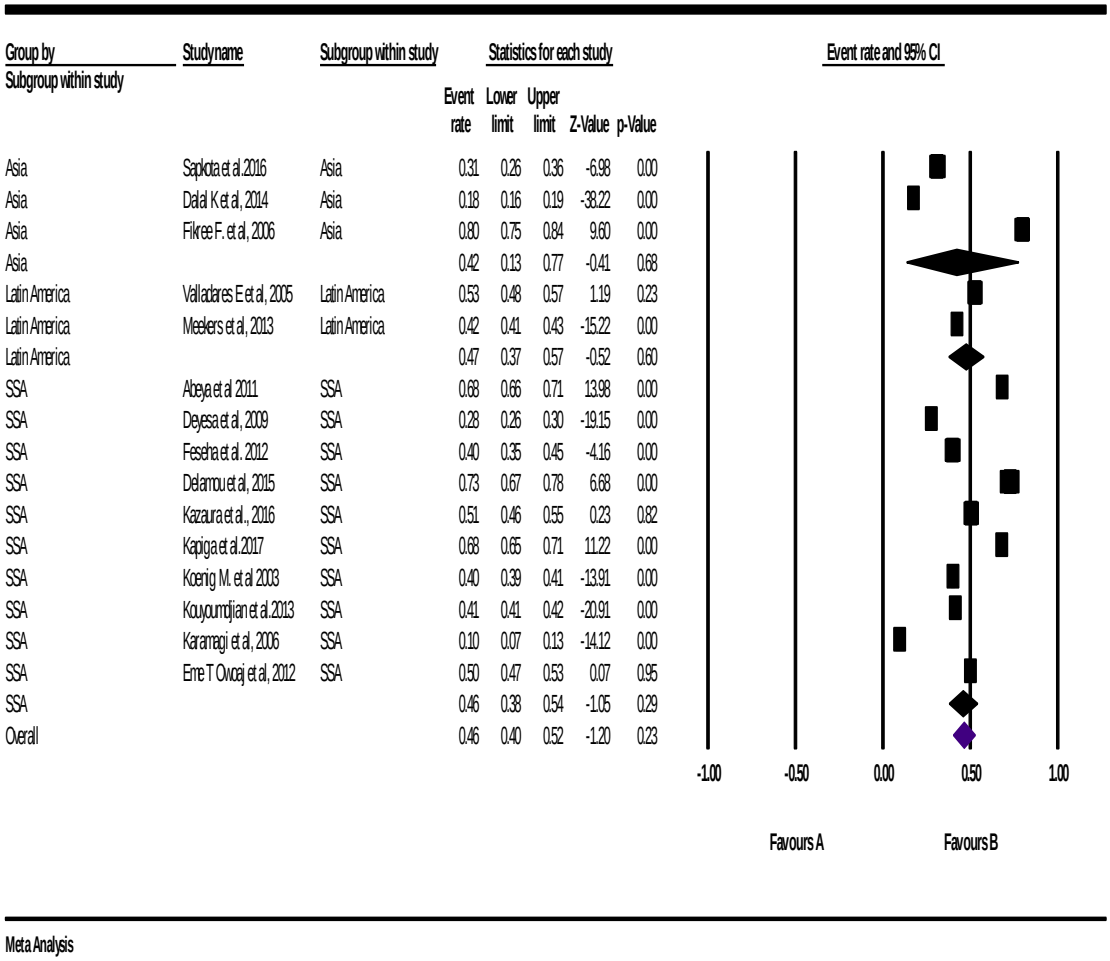
Heterogeneity: Tau^2 =0.744, Standard Error = 0.456, DF =17 (p<0.000); I^2 = 99.7%
Test overall: Z= -3.333 (p<0.001)

Figure 7: Pooled prevalence of the lifetime physical domestic violence

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2.9.9.3 Lifetime psychological domestic violence against women

In fifteen studies, a total of 42,600 women in the reproductive age, the pooled prevalence of lifetime psychological domestic VAW was 46% (95% CI: 40, 52%). The sub-group analysis showed consistent findings with the overall pooled prevalence across the regions (Figure 8).



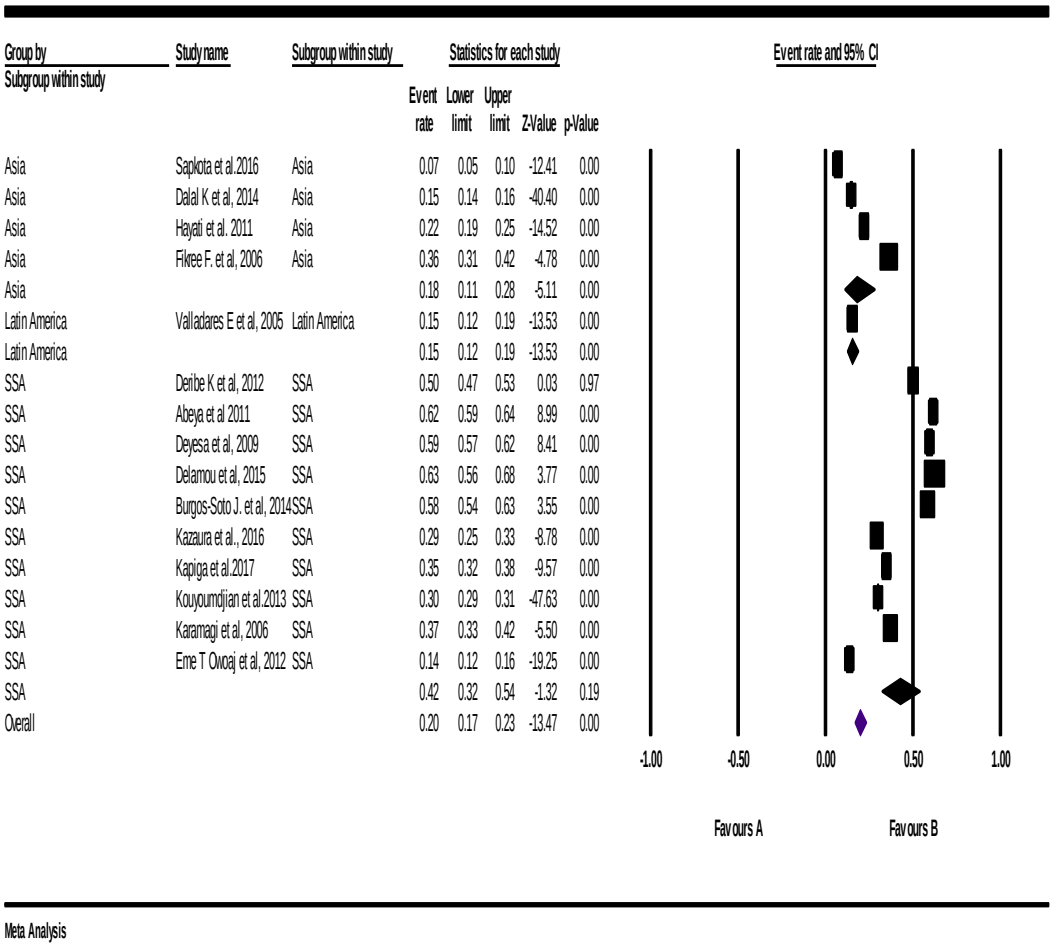
Heterogeneity: Tau^2 =0.290, Standard Error = 0.201, DF =14 (p<0.001); I^2 = 99.46%
Test overall: Z= -1.423(p<0.001)

Figure 8: Pooled prevalence of the lifetime domestic psychological violence

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2.9.9.4 Lifetime sexual violence against women

In fifteen studies, a total of 29,127 women in the reproductive age, the pooled prevalence of sexual domestic VAW was 20% (95% CI: 17, 23%). The lifetime sexual domestic VAW was the highest in sub-Saharan Africa, that is 42% (95% CI: 32, 54%) (Figure 9).



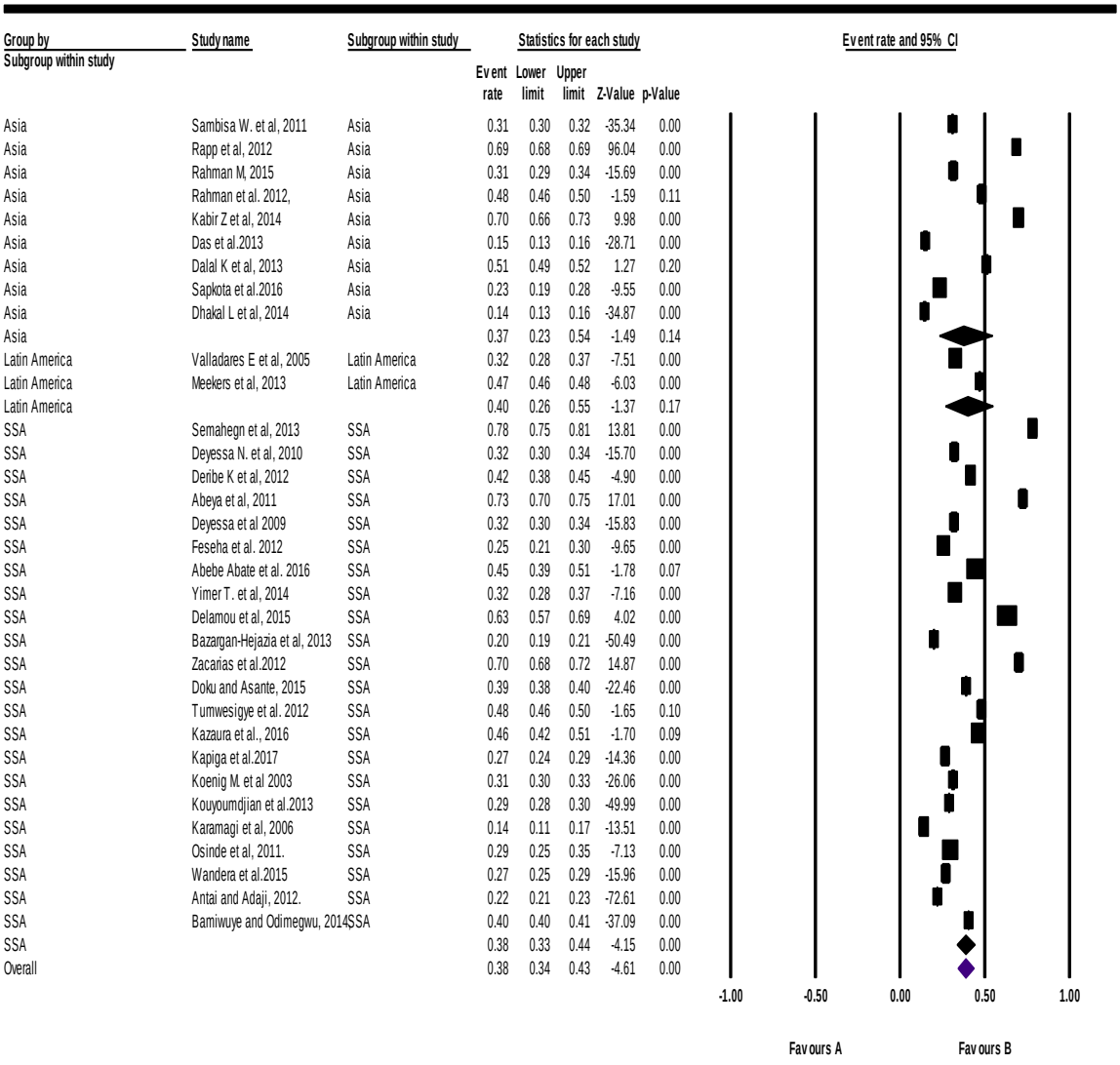
Heterogeneity: Tau^2 =0.610, Standard Error = 0.403, DF =14 (p<0.001); I^2 = 99.41%
Test overall: Z= -3.567 (p<0.001)

Figure 9: Pooled prevalence of the lifetime sexual domestic violence

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2.9.10 Current domestic violence against women

In thirty three studies, a total of 216,043 women in the reproductive age, the pooled prevalence of domestic VAW was 38% (95% CI: 34, 43%). The prevalence in sub-Saharan Africa was quite similar to the pooled prevalence (Figure 10).



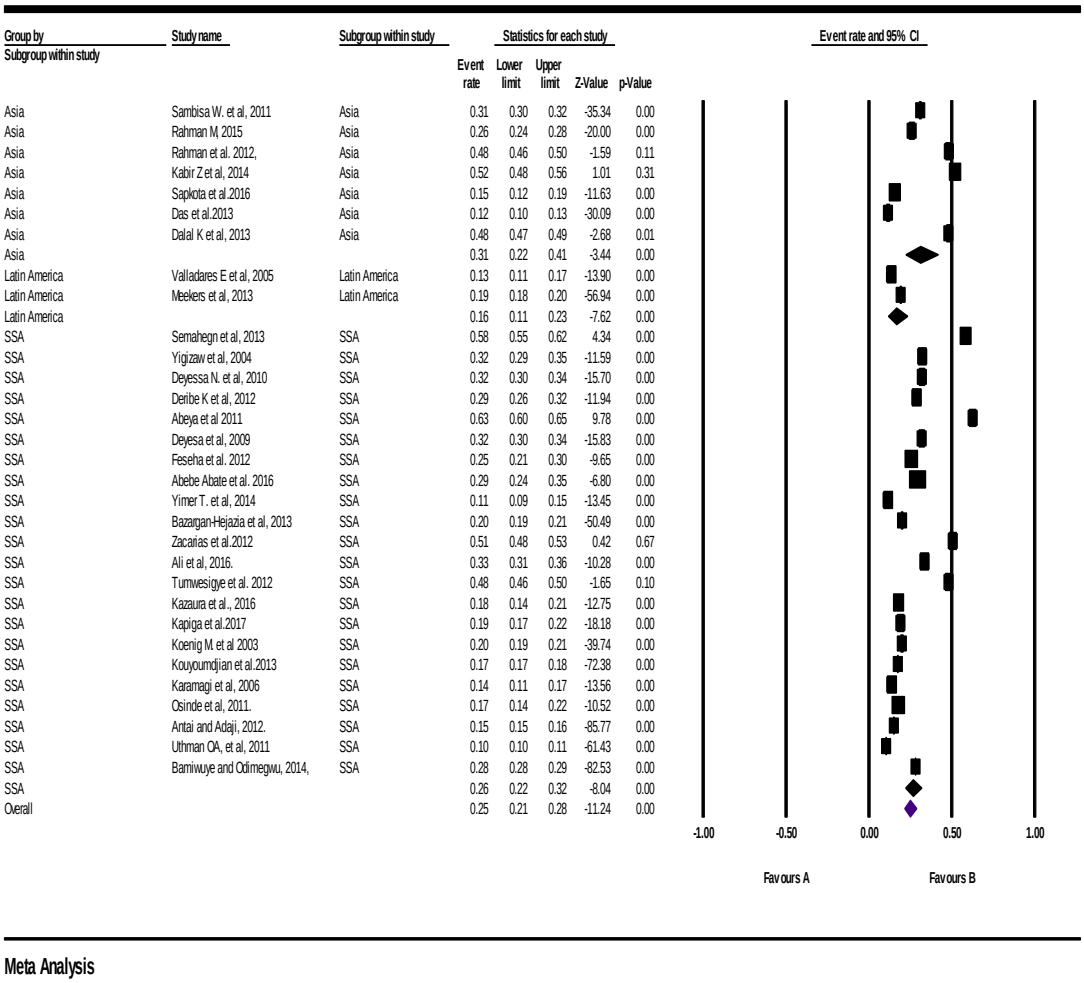
Heterogeneity: Tau^2 =0.698, Standard Error = 0.385, DF =32 (p<0.001); I^2 = 99.88%
Test overall: Z= -3.302 (p<0.001)

Figure 10: Pooled prevalence of the current domestic violence

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2.9.10.1 Current physical violence against women

In thirty one studies, a total of 141,820 women in the reproductive age, the pooled prevalence of physical domestic VAW was 25% (95% CI: 21, 28%). The sub-group analysis of seven-study in Asian countries was 31% (95% CI: 22, 41%) (Figure 11).



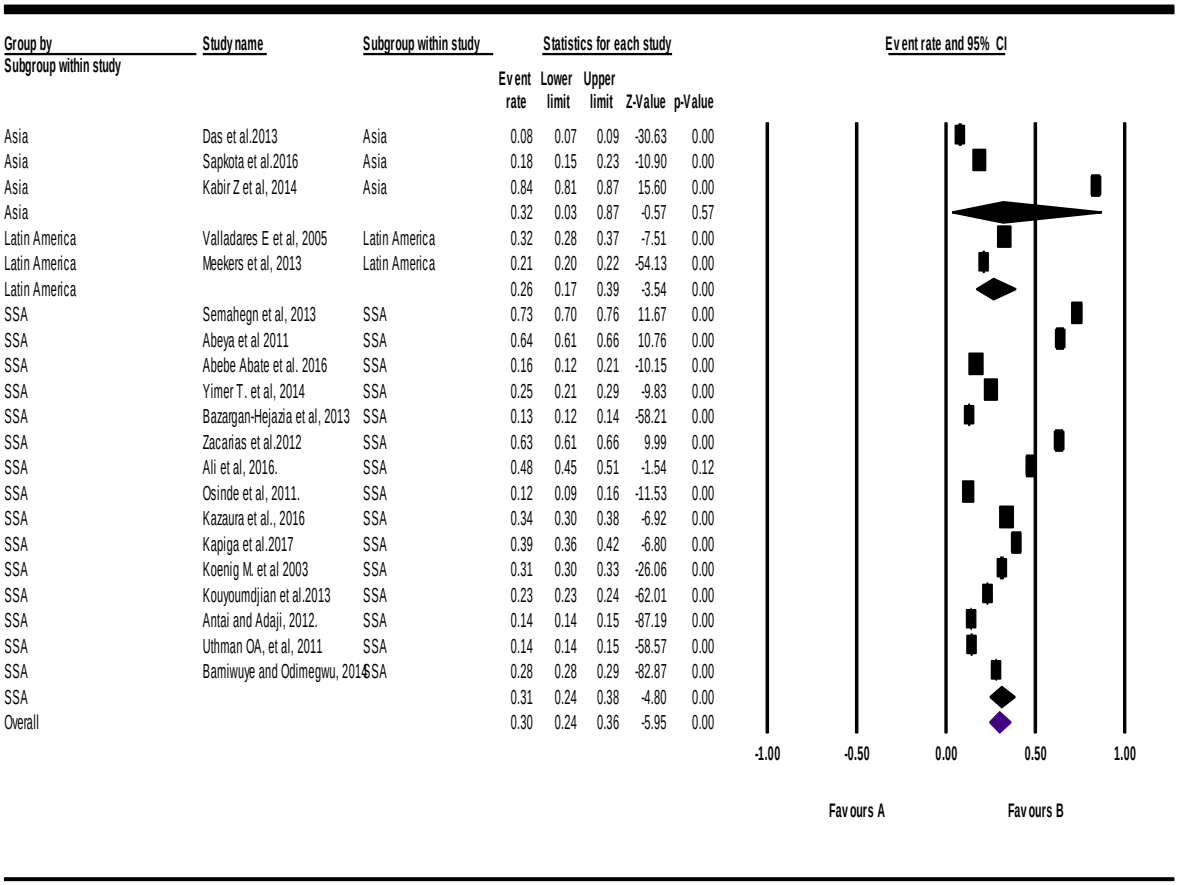
Heterogeneity: Tau^2 =0.359, Standard Error = 0.174, DF =30 (p<0.001); I^2 = 99.61%
Test overall: Z= -9.347 (p<0.001)

Figure 11: Pooled prevalence of the current physical domestic violence

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2.9.10.2 Current psychological violence against women

In twenty studies, a total of 115,798 of women in the reproductive age, the pooled prevalence of psychological domestic VAW was 30% (95%CI: 24, 36%) (Figure 12).



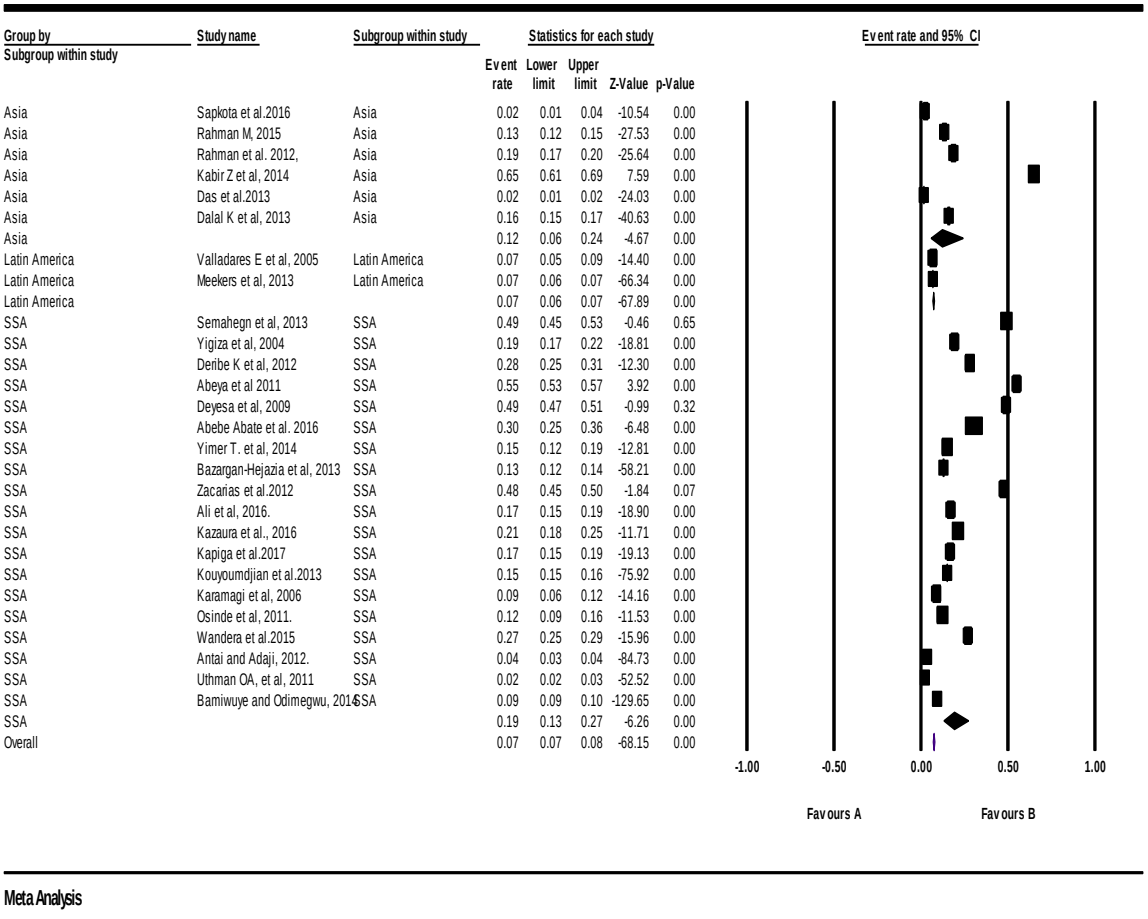
Heterogeneity: Tau^2 =0.42, Standard Error = 0.26, DF =19 (p<0.001); I^2 = 99.71%
Test overall: Z= -5.95 (p<0.001)

Figure 12: Pooled prevalence of the current psychological domestic violence

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2.9.10.3 Current sexual violence against women

In twenty seven studies, a total of study participants (n=124,739) of women in the reproductive age, the pooled prevalence of current sexual domestic VAW was 7% (95% CI: 7, 8%). The sub-group analysis pooled domestic VAW in sub-Saharan Africa countries was 19% (95% CI: 13, 27%) (Figure 13).



Heterogeneity: Tau^2 =0.955, Standard Error = 0.468, DF =26 (p<0.001); I^2 = 99.73%
Test overall: Z= -6.779 (p<0.001)

Figure 13: Pooled prevalence of the current sexual domestic violence

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2.9.11 Systematic review of factors associated with violence against women

This systematic review identified factors associated with domestic VAW according to socio-ecological framework. Individual factors; women being rural residents, belonging to non-Christian religion, age, age at first marriage, low level of education, occupation and income (low-income/unemployed), witnessed violence during childhood, partner's controlling behavior, and alcohol consumption, were some of the factors associated with women's experience of domestic VAW. Likewise, relationship/interpersonal factors; decision making, infidelity, lack of satisfaction in marriage, type/duration of marriage, and lowest wealth index, were some of the risk factors for domestic VAW. In addition, community and social factors (presence of traditional gender-norm and community's receptive attitude towards justified wife-beating were community related factors that were associated with domestic VAW.

2.9.11.1 Individual level factors

i. Socio-demographic characteristic of the couples

In six studies, place of residence was one of the factors associated with domestic VAW, regarding women living in rural area being more likely to experience domestic VAW than urban dwellers (Abeya et al., 2011; Dalal et al., 2013; Deyessa et al., 2010; Doku & Asante, 2015; Karamagi et al., 2006; Yigzaw et al., 2004). Similarly, in two studies, women's religion was a factor associated with domestic VAW. For instance, Muslim women were more likely to experience domestic VAW than non-Muslim (Dalal et al., 2013; Feseha et al., 2012). Women belonging to the traditional religion or other faith(s) were more likely to accept physical domestic VAW than Christianity women (Doku & Asante, 2015).

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ii. Age of the couples

Differences between women's and their partners' ages had an unpredictable relationship with women's experience of domestic violence. In three studies, physical domestic VAW was significantly associated with women's age and age at first marriage (Antai & Adaji, 2012; Fikree et al., 2006; Tumwesigye et al., 2012). Women whose aged (≤20) were at risk to domestic VAW (Valladares et al., 2005). Women who married at age (≤15) were four times more likely to experience domestic VAW than women got married when older (15 years plus) (Yimer et al., 2014).

Although women in the young group (15 - 19 years) were less likely to report emotional domestic VAW, women aged 25 to 29 years and 30 to 34 years were more likely to report physical and sexual VAW respectively than women aged 45 to 49 years (Bazargan-Hejazi et al., 2013). However, in two other studies, women aged 35 to 49 years were three times more likely to report lifetime and current domestic VAW than women aged 15 to 19years (Abeya et al., 2011; Dalal et al., 2014). The age of partners was a positive predictor of domestic VAW (Antai & Adaji, 2012; Semahegn et al., 2013). Though sexual domestic VAW was associated with partners younger than 35 years (Hayati et al., 2011).

iii. Education level

Women's lifetime domestic VAW continued to be associated with women's level of education. In six studies, women with no/primary education had almost twice the prevalence of any form of domestic VAW compared to women who had attained secondary/higher education (Dalal et al., 2013, 2014; Doku & Asante, 2015; Fikree et al., 2006; Koenig et al., 2003; Kouyoumdjian, et al., 2013). Five studies have reported that women with higher educational level had lower probability to suffer physical domestic

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VAW. Women with higher educational level than their partners, were less likely to experience domestic VAW than women with equal or less education level than their partners (Antai & Adaji, 2012; Karamagi et al., 2006; Osinde et al., 2011; Rapp et al., 2012; Tumwesigye et al., 2012).

In a couple of studies, couples with equal high educational level had lowest probability of suffering domestic VAW. Therefore, education was found to be protective to domestic VAW (Abeya et al., 2011; Rapp et al., 2012). Moreover, women whose partners had high educational were less likely to report domestic violence (Abate et al., 2016; Ali et al., 2014; Dalal et al., 2014; Kabir, Nasreen, & Edhborg, 2014; Sambisa et al., 2013). On contrarily, women with no education were about three times more likely to experience domestic VAW than women with secondary higher education (Doku & Asante, 2015). Women's experience of domestic violence continue to be higher and increased in the women with secondary to vocational levels of education compared to those with a tertiary level of education (Delamou et al., 2015; Owoaje & Olaolorun, 2012).

iv. Occupation status

In two studies, women who were engaged in manual labor (farming) were three times more likely to be exposed to domestic VAW than women with non-farming occupations (Feseha et al., 2012; Owoaje & Olaolorun, 2012). The poorest women who were supported by the microfinance programs in Bangladesh, did not show significant change in domestic VAW exposure, except, it improves women's economic condition (Dalal et al., 2013). Similarly, the women whose partners who earned cash were 93% less likely to report physical violence than those women whose partners who did not earned cash (Feseha et al., 2012).

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In three studies, women who were economically reliant on partners earnings, and or did not have their personal means of earnings with partners controlling their earnings were more likely to report sexual violence than their counterparts (Hayati et al., 2011; Semahegn et al., 2013; Yigzaw et al., 2010). Women heading a business or engaged in different types of jobs were 50% less likely to report lifetime domestic VAW than women not heading a business (Abeya et al., 2011). Nevertheless, housewives were less likely to experience sexual domestic VAW than women who have job (Deribe et al., 2012).

v. Witnessed violence during childhood

Domestic VAW was significantly associated with women whose partners' had witnessed violence during their childhood. Those women whose mothers were beaten by their fathers during their childhood were more likely to report lifetime and current domestic VAW than those whose mothers were not beaten by their father (Abeya et al., 2011; Dalal et al., 2014; Deyessa et al., 2010; Yigzaw et al., 2010, 2004). Again, in some studies, women whose partners were beaten by someone in their family during their childhood were two times more likely to report experiences of domestic VAW than those whose partners were not beaten by a family member during childhood (Abeya et al., 2011; Dalal et al., 2014; Yigzaw et al., 2010). Furthermore, women's exposure to physical domestic VAW was five to six times more likely to be higher than women whose partners had witnessed their mothers being beaten by their fathers (Feseha et al., 2012; Hayati et al., 2011; Owoaje & Olaolorun, 2012). Additionally, in one study, domestic VAW was associated with women who had a history of sexual abuse during childhood, adolescence or earlier age at first sex (Kouyoumdjian et al., 2013).

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vi. Mental health status and controlling behavior of partners'

Domestic VAW was higher among women who were afraid of their partners (Dalal et al., 2014; Wandera et al., 2015). Women whose partners had controlling, hostile and or rude behaviors were almost three to four times more likely to be exposed to any type of domestic VAW than their counterparts (Abeya et al., 2011; Dalal et al., 2014; Deribe et al., 2012; Sapkota et al., 2016; Zacarias et al., 2012). Women who had high levels of emotional distress were associated with domestic VAW (Valladares et al., 2005). Likewise, women whose partners previously engaged in physical fights were almost four times more likely to experience domestic VAW than others. In one study, women with an unhealthy mental status were two times more likely to experience domestic VAW than women with a healthy mental status (Sapkota et al., 2016).

vii. Influence partners alcohol consumption

Women whose partners drank alcohol were more likely to experience domestic VAW than women whose partners did not drink alcohol. As we found from several studies, partners' alcohol consumption is the most commonly reported factor associated with domestic VAW (Abeya et al., 2011; Ali et al., 2014; Das et al., 2013; Feseha et al., 2012; Hayati et al., 2011; Karamagi et al., 2006; Koenig et al., 2003; Kouyoumdjian et al., 2013; Owoaje & Olaolorun, 2012; Semahegn et al., 2013; Tumwesigye et al., 2012; Wandera et al., 2015; Yigzaw et al., 2004; Yimer et al., 2014). Domestic VAW was significantly associated with partner's use of psychoactive substances (Owoaje & Olaolorun, 2012).

viii. Pregnancy status

In three studies, pregnant women with high parities had a higher probability of experiencing lifetime domestic VAW than non-pregnant women (Fikree et al., 2006;

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Owoaje & Olaolorun, 2012; Semahegn et al., 2013). Besides, women whose pregnancies were undesired by their partners were six times more likely to be at risk of current domestic VAW than those whose pregnancy are desired by partners (Yimer et al., 2014). In two studies, the likelihood of women's experience of lifetime domestic VAW was consistently higher as the number of children increased (Fikree et al., 2006; Sambisa et al., 2013).

2.9.11.2 Relationship factors

i. Women's decision-making status

Decision making power was a predictor of domestic VAW (Semahegn et al., 2013). In general, the odds of domestic VAW was less by half for women who had an equal say in household decision-making. Sexual violence was 35% less likely to occur among women who had a share in household decision-making (Yigzaw et al., 2004). The likelihood of women's risk of being physically abused reduced by about 8% for those women whose partners dominated household decision-making (Sambisa et al., 2013). On the other hand, women who decided on spending their own or partners' earning with a joint decision-making approach were less likely to be victims of domestic VAW than women who made singularly decision (Dalal et al., 2014).

ii. Lack of satisfaction in marital life and suspicion of unfaithfulness

In four studies, women whose partners had engaged in extramarital sex were two times more likely to be at risk of domestic VAW than their counterparts (Hayati et al., 2011; Karamagi et al., 2006; Wandera et al., 2015; Yigzaw et al., 2010). Exposure to physical domestic VAW was associated with being unfaithful. Women who agreed that a woman was obliged to have sex with her partner had a lower risk of exposure to physical domestic violence than those who disagreed (Hayati et al., 2011). Women who had poor

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relationships with their partners were almost three times more likely to experience physical violence (Kabir et al., 2014).

In addition, women who had satisfaction in their marriage were noted to face a lower risk domestic VAW (Karamagi et al., 2006). Sexual domestic VAW was higher among women whose partners were jealous if they talked with other men, suspected them of infidelity, did not permit them to meet even female colleagues, limited their contact with family (Wandera et al., 2015). Those women who did not believe a wife could do anything if a partner wanted a girlfriend were three times more likely to be exposed to physical domestic VAW (Deribe et al., 2012).

Again, women who refused sex with their partners or asked their partners to use condoms were two times more likely to be victims of domestic VAW than their peers who did not (Dalal et al., 2014). Women who had worries over issues of their daily activities and did not discuss them with their partners,, were more likely to experience domestic VAW than women who discussed their issues (Owoaje & Olaolorun, 2012).

iii. Marriage duration and type

In five studies, domestic VAW had a significant relationship with marriage type. Women who were married or cohabitated by abduction, women married to distant relatives, women with a polygamous partners/marriage, marriage payment of dowry and marriage had no marriage ceremonies were more likely to experience domestic VAW than their counterparts (Abate et al., 2016; Abeya et al., 2011; Ali et al., 2014; Deyessa et al., 2010; Fikree et al., 2006). In two studies**,** women who were married for 5 - 9 years or 10 years plus were at higher risk physical domestic violence than women who were married for less than 5 years (Fikree et al., 2006; Kouyoumdjian et al., 2013).

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iv. Wealth index and economic status

Domestic VAW and wealth index had an association but not a direct relationship across the wealth quintile. In six studies, women belonging to the poorest wealth index group were most likely to expose to domestic VAW than women in the richest wealth index group (Bamiwuye & Odimegwu, 2014; Dalal et al., 2013; Das et al., 2013; Doku & Asante, 2015; Hayati et al., 2011; Sambisa et al., 2013). From other studies, women who had microfinance package were two three times more likely to experience domestic VAW (Dalal et al., 2013). Families who had financial difficulties were associated with domestic VAW (Abeya et al., 2011; Owoaje & Olaolorun, 2012).

2.911.3 Community level factors

i. Existence of the traditional gender-norms

In two studies, women's exposure to domestic VAW were more likely to be high in communities which adhered to traditional patriarchal gender-norms and supported attitudes towards wife-beating (Hayati et al., 2011; Sambisa et al., 2013). In the meantime, women who agreed that "a good wife obeys her partner" and/ or a man should show who the boss is" were more likely to experience sexual domestic VAW than women who disagreed. Furthermore, women who agreed that a woman had no reason to refuse sex with her partner were three times more likely to be exposed to domestic VAW compared to those who agreed for some reasons (Hayati et al., 2011). Moreover, women whose partners did not make enough money had an increased risk of domestic VAW by 5% than the reverse (Sambisa et al., 2013).

ii. Community receptive attitude towards justified wife-beating

Communities who had receptive attitude towards wife-beating (Owoaje & Olaolorun, 2012), justified wife-beating is tolerable (Kouyoumdjian et al., 2013), societal gender-

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norms (Sambisa et al., 2013), relationship control, and relationship inequalities (Antai & Adaji, 2012; Hayati et al., 2011) were factors significantly associated with women's experience of domestic violence.

2.9.12 Research evidence: suggestions for action

This section describes the research recommendations to prevent domestic VAW by transforming traditional gender-norms, engaging stakeholders, women empowerment, service/program integration and enforcing policy action/imposing legal sanctions. This systematic review has also addressed studies that attempted to examine the effectiveness of some interventions on domestic VAW. Domestic VAW was reduced through economic empowerment (microfinance support), though not statistically significant.

i. Transforming the community's traditional gender-norms

In seven studies, undertaking an appropriate awareness creation activities is an important measure to transform a community's culture and old-fashioned gender-norms. This would enhance gender equality and prevents domestic VAW (Abate et al., 2016; Deyessa et al., 2010; Hayati et al., 2011; Rahman, 2015; Sapkota et al., 2016; Semahegn et al., 2013; Yigzaw et al., 2004). Likewise, in eight studies that carry out comprehensive and socially suitable approaches, including medical advising, community mobilization, gender advocacy to transform gender inequality-norms can minimize domestic VAW (Abeya et al., 2011; Abeya et al., 2012; Antai & Adaji, 2012; Deribe et al., 2012; Feseha et al., 2012; Koenig et al., 2003; Sambisa et al., 2013; Yigzaw et al., 2010).

ii. Human rights-based approach

Awareness creation of human and women's rights are crucial to improve women's well-being (Laisser et al., 2011). In four studies, more investments were needed to design

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strategies to implement corrective measures to prevent domestic VAW. It could reduce the intergenerational transmission of deeply-entrenched gender inequity-norms (Abramsky et al., 2016; Delamou et al., 2015; Owoaje & Olaolorun, 2012; Uthman et al., 2011).

iii. Stakeholder engagement

Engaging concerned bodies, such as policymakers, professionals, and other stakeholders is very crucial to address the problem of domestic VAW at macro-level. Concerned stakeholders should design corrective measures or sanctions to prevent domestic VAW (Abeya et al., 2011). Similarly, top ranking administrative bodies who have been making policy, professional experts, scholars, and other concerned bodies should mobilize locally available resources to prevent domestic VAW (Das et al., 2013; Fikree et al., 2006; Kazaura et al., 2016; Yigzaw et al., 2010). Advocacy and stakeholder buy-in should be implemented in different socio-cultural institutions, mass-media, and non-governmental associations to enhance gender equality and prevent domestic VAW (Feseha et al., 2012; Laisser et al., 2011; Owoaje & Olaolorun, 2012; Uthman et al., 2011).

iv. Policy formulation and legal framework

Legal sanctions should be considered during policy formulation and endorsement of laws to promote gender equality, and women's rights to prevent domestic VAW. The enforcement of the law should be more responsive to address domestic VAW (Deribe et al., 2012; Yigzaw et al., 2004). Perhaps, existing law should be effective to protect domestic VAW survivors who had disclosed their experience to seek help/support from people in position/authority (Feseha et al., 2012). Policymakers should take prompt action to break hierarchical barriers between couples, and promote gender equality while

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amending the existing laws or formulating new policies (Abeya et al., 2012; Dalal et al., 2014; Doku & Asante, 2015). However, evidence-based efforts are needed to re-enforce legal rights or existing laws and policies to ensure their effective implementation to prevent domestic VAW (Delamou et al., 2015; Laisser et al., 2011; Sambisa et al., 2013).

v. Women empowerment

Building women's capacity through education, employment, income generation, and addressing imbalance of power between couples, are crucial to prevent domestic VAW (Abeya et al., 2011; Dalal et al., 2014; Doku & Asante, 2015; Sapkota et al., 2016; Tumwesigye et al., 2012; Yigzaw et al., 2004). Likewise, promising public health strategies (increasing awareness, strengthening the self-esteem of spouses and promoting equity in marital relationships) are needed to change attitudes towards gender inequity-norms, are essential to prevent domestic VAW (Abeya et al., 2011; Feseha et al., 2012; Sapkota et al., 2016). Moreover, addressing household poverty-wealth comprehensively (Bamiwuye & Odimegwu, 2014), enhancing the safety of women, promoting fertility control methods, and reproductive health service (Antai & Adaji, 2012) are some other recommended evidences for action to prevent domestic VAW.

vi. Service integration

Innovative strategies are needed to provide support and counselling to domestic violence survivors, who are rarely assisted by health care professionals (Valladares et al., 2005). Research findings have strongly suggested that domestic violence prevention interventions should be integrated with community health programs; reproductive health and other health services to be more comprehensive, at the household level and accessible for VAW survivors (Abate et al., 2016; Dalal et al., 2014; Feseha et al., 2012; Laisser et al., 2011; Semahegn et al., 2013). Existing policy integration may help to

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enhance medical screening of survivors for sexually transmitted infections, including HIV, providing male partner counseling and other healthcare support. Furthermore, the authors recommended that reproductive health service providers should be encouraged to advocate for domestic VAW and mental health screening during antenatal care (Fikree et al., 2006; Laisser et al., 2011; Meekers et al., 2013; Rahman, 2015)

vii. Domestic VAW prevention: engaging men and other influential persons

Couple centered approach has been proposed by research evidence, implement interventions to promote non-violent masculinity values and norms in the community are recommended (Hayati et al., 2011; Kabir et al., 2014; Sapkota et al., 2016). In addition, working with men is a win-win-approach to prevent domestic VAW. Efforts are needed to focus societal, community, relationship and individual level approaches, which engage men to promote men's non-violent behavior, gender equality and to minimize infidelity (Hayati et al., 2011; Karamagi et al., 2006; Laisser et al., 2011). Furthermore, interventions addressing domestic VAW should place more emphasis on reducing partners' controlling behaviors and to minimize men's alcohol drinking habits (Karamagi et al., 2006; Owoaje & Olaolorun, 2012; Tumwesigye et al., 2012; Wandera et al., 2015). Moreover, involving mother-in law would be a significant move in the prevention of domestic VAW (Sapkota et al., 2016). Also, community health workers could be active players in raising community awareness about domestic VAW (Abate et al., 2016; Semahegn et al., 2013).

2.9.13 Evidence from the systematic review and meta-analysis

Comprehensive interventions to address societal norms, gender roles, culture, beliefs and attitudes, involving men and mobilizing community members showed strong significant effect. This systematic review was carried out on selected eight interventional studies

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that had been conducted in LLMICs (Abramsky et al., 2014; Abramsky et al., 2016; Falb et al., 2015; Green et al., 2015; Gupta et al., 2013; Krishnan et al., 2012; Pulerwitz et al., 2015; Wagman et al., 2015). In two studies, socially tolerant attitude towards domestic VAW was lowered by community mobilization intervention. Women's attitude sex refuse when necessary was higher in the community mobilization intervention than control group. Similarly, there was a reduction in sexual (24%) and concurrent physical (43%), domestic VAW (52%) in the intervention group than the control group. Moreover, women experiencing domestic violence in the intervention communities were more likely to receive supportive community responses (Abramsky et al., 2014; Abramsky et al., 2016).

The community-level normative attitude towards physical domestic VAW and justified wife-beating receptive norms, were improved in the intervention group than the control. Additionally, men's suspicions of their partner and communication about sex were improved (Abramsky et al., 2016). Correspondingly, community engagement and group education combined interventions reduced domestic violence almost by 20%, while the community-engagement only group decreased by 23%, and improved gender equitable-norms (Pulerwitz et al., 2015). Two interventional studies reported that women's who were economically empowered through a village loan and savings association approach were less likely to report economic abuse compared to control group (Falb et al., 2015; Gupta et al., 2013).

Attitude towards refusal of sex did not significantly change with women who were in the combined intervention group. Experience of current domestic violence and also receptive attitude towards justified wife-beating were lower, but it was not statistically significant (Gupta et al., 2013). Women who were married as child bride were 46% less likely to

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report physical and or sexual violence in the combined intervention group than the control. The reduction was however, not statistically significant in the overall domestic VAW (Falb et al., 2015).

A study reported that women's receptive attitudes towards justified wife-beating and power relationships were associated with domestic VAW. Women who had justified wife-beating were two times more likely to experience domestic VAW. Furthermore, women in joint sexual decision making were 30% less likely to report domestic VAW compared to women whose partners controlled sexual decision-making. Women were 57% less likely to report domestic VAW when both partners had equal power (Krishnan et al., 2012).

Though women's economic empowerment doubled for those women in the safe home and respect for everyone in the intervention group. Women in the intervention group, however, were 20% less likely to experience domestic VAW than those in the control group. Nonetheless, this package had no significant effect on psychological domestic VAW, men's behavior (perpetration) (Wagman et al., 2015), overall domestic VAW, women's autonomy and women's receptive attitude towards gender-norms (Green et al., 2015).

2.9.14 Discussion of key findings

This systematic review and meta-analysis computed the pooled prevalence of domestic VAW and its types, associated factors, effective interventions and key recommendations to prevent domestic VAW. Fifty five percent of women in the reproductive age had experienced domestic VAW in their lifetime. Of these, the prevalence for the lifetime domestic violence were physical (39%), psychological (45%), and sexual (20%). In

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addition, more than one-third (38%) of women in the reproductive age had experienced current domestic VAW. Of these, prevalence of current domestic violences were physical (25%), psychological (30%) and sexual (7%). In addition, thirteen percent of women experienced concurrent domestic VAW. The finding from this systematic review is similar with the WHO's global estimates and multi-country study findings, which indicated that one-in-three women experienced domestic VAW (Garcia-Moreno et al., 2006; García-Moreno, Zimmerman, et al., 2015; WHO, 2013).

As the systematic review findings indicated that couples' educational level, place of residence, economic status, having witnessed abuse during childhood, partners' having controlling behavior, partners' alcohol consumption, pregnancy status and parity were the risk factors for domestic VAW. Notwithstanding, sexual violence was common among women who had partners' age (<35 years) were significantly associated with domestic VAW. Besides, women in unfaithful relationships, unsatisfied marriages, under age marriage and having history of forced first sex, short duration of marital life, and poor mental health were more likely experience domestic VAW. In addition, the presence of traditional gender-norms and justified wife-beating receptive attitudes in the community were linked to high risk of domestic VAW. This finding is also similar with the existing evidence (Jewkes, 2002; Heise 1998), which is very applicable in LLMICs and is targeted at the deep rooted determinants.

Domestic VAW prevention programs should focus on community culture/traditional gender-norm transformation, stakeholders' engagement, and women empowerment. In addition, efforts should be made to engage men and other influential family members to prevent domestic VAW. Service integration, implementation of existing policy and human right based could have impact to prevent domestic VAW. It is similar with other

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reviews (García-moreno et al., 2015; Jewkes, 2002; Jewkes et al., 2015; Michau et al., 2015).

Both observational and interventional studies were included in this study. However, the findings were interpreted and presented independently to meet the objectives of the systematic review and meta-analysis. Though, this systematic review and meta-analysis used a relatively comprehensive search of the major databases; included both quantitative and qualitative studies; published and unpublished studies and sub-group analysis by setting and violence types, there were limitations. One of the limitation of this systematic review and meta-analysis was that, it did not carry out quantitative synthesis on the factors associated with domestic VAW due to the high heterogeneity between included studies.

2.9.15 Implication of the systematic review and meta-analysis findings

The magnitude of domestic VAW and its associated factors were determined. The recommended and effective evidence-based interventions were identified through this systematic review and meta-analysis. These identified interventions are applicable and effective in LLMICs settings. The findings could be an insightful on domestic VAW, associated factors, and effective interventions. Therefore, concerned stakeholders could use the findings from this research as the main evidence to inform policymakers, program designers and local planners to construct and implement policies and programs to prevent domestic VAW in LLMICs.

Domestic VAW is still high in LLMICs. Almost one-third of the women had experienced domestic VAW. It is a complex public health and human rights violation problem, which is associated with factors bordering the individual, relationship,

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community and entire system level. However, most of the associated factors are preventable through comprehensive interventions. Research evidence showed that upcoming interventions should focus on the transformation of the community's traditional gender-norms, engaging stakeholders, empowering women, engaging men and other influential persons, integrating intervention with existing services and enforcing policy or legal frameworks implementation interventions to prevent domestic VAW.

Integrating legal framework and programs that focus on transformation of traditional gender-norms stand out as the most important interventions to prevent domestic VAW. Domestic VAW reduced by half through gender-norms transformative actions of community mobilization for awareness creation. Therefore, it is recommended that researchers, program planners, policy makers, clinicians and other concerned stakeholders should invest in the implementation of gender-norms transformation focused on community-based interventions to prevent domestic VAW. Details of the systematic review and meta-analysis has been published elsewhere (Semahegn et al., 2019) (Appendix 1*)*.

2.9.16 Intervention component adapted through systematic review

As indicated in the systematic review, domestic violence is associated with different risk factors; individual behavior, interpersonal, community and societal being most known categories. However, most of the community and societal factors are modifiable causes for domestic VAW. To address these factors, research evidence recommended that service integration, traditional gender-norms transformation, awareness creation to improve women's receptive attitude of justified wife-beating, human rights approach, involving influential family members (partner and mother or sister -in-laws), women's

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empowerment and others as some of the most effective ways to prevent domestic VAW. It is for this reason, this research aimed to implement gender-norms transformative intervention at community level to prevent domestic VAW.

2.9.17 Evidence for partner participation

As stated from the systematic review and meta-analysis (Semahegn et al., 2019), engaging men and other influential persons on domestic VAW prevention is one of the proven intervention. Couple centered approach aimed at implementation in the community to promote non-violent masculinity values and norms is crucial in the prevention of domestic VAW (Hayati et al., 2011; Kabir et al., 2014; Sapkota et al., 2016). In addition, working with men is a win-win-approach to prevent domestic VAW. Efforts are needed to focus an appropriate societal, community, relationship, and individual level; to engage men to promote men's non-violent behavior, gender equality and minimize infidelity (Hayati et al., 2011; Karamagi et al., 2006; Laisser et al., 2011).

Furthermore, interventions addressing domestic VAW should place more emphasis on reducing partners' controlling behaviors, and how to prevent men's alcohol drinking habits (Karamagi et al., 2006; Owoaje & Olaolorun, 2012; Tumwesigye et al., 2012; Wandera et al., 2015). In addition, partner and other stakeholders' engagement are highly encouraged to prevent domestic violence, which aimed at transforming traditional inequitable gender-norms (Doyle et al., 2018). Likewise, evidence from some systematic reviews has shown that transforming men's attitude towards equitable gender-norms and equality has a crucial effect on women's experience of domestic violence (Ruane-mcateer et al., 2019). Therefore, involving partners and other men can have a significant effect to transform communities' traditional inequitable gender-norms. It was for this reason that partners' involvement was enhanced on one of the groups of the study, to

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pilot its effectiveness on the prevention of domestic VAW. Hence, this quasi-experimental implementation research intervention materials design and its implementation was in accordance with this systematic review findings and recommendations. This aimed to pilot real setting implementation of interventions, focused, on community-based gender-norms transformation through engaging stakeholders, integrating the service, and mobilizing the community to prevent domestic VAW in the Northwestern Ethiopia.

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CHAPTER THREE

MATERIALS AND METHODS

3.0 Introduction

In this chapter, different study approaches were carried out to answer the research questions. The chapter, therefore, presents the detailed description of the topics and sub-topics such as study area profile, study design and participants' allocation, study participants and their eligibility criteria. It includes sample size determination and sampling procedures, data collection tool, procedures and related activities, study variables, quality assurance measures, intervention description and implementation. The data processing and analysis methods descriptions, ethical considerations and study findings dissemination plan are also presented.

3.1 Study area and period

This study was conducted in Awi Zone, Amhara Regional State, in the Federal Democratic Republic of Ethiopia from November 15, 2017 to December 15, 2018**.** According to 2007 census conducted by the Central Statistical Agency (CSA) of Ethiopia, Awi Zone has a total population of 982,942, of whom 491,865 are men and 491,077 are women. Awi Zone has an area of 9,148.4 square km and a population density of 107.4. Almost 13% of the population live in urban areas (CSA, 2007). Recently, as the Zonal Health Department reported in the month of June, 2018, Awi Zone has 1,285,242 population, of them, women accounts 50.9% (Biresaw, 2018). The zone has a total of 215,564 households with an average of 5 persons per household. About 93.5% of the population are Ethiopian Orthodox Christians, and 5.4% are Muslims (CSA, 2007).

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3.1.1 Location of Awi Zone

Awi Zone hosts one of the zonal administrative centers in the Amhara Regional State, Northwestern Ethiopia. Awi Zone has nine Districts and it is bordered on the West by Benishangul-Gumuz Regional State, on the North, and the East by West Gojjam Zones. The political center of Awi Zone is Injibara town. The town is situated 447km away from the capital city, Addis Ababa in the Northwestern parts of the country (Figure 14).

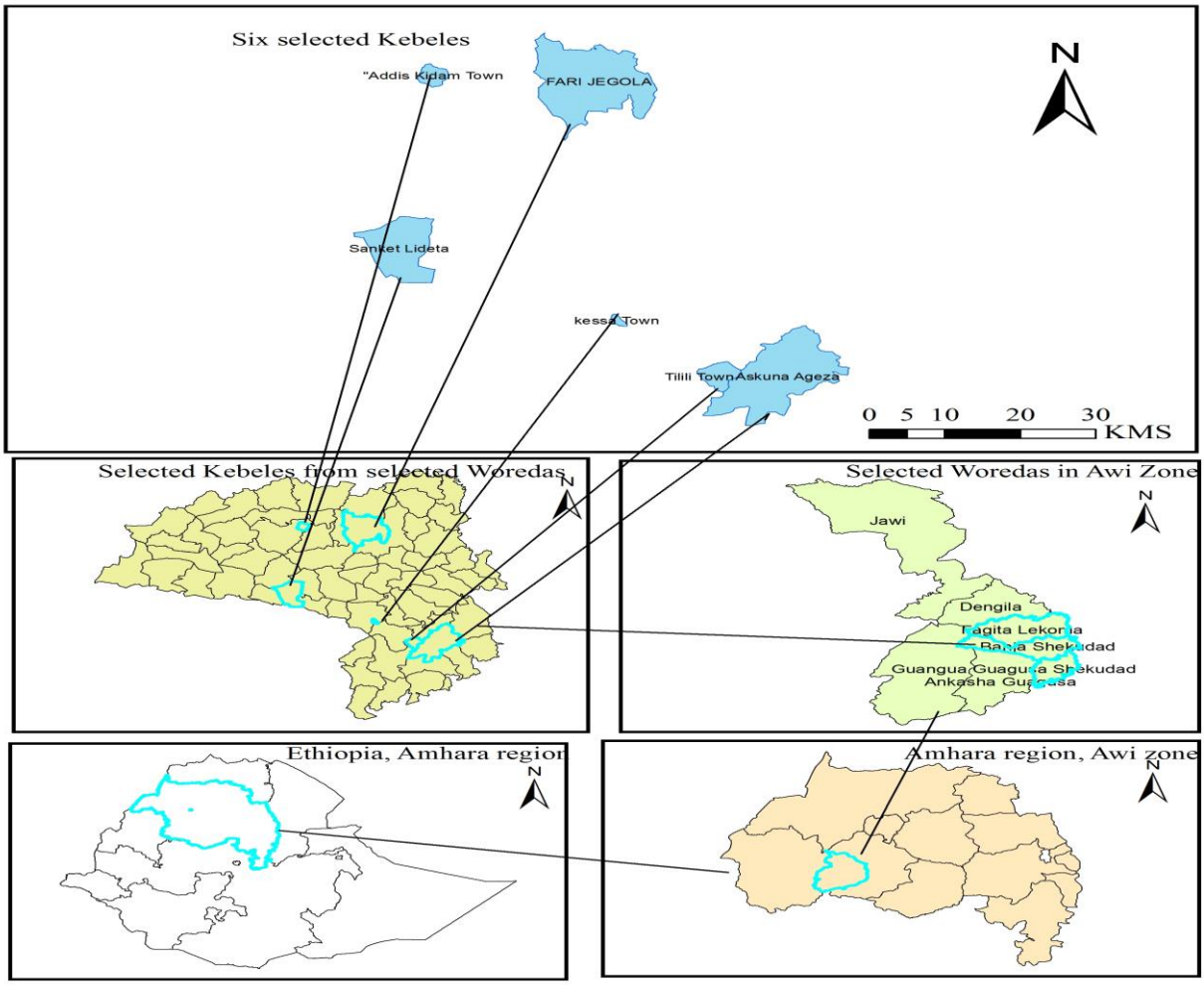


Figure 14: Map of the study site (area)

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3.1.2 Historical origin and foundation of Awi Zonal administration

Previously, before, 1991, Agew-midir Awraja was the name of the administrative center in Gojjam province. Dangila town was the political center of the Agew-midir Awraja. Since then, Awi Zone has become one of the zonal administration in Amhara Regional State in the Federal Democratic Republic of Ethiopia. Currently, Injibara is the administrative center of Awi Zone.

3.1.3 Political administration of Awi Zone

According to the Zonal Health Department report, published in May 2017, the Awi Zone comprised of nine Districts (Dangila Zuria, Jawi, Fagitalekoma, Banja, Guagusa Shikudad, Ankesha, Ayehu-Azena, Zigem and Guangua) and two administrative towns (Enjibara and Dangila). A total of 204 Sub-districts are located within the Awi Zone administration (Biresaw, 2018). The smallest functional administrative unit is referred to as Kebele (Sub-district). It consists of 1000 to 1500 households with an estimated 5000 residents according to the Federal Democratic Republic of Ethiopia government's structure. One of the Districts (Fagitalekoma) in Awi Zone, the prevalence of domestic VAW was 78% (Semahegn et al., 2013; Semahegn & Mengistie, 2015).

3.1.4 Climate and vegetation

Awi Zone has elevations that vary from 1,800 to 3,100 meters above sea level, with an average altitude of about 2,300 meters. Awi is topographically divided into two main parts, namely the highlands and lowlands. The highlands are characterized by chains of mountains and plateaus and the altitudes are over 1,500 meters above sea level. The area comprises Dega (highland), Woina-Dega (semi-highland), and Kola (lowland/semi-desert). However, most of the area typically have highland and semi-highland weather with an annual mean temperature recorded between 15°C and 21°C. The highest rainfall

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occurs during the summer, which starts in the mid of June and ends in early September. The average precipitation is up to 210 mm^3.

3.1.5 Economic activities

Agriculture is the major economic activity in the Awi Zone. The Agew, have traditionally practiced a land-management system, which is well adapted to the local ecology and an enabling them to sustain the fertility of their soil and minimize erosion. This area is recognized as one of the most productive in the Amhara Regional State. This zone has a road density of 39.6 km per 1000 km^2. The average rural household has 1.2 hectares of land. About 14% of the population is engaged in non-farm related jobs

.

3.1.6 Available health care and related infrastructure

Awi Zone has one general hospital, four District hospitals, 46 functional health centers and 208 satellite health posts. This indicates that each Sub-district has one health post staffed with two health extension workers (HEWs).

3.2 Study design

A community-based quasi-experimental study design was conducted using a sequential explanatory mixed-method approach (quantitative and qualitative). Quasi-experimental study designs are interventional studies that aimed at evaluating effectiveness of intervention programs. Unlike randomized controlled trials, it does not use random allocation of exposures, and aimed at demonstrating causal inference between intervention and outcome (Harris et al., 2006; Schweizer et al., 2016). This study has comprised of three study groups such as two interventional groups (Interventional and Active comparator) versus Control group. The study participants were allocated to the intervention, active comparator, and control groups, which aimed at piloting the

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effectiveness of the community-based interventions to prevent domestic violence against married or cohabitating women in the reproductive age. The three groups were almost similar in terms of basic characteristics such as community culture, ethnicity, geographical setting and other socioeconomic contexts. The study protocol was registered in the trial registry platform (ClinicalTrials.gov ID: NCT03265626), and has been published elsewhere (Semahegn et al., 2017) (Appendix 2). This implementation research was written in accordance with the Consolidated Standard Reporting of Trial (CONSORT) (Moher et al., 2010), and the Standards for Reporting implementation studies of Complex Interventions (StaRI) (Pinnock et al., 2017, 2015).

3.3 Quantitative and qualitative study population

3.3.1 Source and study population - quantitative study

All married or cohabitating women (15 - 49 years), and living with current partner at least 12 months preceding the pre-post surveys of the study, and in Awi Zone for at least six months. Of this, married or cohabitating women who have been living with their current partner for at least one year preceding the survey were selected as the study population in the selected sub-districts.

3.3.2 Source and study population - qualitative study

All married or cohabitating women (15 - 49 years), partners, and community representatives such as local politicians, elders or religious leaders, health care providers, police office, women development ‘army’, and Women and Child Affairs office representatives. Of these, women, partners, community leaders, local politicians, religious leaders, elders, health care providers, police, women association and Women and Child Affairs office representatives were purposively selected for qualitative study.

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3.4 Inclusion and exclusion criteria for the study participants

3.4.1 Inclusion criteria for quantitative

- All married and or cohabitating women (15 - 49 years) who have been living with their partners for at least one year;
- Women registered as permanent residents (have lived at least 6 months) in the sub-districts were eligible for the study;

3.4.2 Inclusion criteria for qualitative

- Community and office representatives who have been living for at least 6 months in the study area;

3.4.3 Exclusion criteria for quantitative and qualitative study

- Eligible study participants who had incapability to give responses, hear, and or see that might be as a result of severe bodily and or mental illnesses during data collection period.

3.5 Sample size determination

3.5.1 Calculation of the quantitative study sample size

The sample size for the dichotomous outcome was calculated based on an assumption of the superiority trial hypothesis test, taking into account both the intervention and control group domestic VAW proportion. The study hypothesized (H_A) that exposure to the new community-based intervention aimed at averting domestic VAW would have a significant effect than the existing prevention program (Zhong, 2009). Therefore, the corresponding null hypothesis (H_o) was defined: the new community-based intervention has no effect to prevent domestic VAW. Then, the sample size was determined considering the following parameters:

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N: Number of study participants for each group;

P: Proportion in control group;

d: Expected effect difference between intervention and control (d= P_o-P_x); 22%-9%= 13%) (Abramsky et al., 2014);

δ_0: Margin of error (5%=0.05);

α: Level of significance which is 95% confidence level (α=1-0.95=0.05, 1.645);

ß: Power which is 80% (ß=1-0.8= 0.2 = 0.845)

The sample size calculation formula for binary outcome was adopted (Zhong, 2009).

$$N = 2 \times \left(\frac{z_{1-\alpha} + z_{1-\beta}}{d - \delta_0} \right)^2 \times p \times (1 - p)$$

n= 2x(1.645+ 0.845/(22-9%)-0.05)^2 x 0.22(0.78)

n= 2x(2.49/0.08)^2 x 0.172

n=2x964.875x0.172=331. Then, 15% was added for non-response compensation,

n=331+ (331x0.15) = 381

Eventually, design effect was considered for the complex sampling design (multistage, stratified and systematic sampling) to increase power, and precision of the study's finding. Therefore, design effect of 1.11 was adopted from women who experienced current physical or sexual domestic VAW in Amhara Regional State, Ethiopia (CSA, 2017). Then, the final sample size (n) for each group was calculated as:

n= n x (design effect) = 381x1.11 = 423. In all, (n=423x3(groups), eventually, 1,269 of the women (15 - 49 years) were participated in the study.

3.5.2 Sample size for qualitative study

The qualitative study sample was determined based on information saturation during key informant interviews (KIIs), in-depth interviews (IDIs), and focused group discussions

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(FGDs). Overall, forty three participants were involved in the qualitative component of this study. Of this, four FGDs which comprised of seven to ten discussants (34 discussants) were held at selected sub-districts. Five KIIs and four IDIs were conducted. Local leaders were consulted on the selection eligible qualitative study participants in the community. In addition, some policy documents were reviewed to assess the presence of gender issues in their context.

3.6 Sampling procedures for quantitative study

Complex probability sampling designs (multistage, stratified and systematic) were used to select study participants for quantitative.

3.6.1 Multistage and stratified sampling methods

Using the multi-stage and stratified probability sampling methods, three study sites (Fagitalekoma, Banja and Guagusa Shikudad) were selected from the nine Districts of Awi Zone. These three study sites were randomly selected out of the nine Districts in Awi Zone. Then selected three Districts were allocated accordingly for intervention, active comparator and control groups (Figure 15). In addition, convenience and suitability for the intervention implementation (logistics, geographic non-proximity to minimize information sharing amongst the intervention, active comparator, and control group) were considered during the selection and allocation of study participants. Further, non-proximity to the study site was one of the main strategies used to prevent information contamination on public gathering places such as churches, markets and other social gatherings. Each sub-districts was stratified into urban and rural, as a result of domestic VAW is higher among women in rural than urban area in Ethiopia (CSA, 2017), and based on other assumption that residents might have varied level of awareness, access to information, and community traditional gender-norms between

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urban and rural residents. Thereafter, eligible households were identified from the HEWs registry (family folder) of the sub-district health post.

3.6.2 Probability proportional to size allocation

Probability proportional to size allocation of the sample size was carried out for each stratum by taking the total households in the sub-districts, the total eligible households in the selected sub-districts (urban plus rural), and the calculated sample for each group. Then, the total households of each sub-district was obtained from family folder. Sampling fraction was computed for each stratum ($k=n/N_{i=}$ 2).

3.6.3 Systematic sampling method

Eventually, the sampling frame of eligible households for selected sub-districts was constructed based on the information obtained from the family folder. The eligible women (15 - 49 years) were identified based on the records in their family folder. The women's self-reported dates of birth from 1968 to 2002 (1961 to 1995 Ethiopian Calendar) served as a reference point for the period study (November, 2017). The lower and upper limits were obtained by subtracting 49 and 15 years from 2017 (2010 Ethiopian Calendar). All the dates of birth have been registered in the family folder according to the Ethiopian Calendar.

Systematic sampling was employed to recruit study participants at the household level based on the k^{th} interval (k = 2, k = sample size/ eligible women in the selected site). The first household (random start) was recruited using the first numbers from group of k^{th} values (1 to k^{th} value). Then the random start was recruited by lottery method. Confidential codes were given to selected households for interview. In case, two eligible women were existing in a single house with a common partner (polygamy), one woman

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was selected using random/lottery method for the interview. Participants' allocation and recruitment process were carried out according to the Consolidated Standard Reporting of Trial (CONSORT) recommendation (Moher et al., 2010) (Figure 15**)**.

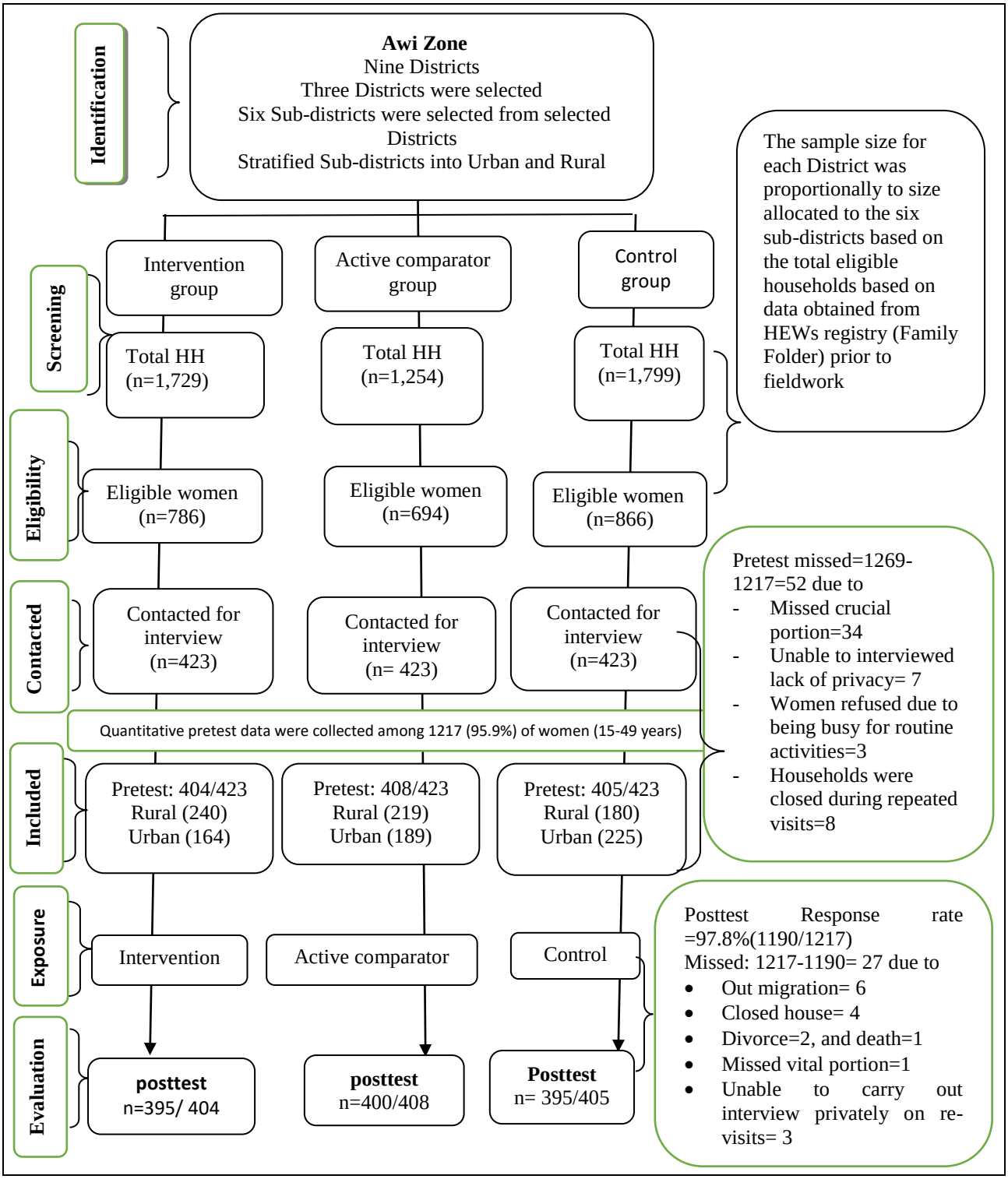
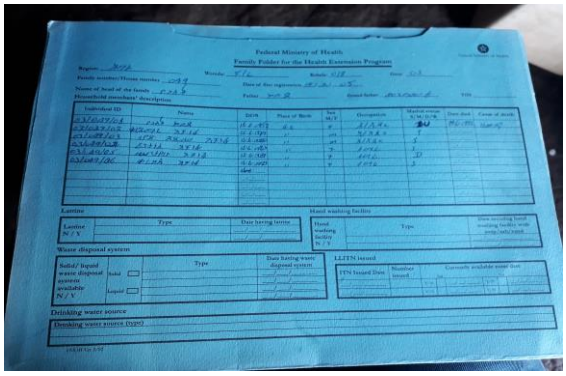


Figure 15: Participants allocation process illustrated using adapted flow diagram

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3.6.4 Sampling method - qualitative study

A pragmatic qualitative research approach was employed to explore communities' perceptions towards domestic VAW, attitude towards gender equality, community gender-norms and attitudes toward justified wife-beating. Community attitudes, implementation of interventions and its barriers or enablers. Purposive sampling method was employed to select study participants for IDIs, KIIs, and FGDs from Awi Zone including District officers and community representatives. Stakeholders such as local politicians, health officers, Women and Child Affairs Office representatives, local leaders, police, health care providers, NGO representatives and other concerned bodies were involved. Some existing policy documents were reviewed to assess the presence of gender and domestic VAW issue. The source of information and activities to identify eligible women and construct sampling frame are recorded (Figure 16).



Family-folder used for eligible women screening

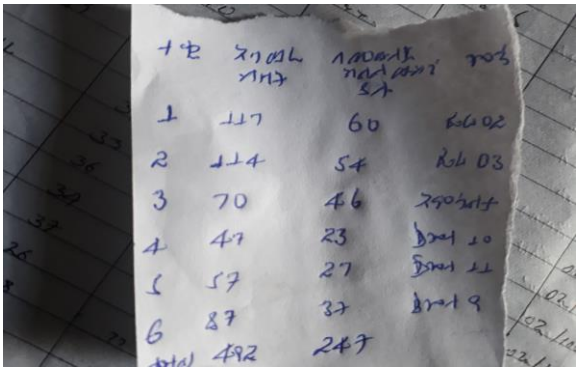


Photo for participant screening



Photo view of Awi culture



Photo-sketched map: one of the study site

Figure 16: Sample photo of data source for women screening for sampling procedure

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3.7 Descriptions of the intervention

This community-based intervention comprised of packages that enhance awareness of the community, and to identify implementation barriers and enabling conditions. The interventions were stakeholder advocacy meeting, community mobilization, community representatives training, women awareness creation, partner engagement and standard service. Each intervention component is briefly described below.

3.7.1 Advocacy meeting workshop

The advocacy meeting/workshop component of the intervention package was delivered to both the intervention and active comparator groups. This component of the intervention was led by the principal investigator. This intervention was held to convince local people who were in positions of authority such as Zonal Departments and District offices gender and reproductive health officers, police and security, women development 'army', HEWs, health center heads and others. Advocacy meeting participants were selected deliberately based on their role and responsibility in the represented communities. A total of 54 stakeholder-representatives participated in different advocacy meeting sessions. Each session comprised 14 to 21 targeted audiences.

A total of three advocacy meeting sessions were employed at Aridian hotel, Injibara town. Research evidence was presented to give insight into the situations of domestic VAW, its predisposing issues and research recommendations for solutions and suitable in the Ethiopian context. Furthermore, some policy documents in Ethiopia, piece of information from the constitution, family laws, criminal codes, guidelines, regional government gender issue training manuals and some rectified international regional conventions, were briefly presented to create awareness. Finally, discussions were held

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about the implementation situation and its implementation barriers and enablers. It was a daylong session.

3.7.2 Community mobilization

The main aim of this intervention component was to raise the awareness of the community about gender equality and VAW to improve traditional gender-norms. It is a jointly-lead collaborative intervention program carried out by the HEWs, police officers and a health personnel to mobilize the community members at different public gathering places or events such as natural resource conservation activities, local-based social association meetings, Sunday church services, community policing sessions and other non-faith-based programs at permanent places of residence. This session was planned to be 15 to 20 minutes teaching to disseminate key information about gender equality, equity issues, the harmfulness of VAW, and others.

In addition to the oral presentation, leaflets were distributed to the participants for further reading and to facilitate the sharing of information such that, other communities and family members can reach each and other. Furthermore, community education activities were to be done through the home-to-home individual teaching and also group teaching (community conversation). The target audience was any community members in the study area. More than 3,000 leaflets were designed and distributed to the community on three major key concepts (Appendix 8). The softcopy of the leaflets was submitted to the Awi Zonal Women and Child Affairs' and Health Departments for future use and sustainability.

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3.7.3 Training of community representatives

A principal investigator and a local police officer(s) lead intervention components that aimed at establishing a community representative's alliance against domestic VAW. The community representatives (leaders, religious fathers, elders) were recruited in collaboration with the local leader and a sub-district police officer. The community representatives training was targeted at the local leaders, elders, religious fathers (priest), women representatives, local officers and other knowledgeable people considering their importance and influential capacity in the community. The five teams comprised 10 to 12 community representatives (n=53) in the sub-districts (study sites) formed to facilitate the intervention.

An intervention was delivered in a day's session for the team. Ten to twelve sessions (re-orientation and feedback gathering) were carried out with each intervention group in collaboration with local police officers and HEWs for a year. The re-orientation and feedback gathering sessions were held regularly around the villages, which too about 45 to 90 minutes. The community representatives' training was mainly focused on transforming these traditional gender-norms into gender equality and equitable power relationship norms that aimed in preventing domestic VAW. All trainees were expected to go back to their home, and continue implementing in their community gatherings (*Idir, Equib, etc.*).

3.7.4 Women awareness creation through information dissemination

Women at the reproductive age were targeted for this intervention to create their awareness about gender equality and domestic VAW. This was a women based intervention component. It was led by HEWs in collaboration with the women development 'army' through integrating with their routine health extension program

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(HEP). The HEWs were undergone a refresher training on gender equality, domestic VAW and related legal frameworks. The HEWs carried out the women's awareness creation activity implementation by house-to-house visits by integrating existing HEP. In addition to house-to-house visiting, leaflets were distributed that focused on women's rights to equality, and VAW and its consequence on women's health.

The awareness creation was focused on interactive sessions on women's equality rights, equity-norms, and independent decision making ability, negotiation skills in relationships, etc. In addition, the HEWs and the principal investigator had an introduction session with women development 'armies' in their locality. The women development 'army' is a group comprised of 19 to 22 women leaders who had a monthly meeting to discuss about different issues. Each woman had 30 to 35 women (households) to supervise whether they were implementing HEP or any other income-generating project for the woman and her family. Eighty four women development 'army' members were involved in the interventions implementation.

3.7.5 Partner involvement in domestic violence prevention

This was a joint lead (either the principal investigator, police officer or other health personnel) intervention component delivered to only the comprehensive intervention group of the study. It was aimed at transforming men's receptive attitudes towards justified wife-beating, traditionally in-equitable gender-norms in relationships, gender equality, decision making, communication and women's involvement in reproductive health issues as part of their human rights. Therefore, group education and discussion sessions were employed for a maximum of 20 minutes. Partners' involvement was a key strategy in transforming perpetrators into change agents by improving their attitudes and establishing an alliance with them as change agents to avert domestic VAW. A total of

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seven sessions were carried out on the designed leaflet and intervention and standard operating procedures to respond VAW. Moreover, the education intervention on partners was organized at the village to create awareness on gender equality, equity, gender-norms, wife-beating attitudes, male involvement and other human rights issues.

3.10. 6 Standard intervention

The existing services are gender mainstreaming, legal services, microfinance support and other government and non-governmental programs that have been taking place as per their plan.

3.8 Intervention implementation

The intervention materials were designed based on a systematical review of the community-based interventional studies, existing national constitution, criminal codes, family laws, standard operating procedures to prevent and respond to sexual violence, gender-based violence awareness training manual, WHO recommendations, and other policy documents. The intervention materials prepared targeted all community members and the transformation of traditional gender-norms to enhance women's awareness of their rights to equality and relationship equity. The intervention materials were reviewed by gender officers from Zonal Departments, and District Offices before dissemination to check their cultural appropriateness and feasibility in integrating with existing community HEP.

The intervention implementation comprised the following activities: contextualization and community entry, intervention materials development and validation, implementers' recruitment, training and commencing of actual implementation for twelve months in a

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step-by-step process. Strategies like home visits, training, community mobilization, advocacy meetings and involving partners were used to implement the intervention.

3.8.1 Intervention implementation framework

This intervention was targeted at addressing the five domains (Intervention character, Inner setting, Outer setting, Individual behavior, and Process of implementation) of implementation research for clearly identifying the implementation barriers and enabling environments based on the Consolidated Framework for Implementation research (CFIR) (WHO-TDR Group, 2014) (Figure 2).

3.8.2 Contextualization and community entry

3.8.2.1 Situation analysis

Before the proposal's development, a situational assessment was conducted to contextualize the research objective and the intervention with stakeholders. Contextual assessments were made in the study area about the problem and implementation gaps using KIIs with local politicians and reproductive health officers at the study area in July 2016. The situational assessment mainly focused on the situation of domestic VAW, community norms related to gender equality and equity, barriers and facilitators of the implementation of an existing policy to prevent domestic VAW at the community level (real settings).

3.8.2.2 Preliminary findings and existing programs

Domestic VAW is common phenomena in Ethiopia, with Awi Zone being also one of the highest in the country (Semahegn & Mengistie, 2015). However, existing community gender-norms, negative attitudes towards gender equality, receptive attitudes of justified wife-beating and implementation bottlenecks were explored. In addition, possible

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practical solutions and strategies were explored and identified to be implemented. Afterward, a consensus was reached with stakeholders in Awi Zone on the problem, which needs a comprehensive intervention to prevent domestic VAW. This situational analysis provided an opportunity for contextualizing the program and using it as an entry mechanism to the community and concerned stakeholders.

The sociocultural, economic and political structures were assessed to identify appropriate intervention delivery mechanisms. The women development 'army', health development 'army', and HEP were some of the existing and suitable government program, which this study would like to integrate designed intervention. This implementation research could efficiently and effectively use these existing HEP approaches, structures, and had piloted for integration for sustainable preventive intervention. In addition, the implementation strategy was designed through discussions with stakeholders to suit the existing programs.

3.8.2.3 Strategy for community entry

A letter requesting for cooperation was submitted to Amhara Public Health Institute (APHI), Zonal Departments, District Offices and study sites (sub-districts). After permission was obtained from local leaders, every activity was carried out with very close collaboration with the community members. The local leaders, the cluster of police officers, head of the health centers, HEWs and women development 'army' representatives as well as other politicians at different levels were actively involved.

3.8.3 Intervention material development and stakeholder buy-in

The intervention materials and guides for implementers were designed by thorough review of some policy documents, and systematically reviewing of existing research

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evidence (Semahegn et al., 2019). The pieces of information from the National Constitution (FDRE, 1994), Criminal Code (FDRE, 2005), Family Law (FDRE, 2000), standard operating procedure to prevent and responding sexual violence manual (FMOH, 2016b), and gender-based violence awareness creation training manual were used to design the awareness creation materials. In addition, various materials including guidelines on VAW prevention and response were referred (Hegarty, et al., 2015; García-Moreno et al., 2015; Jewkes, 2002; Jewkes et al., 2015; Michau et al., 2015; Watts & Zimmerman, 2002). Promoting gender equality-norms, women-empowerment, male-involvement, engaging-stakeholders and legal-sanction enforcement were some of the recommended strategies to prevent domestic VAW.

The designed intervention materials (leaflets, implementer guides and advocacy meetings materials) for community mobilization, to address traditional gender-norms were initially submitted to Zonal Health, Women and Child Affairs and Justice Departments and District offices for review and validation. Necessary modification or amendments were made as per the expert comments and recommendations. In addition, intervention materials were reviewed by the advocacy meeting the audience from multidisciplinary stakeholders to make the materials culturally appropriate and acceptable (Appendix 8).

3.8.4 Implementers recruitment and training

3.8.4.1 Implementers recruitment

The HEWs were recruited as implementers so long as they have been working on the implementation of existing community HEP. It helped to ease the integration of VAW prevention and control. The heads of the health sectors at the selected Districts were consulted for their concurrence on the recruitment of the implementers based on their

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satellite health posts in the sub-districts. In addition, Women and Child Affairs' gender officers were involved and played leading roles. They were also involved actively in the formative assessment, implementation and evaluation.

3.8.4.2 Implementers training

The HEWs were trained on the objective of the study, domestic VAW, gender inequality, ethical issues, the implementation tool and how to integrate that with their routine package implementation. They had implemented the intervention in the community through integrated efforts with HEP. All HEWs were females who were accessible and acceptable for women without the need of requesting consent from their partners.

In addition, two male facilitators (supervisor) were recruited and oriented to facilitate the implementation process in collaboration with the HEWs. The principal investigator, implementers, facilitators and gender officers participated in the training of community change agents (representatives), women and partners as per the protocol and intervention categories.

3.9 Implementation of community-based intervention

The intervention aimed at enhancing the implementation of existing policy documents to prevent and respond to domestic VAW. The intervention was implemented for about 12 months considering time and other resources, feasibility and applicability of this piloted implementation research. The intervention package was designed based on the policy documents which comprised stakeholder advocacy meetings, house-to-house women's awareness creation, community representative and partners' involvement interventions. These were implemented in flexible, innovative and dynamic ways to address the risk of mainly focusing on the transformation of traditional gender-norms. Group discussions

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were carried out with community HEWs, sub-district police officers and a supportive cluster of health personnel who were actively involved in the community-based intervention process and intervention material distributions.

3.9.1 Intervention allocation

This community-based quasi-experimental implementation research comprises three groups such as the two intervention groups (comprehensive intervention and active comparator) versus control group. The local stakeholders were consulted to choose appropriate study sites to minimize information contamination between the intervention and control groups. The two intervention groups (intervention and active comparator) had designed separately, which aimed at piloting the feasibility and effectiveness of partner involvement in the prevention of domestic VAW (Figure 17).

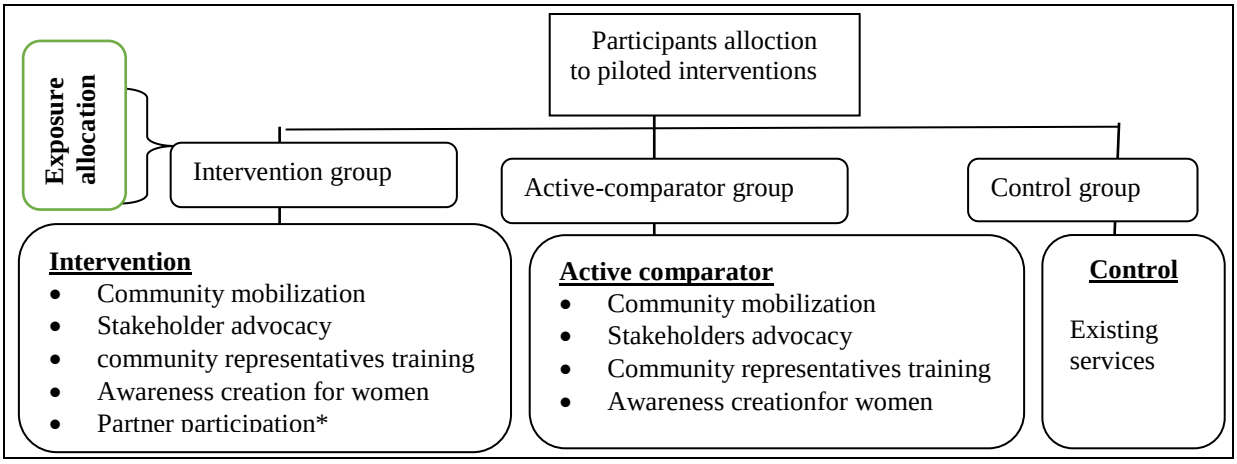


Figure 17: Pictorial presentation of the participants' allocation into the interventions

3.9.1.1 Comprehensive intervention group

One District (Fagitalekoma) was selected for the all-inclusive piloted intervention (advocacy meetings, change agents training, community-mobilization, awareness creation, participating partners as a change agent) to prevent domestic VAW in collaboration with community HEWs. The piloted intervention targeted married or cohabitating women, partners and community representatives (religious leaders, health

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care providers, police, politicians and associations). Awareness creation training and community mobilization were conducted using existing research evidence, guideline recommendations, existing gender equality empowerment training manuals, the country's constitution, civil and criminal codes as well as family laws of the country. The piloted awareness creation intervention had given more emphasis on the commonest form of VAW and women empowerment on decision making and heading the household. To address this, the corrective actions targeted on promoting equity issues between couples, their discussion habit on household matters, and other relationship issues.

3.9.1.2 Active comparator

Two sub-districts from the Banja District were selected as an active comparator group. Active comparator group received the community mobilization, women awareness creation, advocacy meeting and community representatives (religious leaders, health care providers, police, and local politicians) were involved in the sensitization intervention on domestic VAW. This group did not receive the partner engagement component of the piloted intervention package. The same tool and approach were used to track the progress of the intervention.

3.9.1.3 Control (standard service)

The urban and rural sub-districts of Guagussa Shikudad District were assigned for comparison purposes and received the existing services. The existing services are gender mainstreaming, legal services, microfinance, loan or credit support, and other government and non-governmental programs that have been taking place as per their plan and interest. No intervention was made for this study. Data were collected as pretest, qualitative and posttest study.

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3.9.1.4 Sample picture of project fieldwork

The photos were taken during the advocacy meeting, women development 'army' meeting, and other awareness creation activities. All sampled photos was labeled below accordingly. A verbal consent was obtained from the group to take photos, and de-identified from personal identifiers (Figure 18).



Photo on advocacy meeting with stakeholders



Sketched map: women development 'army'



Photo: women development 'army' discussion



Partners awareness creation sessions



Photo on discussion with change agents 1



Photo with implementers on review meeting



Photo with partners after short meeting



Photo with police man lead session

[Source: principal investigator]

Figure 18: Sample photos taken during the fieldwork

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3.10 Expected direction of intervention outcome

The piloted community-based intervention was designed and implemented to achieve the following desirable changes on the outcomes variables. The direction of change was adapted from a study conducted in Uganda. Therefore, a thirteen percent desired level of effect were expected from this community-based quasi-experimental implementation research (Abramsky et al., 2014) (Table 1).

Table 1: Expected direction of change on the outcome variables due to the intervention

Outcome variables	Indicators	Items on assessment (past 1-year experience of-)	Expected direction of change
Overall domestic VAW	domestic VAW prevalence	Report that partner has done at a minimum of one form of either psychological, physical and or sexual violence	Decrease
Physical VAW	physical VAW prevalence	Woman reports that partner has done at least one of the things to her such as slapped, thrown something that could hurt her, pushed, shoved, pulled hair, hit with his fist or something, kicked, dragged or beat her up, choked or burnt, threatened to use or actually used a gun,/knife/other weapon and threatened to use or used any stick against her	Decrease
Psychological VAW	psychological VAW prevalence	Woman reports that her partner has done at least one among listed below such as like intentionally insisting, scold, jealousy or express suspicion, angry, insulting, restriction, threatened by weapon, ignoring, deprive from privilege or basic needs, belittled or humiliating, intimidating etc. in the past one year preceding the pretest and posttest assessment accordingly.	Decrease
Sexual VAW	sexual VAW prevalence	Women reports that partner has done at least one of the following things to her in the past year includes physically forced her to have sex, holding her down or hurting her in some way, had sexual intercourse because she was intimidated by him or afraid he would hurt her	Decrease
Receptive attitude to wife-beating	justified wife-beating prevalence	Attitudes that the partners have the mandate to beat their wives: IF She- goes out without informing her partner; neglected their children; argues with her partner; if she burns the food while preparing; Refuse to have a sex with him.	Decrease
Receptive attitude to inequitable gender-norm	inequitable gender-norms in relationship prevalence	Woman reports at least one yes among listed here below; It is ok for men to have more than one (sexual) partner It is woman's duty to have sex with her partner even if she does not want It is more important for a woman to respect her spouse/partner than it is for a man to respect his spouse A man may beat his spouse if she disobeys him A man can beat his spouse if he believes she is having sex with another man It is more important for a boy to get an education than a girl	Decrease
Women's disclosure of VAW experience	Domestic VAW disclosure Prevalence	Women's disclosure status about the domestic violence experiences was assessed using one structured and closed answer question. Then woman answer yes was coded as Yes=1 and No=0	Increase

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3.11 Monitoring and evaluation of intervention

Overall, this implementation research was monitored critically from input (material preparation, and participant and implementer's selection) to processing/ implementation of interventions as per the objectives of the study. The follow up activities were carried out on research assistants, outputs and outcomes such as number of participants, trainings and community discussion sessions, and leaflets distributed to create awareness in each session. Monitoring activities were also carried out using qualitative methods (feedbacks about the intervention). Finally, evaluation survey was conducted via face-to-face interviews. Monitoring of interventions was done in the two intervention group and also control group on quarterly basis using checklists (Table 2).

Table 2: Monitoring the implementation process

Domains	Activities	RP	Monitoring	Evaluation
Advocacy meeting	Short presentation Evidence based intervention Socioeconomic, health and political consequence of VAW Stakeholder selection and prioritization	PI RA	advocacy meetings (4/annum or quarterly) number of stakeholders engage to the intervention contextualizing the strategies and activities continuous validation of material	Intervention integration with HEP Scaling up of the intervention Program owning by the community change agents Or model partners as change agent
Comprehensive community mobilization	Women awareness creation Training of change agents Community conversation Partner involvement	PI RA	Number of; household (women) received health education/week trained person/month Change agents involved partner participated on sessions leaflet distributed	Qualitative exploration and posttest quantitative evaluation (see next raw)
Domestic VAW	pretest and posttest data collection	PI RA	Qualitative data collection for tracking the change	Proportion of domestic VAW and its types PR; APR; DID
Note: PI: Principal investigator; RA: Research assistant; PR: Prevalence Ratio; APR adjusted PR; DID: Difference-in-Differences				

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3.12 Logic model: Theory of change for the pilot intervention

The figure shows the theory of change process of the intervention logic model, which guides the community-based pilot intervention implementation. The community-based pilot intervention comprised of advocacy meetings, awareness creation, community mobilzation and partner involvment. The pilot intervention implementation aimed at transforming the community traditional inequiatable gender-norms and justfied wife-beatings. The altimate aim was to bring gender equality, to reduce domestic VAW and improve victims' (survivors') support seeking behavior (Figure 19).

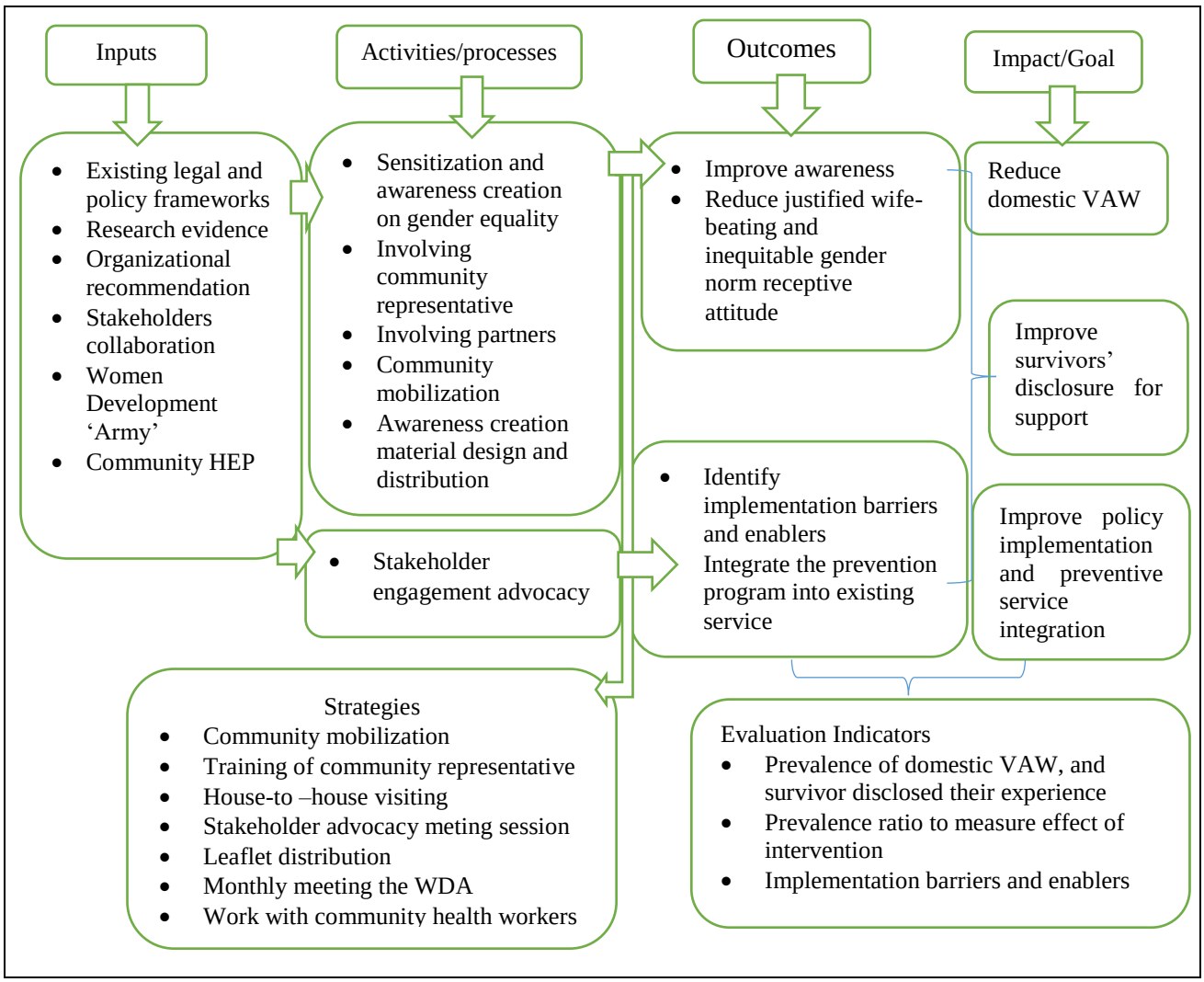


Figure 19: Theory of change for the piloted community-based intervention process

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3.13 Data collection and measurement tools

This subsection of describes the measurement tool adaptation, development and validation process, contents of the tool, type of data collected and data collection methods. Its details are described in the following section.

3.13.1 Measurement tools adaptation, development and validation

Structured and semi-structured questionnaires were designed for data collection to assess domestic VAW. These were adapted from questions used in the Ethiopia DHSs, WHO multi-country study and other various published articles. Such questions pose under physical, psychological, and sexual categories for domestic VAW (Abate et al., 2016; Abramsky et al., 2011; Antai, 2011; Conroy, 2014; Dalal et al., 2014; Hayati et al., 2011; Ismayilova, 2015; Lamichhane et al., 2011;Heise, 1998; Nguyen et al., 2012; Rahman et al., 2013; Sapkota et al., 2016; Semahegn et al., 2013; Shannon et al., 2012; Uthman et al., 2009, 2011) including WHO multicountry study (Ellsberg & Heise, 2005) and Ethiopia DHSs (CSA, 2006, 2012, 2017). The measurement tool was piloted, adjusted to suit the local situation and study objectives. The data collection tool consisted of socio-demographic and socio-economic characteristics of couples (women's self-reported profile), other levels of factors associated with the dependent variables such as domestic VAW (psychological, physical and sexual), and women's receptive attitude towards justified wife-beating and inequitable gender-norms.

3.13.2 Adapted measurement tool reliability estimation

3.13.2.1 Introduction to the reliability estimation of the adapted tool

Cronbach's alpha (α) is a measure of reliability showing the consistency of a set of items (Idre, 2018; Tavakol & Dennick, 2011). A review of the studies conducted in Ethiopia (Abate et al., 2016; CSA, 2006, 2012, 2017; Semahegn et al., 2013; Yigzaw et al., 2004)

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and outside Ethiopia (Abramsky et al., 2014, 2011; Antai, 2011; Conroy, 2014; Dalal et al., 2014; Hayati et al., 2011; Ismayilova, 2015; Lamichhane et al., 2011; Heise 1998; Nguyen et al., 2012; Rahman et al., 2012; Sapkota et al., 2016; Shannon et al., 2012; Uthman et al., 2010, 2011), including WHO multicountry studies (Ellsberg & Heise, 2005), did not report the reliability estimate of the domestic VAW assessment tools. Where the consistency of the items of domestic VAW assessment tool is a core component of the studies. Since we could not find any literature that reported the reliability estimates of the domestic VAW assessment tool, the key task was to develop and validation by estimating inter-item-correlation (reliability) of the adapted tool. The items were adapted from literature to assess the level of domestic VAW in the Northwestern Ethiopia. A sample taken for the pre-intervention survey (n=1217) were included in the reliability analysis (section 3.13.1).

3.13.2.2 Reliability estimate and analysis

The adapted tool were examined for reliability that comprised women's decision making autonomy (13-item) (Antai, 2011); attitude towards justified wife-beating of the women (5-item) (Lamichhane et al., 2011; Uthman et al., 2009), physical violence (7-item); psychological violence (15-item); sexual violence (5-item) (Conroy, 2014; Hesie, 1998) and women's attitude towards inequitable gender-norms (7-item) (Heise, 1998). The Cronbach's alpha was computed using SPSS version 23.0 ® (Table 3).

3.13.2.3 Reliability estimates of the adapted tool

Generally, the internal consistency (reliability) estimate was determined using the Cronbach's alpha values of the items in the adapted tool, commonly ranged from 0 to 1. The higher the value the higher the reliability of the items. Items' Cronbach's alpha had closer to 1, indicates the highest reliability of the tool (Chan, 2012). The overall

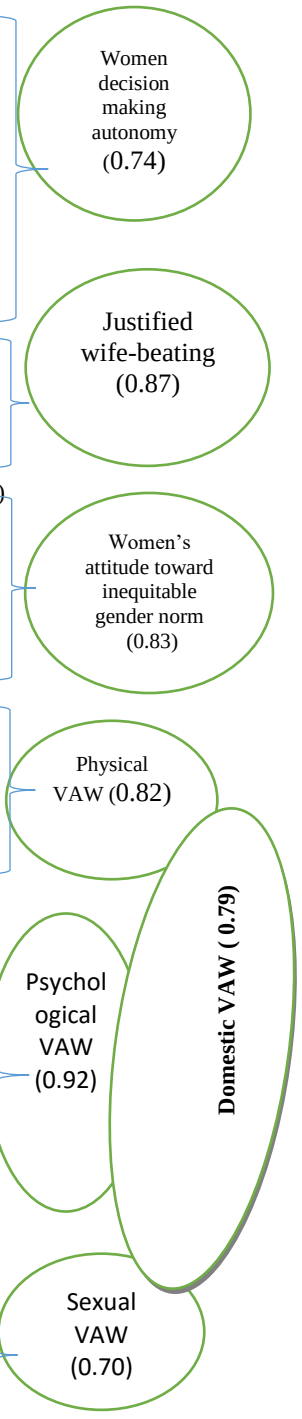
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Cronbach's alpha of the domestic VAW assessment tool was 0.79, which is higher than the lowest suggested score of 0.70. The Cronbach's alpha for the women's autonomy on decision makings, women's attitude towards justified wife-beating, and inequitable gender-norms were 0.76, 0.89 and 0.87, respectively. Likewise, the Cronbach's alphas for physical, psychological and sexual domestic VAW assessment items were 0.88, 93 and 0.81, respectively (Table 3).

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Table 3: The reliability estimation for the adapted assessment items

Items	Range	Mean (SD)	Scale mean if item-deleted	Scale Variance if item-deleted	Corrected item-total correction	Cronbach's Alpha if item-deleted	Cronbach's alpha
Items used to assess women decision making autonomy (WDMAitems)							
WDMAitem1	[1-3]	1.81(0.98)	28.34	23.18	0.56	0.73	
WDMAitem2	[1-3]	1.83(0.96)	28.32	22.71	0.63	0.72	
WDMAitem3	[1-3]	1.84(0.97)	28.31	22.90	0.59	0.72	
WDMAitem4	[1-3]	2.28(1.15)	27.87	23.78	0.38	0.76	
WDMAitem5	[1-3]	2.55(0.81)	27.60	24.31	0.54	0.73	
WDMAitem6	[1-3]	2.68(0.63)	27.47	25.10	0.61	0.73	
WDMAitem7	[1-3]	2.77(1.03)	27.38	25.30	0.29	0.76	
WDMAietem8	[1-3]	2.73(0.52)	27.42	26.15	0.55	0.74	
WDMAitem9	[1-3]	1.27(0.48)	28.88	30.15	-0.20	0.79	
WDMAitem10	[1-3]	2.80(0.53)	27.35	26.59	0.45	0.75	
WDMAitem11	[1-3]	2.00(0.98)	28.15	28.39	-0.01	0.79	
WDMAietm12	[1-3]	2.83(0.54)	27.33	26.72	0.42	0.75	
WDMAitem13	[1-3]	2.76(0.60)	27.39	26.10	0.47	0.74	
Items used to assess women's receptive attitude towards justified wife-beating (JWBitems)							
JWBitem1	[1-2]	1.43(0.50)	9.19	4.96	0.70	0.88	
JWBitem2	[1-2]	1.43(0.50)	9.18	4.88	0.74	0.87	
JWBitem3	[1-2]	1.52(0.50)	9.10	4.83	0.76	0.87	
JWBitem4	[1-2]	1.58(0.49)	9.04	4.96	0.70	0.88	
JWBitem5	[1-2]	1.50(0.50)	9.11	4.85	0.74	0.87	
Items used to assess women's receptive attitude towards Gender Inequitable Norms (GINitems)							
GINietm1	[1-2]	1.87(0.33)	9.14	5.29	0.39	0.88	
GINitem2	[1-2]	1.53(0.50)	9.48	4.39	0.69	0.85	
GINitem3	[1-2]	1.45(0.50)	9.56	4.25	0.74	0.83	
GINitem4	[1-2]	1.61(0.49)	9.39	4.38	0.68	0.84	
GINitem5	[1-2]	1.64(0.48)	9.37	4.46	0.64	0.85	
GINitem6	[1-2]	1.58(0.49)	9.43	4.42	0.64	0.85	
GINitem7	[1-2]	1.32(0.47)	9.69	4.33	0.74	0.83	
Items used to assess physical violence (PhVAWitems)							
PhVAWitem1	[1-2]	1.78(0.42)	11.21	2.08	0.83	0.83	
PhVAWitem2	[1-2]	1.80(0.40)	11.18	2.10	0.85	0.83	
PhVAWitem3	[1-2]	1.80(0.40)	11.19	2.13	0.82	0.83	
PhVAWitem4	[1-2]	1.98(0.16)	11.01	3.03	0.36	0.89	
PhVAWitem5	[1-2]	1.98(0.16)	11.01	3.03	0.36	0.89	
PhVAWitem6	[1-2]	1.92(0.27)	11.06	2.73	0.51	0.88	
PhVAWitem7	[1-2]	1.78(0.42)	11.25	1.96	0.89	0.82	
Items used to assess psychological violence (PsVAWitems)							
PsVAWitem1	[1-2]	1.67(0.47)	25.39	13.27	0.73	0.92	
PsVAWitem2	[1-2]	1.67 (0.47)	25.39	13.28	0.73	0.92	
PsVAWitem3	[1-2]	1.73(0.44)	25.33	13.53	0.69	0.92	
PsVAWitem4	[1-2]	1.97(0.17)	25.09	15.39	0.40	0.93	
PsVAWitem5	[1-2]	1.83(0.37)	25.23	14.08	0.63	0.93	
PsVAWitem6	[1-2]	1.74(0.44)	25.33	13.43	0.73	0.92	
PsVAWitem7	[1-2]	1.74(0.44)	25.32	13.40	0.75	0.92	
PsVAWitem8	[1-2]	1.87(0.34)	25.19	14.20	0.65	0.92	
PsVAWitem9	[1-2]	1.89(0.31)	25.17	14.39	0.64	0.92	
PsVAWitem10	[1-2]	1.85(0.35)	25.21	14.16	0.63	0.92	
PsVAWitem11	[1-2]	1.89(0.31)	25.17	14.35	0.65	0.92	
PsVAWitem12	[1-2]	1.92(0.28)	25.14	14.83	0.51	0.92	
PsVAWitem13	[1-2]	1.89(0.31)	25.17	14.67	0.51	0.92	
PsVAWitem14	[1-2]	1.83(0.38)	25.24	13.97	0.66	0.92	
PsVAWitem15	[1-2]	1.56(0.50)	25.50	12.94	0.78	0.92	
Items used to assess sexual violence (SVAWitems)							
SVAWtem1	[1-,2]	1.72 (0.45)	7.52	0.84	0.77	0.72	
SVAWitem2	[1-2]	1.95(0.22)	7.29	1.40	0.46	0.82	
SVAWitem3	[1-2]	1.93(0.26)	7.32	1.28	0.55	0.80	
SVAWitem4	[1-2]	1.93(0.26)	7.32	1.28	0.55	0.79	
SVAWitem5	[1-2]	1.72(0.45)	7.52	0.82	0.81	0.70	



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3.13.2.4 Discussion of the reliability estimation of the adapted tool

This analysis estimated the reliability of the answer, obtained from the adapted items that were used to assess domestic VAW. The Cronbach's alpha score of the adapted items was 0.79, which is higher than the optimal acceptable value of the reliability of 0.70. Unambiguously, Cronbach's alphas for items used to assess women's independence of decision making on household matters (0.76); women's receptive attitudes towards justified wife-beating (0.89); physical domestic VAW (0.88); psychological domestic VAW (0.93); sexual domestic VAW (0.81) and inequitable gender-norms (0.87). These items had the Cronbach's alpha similar to other studies conducted elsewhere with estimated values ranging from 0.68 to 0.80 (Short et al., 2006); greater than 0.80 (Emami & Safipour, 2013) and higher than 0.90 (Jenkinson et al., 1993).

Furthermore, the result is in line with a study employed in Sweden, which has shown that the Cronbach's alpha of the adapted items to assess domestic VAW was greater than the suggested value (Shakil et al., 2005). As well, it is also similar with the item used to measure the risk of domestic VAW in China which reported the Cronbach's alpha of 0.76 (Chan, 2012; Svalin et al., 2017). Though, this study finding is slightly less than a study conducted in the United States indicated that Cronbach's alpha of 0.96 (Chan, 2014). Still, this finding shows relatively Cronbach's alpha was a bit higher (0.65) than other studies conducted on items used for health professionals evaluation (Dienemann et al., 2007). It is argued that the Cronbach's alpha is not a statistical test, but a coefficient of the consistency of the items (Chan, 2012). In conclusion, the reliability of the adapted tool reliability estimated values were more than seventy percent that is the cut-off point of the good internal consistency or reliability. The validated tool has been published elsewhere (Semahegn et al., 2019) (Appendix 3).

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3.13.3 Type of quantitative data collected

The sets of structured questionnaires to gather data were categorized into nine sections. Details of the overall questionnaire are presented below (Appendix 4 - 5).

Section I: Socio-demographic characteristics of study participants

Included women's age, marital duration, marital condition, religion, educational status, occupational status, residence and pregnancy history.

Section II: Women's access to media and other economic characteristics

Comprised questions related to the availability of mass-media devices, whether women had ever heard about gender equality and VAW, sources of information, and their access to mass-media.

Section III: Socio-demographic characteristics of partner

Included women's partners' background information such as partner's age, educational status, occupational status, information about his earnings, job conditions related to stress, substance use habits (mainly alcohol drinking), number of children alive and other communal attitudes.

Section IV: Women's autonomy in decision makings and justified wife-beating

Covers the information related to women's involvement on household leadership, decision making on large and small household purchases, autonomy on their health and family members' health care, reproductive health service utilization and other related questions. This section comprised of some questions used to assess women's receptive attitudes towards justified wife-beating.

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Section V to VII: Questions used to assess the common types of domestic VAW

This section was devoted to women's experience of domestic violence which comprised of the three major types of domestic VAW (physical, psychological and sexual). The physical violence assessment tool had seven questions with response being "yes" or "no". Psychological violence assessment tool comprised fifteen questions, while the sexual violence assessment tool comprised five questions.

Section VIII: Women's receptive attitude toward inequitable gender-norms

Participants were asked questions that aimed at assessing women's attitude towards inequitable gender-norms in relationships and other sexual negotiation skills.

Section IX: Questions to assess women's disclosure of their experiences

Assessed where victims sought help from, and the type of assistance or support they received from a person in a high position who heard the women's claim. Likewise, this section consisted of questions aimed at assessing why women did not disclose their experiences and seek help.

Section X: Participant's exposure to pilot intervention's implementation

Comprised eight questions used to assess the level of women's exposure to the designed and community-based interventions being piloted to prevent domestic VAW. This section was only used for posttest evaluation.

3.13.4 Qualitative study guide

Interview guides were designed to facilitate the IDIs, KIIs and FGDs. These were used to explore community perceptions, attitude, traditional gender-norms and their related problems, as well as some other types of domestic VAW. They were also used to explore

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the underlying bottlenecks of community-based domestic VAW prevention intervention being implemented which used available resources and existing legal sanctions. In the meantime, probes were used during discussions to gather insight information until the saturation stage.

3.13.5 Data collection procedure

A sequential-explanatory-mixed-method data collection approach was applied to gather data. The sequence of the data collection methods was adapted from literature (Azmat et al., 2016). It was contextualized to suit this implementation research context. The data collection process involved both quantitative (Quan 1 and 2) and qualitative (Qual 1 and 2) processes that were sequentially implemented to gather the necessary data (Figure 20).

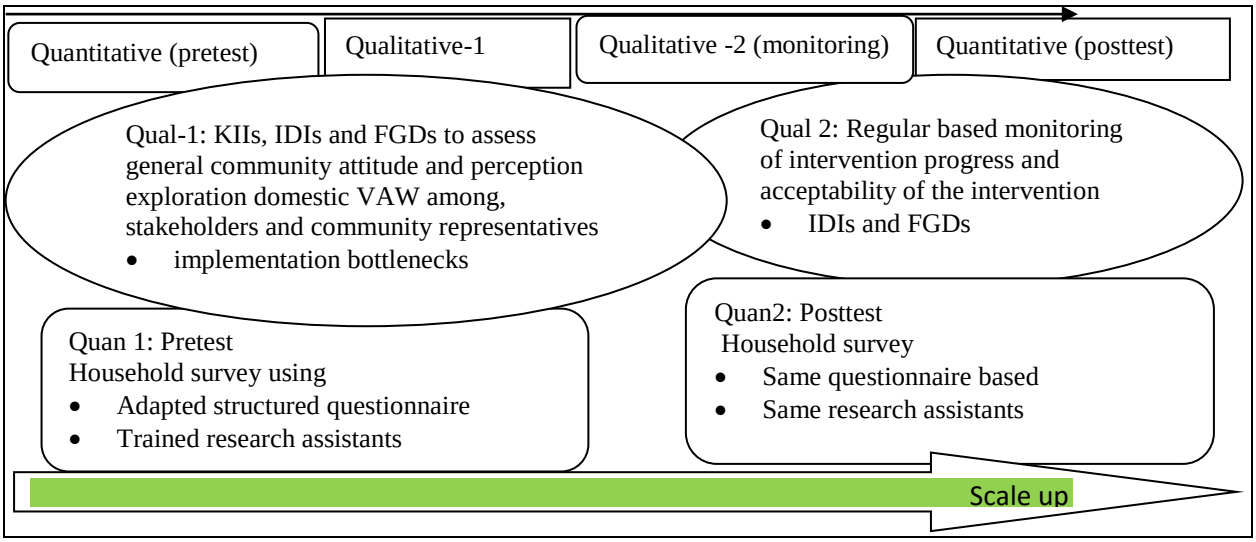


Figure 20: Illustrative presentation of the sequential-explanatory data collection process

3.13.5.1 Data collection method for quantitative study

An interviewer administered face-to-face interview method, which was applied to gather the quantitative data among married or cohabitating women at their homes. Both pretest and posttest evaluation were carried out using structured questionnaire. Pretest quantitative data was collected as a formative assessment prior to the implementation of

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piloted intervention. It served as a benchmark for evaluating outcomes. In addition to the domestic violence assessment tool, an alternative questionnaire was prepared and made available to interviewers to ensure confidentiality should a third person appears unannounced during the interview time (Appendix 6). Women were interviewed by female health professional interviewers at their places of residence for confidentiality as per the WHO VAW research recommendations (WHO, 2001, 2016a).

3.13.5.2 Data collection period and duration of the interview for quantitative study

To evaluate the overall progress of the intervention, pretest data was collected from November 15, 2017 to December 15, 2017 and posttest data from November 15, 2018 to December 15, 2018. The same structured questionnaires and research assistants were involved in both data collection activities to gather data. Posttest survey tool, however included measurements of participants' levels of exposure to the intervention. Interviews for women were completed within 45 to 60 minutes.

3.13.6 Qualitative study data collection methods

The qualitative data collection was done to explore community perceptions of traditional gender-norms about domestic VAW, justified wife-beating, gender equality, sexual negotiation and refusal related issues as well as implementation barriers and enablers. IDIs, KIIs, FGDs and document reviews were performed. Participants' sociodemographic characteristics were captured using anonymously coded structured questionnaires. The details of qualitative data collection guides have been presented in the appendix (Appendix 7).

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3.13.6.1 In-depth interviews

The IDIs were conducted among selected married women and community representatives (elders, religious leaders and partners) to explore sexual negotiation, decision making on household matters and use reproductive health care service, access to and control over resources, and attitudes towards justified wife-beating. These interviews took 30 to 45 minutes.

3.13.6.2 Key informant interviews

The KIIs were employed mainly to explore the implementation status, barriers, and enablers among representatives of women and child affairs office, health officers, police officers, lawyers and local politicians/leaders. These interviews took 20 to 45 minutes.

3.13.6.3 Focus group discussions

The FGDs were held among 7 to 10 discussants per group, to assess societal perceptions of domestic VAW. The FGDs were facilitated by a group of three people (moderator, note taker and principal investigator). The moderator led the discussion by asking questions, and probing answers using the topic guide. Serious attention was given to capture necessary information using voice recorders, note taking, and non-verbal (physical gestures) during the discussions. It took 60 to 90 minutes to conduct one FGD.

3.13.6.4 Policy document reviews

Ethiopia has policies related to gender, women's rights and legal frameworks devoted to safeguarding women's lives. The policy documents were reviewed including the constitution, criminal codes, family laws, training manuals and some ratified regional and international conventions which have been ratified by the government of Ethiopia. The principal investigator carried the reviews.

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3.14 Study variables

The study variables was made up of the dependent and the independent variables. The dependent variables were categorized as primary and secondary variables. Both of the dependent variables were composite variables. A brief description on how the composite variable constructed is available in sub-section 3.14.

3.14.1 Primary dependent variable

Domestic violence against women (composite binary)

3.14.2 Secondary dependent variables

Women's attitudes towards justified wife-beating (composite binary)

Women's attitudes towards inequitable gender-norms (composite binary)

Women's disclosure of their domestic violence experience(s) (binary)

3.14.3 Independent variables

The independent variables are individual, interpersonal/relationship, community and societal level factor. The link between the independent variables and the outcome variable (mainly domestic VAW) is illustrated based on the adapted socio-ecological framework (Figure 1).

Individual-factors: Related to the currently married or cohabitating women and their partners' demographic and socioeconomic characteristics.

Relationship-factors: Related to women and their partners' relationship within the household context which included marriage, decision making and head of household, partners' behavior, marital duration and number of children alive and etc.

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Community related-factors: Factors beyond the women and their partners' behavior which were intrenched by their community or surroundings such as religion and other cultural practices and beliefs.

Societal related-factors: Macro level factors that include countrywide issues such as law or legal sanctions, mass media, and overall societal culture and beliefs

3.15 Data quality assurance

Generally, the quality assurance activates were carried out to minimize the threats of internal and external validities of the study findings from the quasi-experimental implementation research. To assure the quality of data, training, tool validation, pretest, supportive supervision and other series of activities were carried out at pre-data collection, data collection, and intervention implementation period and post data collection.

3.15.1 Pre-data collection quality assurance measures

3.15.1.1 Translation of questionnaire from English to Amharic

The measurement tools written in English language were translated into Amharic (local language) by two language teachers at secondary school in Injibara. The document were then back translated into English to check for the consistency and trustworthiness of the translation. The translators came to a consensus and ensured that the meaning and significance of words, items, contexts, contents, concepts and sensitive word were corrected, preserved and had equivalence with the local language.

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3.15.1.2 Protocol registration and publication

The study protocol was registered (ClinicalTrials.gov ID: NCT03265626), peer reviewed and published elsewhere (Semahegn et al., 2017). This helped us to utilize standardized study protocol and implemented during fieldwork.

3.15.1.3 Data collectors' recruitment

Data were collected by twelve female health professional; Nurses (6), Midwives (5) and Public Health Officer (1), with a minimum qualification of a diploma, who were trained as research assistants. To ensure and maintain confidentiality of the study participants, the research assistants were not local resident of the community. Four supervisors with a bachelors or masters qualification in public health and good previous experience in public health surveys were assigned to coordinate and support fieldwork.

3.15.1.4 Data collectors (field assistants) training

Training sessions was organized for research assistants (data collectors and supervisors) by the principal investigator for five days including pretest activities. Training of research assistants was mainly focused on the purpose of the study, data collection procedures, interview techniques, sampling methods, data quality assurance, confidentiality and other ethical issues of VAW research. The sensitive nature of VAW was explained to research assistants to keep confidentiality and the quality of data. A brief explanation was provided to field research assistants on how to approach participants and priority for safety to the research teams as well as the women according to the guidelines recommendations called "women's safety first" (WHO, 2016a). In addition, refreshment training or orientation/debriefing were provided to research assistants regularly.

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3.15.1.5 Pretest of the fieldwork for readiness

Pretest was conducted among married women from nearby Districts (Dangila Zuria District, Gum-diri Abo Sub-district) to check for the compatibility of the data collection tool. Measurement tool was piloted on the 5% (64 participants) of the sample size. Sensitive words in the question, time, data collection procedure, interview techniques, sequence of questions, consent taking from study participants, facilitation skills and note taking issues were addressed in the pretest of the data collection tool. Necessary revision action were taken based on the field experience and comments from research assistants.

3.15.2 Quality assurance measures during study period

3.15.2.1 Appropriate allocation and selection of the study participants

Geographic non-proximity of the intervention and control groups was considered during the allocation of study participants to minimize information contamination. Quantitative and qualitative data were gathered using adapted standardized questionnaires, and interview or discussion guides. A representative sample was taken using scientifically sound procedures.

3.15.2.2 Provide supportive supervision

Qualified professionals and responsible persons were assigned as research assistants (supervisor) in order to keep the quality of the fieldwork data collection. Strict follow-ups and regular checking of filled questionnaires from the field and at the office were carried out. Any incomplete or inconsistently filled questionnaires were returned to data collectors for re-interviewing. The questionnaires that missed the core components of the tool were omitted and considered as non-responses.

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3.15.2.3 Training and supportive supervision of implementers

Training and supportive supervision were provided for implementers of the intervention by the facilitators' and the principal investigator. Two implementation facilitators and six community HEWs were recruited for the year-long pilot project implementation. Implementers participated in the intervention material review and stakeholder buy-in to be familiar with the materials.

3.15.2.4 Monitoring and evaluation of the fieldwork/implementation

The interventions implementation was monitored critically from the input (material preparation, participant, and implementer's selection) and process/ implementation stage of the intervention per the objective of the study. Continuous support was provided to the research assistants to monitor the implementation from inputs, process and output stages.

3.15.3 Quality assurance measures after the fieldwork completed

All the variables were coded, and data was entered into the EpiData data management software. Data processing, data exploration and cleaning were carried out as necessary.

3.15.4 Quality assurance of the qualitative study

Qualitative study were conducted using a rigor method to maintain the transferability and credibility of the qualitative study findings (Braun & Clarke, 2006; Houghton & Keynes, 2013; Kitto et al., 2008; Pitchforth & Teijlingen, 2005; Ritchie et al., 2003; Whittemore et al., 2001). In addition, the data were managed through applying appropriate method of analysis (Braun & Clarke, 2006) using Nvivo software ® (QSRI, 2016). In addition, to ensure the quality of findings to be generalizable and transferable, mix of FGDs, IDIs, KIIs and policy document review were carried out to capture the necessary data comprehensively.

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3.16 Data processing and statistical analysis

3.16.1 Data processing and or coding

Filled questionnaire were checked for completeness and consistency regularly in daily basis. Independent and dependent variables were pre-defined (coded, labeled and assigned values) in the data entry template. Data gathered from study participants (self-reported) were entered into designed template on EpiData windows version 3.5.1®. Then, data were exported into SPSS version 23.0®.

3.16.1.1 Coding of domestic violence against women

The women's experience of domestic violence and its types were coded according to the WHO's recommendation. Therefore, if a woman reported at least one item among the overall items used to assess the commonest type of VAW items were coded as "Yes = 1", if not "No = 0". Physical VAW was measured if the woman had or reported at least one among the seven-item, was then coded as "yes=1". Women's experience of psychological violence was coded as "1=yes" if the woman had at least one experience among the fifteen-item. Likewise, women's experience of sexual violence was coded as "1=yes" if the woman had at least one experience among the five-item. Ultimately, a woman's experience of domestic VAW was measured if the woman revealed a single type of experience for the last one year either physical, psychological or sexual VAW composite items (3-item) coded as "Yes =1", otherwise, coded as, " No = 0" (Abramsky et al., 2014; Ellsberg, 2005; WHO, 2013).

3.16.1.2 Women's attitude towards inequitable gender-norms in relationship

Women's receptive attitudes towards inequitable gender-norms was measured using a seven-item. The items reliability estimate was 0.83 (Semahegn et al., 2019). If the woman had at least one positive response (yes=1), it was coded as the woman having

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receptive attitudes towards inequitable gender-norms in a relationship (Ismayilova, 2015; Shannon et al., 2012; Uthman et al., 2011). Then women's receptive attitude towards inequitable gender-norms was coded as composite binary outcomes (Yes=1, No= 0).

3.16.1.3 Women's receptive attitude toward justified wife-beating

Women's receptive attitude towards justified wife-beating was one of the secondary dependent variable in this study. The level of women's receptive attitude towards justified wife-beating was assessed using five-item questionnaire. The items reliability estimate was 0.88 (Semahegn et al., 2019). If a woman had at least one positive response (yes) among five-item, was considered as the woman having a receptive attitude towards justified wife-beating (yes=1, No=0) (Rahman et al., 2013; Uthman et al., 2011).

3.16.1.4 Women's disclosure status

Women's disclosure status about their domestic violence experiences was assessed using one structured and a closed answer question. Then women's disclosure status was coded as binary outcome "Yes=1 and while No=0".

3.16.2 Descriptive data analysis

The data analysis was carried out using SPSS ® version 23.0 (IBM SPSS, 2010). Data cleaning was performed by computing frequency of all variables to explore outliers and other data anomalies. Descriptive statistics was applied to determine the prevalence (proportion), mean, median and standard deviation of some independent variables. Descriptive analysis was carried out to address all objectives of the study, and mainly Objective 1 that, aimed to assess the levels of different component of the dependent variables and independent accordingly. In addition, a percent point was computed to determine the descriptive changes between the pre-intervention survey and post-

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intervention survey. Percent point was computed by subtracting the pretest from posttest, and divided by pretest, multiplied by 100.

3.16.3 Inferential statistical analysis methods

Inferential statistical methods were applied to compute the effect size and to examine the relationship between the dependent and independent variables to answer Objective 2 and Objective 4. Generally, Intention to Treat Analysis was carried out to compute the overall changes on the level of domestic VAW. The dependent variables are domestic VAW, women's receptive attitude towards justified wife-beating and inequitable gender-norms. The effect size estimate of prevalence ratio and odds ratio are very closer for those dependent variables have rare outcomes (<10%). Whereas the prevalence of dependent variables are >10%, adjusted prevalence ratio (APR) is recommended for effect size measure, instead of the odds ratio (Antônio et al., 2008; Barros & Hirakata, 2003; Coutinho et al., 2008; Espelt et al., 2017; Petersen & Deddens, 2008). Therefore, Generalized Linear Models (GLM) was applied to compute the APR.

3.16.3.1 Generalized Linear Models with log-link function

The aim of this analysis was to address Objective 2 that sought to identify factors associated with domestic VAW. The GLMs was used to examine the relationship of the dependent variable with independent variables. The robust (modified) Poisson family with log link function was applied to compute APR with 95% CI (Antônio et al., 2008; Barros & Hirakata, 2003; Blizzard & Hosmer, 2006; Coutinho et al., 2008; Espelt et al., 2017; Petersen & Deddens, 2008; Zou, 2004). The robust Poisson regression with the log link function is more preferable to determine unbiased estimate of the APR in the GLMs (Chen et al., 2018; Williamson et al., 2013). Eventually, those independent variable which had a score of p-value less than 0.25 in unadjusted model was included in the final

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model. The final adjusted model was run to identify factors associated with outcome variables through controlling the confounding effect of some variables. This analysis was carried out for the pretest and posttest survey separately to examine the level of changes as a result of intervention exposure.

3.16.3.2 Difference in Differences analysis

The main purpose of the difference in differences (DID) analysis was to address Objective 4, which aimed to assess the effect of community-based intervention on dependent variables. The DID was computed to determine the net effect of the community-based awareness creation interventions between the study groups. First, the absolute difference was computed by subtracting the proportion of outcome from pretest and posttest on each study groups. Then DID was estimated by subtracting the proportion difference from intervention to the control groups. The statistical test for the DID was estimated using the dependent variable, two point of observations, exposure status and the interaction of the two using the regression model (Baku et al., 2017; Wing et al., 2018). Finally, DID was the coefficient of the interaction variable, which was used to determine the interventions effect at 95% CI and $P < 0.05$.

3.17. Qualitative data analysis

The qualitative study synthesis was carried out mainly to complement on the study objectives. Objective 3 has exclusively addressed by the qualitative method that aimed to implement the interventions and identify implementation bottlenecks. In addition, the qualitative study contributes to each objective to complement the quantitative findings. The details of the qualitative data management describes on the following sub-sections.

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3.17.1 Transcription of interview

The collected qualitative data were transcribed from side to side playing, and re-playing the voice recorder and also referring to the summary notes taken during interviews or FGDs. The voice recorder audio was listened to multiple times as much as possible, at very quiet places. It was transcribed verbatim and independently by research assistants and principal investigator. The transcribed qualitative data were translated from the local language (Amharic) into English. The issue of languages translation in public health research was handled according to the research evidence recommendation (Braun & Clarke, 2006; Pitchforth & Teijlingen, 2005).

3.17.2 Coding of the transcriptions

The transcribed and processed qualitative data were imported into Nvivo 11 ® for windows (QSRI, 2016). Coding was performed according to the identified broad themes and sub-themes of the transcribed qualitative data. Corresponding the themes and sub-themes, parent and child nodes were constructed according to the flow of interviews and focus group discussions as well as the relationship between participants 'perspectives.

3.17.3 Identification of themes

The overall qualitative data management were employed based on thematic analysis approach (Braun & Clarke, 2006). The transcribed qualitative data from interviews and focus group discussions were arranged into thematic areas. Similar ideas were read and re-read for better understanding of the transcribed data. They were then, color coded, and merged accordingly. The participants' quotes were narrated and presented using participants' code.

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3.17.4 Arranging the finding

Qualitative data analysis was carried out using Nvivo 11 software. Then, the qualitative data arrangement activities were performed. Furthermore, each node was exported to Microsoft word to carry out manual arrangement of the text. Similar ideas were color coded and merged manually. The findings were presented in text and visual illustrations.

3.18 Ethical considerations

3.18.1 Ethical clearance

The study protocol was approved by the Institutional Health Research Ethical Review Committee (Ref. No. IHRERC/146/2017) at Haramaya University, Harar, Ethiopia (Appendix 9 and 10). The research approach was strictly followed to the WHO recommendation of safety cautions for the women and research team during conducting VAW research 'priority of putting women's safety first' had been implemented during the field work (WHO, 2001, 2016a), and recommendations of the National Research Ethics Review Guide (FDRE, 2014).

3.18.2 Consent for participation

Letter requesting for permission and collaboration were presented to the Awi Zone administrative office, and other respective study areas (Appendix 11). Likewise, informed consent was obtained from sub-districts' administrations to enter the community, and from study participants accordingly. Participation was on voluntary basis, and participants had a full right to withdraw from the interview process at any time of the data collection.

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3.18.3 Information confidentiality assurance mechanisms

All the information obtained from study participants were kept confidential anonymously. Questionnaires were kept in locked metallic cabinets at the offices. The data entered onto the statistical software were kept using password locks for data files.

3.18.4 Strategy designed for violence

In case of the arrival of children or other close family members at the interview place during the interview time, the distractor (alternative) questionnaire was used that comprised of general women's health question. The study participant were informed about the alternative questionnaire to avoid unnecessary stress. In addition, just in case an extremely violent that threatened the research team and study participant, the research team had planned to adhere with the WHO's recommendation for VAW research. The researcher was not cover any legal or medical cost that might be incurred in case something strange happened during the study period. The research team was expected to provide a clear direction and guidance for victims who demanded justice.

3.19 Dissemination plan

The findings of this study is planned to be disseminated to different stakeholders accordingly, using the following mechanisms. The finding will be presented at international research conferences. In addition, efforts will be made to publish the findings in different open access peer review journals. Furthermore, policy brief will be prepared to communicate with policy makers at regional, national-, and international levels accordingly. In addition, the findings of this study will be disseminated to the local or general community using compatible forms in collaboration with concerned stakeholders.

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CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter describes the results of the study in eight sections with sub-sections. The socio-demographic characteristics of the study participants and their partners are described in detail. Women's exposure to the intervention is elaborated. In addition, this chapter presents the magnitude of domestic VAW in the reproductive age and its associated factors, women's receptive attitude towards justified wife-beating, inequitable gender-norms, the effect of intervention exposure on women's receptive attitude and women's disclosure of their domestic VAW experience. The chapter concludes with the summary of the DID analysis, and qualitative component of the study on barriers and enabling environment for intervention implementation.

4.1 Sociodemographic characteristics

Overall, 1,269 women (15 - 49 years) participated in the three-group community-based quasi-experimental study. The response rate of the pre-intervention (pretest) and post-intervention (posttest) surveys were 95.9% (1217/1269) and 97.8% (1190/1217), respectively. Reasons for the non-responses have been described in detail in Figure 16.

4.1.1 Study participants' socio-demographic characteristics

The mean age of the women was 30(±7) years. Almost all the women (99.9%, n=1216) were Orthodox Christians, and only one woman was a Protestant Christians. The majority of the women (98.8%, n=1,202) were formally married and very few of them were cohabitating (1.2%, n=15). Over half (52.5%, n=639) of the women were rural dwellers. The mean marital duration of the women was 12(±8) years (Table 4).

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Table 4: Study participants' socio-demographic characteristics, Northwestern Ethiopia

Variables	n=1217	Pretest survey: n (%)			Posttest survey: n (%)			
		Intervention (n=404)	Comparator (n=408)	Control (n=405)	n=1190	Intervention (n=395)	Comparator (n=400)	Control (n=395)
Age of the women (years)								
<30	604(49.6)	234(57.9)	176(43.1)	194(47.9)	593(49.9)	228(57.7)	175(43.8)	190(48.2)
≥30	613(50.4)	170(42.1)	232(56.9)	211(52.1)	596(50.1)	167(42.3)	225(56.3)	204(51.8)
Residence of women								
Rural	639(52.5)	240(59.4)	219(57.7)	180(44.4)	631(53.1)	236(59.7)	219(54.8)	176(44.6)
Urban	578(47.5)	164(40.6)	189(46.3	225(55.6)	559(47.0)	159(40.3)	181(45.3)	219(55.4)
Women's marital duration (years)								
≤ 10	665(54.6)	251(62.1)	210(51.5)	204(50.4)	651((54.8)	246(62.3)	207(51.8)	198(50.3)
>10	552(45.4)	153(37.9)	198(48.5)	201(49.6)	536(45.2)	149(37.7)	193(48.3)	196(49.7)
Women's educational status								
Illiterate	621(51.0)	166(41.1)	253(62.0)	202(49.9)	604(50.8)	163(41.3)	246(61.5)	195(49.5)
Read & write	152(12.5)	69(17.1)	51(12.5)	32(7.9)	148(12.4)	67(17.0)	50(12.5)	31(7.9)
Grade 1-6	168 (13.8)	67(16.6)	50(12.3)	51(12.6)	166(14.0)	65(16.5)	51(12.8)	50(12.7)
Grade 7-12	216(17.7)	81(20.1)	51(12.5)	84(20.7)	211(17.7)	79(20.0)	50(12.5)	82(20.8)
12+	60(4.9)	21(5.2)	3(0.7)	36(8.9)	60(5.0)	21(5.3)	3(0.8)	36(9.1)
Women's occupational status								
Housewife	1037(85.2)	376(93.1)	329(80.6)	332(82.0)	1012(85.0)	368(93.2)	323(80.8)	321(81.3)
Others*	180(14.8)	28(6.9)	79(19.4)	73(18.0)	177(14.9)	27(6.8)	77(19.3)	73(18.5)
Pregnancy last 12 months								
Yes	287(24.7)	96(23.8)	105(26.2	86(24.2)	248(21.7)	82(21.6)	84(21.1)	82(20.9)
No	873(75.3)	308(76.2)	296(73.8)	269(75.8)	923(78.8)	298(78.4)	314(78.9)	311(79.1)
Children alive								
0	201(16.5)	83(20.5)	39(9.6)	79(19.5)	143(12.0)	66(16.7)	13(3.3)	64(16.2)
≤2	460(37.8)	173(42.8)	142(34.8)	145(35.8)	447(37.6)	168(42.5)	137(34.3)	142(35.9)
>2	556(45.7)	148(36.6)	227(55.6)	181(44.7)	600(50.4)	161(40.8)	250(62.5)	189(47.8)

Note; women's occupation (Others*: merchant/trader, engaged in small business, government or NGOs employee)

4.1.2 Sociodemographic characteristics of women's partners

The mean age of the partners was 37(±9) years. Almost a third (31.1%, n=379) were partners were able to read and write. Over half (50.7%, n=617) were engaged in trade or some income generating activities. Three-quarters (75.0%, n=913) of the women's partners had a history of substance abuse. Of these, almost all (99.9%, n=912) drank alcohol. One in five (22.9%, n=209) of the women whose partners had substance abuse behaviors argued over money for the substance. Partners mainly had access to alcohol from home (83.5%, n=762), relatives/neighbors' invitation (87.2%, n=796), small town alcohol seller (63.4%, n=579), and rural village alcohol seller (57.2%, n=522). More than a quarter (27.2%, n=331) of the women believed their partners' jobs were stressful. In addition, more than half of households' headship (58.5%, n=711) and overall decision making related to household issues (55.5%, n=674) were made by partner (Table 5).

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Table 5: Study participants' socio-demographic characteristics, Northwestern Ethiopia

Variables	n=1217	Pretest survey: n (%)			Posttest survey: n (%)			
		Intervention (n=404)	Comparator (n=408)	Control (n=405)	n=1190	Intervention (n=395)	Comparator (n=400)	Control (n=395)
Age of the partner								
≤36 years	637(52.9)	252(63.2)	183(45.4)	202(50.1)	594(50.3)	233(59.6)	173(43.7)	188(47.8)
>36 years	568(47.1)	147(36.8)	220(54.6)	201(49.9)	586(49.7)	158(40.4)	223(56.3)	205(52.2)
Partners' educational status								
Illiterate	303(24.9)	104(25.7)	137(33.6)	62(15.3)	297(25.0)	103(26.1)	133(33.3)	61(15.4)
Read and write	379(31.1)	125(30.9)	127(31.1)	127(31.4)	366(30.8)	120(30.4)	124(31.0)	122(30.9)
1-6 grades	222(18.2)	73(18.1)	69(16.9)	80(19.8)	218(18.0)	71(18.0)	69(17.3)	78(19.7)
7-12 grades	227(18.7)	75(18.6)	67(16.4)	85(21.0)	223(18.7)	74(18.7)	66(16.5)	83(21.0)
12+	86(7.1)	27(6.7)	8(2.0)	51(12.6)	86(7.2)	27(6.8)	8(2.0)	51(12.9)
Partners' occupational status								
Farmer	489(40.2)	159(39.4)	193(47.3)	137(33.8)	479(40.3)	157(39.7)	191(47.8)	131(33.2)
Non-farmer	728(59.8)	245(60.8)	215(52.7)	268(66.2)	711(59.7)	238(60.3)	209(52.3)	264(66.8)
Woman think partner job is stressful								
Yes	331(27.2)	125(30.9)	69(16.9)	137(33.8)	291(24.5)	113(28.8)	66(16.5)	112(28.4)
No	886(72.8)	279(69.1)	339(83.1)	268(66.2)	895(75.5)	279(71.2)	333(83.5)	283(71.6)
Women know their partner earnings								
Yes	321(26.4)	104(25.7)	144(35.3)	73(18.0)	293(24.7)	105(26.6)	128(32.1)	60(15.2)
No	896(73.6)	300(74.3)	264(64.7)	332(82.0)	895(75.3)	290(73.4)	271(67.9)	334(84.8)
Partners' substance use								
Yes	913(75.0)	306(75.7)	304(74.5)	303(74.8)	882(74.2)	299(75.7)	289(72.4)	294(74.4)
No	304(25.0)	98(24.3)	104(25.5)	102(25.2)	307(25.8)	96(24.3)	110(27.4)	101(25.6)
Frequency of drug use								
Very often	147(16.1)	88(28.8)	30(9.8)	29(9.6)	158(18.67	72(23.9)	47(17.7)	39(13.9)
Sometimes	766(83.9)	218(71.2)	276(90.2)	272(90.4)	689(81.3)	229(76.1)	219(82.3)	241(86.1)
Argue over money for substance								
Yes	209(22.9)	80(26.1)	94(30.6)	35(11.7)	187(21.6)	72(23.8)	67(23.7)	48(17.1)
No	704(77.1)	226(73.9)	213(69.4)	265(88.3)	680(78.4)	231(76.2)	216(76.3)	233(82.9)
Head of the household								
Partner	711(58.5)	215(53.2)	320(78.6)	176(43.5)	497(41.8)	154(39.0)	196(49.1)	147(37.0)
Wife	20(1.6)	7(1.7)	6(1.5)	7(1.7)	10(0.8)	0(0.0)	4(1.0)	6(1.5)
Joint	485(39.9)	182(45.0)	81(19.9)	222(54.8)	683(57.4)	241(61.0)	199(49.9)	243(61.5)
Decision maker on household matters								
Partner	674(55.5)	158(39.1)	315(77.6)	201(49.6)	504(42.4)	133(33.6)	199(49.9)	172(43.8)
Wife	71(5.8)	60(14.9)	4(1.0)	7(1.7)	40(3.4)	12(3.0)	3(0.8)	25(6.4)
Joint	470(38.7)	186(46.0	87(21.4)	197(48.6)	644(54.2)	251(63.4)	197(49.4)	196(49.9)

Note; women's occupation (others: merchant/trader, engaged in small business, government or NGOs employee), partner occupation (Non-farmer: merchant, government or NGOs employee, private business, others)

4.1.3 Background characteristics of the qualitative study participants

A total of 43 study participants were involved in the qualitative component of the research. Of these, thirty four participants were involved in the four focus group discussions that comprised seven to ten discussants. In addition, five KIIs and four IDIs were conducted. The participants' mean age was 37.5 (±8.6) years. All of them were belonging to Orthodox Christianity (Table 6).

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Table 6: Sociodemographic characteristics of qualitative study participants in Ethiopia, 2018

Variables	n=43	%
Age (years)		
Mean (±SD)	37.5 (±8.6)	
≤36	22	51.2
>36	21	48.8
Sex		
Female	25	58.1
Male	18	41.9
Religion		
Orthodox	43	100
Others	0	0
Occupational status		
Housewife	8	18.6
Farmer	6	14
Merchant	3	7.0
Government employee	24	55.8
Other (NGOs)	2	4.6
Educational status		
Illiterate	2	4.7
Able to read and write	2	4.7
1-6 Grades	4	9.3
7-12 Grades	11	25.6
12+	24	55.8
Organization represented		
Women and Child Affairs Department	7	16.3
Police and Security Department	6	14.0
Health Department	16	37.2
Community representatives	13	30.2
Justice Department	1	2.3
Residence		
Urban	23	53.5
Rural	20	46.5

4.2 Women's exposure to the pilot intervention

This section describes women's exposure to pilot community-based intervention implementation. It sought to document the implementation and intervention bottlenecks in the domestic VAW study. A community-based pilot intervention was implemented comprehensively for 12 months. This was to improve awareness of the women and community about gender equality, relationship equity, and different consequences due to domestic VAW. Interventions were implemented through integrating the existing HEP. Relatively few (<5%) study participants in the non-intervention group reported that they had an exposure to the implemented awareness-raising sessions during the study period.

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This indicates the efforts made to control information contamination (dissemination of intervention), that is, communication control among participants was generally successful. The community mobilization (65.1%), gender based violence and its socioeconomic consequence (62.5%), and the health sector response (49.1%) sessions had attended in the intervention group. Women's exposure to gender equality (77.8%) and women development 'army' (77.3%) sessions were the highest in the active comparator group. Generally, women's exposure to the women development 'army' awareness creation was 65.5%. The women development 'army' component of the intervention package was slightly visible in the control (45.1%). This might be due to the existing program that this intervention scaled up and integrated with (Figure 21**)**.

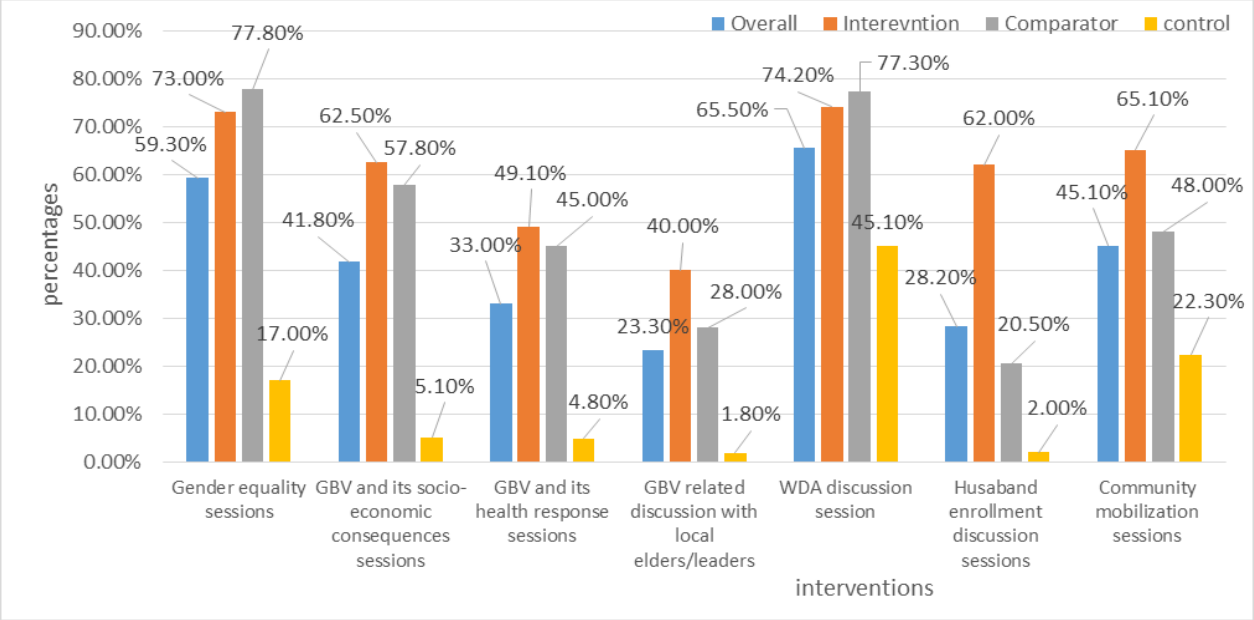


Figure 21: Women's exposure to awareness creation sessions in Ethiopia, 2018

4.2.1 Frequency of exposure to the intervention

In general, eight in every ten (79.2%, n=943) of the women received the awareness creation materials or attended sessions. Eighty three percent (n=987) of them attended the HEWs' lead sessions at least once. Almost half (49.6%, n=590) of them attended the

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awareness creation sessions more than seven times. Slightly more than half (51.9%, n=618) were visited at their home by the HEWs more than seven times (Table 7).

Table 7: Women's exposure to the intervention sessions in Ethiopia, 2018

Frequency of exposure	**n=1190**	**Intervention**	**Comparator**	**Control**
Visited by Health Extension Workers		**n (%)**	**n (%)**	**n (%)**
Above median (>7)	618(51.9)	186(47.1)	150(38.0)	113(28.6)
Below median (=<7)	370(31.1)	167(42.3)	53(13.3)	150(38.0)
No (zero)	202(17.0)	42(10.6)	28(7.0)	132(33.4)
Attended the awareness creation sessions				
Above median (>7)	590(49.6)	186(47.1)	290(72.5)	114(28.9)
Below median (=<7)	397(33.4)	167(42.3)	81(20.3)	149(37.7)
No (zero)	203(17.1)	42(10.6)	29(7.3)	132(33.4)
Attended awareness-creation (at least once)				
Yes	943(79.2)	353(89.4)	371(92.8)	219(55.4)
No	247(20.8)	42(10.6)	29(7.3)	176 (44.6)
Visited by Health Extension Workers (at least once)				
Yes	987 (83.0)	353(89.4)	372(93.0)	263(66.6)
No	202 (17.0)	42(10.6)	28(7.0)	132(33.4)

4.2.2 The outcome of the community-based awareness creation intervention

This sub-section presents the outcomes of the community-based intervention, which aimed to assess the effect of community-based intervention to prevent domestic VAW. Study participants who had ever heard about gender equality at pretest survey, increased from 63.0% (95% CI: 60.3, 65.7%) to 78.3% (95% CI: 75.9, 80.6%) in the posttest survey. In intervention group at pretest survey, women who had ever heard about gender equality improved from 65.0% to 89.4%. This is higher compared with the women in the control group which had improved slightly from 52.7% to 57.3% (Figure 22**)**.

Likewise, women who had heard about domestic VAW increased from 52.1% (95% CI: 49.3, 54.9%) at pretest survey to 75.9% (95% CI: 73.5, 78.4%) during the posttest survey. Women who had ever heard about domestic VAW increased substantially from 57.7% to 90.1% in the intervention group as compared with women in the control which was from 49.8% to 55.9% (Figure 22**)**.

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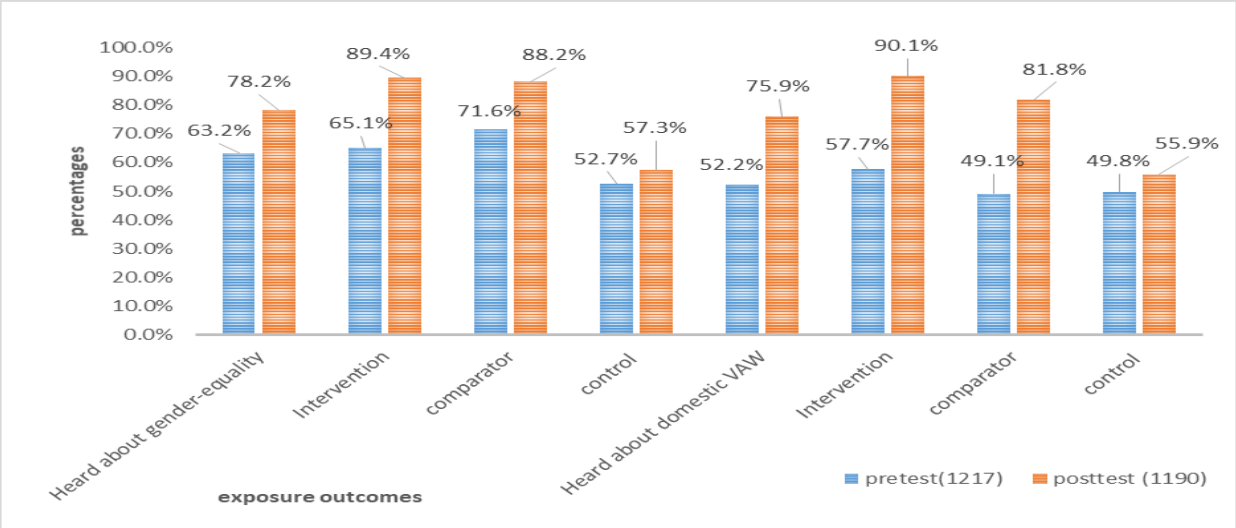


Figure 22: Community-based intervention outcome on women's awareness in Ethiopia, 2018

4.3 Domestic violence against women

Different types of domestic VAW, composite measures of overall domestic VAW, its associated factors and the DID analysis findings are described here. This descriptive findings aimed to address Objective One that assessed the level of different component of domestic VAW.

4.3.1 Women's experiences of different types of domestic violence

The different components of domestic VAW was assessed using various items. These were physical, psychological and types of sexual domestic VAW in the pretest and posttest prevalence of the study groups. These items were used to measure domestic VAW as a composite variable. Hence, if a woman reported at least one type of any violence experience (Table 2) (sub-section 3.15.1.1). Women, shoved or beaten by hitting with an object is the most prevalent type of physical domestic VAW reduced from 22.4% at pretest to 18.4% at posttest. The feeling of jealousy and anger expressed by women's partners when she talks to another man declined from 32.6% at pretest to 29.1% at posttest surveys. Partners used physical force to have sex with their wives

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declined from 27.9% at pretest to 22.6% at the posttest survey. Physically forced sex by partner declined from 20.3% to 17.7% in the intervention group as compared with 18.5% to 17.7% in the control group (Table 8).

Table 8: Different types of domestic violence against women in Ethiopia, 2018

Types of violence experience	Pretest survey: n (%)				Posttest survey: n (%)			
Physical violence types	n=1217	Intervention (404)	Active comparator (408)	Control (405)	n=1190	Intervention (395)	Active comparator (400)	Control (395)
Pushed or shoved, shaken, through something	272(22.4)	84(20.8)	113(27.7)	75(18.5)	219(18.4)	66(16.7)	76(19.0)	77(19.5)
Punched or hit with his fist, twisted arm	244(20.0)	70(17.3)	107(26.2)	67(16.5)	202(17.0)	55(13.9)	81(20.3)	66(16.7)
Slapped, kicked, dragged or beaten	245(20.1)	76(18.8)	110(27.0)	59(14.6)	192(16.1)	61(15.4)	78(19.5)	53(13.4)
Attacked with a knife, gun or other weapon	30(2.5)	12(3.0)	16(3.9)	2(0.5)	15(1.3)	9(2.3)	6(1.5)	0(0.0)
Scalded or burnt purposefully	30(2.5)	1(0.2)	13(3.2)	16(16.0)	23(1.9)	1(0.3)	6(1.5)	16(4.1)
Chocked at that disgraced	94(7.7)	15(3.7)	48(11.8)	31(7.7)	70(5.9)	12(3.0)	26(6.5)	32(8.1)
Psychological violence types								
Jealous or angry if she talks to other man	397(32.6)	152(37.6)	152(37.3)	93(23.0)	346(29.1)	144(36.5)	114(28.5)	88(22.3)
Insisted on knowing where she is at all-time	399(32.8)	146(36.1)	148(36.3)	105(25.9)	341(28.6)	133(33.7)	114(28.4)	94(23.8)
Insulted using abusive word/made feel bad	323(26.5)	107(26.5)	144(35.3)	72(17.8)	261(21.9)	102(25.8)	93(23.3)	66(16.7)
Threatened by object (stick, belt, knife)	38(3.1)	14(3.5)	20(4.9)	4(1.0)	34(2.9)	11(2.8)	21(5.3)	2(0.5)
Created financial hardship or not trust	201(16.5)	77(19.1)	84(20.6)	40(9.9)	189(15.9)	73(18.5)	72(18.0)	44(11.1)
Frightened or looking angrily	322(26.5)	113(28.0)	136(33.3)	73(18.0)	270(22.7)	98(24.8)	110(27.5)	62(15.7)
Expressed suspicion of unfaithful to you	313(25.7)	118(29.2)	113(27.7)	82(20.2)	260(21.8	102(25.8)	84(21.0)	74(18.7)
Ignored or shown indifference	163(13.4)	59(14.6)	60(14.7)	44(10.9)	158(13.3)	57(14.4)	58(14.5)	43(10.9)
Deprived from privileges in the family	129(10.6)	46(11.4)	46(11.3)	37(9.1)	106(8.9)	44(11.1)	31(7.8)	31(7.8)
Denied basic personal needs by partner	179(14.7)	73(18.1)	72(17.6)	34(8.4)	154(12.9)	66(16.7)	58(14.5)	30(7.6)
Intentionally not involved in family matters	132(10.8)	51(12.6)	55(13.5)	26(6.4)	115(9.7)	50(12.7)	42(10.5)	23(5.8)
Belittled/humiliated in front of other people	101(8.3)	20(5.0)	53(13.0)	28(6.9)	68(5.7)	18(4.6)	33(8.3)	17(4.3)
Done things to scare/ intimidate on purpose	134(11.0)	53(13.1)	44(10.8)	37(9.1)	116(9.7)	48(12.2)	34(8.5)	34(8.6)
Restricted from going to families/workshop	212(17.4)	93(23.0)	62(15.2)	57(14.1)	178(15.0)	85(21.5)	50(12.5)	43(10.9)
Sexual violence types								
Physically forced to have sex	340(27.9)	82(20.3)	183(44.9)	75(18.5)	269(22.6)	70(17.7)	129(32.3)	70(17.7)
Had sexual intercourse when did not want	91(7.5)	16(4.0)	61(15.0)	14(3.5)	77(6.5)	12(3.0)	52(13.0)	13(3.3)
Forced to do something sexual that humiliated	89(7.3)	14(3.5)	55(13.5)	20(4.9)	59(5.0)	10(2.5)	33(8.3)	16(4.1)
Intentionally denied or avoided sex	61(5.0)	4(1.0)	48(11.8)	9(2.2)	54(4.5)	1(0.3)	39(9.8)	14(3.5)

For the qualitative component, findings showed that domestic VAW is common in Awi Zone, especially in the rural areas. However, there has been an improvement in recent times.

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One key informant said:

> *"…mostly murder, physical attack injuries, acid pouring and such cases were presented to the courts for legal solutions. Sometimes, acts of domestic violence against women inflicts very serious injuries, and some women end up with disabilities*." [F, 28 years KII_{003}]

Similarly, two key informants mentioned that, wife-beating (dulla) is still common in the rural areas. Women often came with broken bones and serious injuries. One of the focus group discussant said that there are some rude partners. He cited the case of a woman who came and narrated her case in his office. She said that,

> *"…they had an invitation for both of them from her family to go celebrate her brother's return from the 'army'. He sent her alone. He kept an evil plan up on her return home. When she came, he closed the door of the house and beat her terribly…It was so scary for me and I could hardly accept to think of him as a human being…"* [M, 55 years, FGD_{adv1}]

Another bad story that came to our office goes like this,

> "*…a wife went to her friend's house without getting permission from him. The man was so annoyed by her action that he scalded/burnt her body using hot (over heated) metal at seven places on her body. I was so scared while I looked at the scars at the burned parts of the victim's body…"* [M, 55 years, FGD_{adv1}]

4.3.2 Women's experience of domestic violence against women

Domestic VAW was measured as a composite primary outcome variable and its types, which is a woman who had at least one experience either physical, psychological or sexual violence types. The prevalence of domestic VAW reduced from 48.3% (95% CI: 45.5, 51.1%) at pretest to 40.1% (95% CI: 37.3, 42.9%) at posttest. But the decline between the pretest and posttest survey was not statistically significant. Overall, the prevalence of domestic physical VAW at pretest declined from 26.3% (95% CI: 23.8, 29.0%) to 21.9% (95% CI: 19.5, 24.2%). Women's experience of physical domestic violence declined from 21.8% to 18.0% in the intervention group as compared to the

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slight changes in the control group from 19.8% to 19.2%. Likewise, women's experience of psychological domestic violence at pretest declined from 43.9% (95% CI: 41.2, 46.8%) to 36.9% (95% CI: 34.2, 39.6%) at posttest survey. Women's experience of sexual domestic violence showed decline from 27.7% (95% CI: 25.2, 30.2%) at pretest to 21.9% (95% CI: 19.5, 24.2%). Sexual domestic VAW showed a substantial decline among women in the active comparator group from 43.4% to 30.8% as compared with a smaller reduction among women who were in the control group from 19.3% to 17.5% (Figure 23).

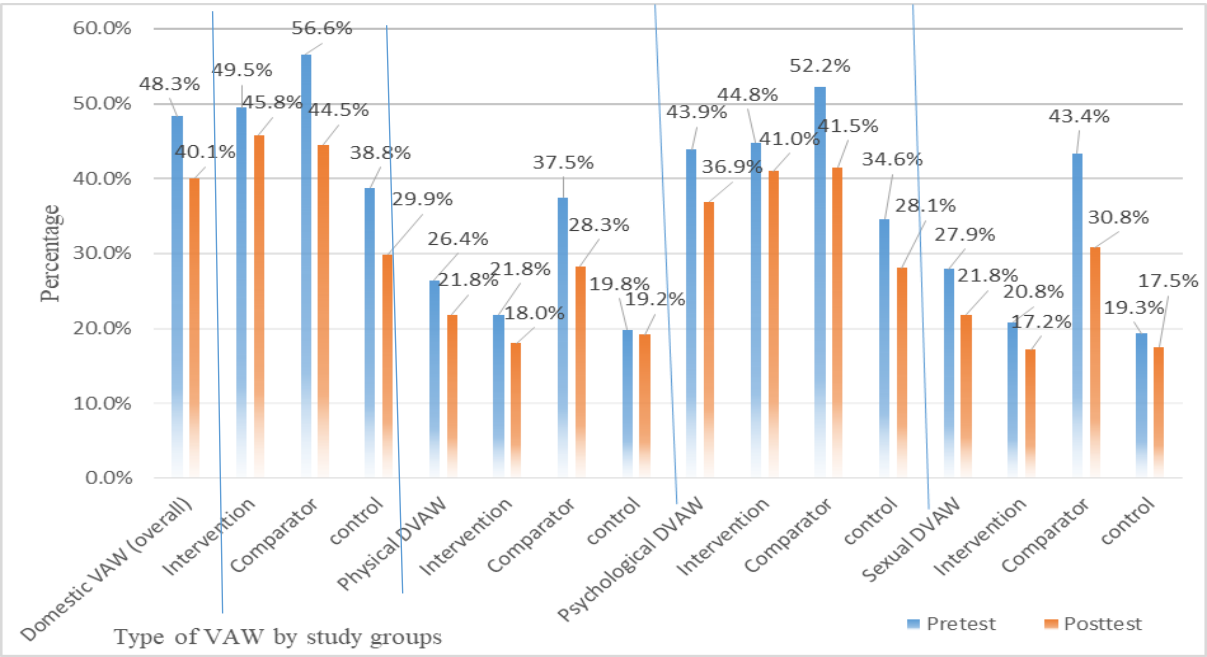


Figure 23: Types of domestic violence against women in Ethiopia, 2018

4.4 Women's attitudes towards justified wife-beating and inequitable gender-norms

This section of the chapter describes women's receptive attitude towards justified wife-beating and inequitable gender-norms, which were measured as a composite secondary dependent variables for the study (sub-section 3.15.1.2).

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4.4.1 Women's receptive attitudes towards justified wife-beating

Women's receptive attitudes towards justified wife-beating decreased by almost 15.1% from at pretest of 69.9% (95% CI: 66.8, 71.9%) to 59.0% (95% CI: 56.2, 61.8%). Women's receptive attitude towards justified wife-beating declined by 19.7% in the intervention group (from 58.9% to 47.3%) as compared with about a decline by 2.1% in the control group (from 76.3% to 74.7%). Women's receptive attitude towards justified wife-beating declined by 26.0% in the active comparator (Figure 24).

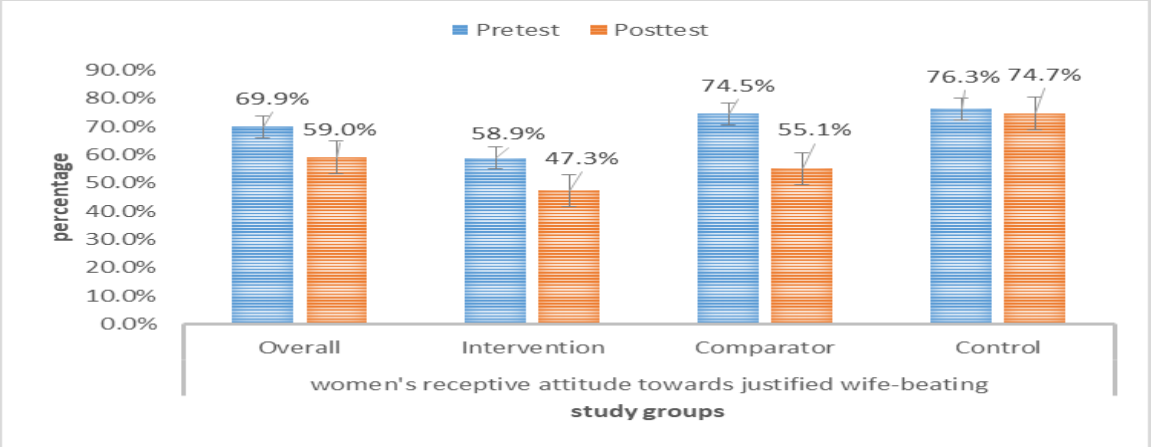


Figure 24: Women's attitude towards justified wife-beating in Ethiopia, 2018

Women were asked if wife-beating was justifiable in certain circumstances. Five 'justifiable' situations were listed. Women's receptive attitudes towards justified wife-beating had a progressive decline from the pretest to the posttest survey. One of the major justified reason for wife-beating was if women go out without informing the partners, which reduced from 57.3% at pretest to 48.3% at posttest. If women did not take care of the children was another main justified reason for wife-beating that, reduced from 56.5% to 49.6%. Likewise, women's receptive attitudes towards wife-beating reduced significantly in the intervention as compared with the active comparator and control groups. The women's receptive attitude towards justified wife-beating reduced consistently in the intervention and active comparator group (Figure 25).

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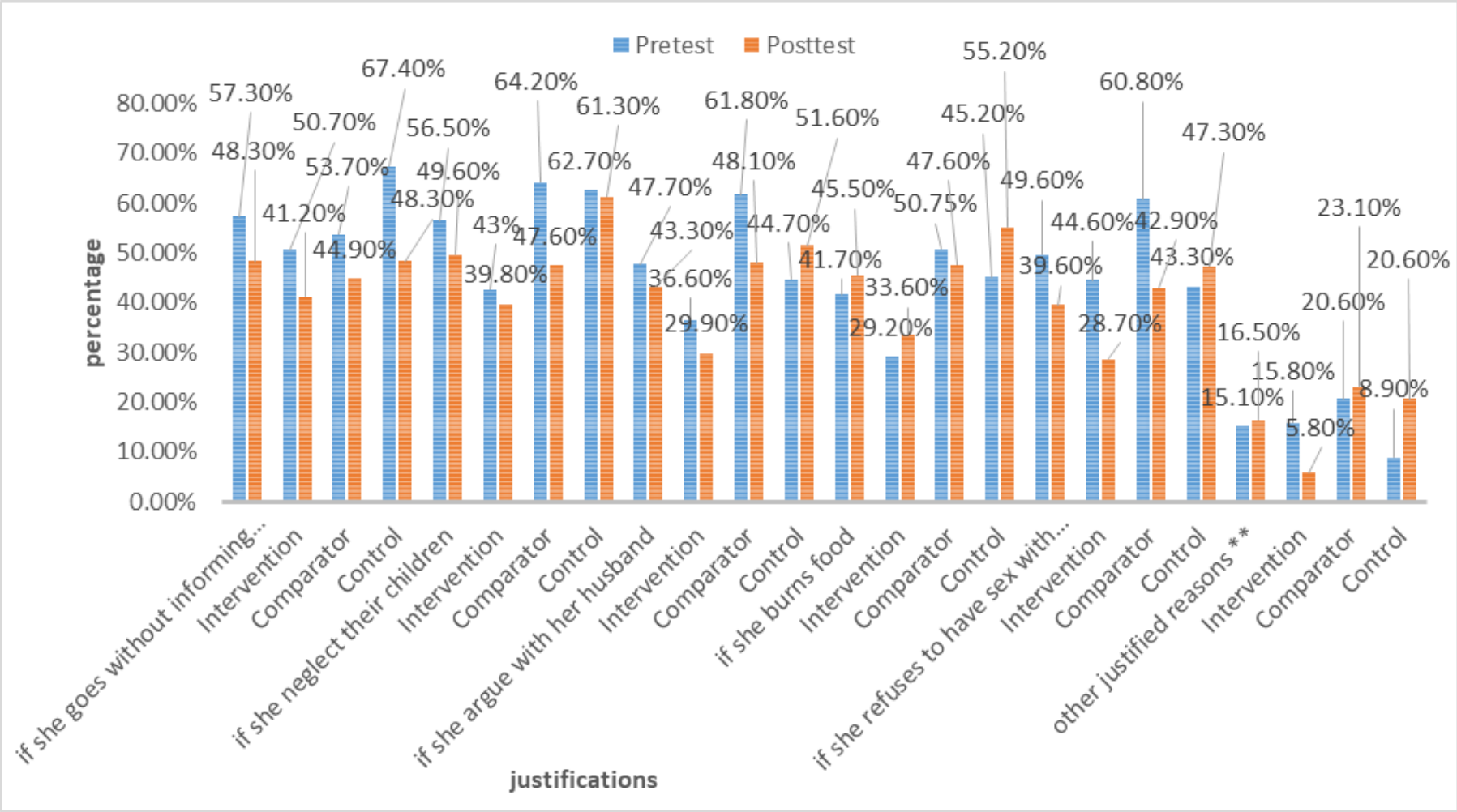


Figure 25: Women's attitude towards justified wife-beating in Ethiopia, 2018

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The qualitative study participants stated that the community may have different attitudes towards justified wife-beating. Even women themselves have receptive attitudes towards justified wife-beating. One of the focus group discussion participants said:

> "…*women would not accept to be loved by their partners unless beaten by them. The partner will not get approval as a man unless he beats his wife. Perhaps, the wife may not even be sure that her partner loves her unless he beats her sometimes, especially in the rural areas"* [M, 31 years, FGD_{adv4}]

Another female key informant said:

> "…*most people do not understand the effects of wife-beating on women's lives. As a family…you have to be calm (tolerant) when your partner becomes seriously aggressive (a fire)…"* [F, 35 years, KII_{002}]

4.4.2 Women's receptive attitude towards inequitable gender-norms

Approximately six–out-of-ten women had receptive attitudes towards relationship inequitable-norms between wives and partners. Notwithstanding, this has declined from 67.6% (95% CI: 65.0, 70.3%) to 55.9% (95% CI: 53.0, 58.7%). Women's receptive attitude towards inequitable gender-norms declined by 24.3% among women in the intervention group (from 86.1% to 65.2%) as compared with women among in the control group showed 5.4% decline (from 53.3% to 50.4%). Generally, the community-based awareness creation intervention significantly reduced women's receptive attitudes towards inequitable gender-norms (Figure 26).

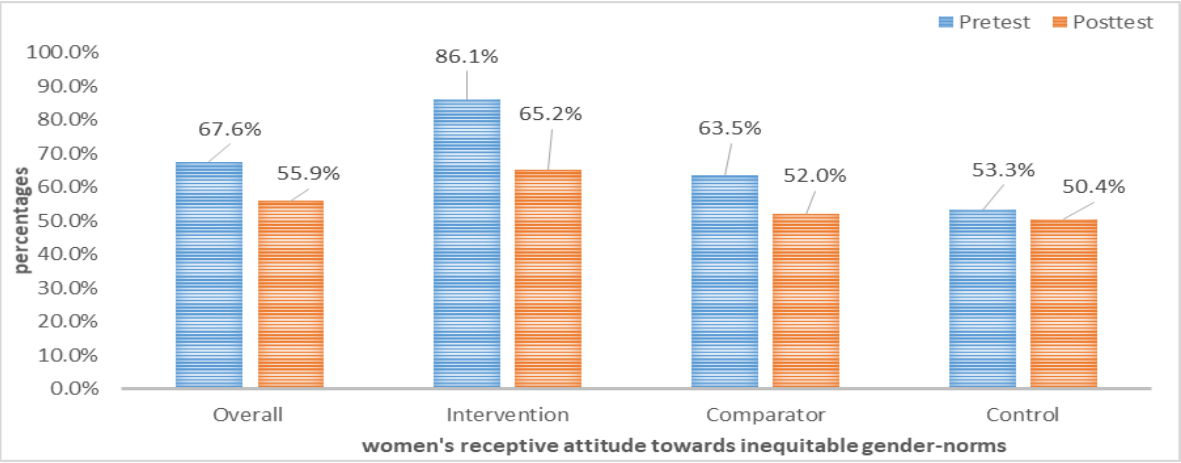


Figure 26: Women's attitude towards inequitable gender-norms in Ethiopia, 2018

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Likewise, women's receptive attitude towards inequitable gender-norms for each measurement items showed a progressive decline from the pretest survey to the posttest survey. An enormous reduction from pretest to posttest on 'woman's duty to have sex with her spouse/partner' from 79.0% to 50.1%, 'more important for a woman to respect her spouse/partner' from 79.1% to 52.8%, and 'may a man beat his wife if she disobeys him' from 61.4% to 40.4% among women in the intervention group as compared with women in the control group who had very scanty changes (Figure 27).

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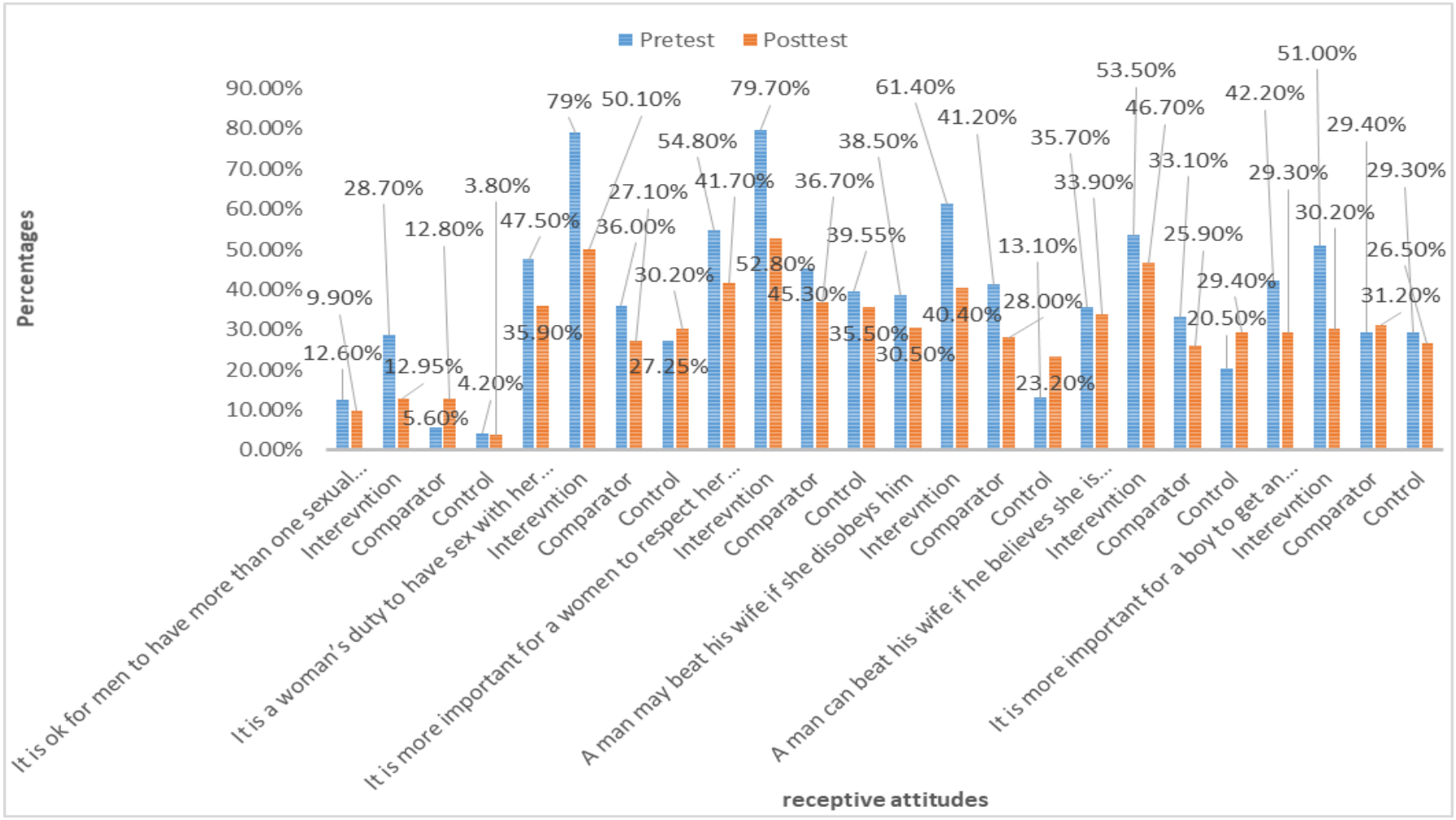


Figure 27: Women's receptive attitude towards inequitable gender-norm in Ethiopia, 2018

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The community has a receptive attitude towards gender-inequality, and has been a prevailing unresolved issue in our community. Even the community has proverbs which say:

> "…*besiet bijemer bewond yalik*" which means *"... a woman cannot make a critical decision over a man*"

This is quoted to show that, women are considered to be inferior to men, and also that, women themselves accept that men are superior. One female key informant commented:

> *"...the community will give nick names to the woman if she does not accept the community's gender-norms or if she tries to confront some community beliefs…the woman will face stigma and or discrimination due to her unacceptance of the community's norms…*" [F, 26 years, KII_{009}]

A focus group discussant described women in different ways. She said:

> "*...it is not even allowed for a woman to head the household, because… women are not broad thinkers and good decision makers, I see no improvement in their life…family being led by a woman…but much improvement is seen in a household being led by a man. Even though, very few or exceptional women can lead, majority of the women are incapable and have difficulties in leading their households…women are created inferior naturally, I think so…"* [M, 43 years, FGD_{P8}]

Another participant on the key informant interviews said:

> *"...If women become heads…they give her a nick name (Aba). The woman will be called with a man's accent, and if she comes over the partner, the woman will face bullying…"* [F, 37 years, KII_{004}]

One female participant in the FGDs said:

> "…*I cannot confidently say, there is gender equality even nowadays. I would love for my partner to help me carry out household chores. I have seen some young men being so cooperative and helping their wives, mothers and sisters by doing tasks that were categorized as women's tasks by the community. I feel jealous when I see those men who help their wives or mothers…"* [W 29 years, FGD_{p5}]

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4.4.3 Women's sexual negotiation, norm and perception about sexual refusal

This sub-section devoted to look at how the gender-norms and perceptions affect women's sexual negotiation and sex refusal. The majority of the women were not in the position to talk about sexual negotiation, sex refusal and the community's perception about sexual negotiation. Approximately three-fourth (70%) of the women perceive that they could refuse their partners sex if they were not in a good mood, and 57.2% of women knew that their partners had relationships with other women. Majority of the women reported that their partners would be annoyed (61.7%) and or may use force to have sex (51.8%) if they refused them. Most of the women perceived that they did not have the right to refuse sex to their partners even if they know or suspect him for some diseases (Table 9).

Table 9: Women's sexual negotiation and refusal in Northwestern Ethiopia, 2018

Variables	Pretest survey: n (%)				Posttest survey: n (%)			
	n=1217	Intervention (404)	Comparator (408)	Control (405)	n=1190	Intervention (395)	Comparator (400)	Control (395)
Women's reason to refuse to have sex with partner								
Suspected STIs	542(44.5)	280(69.3)	215(52.7	47(11.6)	583(49.7)	222(56.6)	217(54.4)	144(37.6)
Knows him unfaithful	696(57.2)	310(76.7)	249(36.9)	117(28.9)	682(58.2)	296(75.7)	218(54.8)	168(44.0)
Tired or no mood	853(70.1)	335(83.4)	216(52.9)	300(74.1)	691(58.7)	253(64.1)	205(51.4)	233(60.7)
No power to refuse	524(43.1)	265(65.6)	205(50.4)	54(13.3)	414(35.2)	163(41.4)	179(44.8)	72(18.8)
Partners action on his wife for sex refusal								
Get annoyed	751(61.7)	282(69.8)	295(72.3)	174(43.0)	648(55.0)	245(62.0)	223(55.8)	180(46.9)
Use force to have sex	630(51.8)	261(64.6)	277(67.9)	92(22.7)	551(46.8)	214(54.3)	215(53.9)	122(31.8)
Have sex with other women	485(39.9)	180(44.6)	116(28.4)	189(46.7)	246(20.9)	49(12.4)	63(15.8)	134(35.0)
Refuse to give money	358(29.4)	151(37.6)	150(36.8)	56(13.8)	441(37.4)	156(39.5)	186(46.5)	99(25.8)

Findings from the qualitative interview attest to this. The IDI participants mentioned that sexual negotiation may be important. But no man asked permission to have a sex with his wife. That women have no right to refuse to have sex with their partners. In addition, three FGD participants remarked:

> "…*The community considers discussion on sex as a taboo…why is she here…the wife is in the house for him to have sex with her as he wants*…" [M, 53 years, KII_{001}]

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> "…*We are living as village people but not as city people, some men do not follow their wives' feeling and even engage in physical fight with them…that is why I paid money (dowry) to marry you…"* [F, 33 years, FGD_{p4}]

> *"…if the man is drunk with (local beer) and says he wants to have sex…she may not be in the mood…this causes a conflict…Generally, in our community, once a man wants to have sex…no one refuses…He can do whatever he wants to satisfy himself…"* [M, 51 years, FGD_{p12}]

Other female key informants said:

> "…*This is one of the areas that needs immediate intervention…Lack of sexual negotiation is very common in rural areas which increases the risk for HIV exposure and other sexually transmitted infections…"* [F, 35 years, KII_{002}]

> *"…I do not think that women openly discuss sex with their partners…Mostly, women do not disclose this sexuality issue, but only call for divorce…Often, they hide it…"* [F, 26 years, KII_{009}]

4.5 Disclosure of domestic violence survivors' experience

This sub-section address survivors' disclosure status about domestic violence experience. Overall, domestic VAW survivors' (women's) disclosure of their experience to seek help from people in position significantly increased at the pretest, from 29.7% (95% CI: 26.0, 33.4%) to 55.7% (95% CI: 51.2, 60.2%). Women disclosure of their domestic violence experience showed an improvement by 55.2% among women who were in the intervention group at pretest (from 32.3 to 72.2%) as compared with women in the control group that increased by 50.9% (from 15.8 to 32.2%). The women's disclosure improvement in the active comparator and control group were about similar (Figure 28).

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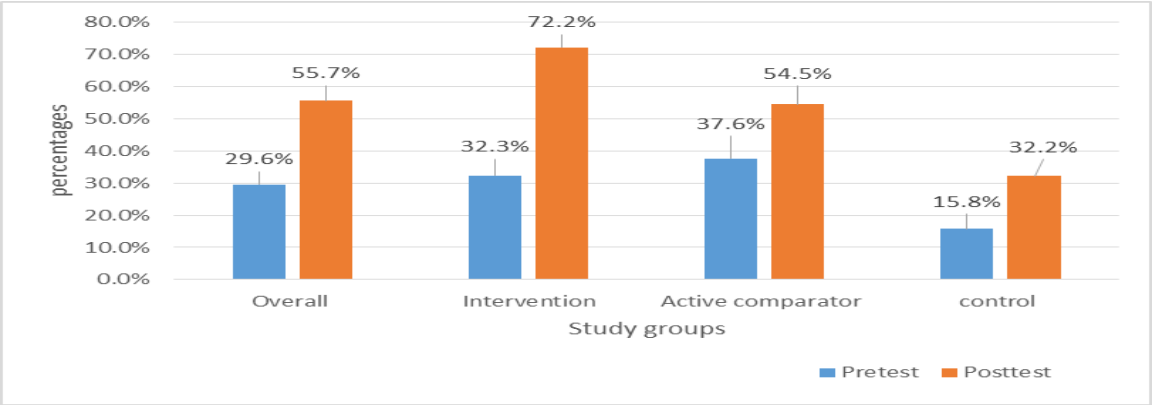


Figure 28: Women's disclosure of their domestic violence experience in Ethiopia, 2018

4.5.1 To whom victim women disclosed their issue for help

Women often sought help from people in position. Of these, majority of victims disclosed their problem to their family (86.4%), to Women and Child Affairs' officers (68.8%) and to their neighbors/friends (37.4%). Likewise, only one-third (66.7%) had some form of help from those they reported to (Table 10).

Table 10: Domestic violence survivors disclosure to someone in Ethiopia, 2018

Variables	Pretest survey: n (%)				Posttest survey: n (%)			
	n=593	Intervention	Comparator	Control	n=474	Intervention	Comparator	Control
From whom survivors tried to get help								
Relatives/family	157(86.4)	58(88.9)	83(91.0)	16(62.5)	257(98.9)	132(100)	89(96.7)	36(100)
Neighbors /friends	69(37.4)	9(11.1)	53(59.8)	7(25.0)	207(95.8)	101(98.1)	77(91.7)	29(100)
Local authorities	10(4.6)	2(3.2)	6(5.7)	2(4.2)	39(52.7)	23(85.2)	15(32.6)	1
Religious leaders	37(20.1)	2(3.2)	28(29.9)	7(29.2)	35(46.1)	12(70.6)	20(35.7)	3
Local judges/elders	40(23.0)	18(28.6)	21(24.4)	1(4.2)	30(42.9)	20(83.3)	9(20.0)	1
Justice/ police	35(20.1)	16(25.4)	14(16.1)	5(20.8)	20(33.9)	5(55.6)	11(23.9)	4
Others	0	0	0	0	44	5	39	0

Note: Multiple responses were possible; Other includes Health personnel and women's association

4.5.2 Women's reasons for non-disclosure

The main reasons for their silence were the assumption that disclosure was not useful (72.2%, n=287), VAW was a part of life (75.6%, n=291), the feeling of embarrassment (50.9%, n=196), and avoidance of being identified as a family disgrace (47.3%, n=182) during the pretest survey. The women's reasons for non-disclosure of VAW experiences declined at the posttest survey (Figure 29**)**.

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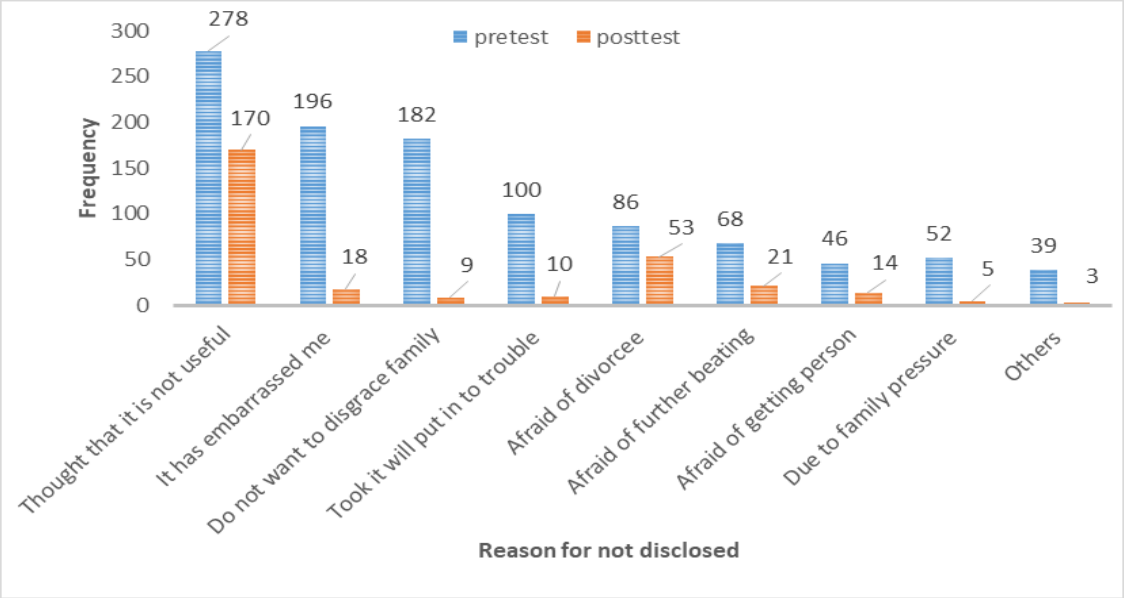


Figure 29: Survivors' reason for not disclosed their experience in Ethiopia, 2018

4.6 Factors associated with outcome variables

This sub-section presents the findings of the relationship between the explanatory variables and outcome variables (primary and secondary). For this, the Generalized Linear Models (GLMs) using robust (modified) Poisson family with log link function was applied to examine the relationship of different explanatory variables with the three outcome variables separately. This section has aimed at addressing Objective 2 that stated to identify factors associated with domestic VAW. The results of this analysis presents below from sub-section 4.6.1 to 4.6.3.

4.6.1 Factors associated with domestic violence against women

This sub-section presents the findings of the relationship of the domestic VAW with different independent variables. Twenty one independent variables were included in the unadjusted model of the GLMs using robust (modified) Poisson family with log link function to assess their relationship with the dependent variable (domestic VAW). The independent variables were individual (women's age, residence, marital duration, educational, occupation and pregnancy), relationship (partners' age, education,

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occupation, substance use, number of children alive, argument over money, knowledge of partners' earnings, frequency of substance use, job stressfulness) and heard about gender equality and or domestic VAW, decision making, headship of households, attitudes towards justified wife-beating and inequitable gender-norms. Of these, women's age (p=0.293), partners' age (p=0.920), number of children (p=0.398), women's pregnancy status (p=0.532), heard about VAW (p=689) were excluded from the multivariate analysis based on P>0.25. Therefore, sixteen variables were included in the adjusted GLMs (Table 11**)**.

Finally, the effect size or adjusted prevalence ratio (APR) of most of the independent variables showed a change from pretest to posttest which is to serve as a predictor. Hence, at the pretest survey, women who had no receptive attitudes towards justified wife-beating had 42% lower experience of domestic VAW as compared with women had receptive attitude towards justified wife-beating (APR, 0.58; 95% CI:0.45, 0.75). Likewise, those women who had no receptive attitude towards inequitable gender-norms between men and women had 37% reduction from experience of domestic VAW as compared with women who had receptive attitude (APR, 0.63, 95%CI: (0.50, 0.79). However, none of them had a significant statistical association with the women's experience of domestic violence at the multivariate analysis of the posttest survey. These two factors had statistically significant association at the pretest. Hereafter, wife-beating and inequitable gender-norms were changed into statistically non-significant factor after the intervention. Overall, women who had no receptive attitudes towards justified wife-beating and inequitable gender-norms, had not heard about gender equality, and not argued over money for substance use had 18% lower in experiencing of domestic VAW as compared with their counterparts, but was no statistical association at the posttest (Table 11).

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Table 11: Factors associated with domestic violence against women in Ethiopia, 2018

Variables	Pretest survey					Posttest survey				
	Domestic violence			CPR(95%CI)	APR(95% CI)	Domestic violence			CPR(95%CI)	APR (95% CI)
	n=1217	yes	No			n=1190	Yes	No		
Residence of women										
Rural	639(52.5)	319(49.9)	320(50.1)	1.07(0.71,1.26)	0.96(0.76,1.21)	631(53.0)	273(43.3)	358(56.7)	**1.19(1.03,1.37)***	1.28(0.98,1.66)
Urban	578(47.5)	269(46.5)	309(53.5)	1.00	1.00	559(47.0)	204(36.5)	355(63.5)	1.00	1.00
Women's marital duration (in years)										
≤10	665(54.6)	333(50.1)	332(49.9)	1.09(0.97,1.22)	1.2(0.99,1.45)	651(54.8)	278(42.7)	373(57.3)	**1.15(1.02,1.33)***	1.20(0.97,1.50)
>10	552(45.4)	255(46.2)	297(53.8)	1.00	1.00	538(45.2)	199(37.0)	339(63.0)	1.00	1.00
Women's educational status										
Illiterate	621(51.0)	305(49.1)	316(50.9)	1.55(1001,2.55)	1.24(0.58,2.9)	604(50.8)	239(39.6)	365(60.4)	1.32(0.84,2.21)	1.28(0.57,3.20)
Read and write	152(12.5)	83(54.6)	69(45.4)	1.72(1.07,2.92)*	1.40(0.6,3.3)	148(12.4)	63(42.6)	85(57.4)	1.42(0.86,2.47)	1.35(0.58,3.47)
Grade 1-6	168(13.8)	81(48.2)	87(51.8)	1.52(0.95,2.58)*	1.29(0.6,3.1)	166(14.0)	68(41.0)	98(59.0)	1.37(0.83,2.37)	1.17(0.51,2.99)
Grade 7-12	216(17.7)	100(46.3)	116(53.7)	1.46(0.92,2.46)*	1.25(0.6,2.9)	211(17.7)	89(42.2)	122(57.8)	1.41(0.87,2.41)	1.40(0.63,3.44)
12+	60(4.9)	19(31.7)	41(68.3)	1.00	1.00	60(5.0)	18(30.0)	42(70.0)	1.00	1.00
Women's occupational status										
Housewife	1037(85.2)	509(49.1)	528(50.9)	1.18(0.89,1.43)	1.01(0.74,1.37)	1013(85.1)	418(41.3)	595(58.7)	1.23(0.95,1.64)*	1.11(0.78,1.63)
Other Job	180(14.8)	79(43.9)	101(56.1)	1.0	1.0	177(14.9)	59(33.3)	118(66.7)	1.00	1.00
Partner and other relationship factors										
Partners' education										
Illiterate	303(24.9)	171(56.4)	132(43.6)	1.57(1.09,2.34)	1.26(0.73,2.29	297(25.0)	128(43.1)	169(56.9)	1.24(0.84,1.87)	0.99(0.57,1.81)
Read & write	379(31.1)	183(48.3)	196(51.7)	1.34(0.93,2.00)*	1.18(0.69,2.2)	366(30.8)	143(39.1)	223(60.9)	1.12(0.77,1.69)	0.98(0.57,1.80)
Grade 1-6	222(18.2)	92(41.4)	130(58.6)	1.15(0.78,1.75)	1.00(0.58,1.84)	218(18.3)	85(39.0)	133(61.0)	1.12(0.75,1.72)	0.90(0.51,1.66)
Grade 7-12	227(18.7)	111(48.9)	116(51.1)	1.38(0.92,2.05)	1.25(0.7,2.25)	223(18.7)	91(40.8)	132(59.2)	1.17(0.78,1.80)	1.10(0.65,1.99)
12+	86(7.1)	31(36.0)	55(64.0)	1.00	1.0	86(7.2)	30(34.9)	56(65.1)	1.00	1.00
Partners' occupation										
Farmer	489(40.2)	250(51.1)	239(48.9)	1.10(0.93,1.30)	1.1(0.86,1.41)	479(40.3)	205(42.8)	274(57.2)	1.12(0.93,1.34)	0.98(0.75,1.29)
Non-farmer	728(59.8)	338(46.4)	390(53.6)	1.00	1.00	711(59.7)	272(38.2)	439(61.7)	1.00	1.00
Substance (alcohol)abuse										
Yes	913(75.0)	480(52.6)	433(47.4)	1.00	1.00	882(74.2)	393(44.6)	489(55.4)	1.00	1.00
No	304(25.0)	108(35.5)	196(64.5)	0.68(0.55,0.83)*	1.24(0.31, 3.33.)	307(25.8)	83(27.0)	224(73.0)	0.61(0.48,0.76)*	2.02(0.71,4.52)
Argue over money for substance use (913)										
Yes	209(22.9)	140(67.0)	69(33.0)	1.00	1.00	187(21.6)	97(51.9)	90(48.1)	1.00	1.00
No	704(77.1)	341(48.4)	363(51.6)	**0.72(0.60,0.88)***	0.89(0.69,1.13)	680(78.4)	293(43.1)	387(56.9)	0.83(0.66,1.05)*	0.82(0.62,1.08)

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Table 11: Factors associated with domestic violence against women in Ehiopia, 2018

Variable	Pretest survey			CPR(95%CI)	APR (95% CI)	Posttest survey			CPR(95%CI)	APR (95% CI)
	Domestic violence					Domestic violence				
	n=1217	yes	No			n=1190	Yes	No		
Frequency of alcohol use										
Very often	147(16.1)	99(67.3)	48(32.7)	**1.35(1.07,1.67)***	1.17(0.88,1.53)	158(18.7)	79(50.0)	79(50.0)	1.15(0.89,1.46)	1.10(0.81,1.46)
sometimes	766(83.9)	382(49.9)	384(50.1)	1.00	1.00	689(81.3)	301(43.7)	388(56.3)	1.00	1.00
Woman thinks partner's job stressful										
Yes	331(27.2)	189(57.1)	142(42.9)	1.00	1.00	291(24.5)	121(41.6)	170(58.4)	1.00	1.00
No	886(72.8)	399(45.0)	487(55.0)	0.79(0.66,0.94)*	0.86(0.71,1.06)	895(75.5)	353(39.4)	542(60.6)	0.95(0.77,1.17)	0.96(0.75,1.23)
Woman knows partner's earning										
Yes	321(26.4)	146(45.5)	175(54.5)	1.00	1.00	293(24.7)	107(36.5)	186(63.5)	1.00	1.00
No	896(73.4)	442(49.3)	454(50.7)	1.08(0.90, 1.31)	1.20(0.95,1.52)	895(75.3)	370(41.3)	525(58.7)	1.13(0.92,1.41)	1.19(0.95,1.59)
Community and societal level factor										
Heard about gender equality										
Yes	767(63.2)	383(49.9)	384(50.1)	1.00	1.00	921(78.2)	383(41.1)	538(58.4)	1.00	1.00
No	447(36.8)	203(45.4)	244(54.6)	**0.91(0.77,1.08)**	0.83(0.67,1.01)	256(21.8)	89(34.9)	167(65.2)	1.34(1.03,1.79)*	0.81(0.62, 1.05)
Head of household										
Partner	711(58.5)	393(55.3)	318(44.7)	**1.46(1.23,1.75)***	1.10(0.77,1.58)	496(41.8)	227(45.8)	269(54.2)	**1.27(1.06,1.52)***	1.10(0.85,1.43)
Wife	20(1.6)	10(50.0)	10(50.0)	1.32(0.65,2.37)	1.15(0.59,3.44)	10(0.8)	2(20.0)	8(80.0)	0.55(0.10,1.73)	0.78(0.13,2.66)
Joint	485(39.9)	184(37.9)	301(62.1)	1.00	1.00	682(57.4)	246(36.1)	436(63.9)	1.00	1.00
Decision maker on household matters										
Partner	674(55.5)	383(56.8)	291(43.2)	**1.55(1.30,1.86)***	1.14(0.79,1.6)	504(42.5)	230(45.6)	274(54.4)	**1.27(1.06,1.52)***	1.21(0.93,1.57)
Wife	71(5.8)	31(43.7)	40(56.3)	1.19(0.80,1.72)	0.76(0.4,1.38)	40(3.4)	15(1.3)	25(62.5)	1.04(0.59,1.69)	1.00(0.48,1.83)
Joint	470(38.7)	172(36.6)	298(63.4)	1.00	1.00	642(54.1)	231(36.0)	411(64.0)	1.00	1.00
Wife-beating receptive attitude										
Yes	851(69.9)	479(56.3)	372(43.7)	1.00	1.00	487(41.0)	170(34.9)	317(65.1)	1.00	1.00
No	366(30.1)	109(29.8)	257(70.2)	**0.54(0.44,0.66)***	0.**58(0.45,0.75)***	702(59.0)	306(43.6)	396(56.4)	**0.80(0.66,0.96)***	0.82(0.66,1.02)
Inequitable gender-norms receptive attitude										
Yes	823(67.6)	463(56.3)	360(43.7)	1.00	1.00	525(44.2)	185(35.2)	340(64.8)	1.00	1.00
No	394(32.4)	125(31.7)	269(68.3)	0.56(0.46,0.69)*	**0.63(0.50,0.79)***	662(55.8)	291(44.0)	371(56.0)	**0.80(0.67,0.96)***	0.85(0.69,1.05)

Note: **significantly associated ; variables such as* women's age, partners' age, number of children, women's pregnancy status, heard about VAW w*ere excluded from the adjusted model due to p >0.25 in the unadjusted model; CPR: Crude Prevalence ratio; APR: Adjusted prevalence ratio*

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4.6.2 Factors associated with women's attitudes towards justified wife-beating

Nineteen independent variables were included in the analysis as potential factor for women's receptive attitude toward justified wife beating. Those variables were women's (age, residence, marital duration, educational status, occupation and pregnancy), relationship (partner's age, education, occupation, alcohol use, number of children alive, argument over money, knowledge of partners' earnings, frequency of alcohol use, job stressfulness), heard about gender equality and or VAW, decision making and heading of households. Of these, five independent variables such as women's residency (p=0.368), occupational status (p=0.982), partner's occupation (p=0.906), argument over money (p=0.556) and knowledge of partners' earnings (p=0.949) were excluded from the multivariate analysis due to the P>0.25. Therefore, fourteen variables were included in the adjusted model**.**

Eventually, four independent variables had statistical significant association in the adjusted model at the pretest. Women who had no ever heard about gender equality had 18% higher receptive attitude of justified wife-beating as compared with women who had ever heard about gender equality (APR, 1.18, 95% CI: 1.02, 1.36). Besides, women in a household headed by partner had 23% higher receptive attitude of justified wife-beating than women who lived in jointly headed household (APR, 1.23, 95% CI: 1.01, 1.49). Women whose partners had stressful job had 24% higher receptive attitude of justified wife-beating than their counterparts (APR, 1.24, 95% CI: 1.14, 1.35). Pregnant women had 13% higher receptive attitude towards justified wife-beating compared to non-pregnant women during the pretest survey (APR, 1.13, 95% CI: 1.03, 1.23). Unfortunately, all the explanatory variables had no statistical significant association after intervention or posttest (Table 12)..

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Table 12: Factors associated with women's receptive attitude towards justified wife-beatings in Ethiopia, 2018

Variable	Pretest survey					Posttest survey				
	Receptive attitude towards justified wife-beating					Receptive attitude towards justified wife-beating				
	n=1217	yes	No	CPR(95%CI)	APR(95% CI)	n=1190	Yes	No	CPR(95%CI)	APR(95% CI)
Age of the women (in years)										
<29	604(49.6)	393(65.1)	211(34.9)	**0.87(0.81,0.94)***	1.08(0.94,1.24)	592(49.8)	335(56.6)	257(43.4)	0.92(0.84,1.01)	1.13(0.93,1.37)
≥30	613(50.4)	458(74.7)	155(25.3)	1.00	1.00	596(50.2)	366(61.4)	230(38.6)	1.00	1.00
Marital duration of the women										
< 10 years	665(54.6)	446(67.1)	219(32.9)	**0.91(0.85,0.98)***	0.99(0,89,1.12)	651(54.8)	366(56.2)	285(43.8)	**0.90(0.82,0.99)***	0.90(0.77,1.05)
>10 years	552(45.4)	405(73.4)	147(26.6)	1.00	1.00	537(45.2)	335(62.4)	202(37.6)	1.00	1.00
Educational status of the women										
Illiterate	621(51.0)	471(75.8)	150(24.2)	**1.37(1.08,1.73)***	1.19(0.83,1.71)	603(50.8)	373(61.9)	230(38.1)	1.06(0.85,1.33)	1.00(0.69,1.46)
Read & write	152(12.5)	96(63.2)	56(36.8)	1.15(0.89,1.49)	1.10(0.75,1.61)	148(12.5)	84(56.8)	64(43.2)	0.97(0.75,1.26)	0.91(0.61,1.37)
1-6 grades	168(13.8)	112(66.7)	56(33.3)	1.20(0.93,1.55)	1.09(0.75,1.59)	166(14.0)	92(55.4)	74(44.6)	0.95(0.74,1.22)	0.89(0.60,1.31)
7-12 grades	216(17.7)	139(64.4)	77(35.6)	1.17(0.91,1.50)	1.23(0.86,1.75)	211(17.8)	117(55.5)	94(44.5)	0.95(0.74,1.22)	1.02(0.71,1.47)
12+	60(4.9)	33(55.0)	27(45.0)	1.00	1.00	60(5.1)	35(58.3)	25(41.7)	1.00	1.000
Pregnancy last 12 months										
Yes	287(24.7)	219(76.3)	68(23.7)	**1.14(1.06,1.24)***	**1.13(1.03,1.23)***	248(21.2)	142(57.3)	106(42.7)	0.95(0.85,1.07)	1.02(0.89,1.16)
No	873(75.3)	583(66.8)	290(33.2)	1.00	1.00	923(78.8)	555(60.1)	368(39.9)	1.00	1.00
Relationship factors										
Partner age										
<36	637(52.9)	408(64.1)	229(35.9)	0.83(0.78,0.90)*	0.92(0.81,1.05)	594(50.4	335(56.4)	259(43.6)	0.92(0.83,1.01)	1.02(0.85,1.22)
>36	568(47.1)	435(76.6)	133(23.4)	1.00	1.00	585(49.6)	360(61.5)	225(38.5)	1.00	1.00
Educational status of partner										
Illiterate	303(24.9)	214(70.6)	89(29.4)	1.16(0.97,1.4)*	0.92(0.74,1.14)	297(25.0)	173(58.2)	124(41.8)	0.95(0.78,1.15)	0.90(0.68,1.21)
Read & write	379(31.1)	283(74.7)	96(30.6)	**1.23(1.02,1.47)**	1.00(0.81,1.23)	365(30.7)	226(61.9)	139(38.1)	1.01(0.84,1.21)	1.00(0.75,1.32)
1-6 grades	222(18.2)	154(69.4)	68(30.6)	1.13(0.93,1.37)	0.97(0.78,1.21)	218(18.3)	129(59.2)	89(38.1)	0.96(0.79,1.17)	1.00(0.75,1.34)
7-12 grades	227(18.7)	148(65.2)	79(34.8)	1.08(0.89,1.31)	0.96(0.77,1.18)	223(18.8)	121(54.3)	102(45.7)	0.88(0.72,1.08)	0.94(0.71,1.24)
12+	86(7.1)	52(60.5)	34(39.5)	1.00	1.00	86(7.2)	53(61.6)	33(38.4)	1.00	1.00
Substance abuse (alcohol)										
Yes	913(75.0)	656(71.9)	257(28.1)	**1.13(1.03,1.24)***	0.89(0.49,1.61)	881(74.2)	539(61.2)	342(38.8)	**1.15(1.02,1.30)***	1.38(0.59,3.19)
No	304(25.0)	195(64.1)	109(35.9)	1.00	1.00	307(25.8)	163(53.1)	144(46.9)	1.00	1.00

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Table 12: Factors associated with women's receptive attitude towards justified wife-beatings in Ethiopia, 2018

Variable	**Pretest survey**					**Posttest survey**				
	Receptive attitude towards justified wife-beating					**Receptive attitude towards justified wife-beating**				
	n=1217	**yes**	**No**	**CPR(95%CI)**	**APR(95% CI)**	**n=1190**	**Yes**	**No**	**CPR(95%CI)**	**APR(95% CI)**
Frequency of alcohol use										
Very often	147(16.1)	98(66.7)	49(33.3)	0.92(0.82,1.04)	**0.88(0.79,0.99)***	158(18.7)	90(57.0)	68(43.0)	0.91(0.79,1.06)	0.93(0.80,1.07)
Sometimes	766(83.9)	558(72.8)	208(27.2)	1.00	1.00	689(81.3)	430(62.4)	259(37.6)	1.00	1.00
Do you think partner job stressful										
Yes	331(27.2)	257(77.6)	74(22.4)	**1.17(1.08,1.26)***	**1.24(1.14,1.35)***	291(24.6)	177(60.8)	114(39.2)	1.04(0.93,1.26)	1.07(0.91,1.21)
No	886(72.8)	594(67.0)	292(33.0)	1.00	1.00	894(75.4)	523(58.5)	371(41.5)	1.00	1.00
Number of alive children										
None	201(16.5)	132(65.7)	69(34.3)	0.87(0.78,0.97)*	0.95(0.81,1.11)	143(12.0)	88(61.5)	55(38.5)	0.99(0.86,1.15)	0.94(0.77,1.14)
<2	460(37.8)	304(66.1)	156(33.9)	0.88(0.81,0.96)	0.94(0.84,1.07)	447(37.6)	243(54.4)	204(45.6)	**0.88(0.79,0.98)***	0.91(0.79,1.05)
>2	556(45.7)	415(74.6)	141(25.4)	1.00	1.00	599(50.4)	371(61.9)	228(38.1)	1.00	1.00
Community and societal level factors										
Ever heard about gender equality										
Yes	767(63.2)	516(67.3)	251(32.7)	1.00	1.00	921(78.2)	521(56.6)	400(43.4)	1.00	1.00
No	447(36.8)	334(74.7)	113(25.3)	**1.11(1.03,1.20)***	**1.18(1.02,1.36)***	256(21.8)	170(66.4)	86(33.6)	**1.17(1.06,1.30)***	0.99(0.77,1.28)
Ever heard about VAW										
Yes	629(52.2)	426(67.7)	203(32.3)	1.00	1.00	887(75.9)	501(56.5)	386(43.5)	1.00	1.00
No	576(47.8)	418(72.6)	158(27.4)	**1.06(0.99,1.15)***	0.89(0.77-1.02)	281(24.1)	184(65.5)	97(34.5)	1.16(1.05,1.29)*	1.17(0.91,1.50)
Head of household										
Partner	711(58.5)	566(79.6)	145(20.4)	**1.43(1.31,1.56)***	**1.23(1.01,1.49)***	496(41.8)	321(64.7)	175(35.3)	**1.17(1.07,1.29)***	1.08(0.95,1.24)
Wife	20(1.6)	14(70.0)	6(30.0)	1.26(0.94,1.70)	**2.15(1.41,3.28)***	10(0.8)	4(40.0)	6(60.0)	0.73(0.34,1.56)	0.89(0.40,1.95)
Joint	485(39.9)	270(55.7)	215(44.3)	1.00	1.00	682(57.4)	376(55.1)	306(44.9)	1.00	1.00
Decision maker on household issue										
Partner	674(55.5)	549(81.5)	125(18.5)	**1.45(1.32,1.58)***	1.17(0.96,1.43)	661(55.6)	438(66.3)	223(33.7)	**1.18(1.08,1.30)***	1.08(0.94,1.24)
Wife	71(5.8)	37(52.1)	34(47.9)	0.93(0.74,1.18)	0.54(0.56,0.81)*	68(5.7)	26(38.2)	42(61.8)	0.96(0.71,1.30)	0.92(0.66,1.29)
Joint	470(38.7)	263(56.0)	207(44.0)	1.00	1.00	459(38.6)	237(51.6)	222(48.4)	1.00	1.00

Note: ***** *p value <0.05 or significantly associated ; variables such as know partner earnings, argue over money for substance, occupational status of partner, occupational status of women and residence of women were excluded from the adjusted model due to p >0.25 in the unadjusted model; CPR: Crude Prevalence ratio; APR: Adjusted prevalence ratio*

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4.6.3 Factors associated with women's attitudes towards inequitable gender-norms

Nineteen independent variables were included in the analysis to assess their relationship with the dependent variable (women's attitudes towards inequitable gender-norms). The independent variables were categorized into women's related variables (age, residence, marital duration, educational status, occupation and pregnancy), relationship (age, education, occupation, partners' alcohol use, number of children alive, argument over money, knowledge of partners' earnings, frequency of alcohol use, job stressfulness) and heard about gender equality, VAW, decision makings and heading of households. Of these, women's age ($p = 0.301$), partners' age ($p = 0.920$), having children alive ($p = 0.406$), and knowledge of partners' earnings ($p = 0.613$) were excluded from the multivariate analysis based on a P values greater than 0.25. Therefore, fifteen independent variables were included in the adjusted GLMs (Table 13).

Eventually, three independent variables showed statistically significant association in the pretest survey. Wife had a decision making autonomy on household matters (APR, 1.80, 95% CI: 1.51, 2.15), partner head (APR, 0. 85, 95%CI: 0.74, 0.99), wife headed (APR, 0.65, 95% CI: 0.42, 0.88) and partner drinks alcohol very often (APR, 1.25, 95% CI: 1.12, 1.41). Unfortunately, all the independent variables had no statistical significant association on the intervention evaluation or posttest survey (Table 13).

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Table 13: Factors associated with women's attitude on inequitable gender-norms in Ethiopia, 2018

Variables	Pretest survey					Posttest survey				
	Receptive attitude towards inequitable gender-norms					Receptive attitude towards inequitable gender-norms				
	n=1217	Yes	No	95%CI CPR	95% CI APR	n=1190	Yes	No	CPR(95%CI)	APR(95% CI)
Residence of women										
Rural	639(52.2)	466(72.9)	173(27.1)	**1.18(1.09,1.27)***	1.22(1.04,1.36)*	629(53.0)	368(58.5)	261(41.5)	**1.11(1.02,1.23)***	1.16(0.99,1.36)
Urban	578(47.5)	357(61.8)	221(38.2)	1.00	1.00	558(47.0)	294(52.7)	264(47.3)	1.00	1.00
Marital duration of the women										
≤10 years	665(54.6)	435(65.4)	230(34.6)	0.94(0.87,1.01)	0.99(0.89,1.11)	651(54.9)	342(52.5)	309(47.5)	**0.88(0.80,0.98)***	0.90(0.81,1.05)
>10 years	552(45.4)	388(70.3)	164(29.7)	1.00	1.00	535(45.1)	319(59.6)	216(40.4)	1.00	1.00
Educational status of the women										
Illiterate	621(51.0)	444(71.5)	177(28.5)	**1.48(1.13,1.93)***	1.48(0.94,2.34)	602(50.8)	349(58.0)	253(42.0)	1.24(0.94,1.64)	1.49(0.77,2.87)
Read & write	152(12.5)	111(73.0)	41(27.0)	**1.51(1.14,2.00)**	1.50(0.94,2.37)	147(12.4)	79(53.7)	68(46.3)	1.15(0.85,1.57)	1.55(0.79,3.03)
1-6 grades	168(13.8)	110(65.5)	58(34.5)	**1.37(1.03,1.81)**	1.43(0.90,2.28)	166(14.0)	90(54.2)	76(45.8)	1.16(0.86,1.58)	1.50(0.77,2.93)
7-12 grades	216(17.7)	129(59.7)	87(40.3)	1.24(0.93,1.64)	1.26(0.80,1.99)	211(17.8)	115(54.5)	96(45.5)	1.17(0.87,1.57)	1.61(0.84,3.09)
12+	60(4.9)	29(48.3)	31(51.7)	1.00	1.00	60(5.1)	28(46.7)	32(53.3)	1.00	1.00
Occupational status of women										
Housewife/farmer	1012(85.1)	705(69.7)	307(30.3)	**1.24(1.08,1.42)***	1.13(0.94,1.36)	1009(85.1)	575(57.0)	434(43.0)	**1.17(1.00, 1.38)***	1.24(0.95,1.63)
Other occupations.	177(14.9)	99(55.9)	78(44.1)	1.00		177(14.9)	86(48.6)	91(51.4)	1.00	1.00
Pregnancy last 12 months										
Yes	287(24.7)	205(71.4)	82(28.6)	1.05(0.97,1.15)	1.09(1.00,1.20)	248(21.2)	127(51.2)	121(48.8)	0.90(0.79,1.03)	0.87(0.75,1.03)
No	873(75.3)	588(67.4)	285(32.6)	1.00	1.00	921(78.8)	523(56.8)	398(43.2)	1.00	1.00
Relationship factors										
Partner Education										
Illiterate	303(24.9)	228(75.2)	75(24.8)	1.27(1.06,1.54)	0.96(0.73,1.26)	297(25.0)	163(54.9)	134(45.1)	1.05(0.84,1.32)	1.05(0.72,1.54)
Read & write	379(31.1)	252(66.5)	127(33.5)	1.12(0.92,1.35)	0.83(0.63,1.09)	364(30.7)	205(56.3)	159(43.7)	1.08(0.86, 1.34)	1.08(0.74,1.58)
1-6 grades	222(18.2)	158(71.2)	64(28.8)	1.2(0.99,1.46)	0.98(0.75,1.29)	217(18.3)	136(62.7)	81(37.3)	1.20(0.96,1.50)	1.15(0.79,1.69)
7-12 grades	227(18.7	134(59.0)	93(41.0)	1.00(0.81,1.22)	0.87(0.66,1.15)	223(18.8)	113(50.7)	110(49.3)	0.97(0.76,1.23)	1.05(0.72,1.53)
12+	86(7.1)	51(59.3)	35(40.7)	1.00	1.00	86(7.2)	45(52.3)	41(47.7)	1.00	1.00
Occupation of partner										
Farmer	489(40.2)	362(74.0)	127(26.0)	1.17(1.08,1.26)	0.99(0.89,1.10)	478(40.2)	275(57.5)	203(42.5)	1.05(0.95,1.16)	0.95(0.81,1.16)
Non-farmer	728(59.8)	461(63.3)	267(36.7)	1.00	1.00	711(59.8)	389(54.7)	322(45.3)	1.00	1.00
Substance /alcohol abuse										
Yes	913(75.0)	634(69.4)	279(30.6)	1.12(1.01,1.23)*	0.68(0.54,0.84)*	879(74.1)	496(56.4)	383(43.6)	1.05(0.93,1.18)	1.24(0.47,3.26)
No	304(25.0)	189(62.2)	115(37.8)	1.000	1.00	307(25.9)	165(53.7)	142(46.3)	1.00	1.00

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Table 13: Factors associated with women's receptive attitude towards inequitable gender-norms in Ethiopia, 2018

Variable	Pretest survey					Posttest survey				
	Receptive attitude towards inequitable gender-norms					Receptive attitude towards inequitable gender-norms				
	n=1217	Yes	No	95%CI CPR	95% CI APR	n=1190	Yes	No	CPR(95%CI)	APR(95% CI)
Argue over money for substance										
Yes	209(22.9)	168(80.4)	41(19.6)	**1.22(1.12,1.32)***	1.12(0.99,1.26)	187(21.6)	102(54.5)	85(45.5)	0.97(0.84,1.12)	0.99(0.83,1.18)
No	704(77.1)	468(66.5)	236(33.5)	1.00	1.00	678(78.4)	382(56.3)	296(43.7)	1.00	1.00
Frequency of alcohol use										
Very often	147(16.1)	129(87.8)	18(12.2)	**1.33(1.23,1.43)***	**1.25(1.12,1.41)***	158(18.7)	83(52.5)	75(47.5)	0.94(0.80,1.10)	0.97(0.80,1.18)
Sometimes	766(83.9)	506(66.1)	260(33.9)	1.00	1.00	687(81.3)	385(56.0)	302(44.0)	1.00	1.00
Woman thinks partners' job stressful										
Yes	331(27.2)	239(72.2)	92(27.8)	1.10(1.01,1.19)*	1.11(1.04,1.22)*	291(24.6)	162(55.7)	129(44.3)	1.00(0.89,1.12)	1.06(0.92,1.22)
No	886(72.8)	584(65.9)	302(34.1)	1.00	1.00	892(75.4)	497(55.7)	395(44.3)	1.00	1.00
Community and societal level factors										
Ever heard about gender equality										
Yes	767(63.2)	501(65.3)	266(34.7)	1.00	1.00	920(78.3)	493(53.6)	427(46.4)	1.00	1.00
No	447(36.8)	320(71.6)	127(28.4)	**1.10(1.02,1.19)***	1.04(0.91,1.19)	255(21.7)	160(62.7)	95(37.3)	**1.17(1.05,1.31)***	1.13(0.80,1.61)
Ever heard about VAW										
Yes	629(52.2)	408(64.9)	221(35.1)	1.00	1.00	886(76.0)	472(53.3)	414(46.7)	1.00	1.00
No	576(47.8)	404(70.1)	172(29.9)	**1.08(1.02,1.17)***	1.08(0.95,1.23)	280(24.0)	178(63.6)	102(36.4)	**1.19(1.07,1.33)***	1.08(0.76,1.53)
Head of household										
Partner	711(58.5)	500(70.3)	211(29.7)	**1.11(1.02,1.21)***	**0.85(0.74,0.99)***	496(41.8)	278(55.6)	220(44.4)	0.99(0.90,1.10)	0.84(0.72,0.98)*
Wife	20(1.6)	11(55.0)	9(45.0)	0.86(0.58,1.29)	**0.61(0.42,0.88)***	10(0.8)	4(40.0)	6(60.0)	0.71(0.33,1.53)	0.38(0.08,1.93)
Joint	485(39.9)	311(64.1)	174(35.9)	1.00	1.00	680(57.3)	381(56.0)	299(44.0)	1.00	1.00
Decision maker on household issue										
Partner	674(55.5)	470(69.7)	204(30.3)	**1.15(1.05,1.25)***	1.14(0.98,1.34)	660(55.6)	370(56.1)	290(43.9)	**1.14(1.03,1.26)***	1.21(1.04,1.41)*
Wife	71(5.8)	63(88.7)	8(11.3)	1.46(1.3,1.62)	1**.80(1.51,2.15)***	69(5.8)	46(66.7)	23(33.3)	0.56(0.35,0.91)	0.66(0.39,1.13)
Joint	470(38.7)	288(61.3)	182(38.7)	1.00	1.00	459(38.6)	247(53.8)	212(46.2)	1.00	1.00

*Note: ***** is p<0.05 or significantly associated; variables (number of alive children, know partner earnings, and age of the women) were excluded from the adjusted model due to scoring p >0.25 in the unadjusted model; CPR: Crude Prevalence ratio; APR: Adjusted prevalence ratio*

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4.7 Net effect of piloting intervention implementation

The DID analysis of the piloted intervention implementation program to prevent domestic VAW was computed to answer Objective 4 that aimed to determine the effect of community-based intervention on domestic VAW and other secondary outcome variables. The DID was computed to determine the net effect of the intervention, which is presented from sub-section 4.7.1 to 4.7.4.

4.7.1 Net effect of piloting intervention implementation

Thus women who had ever heard about gender equality increased by 20% in the intervention than women in the control group (DID: 0.20; 95% CI: 0.11, 0.29). As well, women who had ever heard about gender equality increased by 13% in the active comparator group than women in the control group (DID, 0.13; 95% CI: 0.04, 0.21). Furthermore, women who had ever heard about domestic VAW increased by 26% in the intervention group (DID, 0.26; 95% CI: 0.17, 0.35) as compared with the control group (Table 14).

Table 14: Effect of intervention on gender equality and domestic violence in Ethiopia, 2018

Outcome measures	Pretest	Posttest	Difference	DID (95% CI)	P value
	n (%)	n (%)	n (%)		
Heard about gender equality	767(63.2)	921(78.2)	154(15)	Increased	
Intervention	263(65.1)	344(89.4)	81(24.3)	**0.20(0.11, 0.29)[Ic]**	**0.001**
Comparator	292(71.6)	352(88.2)	60(16.6)	0.07(-0.01, 0.15)[Ica]	0.075
Control	212(52.7)	225(57.3)	13(4.6)	**0.13(0.04, 0.21)[cc]**	**0.001**
Heard about domestic VAW	629(52.2)	887(75.9)	252(23.4)	Increased	
Intervention	232(57.7)	346(90.1)	114(32.4)	**0.26(0.17, 0.35)[Ic]**	**0.001**
Comparator	197(49.1)	324(81.8)	145(32.4)	-0.01(-0.09, 0.08)[Ica]	0.878
Control	200(49.8)	217(55.9)	17(6.1)	**0.27(0.17, 0.36)[cc]**	**0.001**

Note; DID: difference in differences; [Ic] DID between Intervention and Control; [Ica] DID between Intervention and Comparator; [cc] DID between comparator and Control; CI: confidence interval

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4.7.2 Net effect of interventions on preventing domestic violence against women

The DID analysis of the piloting intervention implementation program to prevent domestic VAW. The women's experience of domestic violence reduced in the intervention and active comparator as compared with the control groups, but was not statistically significant. Likewise, physical domestic VAW reduced by 8% among women who were in the active comparator than the control groups (DID, -0.08; 95% CI: -0.17, -0.001). In addition, women's experience of sexual domestic violence reduced by about 10% among women in the active comparator group than the control group (DID, -0.10; 95% CI: -0.19, -0.02). Likewise, the community-based intervention implementation resulted in 9% sexual domestic VAW reduction among women in the active comparator than women in the intervention group (DID, 0.09; 95% CI: -0.01, 0.17), but was not statistically significant (Table 15).

Table 15: Effect of piloting interventions on domestic violence in Ethiopia, 2018

Outcome	Pretest	Posttest	Difference	DID (95%CI)	P value
	n (%)	n (%)	n (%)		
Overall domestic VAW	588(48.5)	477(40.1)	-111(-8.4)		
Intervention	200(49.5)	181(45.8)	-19 (-3.7)	0.05(-0.04,0.15)[Ic]	0.292
Comparator	231(56.6)	178(44.5)	-53 (-12.1)	0.08(-0.01,0.18)[Ica]	0.090
Control	157(38.8)	118(29.9)	-39 (-8.9)	-0.03(-0.13,0.06)[cc]	0.496
Overall physical VAW	321(26.4)	260(21.8)	-61 (-4.6)		
Intervention	88(21.8)	71(18.0)	-17 (-3.8)	-0.03(-0.11,0.05)[Ic]	0.401
Comparator	153(37.5)	113(28.3)	-40 (-9.2)	0.05(-0.03,0.14)[Ica]	0.231
Control	80(19.8)	76(19.2)	-4 (-0.6)	**-0.08(-0.17,-0.001)**[cc]	**0.049**
Overall psychological VAW	534(43.9)	439(36.9)	-95 (-7.0)		
Intervention	181(44.8)	162(41.0)	-19 (-3.8)	0.03(-0.07,0.12)[Ic]	0.587
Comparator	213(52.2)	166(41.5)	-47 (-10.7)	0.07(-0.03,0.17)[Ica]	0.148
Control	140(34.6)	111(28.1)	-29 (-6.5)	-0.05(-0.14, 0.05)[cc]	0.342
Overall sexual VAW	339(27.9)	260(21.8)	-79 (-6.1)		
Intervention	84(20.8)	68(17.2)	-16 (-3.6)	-0.02(-0.09,0.06)[Ic]	0.639
Comparator	177(43.4)	123(30.8)	-54 (-12.6)	0.09(-0.01,0.17)[Ica]	0.050
Control	78(19.3)	69(17.5)	-9 (-1.8)	**-0.10(-0.19, -0.02)**[cc]	**0.017**

Note; DID: difference in differences; [Ic] DID between Intervention and Control; [Ica] DID between Intervention and Comparator; [cc] DID between Comparator and Control; CI: Confidence interval

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4.7.3 Net effect of intervention implementation on women's receptive attitude

The DID was computed to evaluate the net effect of the piloted intervention implementation on the prevention of women's receptive attitudes towards justified wife-beating and or inequitable gender-norms. Women's receptive attitude towards justified wife-beating declined by 10% among women in the intervention group compared to the women in the control group (DID, -0.10; 95% CI: -0.19, -0.01). The women's receptive attitude towards justified wife-beating decreased by 17%, which is significantly improved among women in the active comparator group compared to the control group (DID,-0.17; 95% CI: -0.26, -0.08). There was about 7% more reduction on their receptive attitude of justified wife-beating in the intervention group than the active comparator group, but it was not statistically significant. Similarly, the DID analysis reveals that women's receptive attitude towards inequitable gender-norms reduced by 17% in the intervention than the control group (DID, -0.17, 95% CI: -0.26, -0.08). It was reduced by 9% in the intervention than the active comparator group (DID, -0.09, 95% CI: -0.18, -0.01). The DID between the active comparator and control group was not significantly associated (Table 16).

Table 16: Effect of piloting interventions on women's receptive attitudes in Ethiopia, 2018

Outcome	Pretest n (%)	Posttest n (%)	Difference n (%)	DID (95% CI)	P value
Women's receptive attitude towards justified wife-beating					
Overall	851(69.9)	702(59.0)	-149(-10.9)		
Intervention	238(58.9)	187(47.3)	-51 (-11.6)	**-0.10(-0.19, -0.01)^{Ic}**	**0.034**
Comparator	304(74.5)	220(55.1)	-84 (-19.4)	0.07(-0.02, 0.17)^{Ica}	0.129
Control	309(76.3)	295(74.7)	-14 (-1.6)	**-0.17(-0.26, -0.08)^{cc}**	**0.001**
Women's receptive attitude towards inequitable gender-norms					
Overall	823(67.6)	664(55.8)	-159(-11.8)		
Intervention	348(86.1)	258(65.2)	-90 (-20.9)	**-0.17(-0.26, -0.08)^{Ic}**	**0.001**
Comparator	259(63.5)	207(52.0)	-52 (-11.5)	**-0.09(-0.18, -0.01)^{Ica}**	**0.040**
Control	216(53.3)	199(50.4)	-17 (-2.9)	-0.08(-0.18, 0.02)^{cc}	0.105

Note; DID: difference in differences; ^{Ic} DID between Intervention and Control; ^{Ica} DID between Intervention and Comparator; ^{cc} DID between Comparator and Control

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4.7.4 The effect of intervention to promote women's disclosure

The DID was computed to evaluate the net effect of the piloted intervention on the promotion of women's disclosure of their experience of domestic VAW. The overall DID of women's disclosure was about 24% higher in the intervention group than the control group (DID, 0.24, 95% CI: 0.10, 0.38). Almost similar findings were reported in the active comparator group. The women's disclosure of their experience with VAW was 22% higher in the intervention group than the control group (DID, 0.22, 95% CI: 0.09, 0.35). There was around 2% higher change in the active comparator than control group, but it was not statistically significant (Table 17).

Table 17: Effect of piloting interventions on women's disclosure in Ethiopia, 2018

Outcome	Pretest n (%)	Posttest n (%)	Difference n (%)	DID (95% CI)	P value
Women's disclosure of domestic VAW					
Overall	176(29.6)	264(55.7)	88 (26.1)	Improved	
Intervention	66(32.3)	130(72.2)	64 (39.9)	**0.24(0.10, 0.38)[Ic]**	**0.001**
Comparator	86(37.6)	96(54.5)	10 (16.9)	**0.22(0.09, 0.35)[Ica]**	**0.001**
Control	24(15.8)	38(32.2)	14 (16.4)	0.02(-0.13, 0.16)[cc]	0.833

Note; DID: difference in differences; *[Ic] DID between Intervention and Control; [Ica] DID between Intervention and Comparator; [cc] DID between Comparator and Control*

4.7.5 Summary of the difference in differences analysis findings

This section presents the summary report of the DID analysis which was aimed in determining the effectiveness of the designed community-based intervention to address study Objective 4. The community-based intervention was significantly associated with women's awareness on their right of equality. So women who had ever heard about gender equality increased by about 20% in the intervention community than women in the control group. Women who had ever heard about domestic VAW increased by 26% in the intervention and active comparator than the control group (Table 18).

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Women's experience of physical domestic VAW declined by 8% in the active comparator group than the control group. Sexual violence declined by about 10% among women in the active comparator group than the control group. Women's receptive attitude towards justified wife-beating declined by about 10% in the intervention group compared to the control group. The women's receptive attitude towards justified wife-beating decreased significantly by 17% in the active comparator compared to the control group. Also, women's disclosure was about 24% greater in the intervention group than the controls. Women's disclosure of their experience with domestic VAW was 22% higher in the intervention group compared to the control groups (Table 18).

Table 18: Summary of the effect of community-based intervention in Ethiopia, 2018

Outcome measures	Pretest	Posttest	Difference	DID (95% CI)	P value
	n (%)	n (%)	n (%)		
Heard about gender equality	767(63.2)	921(78.2)	154(15)		
Intervention	263(65.1)	344(89.4)	81(24.3)	**0.20(0.11, 0.29)^{Ic}**	0.001
Comparator	292(71.6)	352(88.2)	60(16.6)	0.07(-0.01, 0.15)^{Ica}	0.075
Control	212(52.7)	225(57.3)	13(4.6)	**0.13(0.04, 0.21)^{cc}**	0.001
Heard about domestic VAW	629(52.2)	887(75.9)	252(23.4)		
Intervention	232(57.7)	346(90.1)	114(32.4)	**0.26(0.17, 0.35)^{Ic}**	0.001
Comparator	197(49.1)	324(81.8)	145(32.4)	-0.01(-0.09, 0.08)^{Ica}	0.878
Control	200(49.8)	217(55.9)	17(6.1)	**0.27(0.17, 0.36)^{cc}**	0.001
Physical domestic VAW	321(26.4)	260(21.8)	-61 (-4.6)		
Intervention	88(21.8)	71(18.0)	-17 (-3.8)	-0.03(-0.11,0.05)^{Ic}	0.401
Comparator	153(37.5)	113(28.3)	-40 (-9.2)	0.05(-0.03,0.14)^{Ica}	0.231
Control	80(19.8)	76(19.2)	-4 (-0.6)	**-0.08(-0.17,-0.001)^{cc}**	**0.049**
Sexual domestic VAW	339(27.9)	260(21.8)	-79 (-6.1)		
Intervention	84(20.8)	68(17.2)	--16 (-3.6)	-0.02(-0.09,0.06)^{Ic}	0.639
Comparator	177(43.4)	123(30.8)	-54 (-12.6)	0.09(-0.01,0.17)^{Ica}	0.050
Control	78(19.3)	69(17.5)	-9 (-1.8)	**-0.10(-0.19, -0.02)^{cc}**	**0.017**
Justified wife-beating	851(69.9)	702(59.0)	-149(-10.9)		
Intervention	238(58.9)	187(47.3)	-51 (-11.6)	**-0.10(-0.19, -0.01)^{Ic}**	0.034
Comparator	304(74.5)	220(55.1)	-84 (-19.4)	0.07(-0.02, 0.17) ^{Ica}	0.129
Control	309(76.3)	295(74.7)	-14 (-1.6)	**-0.17(-0.26, -0.08)^{cc}**	0.001
Inequitable gender-norms	823(67.6)	664(55.8)	-159(-11.8)		
Intervention	348(86.1)	258(65.2)	-90 (-20.9)	**-0.17(-0.26, -0.08)^{Ic}**	0.001
Comparator	259(63.5)	207(52.0)	-52 (-11.5)	**-0.09(-0.18, -0.01**)^{Ica}	0.040
Control	216(53.3)	199(50.4)	-17 (-2.9)	-0.08(-0.18, 0.02) ^{cc}	0.105
Women's disclosure of VAW	176(29.6)	264(55.7)	88 (26.1)	Improved	
Intervention	66(32.3)	130(72.2)	64 (39.9)	**0.24(0.10, 0.38)^{Ic}**	0.001
Comparator	86(37.6)	96(54.5)	10 (16.9)	**0.22(0.09, 0.35)^{Ica}**	0.001
Control	24(15.8)	38(32.2)	14 (16.4)	0.02(-0.13, 0.16)^{cc}	0.833

Note; DID: difference in differences; ^{Ic} DID between Intervention and Control; ^{Ica} DID between Intervention and Comparator; ^{cc} DID between Comparator and Control

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4.8 Review findings from policy documents

Some policy documents were reviewed. These were documents from international ratified convention, government policies related to domestic VAW, and governmental structure and willingness. This review was conducted for insight into the existing policy documents and their contents regarding gender-equality and domestic VAW. This is intended to implement the intervention and scale-up domestic violence prevention programs within the existing policy framework in the country.

4.8.1 International ratified conventions

The government of Ethiopia is signatory to various international conventions and regional conventions, charters and protocols. Some of the major conventions related to this work are: the Universal Declaration of Human Rights (1948) (UN, 1948), Conventions on the Elimination of all forms of Discrimination Against Women, Article 1 (UN, 1981), the African Charter on Human and Peoples Rights, Article 3(1-2) (OAU, 1986), Beijing Platform for Action (PFA) (1995), committed to safe guarding women's rights (UN, 1995), and Maputo Plan of Action (2016-2030), which gives due attention to the implementation of international, regional and national legislations in order to create a conducive situation for getting reproductive health care to prevent domestic VAW (AU, 2016).

4.8.2 Government policy documents related to violence against women

To fulfil the ratified international conventions' requirements, the government of Ethiopia incorporated women's issue in different policy documents. The National Population Policy (1993) has determined the minimum legal age for marriage for both sex is 18 years, which aimed at improving women's lives (FDRE, 1993). Again, the Constitution (1994) has clearly

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addressed human rights related protection from its Article 14-18 (the right to life, security and prohibition against inhuman treatments). Article 25 in the Constitution states: “that all person are equal before the law”, Article 35 (1-9) states: “women have equal rights with men”, and Article 34 (1-5) talks about marital, personal and family rights (FDRE, 1994).

Moreover, Article 4 of the Criminal Code of Ethiopia under Proclamation No. 414/2004, emphasizes equality before the law. Article 561 criminalize any injuries and sufferings caused to women (FDRE, 2005). Furthermore, the issue of marriage (conditions of marriage, equal rights of access to resource and control over resource) is addressed specifically in the revised family laws of Ethiopia (FDRE, 2000). To enforce the existing policies, the government of Ethiopia launched a gender mainstreaming program, framed with a health sector gender mainstreaming manual, to serve as an implementation guide (FMOH, 2013). In addition, the Ministry of Health has developed the standard operating procedures to respond to and prevent sexual violence. Though all these laws are in place, the public awareness is very low due to poor implementation (FMOH, 2016b). Module for trainers and participants was available for awareness creations (FMOH, 2016a).

4.8.3 Governmental structure and progressive willingness

The Ethiopian government has placed due attention and commitment on the affairs of women. For this reason, a Women and Child Affairs has been established as a Ministry with accompanying sectors to the District levels. It is mandated to address issue of women and children. This government commitment contributes to women rights protection, follow-up and to take necessary measures to promote gender equality and prevent VAW.

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4.9 Existing policies implementation status

The assessment of the implementation status was conducted to address Objective 3. It was aimed at identifying implementation bottlenecks to prevent domestic VAW. These include barriers and enabling factors for future implementation.

The barriers include financial constraints, lack of commitment from local politicians, lack of awareness on existing programs, poor planning, poor implementation collaborations, poor integration, community traditional gender-norms, and competing priorities. The enabling factors, such as existing women development 'army', HEP, social organization (Equib), Women and Child Affairs office, women leaders and school gender-clubs. Through the narratives of participants the details of this barriers and enablers follows.

4.9.1 Barriers of community-based intervention implementation

Implementation of existing policy documents and research evidence recommendations to prevent domestic VAW have been affected by various barriers. The study participants mentioned various types of barriers at different levels according to their context and the responsibility of the stakeholders who they represented. Some of the major hindrances to the implementation of domestic VAW prevention interventions follows:

4.9.1.1 Financial constraints

Financial constraints (budget allocation) was one of the most frequently cited implementation barrier. It was explained that the sectors have inadequate budget to provide training on gender equality and prevention of domestic VAW. However, the government has a policy specifying the allocation of 2% of every sectors' annual budget to be dispensed for

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gender related activities. The sectors, on the other hand, do not use the allotted budget for the specified activity. One of the female discussants in the FGDs said:

> "*…no special budget is allocated for gender equality or domestic violence prevention in our setting. During annual budget allocation in our administration, they address the issue of women and child affairs later after other sectors' budget allocation…*" [F, 38 years, FGD_{p1}]

4.9.1.2 Lack of commitment from local politicians

The issue of promoting gender equality and preventing domestic VAW are only documented in our setting. They have not been implemented in the regular programs. In addition, gender main streaming has not been actively implemented here because of the indifference of some stakeholders. Lack of commitment and attention from politicians, poor involvement of the implementers, and lack of full engagement within the community are some of the barriers that affect implementation of existing policy at the community level. One male participants from FGDs remarked:

> "*…We have been providing training in our community on gender equality and division of labor for a few years now. Mostly, that is woman's burden because household activities were too much and imbalanced. To ensure gender equality, politicians should teach and be role models for what the training sessions represented. They should start from their offices and homes. Sadly, they are not good role models. They are not also working but talking, and giving only paper value. Generally, implementation is so p*oor…" [M, 49 years, FGD_{p1}]

4.9.1.3 Poor planning

The implementation of existing policies to prevent domestic VAW and promote gender equality in our setting has been affected by the lack of appropriate and well-targeted planning. Therefore, frequently raised barriers related to poor planning were lack of planning for training of officers to prevent and reduce domestic VAW and gender equality.

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One female participants from FGDs remarked

> *"…they (top officials) did not consider gender equality and domestic violence against women during planning. So we do not have a plan to do this type of trainings to reduce domestic violence against women, and also we did not do anything based on plan ahead [F, 30 years, FGDp$_6$].*

4.9.1.4 Poor implementation collaboration

Evidence from the interviewees' perspective show that existing policy and evidence based intervention could not be implemented due to lack of collaborative efforts. Hence, poor implementation collaborations is as a result of lack of stakeholders working on the domestic VAW prevention. A male participant from the FGDs mentioned:

> *"…if we work in collaboration with health extension programs, implementation of violence against women prevention will be an easy task. It will not be an extra burden for us and it will bring about the needed change…"* [M, 55 years, FGD$_{adv1}$]

4.9.1.5 Poor integration with existing programs

Participants from the qualitative study mentioned that lack of service integration within and between sectors is a main barrier in the implementation of existing polices for preventing domestic VAW and enhance women's participation. One of the male key informants said:

> "*…there is a huge gap integrating efforts to prevent violence against women. Perhaps, one sector may take the responsibility of leading a particular initiative, but may not be well integrated with other sectors to address violence against women at the grass root level…"* [M, 53 years, KII$_{001}$]

One female participant from FGDs said domestic VAW prevention is not integrated with HEP. However, integration is possible to enable us implement domestic VAW prevention interventions very well.

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One of the female participant in the FGDs commented:

> *"…no one has been supporting us so far…We could not find any sector working on violence against women to collaborate with, or integrate our plan with…everybody speaks about the program integration…but there is very little practical implementation to prevent domestic violence against women. Everything is pushed on the health extension workers for fieldwork /community work without adequate support…"* [F, 33 years, FGDp6]

4.9.1.6 Community traditional gender-norms

Almost all participants agreed that the set attitude to traditional gender-norms in the community has played a negative role at implementing existing policies to promote gender equality and prevent domestic VAW. The community has a culture that supports traditional gender-norms, for instance, lack of positive attitude towards gender equality, and lack of male involvement. Hence implementers' view of wife-beating is seen as a normal experience. Again, the passive involvement of women from different sectors due to the lack of motivation and empowerment from local politicians and themselves affects implementation of existing policy to empower them. Stakeholders, such as politicians, local leaders, religious leaders, elders, and other responsible bodies, lack information about the negative effect of domestic VAW and gender inequality norms. This lack has been a main barrier to implement necessary preventive interventions by integration with existing services, and intersectoral collaborative effort.

One of a male focused group discussant remarked:

> "…*to ensure gender equality, politicians should teach and been a role model. They should start from their office and house. But they have not been a good example for others. They have not also been working as talking, only paper value. Generally, implementation is so p*oor…" [M, 55 years, FGDadv1].

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4.9.1.7 Competing priority

Most of the participants from qualitative study agreed that stakeholders have increased workload and competing priorities for programs. In addition, they have several committees and have many tasks that make the sectors busy. This makes it difficult to implement domestic violence prevention programs.

One of the female discussant said:

> *"…Over busy, lack independent responsible body to coordinate this because Women Child Affairs Office is almost not functioning well, only implementing politics, very superficially. No-one is asking the women their life experience at their home…"* [F, 31 years, FGD_{P3}].

In addition, one of the key informant indicated:

> "*…Women's and Child affairs office has no structure at the bottom (Kebele level) to engage very well…"* [F, 35 years, KII002].

4.10 Enablers/facilitators of community-based interventions

Implementers have not taken advantage of the enabling conditions to implement existing policies to prevent domestic VAW and promote gender equality norms in real life settings. The existing enabling environment can be facilitated through integration, collaboration and engaging communities in the implementation program. Some of the enabling or facilitating conditions are:

4.10.1 Existing women development 'army' structure

The government has designed a policy and small functional units, called one to five (1:5) development 'army' groups, for both females and males. Each development 'army' group could be made up of 30 to 40 members or households. Almost all the qualitative study

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participants suggested that these two existing groups (women development 'army' and men development 'army' groups) can be good opportunities for the implementation of interventions with an optimal cost and a culturally compatible approach. However, participants agreed that the women development 'army' group being the most active of the two groups, is an important entry point for community-based action, easy access to the women, encourage active participation and enable close follow-ups that to be led by the HEWs.

One of the key informants commented:

> *"…women gather in one house every month to have various discussions on their issues, some of which include savings (**Equib**) and small income generating activities. This committee fights for women's rights and also plays a crucial role in the prevention of domestic violence. The women development 'army' groups are working in collaboration with the health sector, mainly health extension program…"* [F, 35 years, KII_{002}]

4.10.2 Health extension program

The HEP under the health sector is run by all female HEWs. These women are taken through intensive training on seventeen community health packages of services, to be able to organizes culturally appropriate sessions for women at the household level to improve women's and children's health in the community. This has enhanced the health sector's implementation of their program to impact on maternal and child health. This is an existing program that the domestic violence prevention interventions can be integrated with in the future.

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Couple of key informants mentioned:

> "*…although we have not been working that much with good collaboration, the health sector has a community based health education program, which has been delivered by health extension workers. If sectors could integrate it would not be difficult to tackle domestic violence. The health extension program, itself is a good enabler if we use it for the future. The health sector is an important implementers better than other sectors. The health extension workers are the leader of the women development 'army'…"* [F, 35 years, KII002 & F, 26 years, KII 009].

4.10.3 Social organization

Equib is an informal local savings and loans scheme, which is led by a community owned committee. It also functions as a social gathering that holds discussion sessions on social issues. This scheme supports members of the community as well as an avenue for effective conflict resolution within the community. It is bound by the community traditional governance culture. This can be used as an enabling situation to implement domestic VAW prevention interventions.

4.10.4 The existing government structure with a good intent and motive

The Women and Child Affairs Office is the governments from Ministry as top level to the District (lower level) in the country. The Ministry has the mandate to safe guard women and children. Working in collaboration with the Women and Child Affairs Office can be strategic to sustain the intervention program.

4.10.5 Work in collaboration with school clubs

The school gender-clubs work in collaboration with school teachers and directors to prevent child marriages. They identify potential child marriage victim, whose family might have made such arrangements and report to the justice office for them to take necessary action.

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For instance two key informants mentioned:

> ***"…****schools have committees to prevent harmful traditional practices and early marriages…have been doing a good job…playing a pivotal role in preventing early marriages. This method can be adopted…it will have a great role to play in preventing domestic violence against women in the community*…" [F, 35 years, KII002; M, 53 years, KII001]

4.11 Summary of piloting implementation barriers and enablers

The intervention piloted, targeted at barriers and enablers of the implementation under five domains, include individual behavior, inner setting, intervention, outer setting, and process setting, which have been guided by CFIR (WHO-TDR Group, 2014) (Figure 30).

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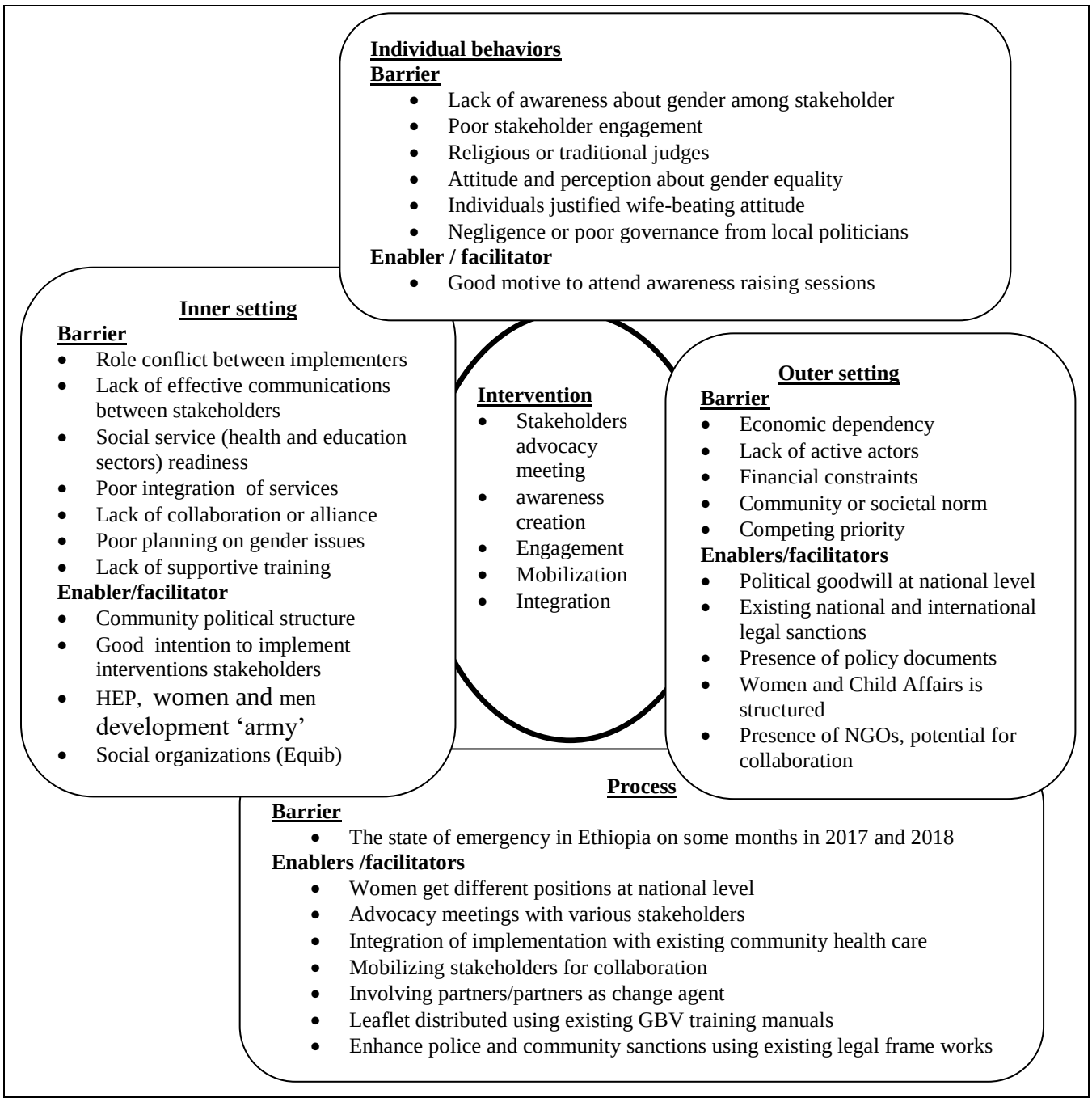


Figure 30: Barrier and enablers fitted in CFIR in Ethiopia, 2018

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CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter is a discussion of the key findings. It, among others, compare the study findings with existing literature and attempts to offer explanations to find and highlight implications of key findings for programing. The following sub-topics are narrated according to the study objective and summary of key findings of the study; discussion of intervention exposure status and controlling mechanism effectiveness; domestic violence against women; women's receptive attitude of justified wife-beating; women's receptive attitude of inequitable gender-norm; women's disclosure status; barriers and enablers for implementation of intervention; controlling strategies of factors that jeopardize validity of quasi-experimental studies; generalizability and transferability of the study findings; strengths and limitations of the study; lessons learned from fieldwork about feasibility; what is new from this implementation research; and implication of the study finding.

5.1 Summary of main findings

5.1.1 Levels of domestic violence against women

This study determined the effect of the piloted community-based intervention on the transformation of the community's traditional gender-norms to promote gender equality and prevent domestic VAW. Almost eight-in-ten women (79%) received the awareness raising materials or sessions at least once. The overall prevalence of domestic VAW declined by 17%, from 48% at pretest to 40% at the posttest evaluation survey. Furthermore, women's receptive attitude towards justified wife-beating declined by 15% (from 69.9% to 59.0%).

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Women's receptive attitude towards relationship inequitable gender-norms declined by about 17% (from 67.6 to 55.9%). Women's claim to action has also substantially improved from 29.7 to 55.7%.

5.1.2 Associated factors

Women who had no receptive attitudes towards justified wife-beating had a 42% less experience of domestic VAW compared to women who had receptive attitude towards justified wife-beating at the pretest survey. Likewise, those women who had no receptive attitude towards inequitable gender-norms had a 37% less experience of domestic VAW as compared with women who had receptive attitude. Women, who had not ever heard about gender equality (18%), household heading by partner (23%), partners on stressful job (24%), and being pregnant (13%), had higher receptive attitude towards justified wife-beating compared to their counterparts. Women who had decision making autonomy on household matters had 80% higher receptive attitude towards inequitable gender-norms than women who had joint decision makings. Women whose partners had the habit of drinking alcohol very often, had 25% increase in receptive attitude of inequitable gender-norms than partners who drank alcohol occasionally. Women who were from a household headed by women had a 35% less receptive attitude for gender inequity-norms.

5.1.3 Effect of community based intervention

The effect of community-based intervention was assessed using the difference in differences analysis. This community-based intervention significantly improved women's awareness on their right to equality. Physical domestic VAW reduced by 3% in the intervention group and

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by 8% in the active comparator group compared to women in the control group. Sexual domestic VAW significantly reduced by 10% among women in the active comparator group than the control group. Women's receptive attitude towards justified wife-beating reduced by 10% in the intervention group and 17% in the active comparator group than women in the control group. On the other hand, women's disclosure significantly improved by 24% in the intervention group than women in the control groups.

5.1.4 Barriers and enablers to implementation

Presence of policy documents that are expected to address women's rights and gender issues, implementation status of existing policies, barriers of implementation and enablers for future implementation plans were explored. Gender-equality and rights of the women have been well addressed and incorporated into various policy documents such as the constitution, criminal codes, family law, women and children affairs from the Ministry to District levels and other various guidelines. These were encouraging conditions for further implementation of the existing policies into routine/standard services. Yet there are some bottlenecks that hinder implementation, such as budget constraints, lack of commitment, integrated or collaborative works, community traditional gender-norms, poor planning and non-adherence to planned activities. However, these exist several enabling conditions, namely, the community HEP, women development 'army's, government political willingness, existing policy frameworks, school clubs and others can be used for future sustainable implementation of the domestic VAW prevention programs.

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5.2 Intervention exposure

A community-based pilot intervention implementation was rolled out for 12 months to raise community awareness to promote gender equality for the prevention of domestic VAW. The intervention was delivered using the community HEWs through its integration with their routine HEP. In this study, almost eight-in-ten (79%) women received the awareness raising materials or attended the awareness sessions at least once during the intervention period. Generally, participants' exposure to the intervention material was similar to a study conducted in Uganda which revealed that 68% of women reported any exposure to materials, activities or multi-media events (Abramsky et al., 2014). Relatively few (<5%) study participants in the control group reported an exposure to the community-based awareness-raising intervention. This indicates that the efforts made to control information contamination in the control group were generally successful, with the exception of the women development 'army' community mobilization sessions that was considered as a standard service. This is consistent with a study conducted in Uganda, that reported 3% of the participants' in the control communities reported having an exposure to intervention materials, activities or multimedia events (Abramsky et al., 2014).

5.3 Domestic violence against women

The level of domestic VAW though unacceptably high, was reduced from 48% to 40% by the implementing the community-based awareness creation pilot intervention. This prevalence is consistent with finding from a meta-analysis comprising thirty six studies conducted in Ethiopia, which has reported that 47% of women were victims of domestic VAW (Kassa & Abajobir, 2018). The overall prevalence of domestic VAW declined by about 8%. This is quite consistent with the fining of a study conducted in Cote d'lvoire

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which found that women in gender dialogue groups witnessed an 8% reduction in reporting physical and or sexual domestic VAW in the past year. Nevertheless, it was not statistically significant (Gupta et al., 2013). Likewise, this finding is in line with a study conducted in Ghana that showed that intimate partner violence reduced through community-based awareness creation (Alangea et al., 2020).

The finding is supported by another study conducted in rural Tanzania, which reported that the net effect of the intervention between the two areas was statistically significant (Abeid et al., 2015). Another study in Tanzania has reported that domestic VAW reduces from end to end promotion of gender-equity behaviors in the society. Actions aimed at attitudinal changes on the community could make a progressive transformation of the inequity norms and beating attitudes (Krishnan et al., 2012). Likewise, in a community mobilization study conducted in Uganda, it was reported that all types of domestic VAW reduce in community level mobilization interventions that aimed at changing attitudes, social-norms, and behaviors related to domestic VAW. The fact that community mobilization is a holistic approach in the prevention of domestic violence (Abramsky et al., 2014; Abramsky et al., 2016; Wagman et al., 2015).

In addition, this interventional study is consistent with positive improvement outcomes of a research conducted in South Africa (Pronyk et al., 2006), and Rwanda (Doyle et al., 2018). It showed that adapting gender-transformation activities, which combined social training and economic development interventions that involved men and couples, can lead to an increase in gender equity norms and subsequently reduce women's experience of domestic VAW. What is more, a study conducted in other parts of Ethiopia reported that community-based

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community engagement, and group education about gender equality norms as well as awareness creation among the youth population decreased report of domestic VAW from 53.0 to 38.0% between the pretest-posttest surveys (Pulerwitz et al., 2015). Since this huge decline among the young generation was witnessed in the qualitative study, young men are now accepting gender equality norms. Young men were also relatively adaptive to the changes and traditional gender-norms transformation. This study findings could serve as guiding information for policy scale up to implement intervention programs in routine service in real life settings.

Generally, the present comprehensive intervention package in the piloted implementation research is consistent with research evidence recommendations. A multi-sectored is recommended for use to integrate the comprehensive sexual reproductive health services to end domestic VAW (García-Moreno & Temmerman, 2015). This also supported the systematic review and qualitative study findings with regard to mobilizing local resource for implementation alliance, collaboration and service integration with various stakeholders were limited in the study area. Research could be insightful for future strategic plan for stakeholders to create a collaborative platform and service integration to prevent domestic VAW other similar settings.

5.4 Women's receptive attitude towards justified wife-beating

Women's receptive attitude towards justified wife-beating at posttest survey was 59%, a declined from the pretest at 69%. This showed a change in attitude of the women. This finding is quite consistent with a systematic review finding in Ethiopia which has shown that the pooled level of women's attitude towards justified wife-beating was 57% (Guracho &

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Bifftu, 2018). On the other hand, this study's posttest survey level of 59% was higher than a what was reported (47%) in Pakistan study (DHS 2012-13) (Aslam et al., 2015), where the women argued justified wife-beating was accepted. Likewise, the change in attitude is consistent with a study finding from rural Tanzania, which reported there was a significant reduction in most of the attitudinal indicators favoring male dominance, justification of men beating their partners, receptive attitudes toward domestic VAW norms through community-based gender-equity norms intervention (Abeid et al., 2015; Krishnan et al., 2012). Therefore, preventing women receptive attitude towards justified wife-beating through awareness creation intervention has a dual effect. Transforming women's attitude and integrating with existing service are the main effect when awareness is created for this intervention to prevent domestic VAW.

Likewise, a study conducted in Cote d'lvoire indicated that the acceptance of justified wife-beating was significantly reduced among women in the intervention group (Gupta et al., 2013). This finding is again supported by the Tanzanian study, which reported that wife-beating has progressively declined. Nevertheless, women considering beating as a sign of love, male dominance, lack of openness on sexual matters, inequitable gender-norms on decision making and other household and socially related issues were mentioned as what made the problem continue to persist (Laisser et al., 2011).

Again, the decline of women's receptive attitude towards justified wife-beating is quite consistent with the progressive decline that has been reported by the three consecutive Ethiopia DHS for the last fifteen years (CSA, 2001, 2012, 2017). Therefore, further implementation of the community-based interventions on gender-norms transformation

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could synergize the observed decline on justified wife-beating. Program implementation planning should focus on moderate alcohol use by partners, male dominancy, jealousy and open communication regarding sexual matters could be effective in the prevention wife-beating. In addition, future interventions could target the resource ownership (mainly land ownership), managing third party (family) interferences and various households' matters.

5.5 Women's receptive attitude towards inequitable gender-norms

Women's receptive attitude towards inequitable gender-norms at posttest survey was 56%, a declined from the pretest at 68%, which indicating attitudinal change to inequitable gender-norms. This similar to the results reported from another study conducted in Ethiopia. The report indicated that community-based gender equality awareness creation increased support for gender-equitable norms (Pulerwitz et al., 2015). Although the Pulerwitz et al., study was conducted in urban setting (Addis Ababa) with a bit of a difference in the age group of the population. It reported that community-based mobilization could improve gender equity norms.

Likewise, this study finding is consistent with another research evidence reported from South Africa. The authors indicated that comprehensive gender-norms transformation intervention improved women's sexual decision making and gender equitable norms, and great contribution in reducing of negative attitudes toward women (Kalichman et al., 2011). Furthermore, this study finding on gender equitable norm is in line with the WHO strategic documents for HIV prevention (2016 - 2021). Promoting open discussion and equitable norms are crucial public health programs to prevent both domestic VAW and HIV (WHO, 2016b).

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In addition, this study finding is consistent with a study conducted in Pakistan (2012-13) (Aslam et al., 2015) reported that inequitable gender-norms are vertically transmitted from parents to children, which causes domestic VAW. Therefore, finding from the community-based intervention to promote gender-equity norms could be insightful for policy makers and any other concerned stakeholders to prevent domestic VAW. To break the chain of intergenerational transmission, engaging men in domestic VAW prevention approach is a winning strategy, which gives a responsibility for men to change their behavior from being perpetrators to preventive change agents. This supported by an evidence reported from a study in South Africa. Partner engagement activities to promote gender equity norms, and to transform traditional gender-norms could promote gender equity norms in the prevention of domestic VAW (Jewkes et al., 2015).

What is more, it is almost aligned with a change in gender inequitable norms improvement reported in a study conducted in Tanzania (Krishnan et al., 2012), and in Rwanda (Doyle et al., 2018), which reported that promotion of gender equity through gender-transformative interventions by engaging men, boys and couples showed an effective change on the deeply entrenched gender inequality norms in the community. Furthermore, the comprehensive intervention engaging multiple stakeholders, gender relationships and the acceptability of violence, supporting greater communication and sharing of decision making among family members, as well as non-violent behavior in LMICs (Ellsberg et al., 2015). The improvement in gender equitable norms realized in the traditional gender-norms transformation interventions should be scaled up and implemented in low income countries setting.

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5.6 Women's disclosure status

In this study, women disclosure of their domestic violence experience improved substantially form 29% at pretest to 56% at posttest survey. This finding is similar to that of a study conducted in rural Tanzania which revealed that women's knowledge on sexual violence disclosure improved in both the intervention group, from 57.3% to 80.6%, and in the comparison group, from 55.5% to 71.9% (Abeid et al., 2015). In addition, women's disclosure of their experience to their family, neighbors or friends' who are of the women development armies, religious leader and local leaders was high. This implied that the community mobilization intervention was crucial to promote gender equality norms, enhance women's disclosure and prevent domestic VAW.

5.7 Factors associated with domestic violence and related issues

Most of the potential risk factors have not shown statistically significant association. Factors related to the community norms and individual attitudes were the most relevant risk factors to domestic violence against women. The associated factors were found to be in line with the adapted socio-ecological and integrated theoretical framework (Fulu & Miedema, 2015; Heise, 1998). These factors are, women having a decision making, headship of the household, argument over money for alcohol, inequitable gender norms and justified wife-beating. These had lower risk for domestic violence. This is also supported by a study conducted in Ethiopia, which showed that women's involvement in decision-making had a significant effect on women's lives and their family (Fantahun et al., 2007).

Furthermore, women who had receptive attitude towards justified wife-beating and inequitable gender-norms had higher risk for domestic VAW. This is consistent with the

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studies finding, which had conducted in several countries (Aslam et al., 2015; Uthman et al., 2009, 2011) have shown that peoples' attitude towards justified wife-beating had a higher risk for domestic VAW. Attitude and gender-norms are intergenerationally transferred or vertically transmitted causes of domestic VAW from parents to children (Aslam et al., 2015). Likewise, studies have documented that inequitable gender-norms has a significant association with domestic VAW (Conroy, 2014; Rahman et al., 2013; Shannon et al., 2012). Although most of the factors had no statistically significant association with domestic VAW. Most of them are important risk factors in a country like Ethiopia where domestic VAW, mainly justified wife-beating and inequitable gender-norms have been considered as part of tradition/culture. It is for this reason that public health programs and community-based interventions should focus on such factors to prevent domestic VAW.

5.8 Effect of community-intervention

This study found that women who had ever heard about domestic VAW increased from 52.1% to 75.9%. It increased from 57.7% to 90.1% in the intervention, and 49.8% to 55.9% in the control group. This is quite similar to a study conducted in Tanzania, which reported that women's knowledge on sexual violence increased significantly from 57.3% to 80.6% in the intervention area and from 55.5% to 71.9% in the comparison area (Abeid et al., 2015). In the piloted community-based intervention implementation, there was a marginal reduction on domestic VAW. It showed a statistically significant difference of the reduction on women's receptive attitude towards justified wife-beating and inequitable gender-norms. This is consistent with the other research finding and recommendation for use of gender-norms transformative intervention for community-based behavioral change communication (Lees et al., 2019).

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In addition, this is consistent with findings from a study conducted in Sri Lanka, which reported that women positive behavior change on acceptance traditional gender-norms improved in the health promotion intervention group compared to control group (Herath et al., 2018). Domestic violence, receptive attitude towards justified wife-beating and inequitable gender-norms can be prevented through effective implementation in the community when it is integrated with HEP and different development 'army' structures. This piloted intervention is consistent with evidence from multicountry study conducted in six counties LMICs (Ferrari et al., 2019), to prevent domestic violence using six recommended interventions (mainly using village /community and adult small group sessions).

This showed that there is a significant difference between the two intervention groups and control group. Types of domestic violence mainly physical and sexual violence, justified wife-beating and inequitable gender-norms reduced significantly in the two intervention groups compared to the control group. However, there were differences between the two intervention groups (intervention and active comparator). Overall changes/reduction in the level of physical violence, sexual violence, women's receptive attitude towards justified wife-beating were higher in the active comparator group than the intervention group, though not statistically significant. These differences might be due to the pre-existing higher prevalence recorded in the intervention group. Nevertheless, the dimension of the reduction showed in parallel trend, which fulfill the assumption of DID analysis. In addition, partner and other stakeholders engagement was highly encouraged to prevent domestic violence to transform traditional inequitable gender-norms in LMICs (Doyle et al., 2018), and in Australia (Puccetti et al., 2019).

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Working with men and boys has been recommended and documented by several research evidence (Jewkes et al., 2015; Ruane-mcateer et al., 2019). As evidenced from this study, women's attitude towards inequitable gender-norms reduced significantly by 9% in the intervention than the active comparator groups. This is consistent with a study conducted in Ghana, which showed that community based awareness creation intervention reduced men's controlling behavior (Alangea et al., 2020). Generally, In Ethiopia, domestic violence; justified wife-beating and inequitable traditional gender-norms are found to be universal phenomena, community-based intervention to transform women's attitude could have a significant effect on prevention of domestic violence, regardless of the statistical association observed. This finding would be a great contribution in informing policy makers, to promote implementation of existing policy to enhance community awareness.

5.9 Implementation status of existing policies intervention

Implementation of existing government policies or sanction, is crucial to response to effectively prevent domestic VAW. This study found that there is a gap in implementation of existing policies in relation to gender equality and prohibition of domestic VAW. The finding of the qualitative component is consistent with the WHO's recommendation to achieve the five years strategic plan response to HIV /AIDS through the promotion gender equality and equity norms. To respond to this, necessary, legal, regulatory and policy reforms must be made and implemented, to strengthen service integration and linkages, to improve the impact and efficiency of community-based interventions (WHO, 2016b).

Given the existence of policy documents, the implementation of these policies into real life setting has been as poor as evidenced from the qualitative findings. Stakeholders were not

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implementing policies and program to the expected extent due to several bottlenecks. This study explored that lack of commitment from local politicians, financial constraints, poor integration of service and weak intersectoral collaboration were barriers to the implementation of existing policies. In addition, poor planning of awareness creation on domestic VAW, and non-adherence to the plan were also some of the hindering factors. The existed community's old fashioned gender-norms reflected among politicians, poor implementation alliance and stakeholders engagement, competing priorities, lack of supportive supervision were also exacerbated the poor implementation. These barriers were similar to the findings from a systematic review (Semahegn et al., 2019).

In addition, this qualitative study identified implementation barriers consistent with review evidence that revealed that the government needs to address the political, social, and economic structures, which subordinates women. Implementing national plans and making budget commitments to investing in actions by multiple sectors, community and group interventions with the involvement of both women and men, can shift discriminatory social norms. Likewise, education and empowerment of women are fundamental. Furthermore, training of health workers to identify and support survivors are strategies to prevent and respond to violence via integrated services (García-Moreno, et al., 2015).

In addition, the qualitative findings and policy documents review from this study have identified implementation barriers that have earlier been identified in the literature. A weak health system has been a challenge given that the health systems have a crucial role in the multisectoral response to domestic VAW. Substantial system and behavioral barriers exist, especially in Ethiopia. The research evidence has suggested that domestic VAW was

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identified as a health priority. Strengthening the role of the health system in addressing domestic VAW and girls, as suggested by Garcia (2015), needs a comprehensive health-system approach that helps health-care providers to identify and support women subjected to domestic VAW by capacity building, effective coordination between stakeholders.

It is evidenced that the communities' behavior and norms towards violence improved when reasonable, regular and contextual health service delivery strategies. To bring impactful changes to individuals and society at large, local resource, health service and public health schemes and communities should be mobilized. Inter-sectoral collaboration and integration are crucial to break the root-cause of domestic violence that is the global epidemic public health problem worldwide (Slutkin et al., 2018).

5.10 Enabling environment for future policy implementation

The presence of an appropriate community structure, community health care, social organizations (traditional savings and loan associations), government positive political will, school-based gender clubs and nongovernmental organizations working on the related issues, and welcoming reception of the community members are some of the great enabling opportunities that can facilitate the implementation of existing policy and programs in promoting gender equality and preventing domestic VAW.

Evidence from this study has shown that domestic VAW in LMICs can be reduced through interventions that target the key determinants of domestic VAW. Such as inequitable gender-norms relationships, receptive individual and collective attitudes towards gender-norms, and behaviors. The various sectors, e.g., health, criminal justice, security, faith,

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education, and civil society, should collaborate and use diverse strategies across the social ecology, i.e., the delicate equilibrium of interacting, social, institutional, cultural, and political contexts, to achieve meaningful changes within the social and political structures and for individuals and communities. This is consistent with a qualitative study conducted in Australia (Puccetti et al., 2019), which showed that engaging community leaders, and other service providers are the key areas of primary prevention of domestic VAW. That means, intersectoral collaborations and community leaders' involvement can transform gender norms, improve women's decision making and reduce risk of men's controlling behavior.

As noted by Michau (2015), it is important to develop program components that are comprehensive and mutually reinforcing (collaboration and coordination) instead of stand-alone interventions. In a multisectoral approach, as shown in this study outcomes, changes in attitudes and behaviors may not need a generation, but can be achieved within shorter timeframes if intervention models adhere to key principles for effective prevention of domestic VAW and girls. Women's movements have led advocacy and action against domestic VAW, and remain central in the design and implementation of high-quality programs to prevent domestic VAW. Based on evidence and promising practical models, greater investments are needed in programmatic innovations, research-activist collaborations, and health sector-leadership to build even greater momentum for primary prevention of domestic VAW and girls (Michau et al., 2015).

5.11 Validity and reliability of a quasi-experimental implementation research

The factors that might jeopardize the internal and external validity of the studies' findings were controlled using different strategies to ensure quality, generalizability, transferability

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and scalability of the findings from a quasi-experimental implementation research (Bracht & Glass, 1968; Campbell & Stanley, 1966; Drost, 2004; Godwin et al., 2003; Trochim, 2006; WHO-TDR Group, 2014). External validity refers to generalizability which is the approximate truth of propositions, inferences, or conclusions or the extent to which inferences are drawn from a study to the broader population beyond the study population. Whereas, the internal validity is the approximate truth about inferences regarding cause-effect or causal relationships. It is all around the extent to which the data collected accurately addresses the research question that depends on design, data analysis, sufficient sample size and sampling methods with minimal bias (Trochim, 2006).

The effort to achieve methodological purity can result in clinically worthless results, while trying to achieve full generalizability can end with invalid and unreliable outcomes. Therefore, methodological choice to balance internal validity (reliability) and external validity (generalizability) is a compulsory measure in clinical trials that have been conducted in community practices (Godwin et al., 2003).

Commonly known 12 main factors have jeopardized the reliability and validity of quasi-experimental study findings. Of these, the internal validity of a quasi-experimental study can be affected by either of the eight commonly reported factors including history, maturations, testing, instrumentations, statistical regressions, experimental mortalities, and selection. In addition, external validity of the study finding could be affected by the other four factors such as selection bias, reactive or interaction effect of testing, reactive effects of experimental arrangements and multiple treatment interference (Bracht & Glass, 1968; Campbell & Stanley, 1966). In response to these factors and to minimize their effect on the quality

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of the findings, several quality assurance activities were carried out before the commencement of the work, during program implementation and after the evaluation survey (see section 3.15.2 to 3.15.4, and Appendix 12).

5.12 Generalizability and Transferability

5.12.1 Generalizability

Several strategies were applied to ensure quality to be able to generalize the finding of this study. The protocol was peer reviewed for its methodological rigorousness. The reliability of the tool was also estimated using recommended scientific methods. An overall data handling approach was carried out with scientific strategies throughout the work. Regarding the methodology, participants were recruited to achieve well representative sample using pre-defined eligibility criteria to minimize selection bias.

In addition, fifteen percent additional participants were considered to minimize non-responsive due to a variety of reasons. The study participants' allocation into three different groups were carried out prior to starting the intervention implementation. All the intervention implementation materials were reviewed and validated by the local stakeholders (expertise). Furthermore, same data collection tools and research assistants were used at the pretest and posttest evaluation surveys.

Appropriate statistical methods were applied to handle confounding effects of some variables, and to control the over estimation of the effect size. The GLM was mainly fitted to the Poisson robust variance estimator and log link function to estimate the APR. In addition, the DID analysis was carried out to determine the net effect of the piloting

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community-based intervention. Hence, the findings of the present study are so generalizable to the target population and applicable in other similar settings.

5.12.2 Transferability

This study used a rigorous qualitative research approach (Houghton & Keynes, 2013) that are transferable of the findings. The exploratory study was conducted within a one year period. The most knowledgeable and experienced study participants were recruited purposively in consultation with the local leaders. The qualitative data were collected using mixed methods from different sources for triangulation of the exploratory findings from the document reviews, KIIs, in-depth interviews and FGDs. The collected data were transcribed, coded, identified themes, and thematically analyzed using Nvivo 11. Therefore, the present exploratory study is so transferable to other similar settings to address implementation barriers from the grass root, and to promote enabling conditions to enhance further policy implementation.

5.13 Strengths and limitations of the study

5.13.1 Strengths of the study

a. **Evidence and context based research**: This research has been proposed through the systematic assessment of research findings available in the poor resource setting in the developing countries. A systematic review and meta-analysis has been done that includes an overview of the prevalence, associated factors, effective interventions and researchers' recommendation. In addition, the authors (principal investigator) had a discussion with stakeholders about VAW in the study area to assess the situation.

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b. **Community-based study**: This study used a **c**ommunity-based survey to assess the level of domestic VAW. Community-based research is very crucial to digging out problems in real settings and for the appropriate generalization of the finding to inform policy.

c. **Applied mixed methods*:*** This study used a mix of quantitative and qualitative methods, and sequential explanatory approach to assess the level of domestic VAW, its associated factors, and to explore implementation barriers. A quantitative research approach was applied to determine the effect of community intervention on the level of domestic VAW using pretest and posttest quantitative survey. In addition, a qualitative research approach was applied to explore the barriers of intervention programs implementation to prevent and control domestic VAW in the study area. Furthermore, the qualitative methods by themselves applied a mixed data collection techniques to boost findings' transferability.

d. **Adequate sample size**: This study has an adequate sample size which has been achieved using scientifically sound methodology (significance level, power, design effect, non-response compensation).

5.13.2 Limitations of the study

Although this study has used several strong approaches to generate scientifically sound evidence, it had passed through different limitations. Some of the limitations are:

a. **Non-random allocation**: study participants were not allocated randomly into the intervention groups and control group due to the nature of quasi-experimental design. The intervention was provided for all community residents to avoid unnecessary disclosure of women who participated in the pretest-posttest evaluation.

b. Partners were not involved in the quantitative survey: The quantitative survey did not set to assessment the reason for partners abusing their wives. Also the study did not

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examine the initiators or source of the violence. These might have given another perspective.

5.14 Lesson learned from fieldwork

Our qualitative component of the study demonstrated implementing existing policies to promote gender equality and prevent domestic VAW in actual settings is feasible and practicable. During fieldwork observed and review meetings feedback, community reception (acceptance), stakeholders' active engagement and the presence of different smart structures within the community and governors are great opportunities to providing intervention.

In the present implementation study, the reception and humble cooperation from officials, local leaders, community HEWs and the community at large were inspirational for the community-based intervention implementers. Study participants' willingness, motivation to listen during sessions, and the interactive and animated nature of discussions, and over all reception were so encouraging for further scaling up of the interventions. The communities have been interested in attending, lessons, asking questions and demonstrating a passion for change. The community's receptive attitude towards traditional gender-norms has played a pivotal role in different manners at different levels/hierarchies.

In addition, this intervention and approach (house-to-house and involving men) were new and really demand driven. Using the community HEWs, women development 'army' group and men development 'army' to diffuse the intervention for the future is the most innovative, feasible and practicable approach to reach out to the community and bring about

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desirable change within an optimal time period and improve sustainability of the implementation and its positive impact.

On the other hand, there were hindering factors or several challenges faced during the implementation period. One of the main hindering factors was the political tension related to transition. Some changes in political positions and appointments and also the declarations of a state of emergency in the country at a certain time through the period demanded further ingenuity in the intervention management. Even with the best of effort, this affected our full engagement in the study area. In addition and far from politics, the community HEWs and other potential implementers had competing priorities which made them give a less attention to gender equality and domestic VAW prevention.

5.15 Implication of the finding

Although domestic VAW is a recognized public health, human rights and women's reproductive health rights abuse, robust scientific evidence is needed to inform stakeholders. Domestic VAW is a common life experience for women but is often perceived as minor and socially not taken as serious by many governments. It is known to have a devastating consequence on women's health and family conditions. It has an equivalent cost of the budget allotted for primary education by many developing countries. Hence, generating evidence, piloting evidence-based implementation and its effectiveness as well as exploring policy and program implementation barriers are very crucial for further corrective actions by responsible bodies.

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This quasi-experimental implementation research has provided insight into the level of domestic VAW, its associated factors and effectiveness of community-based awareness creation and stakeholder engagement interventions. The finding from this study is consistent with previous studies conducted in several low income countries. This finding has a great implication in Ethiopia, where a country that domestic VAW is considered as a norm/part of culture. In program point of view, it has eminence contribution to prevent and control domestic VAW in Ethiopia.

In addition, this implementation research is not only limited on piloting effectiveness of community-based intervention to prevent domestic VAW. But it aimed to identify the major barriers that hinder the implementation of intervention within existing policy frameworks. Furthermore, the study identified enablers that were feasible and practicable strategy for future implementation to improve the life of the women from experiencing domestic VAW and inequality treatments. Therefore, concerned stakeholders can use the findings of this study as main evidence to inform policymakers, program designers and local planners to construct and implement policies aimed at preventing domestic VAW in Ethiopia and other similar settings.

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CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter presents the summary, conclusions of the study findings outlined according to the study objectives. In the light of the objectives and findings, specific recommendations have been made to address the domestic VAW interventions, barriers and enablers for future programs implementation in Awi Zone, Northwestern Ethiopia. The main aim of this study was to address the following questions:

- What is the level of domestic VAW in Awi Zone?
- What are the factors associated with domestic VAW?
- Can domestic VAW be prevented through a community-based intervention?
- What are the bottlenecks of prevention intervention implementation?
- How can stakeholders be engaged to mobilize community and resources to implement existing evidence-based interventions to transform gender-norms?

6.1 Summary of key findings

The key findings from this study are summarized under domestic violence, women's receptive attitude on justified wife-beating, inequitable gender-norms and women's disclosure based on the research questions.

6.1.1 Level of domestic violence and related outcome

Almost half (48%) of the women reported domestic VAW at the pretest. This declined to 40% at posttest survey. More than two-thirds (69%) of women had receptive attitude

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towards justified wife-beating, which reduced to 59% at posttest. At pretest survey, two-thirds (68%) of the women had receptive attitude of inequitable gender-norms. It reduced to 56% at the posttest evaluation survey. Women's disclosure of their domestic VAW experience improved from 30% to 56%.

6.1.2 Associated factors

Adjusted prevalence ratio (APR) was used to determine associated factors. At the pretest survey, women who had no receptive attitudes towards justified wife-beating had a 42% less experience of domestic VAW compared to women who had receptive attitude towards justified wife-beating. Likewise, those women who had no receptive attitude towards inequitable gender-norms had a 37% less experience of domestic VAW as compared with women who had receptive attitude. Women, who had not ever heard about gender equality (18%), household heading by partner (23%), partners on stressful job (24%), and being pregnant (13%), had higher receptive attitude towards justified wife-beating compared to their counterparts. Women who had decision making autonomy on household matters had 80% higher receptive attitude towards inequitable gender-norms than women who had joint decision makings. Women whose partners had the habit of drinking alcohol very often, had 25% increase in receptive attitude of inequitable gender-norms than partners who drank alcohol occasionally. Women who were from a household headed by women had a 35% less receptive attitude for gender inequity-norms. Wife-beating and inequitable gender-norms were changed into statistically non-significant factors after the pilot intervention. All the independent variables had no statistical significant association after the posttest evaluation survey of the pilot intervention.

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6.1.3 Effect of community-based intervention

The net effect of community-based pilot intervention was assessed using the DID analysis method. This community-based pilot intervention significantly improved the women's awareness on their rights to equality. Physical domestic VAW reduced by 3% in the intervention group and by 8% in the active comparator compared to the women in the control group. Sexual domestic VAW was significantly reduce by 10% among women in the active comparator group than the control group. Women's receptive attitude towards justified wife-beating reduced by 10% in the intervention group and 17% in the active comparator group over the women in the control group. On the other hand, women's disclosure was significantly improve by 24% in the intervention group over the women in the control group.

6.1.4 Bottlenecks in implementation

Poor implementation of existing policy related to gender equality and domestic VAW at community level was linked with budget constraints, lack of commitment, poor integration and collaborative works, deep-rooted inequity-norms, and stakeholders having competing priority. Meanwhile the existing policies, such as community HEP, women development 'army', political will, existing policy frameworks, and school-based clubs are some of the enabling conditions for future scale-up the domestic VAW prevention programs.

6.2 Conclusions

This is the first implementation research conducted in Ethiopia to pilot the community-based intervention to promote gender equality-norms and prevent domestic VAW. The community-based intervention implementation was applicable, feasible, successful, and

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effective in reducing women's receptive attitude, and domestic VAW. It could be integrated within the HEP, women development 'army', and other community mobilization programs. Domestic VAW, women's receptive attitude of gender inequitable-norms, and justified wife-beating reduced significantly, though the prevalence high. In addition, women's receptive attitude towards inequitable gender-norms, and justified wife-beating was significantly associated with domestic VAW.

The community-based pilot intervention implementation was effective in enhancing women's awareness level about gender equality, domestic VAW and women's disclosure of their experience of abuse. These were higher among women in the intervention group over the control group. Likewise, women's receptive attitude towards justified wife-beating, and inequitable gender-norms reduced significantly in the intervention and active comparator groups as compared with control group. The community-based gender-norms transformation interventions were effective in the prevention of communities' receptive attitudes towards justified wife-beating, inequitable gender-norms and domestic VAW.

The existing policy framework is a good reflection of the government's political willingness to safe guard the rights of women from domestic violence. It is a fact that the integration of domestic violence prevention with existing programs and policy frameworks was limited. As a result, the implementation of existing policies focused on gender equality and prevention of domestic VAW was observed to be poor. It was highly embedded in the communities' traditional gender-norms, local politicians' and other stakeholders' attitude. In addition, budget constraints, lack of commitment, integrated or collaborative works, competing priorities, weak efforts to establish implementation alliance, poor planning,

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including, non-adherence to planned activities were the major barriers to the implementation of existing policies.

The existing community HEP, women development 'army' structure, and school-based gender equality clubs are the main enabling conditions for intervention integration. Likewise, government's political willingness, women and child affairs office and other existing policy frameworks on women's rights and program implementation, are some of the enabling conditions found in this setting. These can be used to scale up and synergize sustainable implementation to prevent domestic VAW in the future. Therefore, community-based intervention is acceptable and proven way to prevent domestic VAW. The well tested and integrated community-based gender-norms transformative interventions should be replicated in different Districts of Awi Zone, Northwestern Ethiopia, and similar settings.

6.3 Recommendations

The findings of the study have crucial contributions and implications for prompt action from a human rights and public health perspectives in the Northwestern Ethiopia, specifically in the Awi zonal administration of Amhara region. Dissemination of this research finding could inform the deep-rootedness of VAW in the Ethiopian culture. Sustainable intervention is important from programs' perspective, to prevent VAW in Ethiopia, even if marginal association has been observed. Therefore, the following suggestions are being made to the concerned bodies accordingly.

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6.3.1 Inter-sectoral collaboration

Sectors should collaborate and harmonize their program planning and implementation, in order to promote gender equitable norms and to prevent domestic VAW. In addition, the sectors should focus on old fashioned gender-norms transformation. It addresses the communities' receptive attitude towards wife-beating, inequitable gender-norms to prevent domestic VAW that have shown a significant reduction in the piloting intervention.

6.3.2 Health Sector

Beside the existing clinical service, the health sector should consider their gender-based violence response and provide appropriate care for survivors at community level. A more comprehensive community-based prevention approach is needed by integrating the domestic VAW prevention interventions with HEP.

6.3.3 Women and Child Affairs Office

The office should provide training using the available gender module. Actively engage and mobilize the community to create awareness to promote gender equality and prevent domestic VAW. In addition, the office should provide support to the women development 'army' through capacity building trainings to widen their scope of implementation at community level. They should strengthen the collaboration with other sectors and set common goals to prevent domestic VAW.

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6.3.4 Police, Security and Justice Offices

These sectors have been working to maintain and enforce the rule of law in the country. Therefore, gender equality and wife-beating prevention should one of the priority area, and keep it in a sustained program implementation.

6.3.5 Women Development 'Army'

Gender equality, women's right, domestic violence against women and others should be a topic in their monthly regular meetings for awareness creation (discussion) sessions. The information disseminations and income generation scheme should be sustained and strengthened to empower themselves socially and economically. Concerned bodies in the prevention of domestic VAW, gender equality should work together and support them.

6.3.6 Community Leaders

Community leaders should give attentions to gender equality and equitable norms and strengthen their efforts in collaboration with different stakeholders including local elders, religious fathers, women's development 'army' and men's development 'army'.

6.3.7 Partners

Partners should accept gender equality and relationship power equity norms for the benefit of their family lives. In addition, partners should play active roles as change agent to prevention of domestic VAW in their locality.

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6.4 Future research direction

- The present study did not carry out a complete assessment of the reasons why some partners perpetrated their wives. This study did not collect a quantitative data from men. Hence, future studies should consider having women and men's perspectives especially on attitude towards justified wife-beating, and equity of power in relationships. Future research should examine these issues and provide comprehensive information on both men and women's perspective to inform policy makers.
- This study focused on women as the potential victims of abuse, but did not examine the initiators of the violence. Therefore, future research could investigate the initiator of the conflicts.
- This study gives insight into the role of community-based interventions to transforming community traditional gender-norms to promote gender equality and prevent VAW. Researchers should therefore, consider the impact of long term intervention.

6.5 Contribution to knowledge and literature

This study was characterized by rigour in the review and synthesis of existing literature through a systematic review and meta-analysis.

- The systematic review and meta-analysis was aimed to determine the level of domestic violence, associated factors, and identified interventions to prevent domestic violence in low-income country settings to inform policy. Interventions focused on transformation of community's traditional gender-norms impacted on the on domestic violence. The systematic and meta-analysis work has been published elsewhere and accessible for researchers on the related field.

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- The study adapted a tool to assess domestic VAW and estimated its reliability. The assessment tool contributes to evidence on the reliability estimate for and knowledge on domestic VAW. These can used by different researchers in related fields in low-income country settings and has been published elsewhere.
- This piloted community-based interventions focused on transformation of community's traditional gender-norms. It was implemented through integrating existing services, engaging stakeholders and mobilizing the community within the existing policy frameworks. The women's receptive attitude towards justified wife-beating and inequitable gender-norms declined significantly. The reductions on domestic violence was marginal. This is helpful for sustainable interventions, which can make an impact on prevention of domestic violence. This can be a contribution to the evidence to inform policy makers and other concerned bodies to implement existing policy.

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APPENDICES

Appendix 1: Published systematic review and meta-analysis

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Reproductive Health

REVIEW Open Access

Are interventions focused on gender-norms effective in preventing domestic violence against women in low and lower-middle income countries? A systematic review and meta-analysis

Agumasie Semahegn[1,2*], Kwasi Torpey[1], Abubakar Manu[1], Nega Assefa[2], Gezahegn Tesfaye[2] and Augustine Ankomah[1,3]

Abstract

Background: One in three women experience intimate partner violence worldwide, according to many primary studies. However, systematic review and meta-analysis of intimate partner violence is very limited. Therefore, we set to summarize the findings of existing primary studies to generate evidence for informed decisions to tackle domestic violence against women in low and lower-middle income countries.

Methods: Studies were searched from main databases (Medline via PubMed, EMBASE, CINAHL, PopLine and Web of Science), Google scholar and other relevant sources using electronic and manual techniques. Published and unpublished studies written in English and conducted among women aged (15–49 years) from 1994 to 2017 were eligible. Data were extracted independently by two authors, and recorded in Microsoft Excel sheet. Heterogeneity between included studies was assessed using I^2, and publication bias was explored using visual inspection of funnel plot. Statistical analysis was carried out to determine the pooled prevalence using Comprehensive Meta-Analysis software. In addition, sub-group analysis was carried out by study-setting and types of intimate partner violence.

Results: Fifty two studies were included in the systematic review. Of these, 33 studies were included in the meta-analysis. The pooled prevalence of lifetime intimate partner violence was 55% (95% CI: 52, 59%). Of these, main categories were lifetime physical violence [39% (95% CI: 33, 45%); psychological violence [45% (95% CI: 40, 52%)] and sexual violence [20% (95% CI: 17, 23%)]. Furthermore, the pooled prevalence of current intimate partner violence was 38% (95% CI: 34, 43%). Of these, physical violence [25% (95% CI: 21, 28%)]; psychological violence [30% (95% CI: 24, 36%)] and sexual violence [7.0% (95% CI: 6.6, 7.5%)] were the pooled prevalence for the major types of intimate partner violence. In addition, concurrent intimate partner violence was 13% (95% CI: 12, 15%). Individual, relationship, community and societal level factors were associated with intimate partner violence. Traditional community gender-norm transformation, stakeholders' engagement, women's empowerment, intervention integration and policy/legal framework were highly recommended interventions to prevent intimate partner violence.

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* Correspondence: agucell@yahoo.com
[1]Department of Population, Family and Reproductive Health, School of Public Health, College of Health Science, University of Ghana, Legon, Accra, Ghana
[2]College of Health and Medical Sciences, Haramaya University, Po. Box 235, Harar, Ethiopia
Full list of author information is available at the end of the article

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(Continued from previous page)
Conclusion: Lifetime and current intimate partner violence is common and unacceptably high. Therefore, concerned bodies will need to design and implement strategies to transform traditional gender norms, engage stakeholders, empower women and integrate service to prevent violence against women.

Protocol registration: PROSPERO: 2017: CRD42017079977.

Keywords: Domestic violence against women, Systematic review, Meta-analysis

Plain English summary

Domestic violence against women (VAW) is a well-recognized public health concern and systematic human rights violation. It has a serious negative impact on women's lives. Domestic VAW is common and still unacceptably high in different parts of the world as observed from several primary studies which have been conducted on the frequency and its associated factors. Additionally, some interventional studies have been conducted in some parts of the world revealed that gender-norms transformation through behavioral change and communication focused program can promote gender-equality norm and avert domestic VAW. Summarized or synthesized evidence is still needed to inform and persuade policy makers and stakeholders, so they can take an evidence based decision making approach. One of the most challenging issue is that most countries' governments have considered VAW as a minor and socially tricky issue. There is some ambiguity as to whether VAW is a private or public matter. This systematic review and meta-analysis aimed at summarizing existing primary study findings to determine its level and associated factors, identify effective interventions to prevent domestic VAW and make key recommendations. The purpose is to contribute evidence to be used by program planners, policy makers, clinicians and other stakeholders to make an informed decision on the issue of domestic VAW. The study showed that more than half of the women experienced VAW, and almost one-third of the women have experienced current VAW. Intervention strategies should focus on traditional gender role transformation to minimize the relationship power-gap and prevent VAW.

Background

Globally, VAW is a well-recognized public health problem and a gross pervasive violation of human rights. About 35% of women experience VAW [1, 2], and almost two-third of women murders are committed by their intimate partners every year. About five percent of the women's total health years loss has been attributed by domestic VAW which is also exacerbated by authority inequity in relationship [3, 4]. Additionally, VAW causes ill health and its associated devastating outcome are more than the cumulative problem of cancer, road traffic accidents and malaria which are massive threat and an uncontrollable public health challenge for the upcoming generation [4]. VAW is sturdily interconnected with gender inequality that affects women's negotiation ability about reproductive health and related issues [5–7]. The expenses associated with VAW has been estimated to be 3.7% of the countries' gross domestic product, which is almost comparable with what several countries devote on primary education [8]. Yet, it has been considered exclusively as private matter and negligible issue by the governments' of various countries, hence not perceived as a crime [4, 5, 9].

Global and regional commitment to fighting domestic VAW is reflected in various international statues. For example, the United Nations aims to build an enabling household situation in improving women's right, their political participation, economic empowerment and safety [10]. In addition, provision of comprehensive and universal access to sexual and reproductive health care has been a strategy to avert domestic VAW in the Maputo Plan of Action (2016-2030) [11]. Further, research evidence has revealed that women empowerment and community mobilization are the most recommended interventions to minimize the expenses associated with VAW and its consequences [12]. The problem of domestic VAW is caused and exacerbated by poverty, alcohol consumption and societal receptive attitude towards inequitable gender-norms, which has been exhibited through denying access to education; lack of autonomy and justifying wife-beating by fellow women [9, 13–20].

Furthermore, women's experience of domestic violence is significantly associated with several and multiple poor physical and mental health outcomes [1, 9, 14, 17, 21–27]. Likewise, VAW has been associated with various poor reproductive health conditions such as HIV, unintended pregnancy and unsafe abortion [1, 4, 7, 9, 15–18, 20, 25, 28–41]. Therefore, VAW needs a comprehensive approaches to empower women economically, transform traditional gender-norms in improving their communication and negotiation skills [9, 17, 42]. There is a paucity of summarized evidence on; the level of domestic VAW, its associated factors, proven evidence on the

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technical approach and key research recommendations in low and lower-middle income countries (LLMICs). However, many primary studies have been conducted in LLMICs. The main purpose of this systematic review and meta-analysis was to summarize existing primary studies in LLMICs to determine the prevalence of domestic VAW and its associated factors; to identify effective and proven interventions and make key recommendations. It will provide an insight to policy makers, program planners, clinicians, researchers and other stakeholders to make an informed decisions on issues related to VAW.

Review question(s)

- What was the level of domestic VAW in LLMICs?
- What were the factors associated with domestic VAW in LLMICs?
- What were the research evidence that should translate into routine action in LLMICs?
- What were the studies' key recommendations on the prevention of domestic VAW in LLMICs?

Method development and protocol registration

The protocol for the systematic review and meta-analysis has been registered in the International Prospective Register of Systematic Reviews (PROSPERO) (ID: CRD42017079977). This systematic review and meta-analysis methods was written according to the preferred reporting items for systematic review and meta-analysis (PRISMA) guideline [43]. The filled PRISMA checklist is attached as Additional file 1.

Searching methods and identifications of studies

Studies were searched using medical subject headings (MeSHs), manual and email methods. Main electronic databases [Medline via PubMed, EMBASE, CINAHL, PopLine and Web of Science], direct Google search and other relevant sources were used to access studies before December 31st, 2017. In addition, emails were sent to authors whose studies were included to request studies. In addition, relevant citations from retrieved studies were searched. Search strings were constructed using keywords and their combinations based on the review questions. However, search strings were modified to suit to the databases interface accordingly. The overall detail of the search strategies are presented as Additional file 2: 2-1 to 2-4. The overall search results were exported to the Endnote citation manager software [44], and duplicate studies were removed.

Eligibility criteria and type of studies included

Observational and interventional studies were eligible to determine the level of, and factors associated with domestic VAW as well as effective interventions and key recommendations to prevent VAW. In addition, published and unpublished studies that have been conducted on women (15–49 years) in LLMICs to assess VAW and were written in English (1994–2017) were eligible for the systematic review. The LLMICs were selected based on the World Bank's country classification [45]. Case series, editorials, commentaries, life stories and fact sheet reports on VAW were excluded.

Selection of studies

Studies were selected using eligibility criteria and screened through four steps for the systematic review and meta-analysis. Initially, studies were screened and selected for subsequent evaluation based on their titles and abstracts, that is, if studies clearly reported on domestic VAW and its associated factors. Secondly, the two authors (AS and GT) independently screened the studies' abstract section (aims, methods, results and conclusion) to proceed to the next step. Studies whose abstract section briefly reported the prevalence of domestic VAW and its associated factors were included in the next evaluation process. Thirdly, studies selected by abstract screening were re-assessed independently by authors (AS and GT) with focus on the full-text. Eventually, selected studies were appraised for final inclusion in the systematic review and meta-analysis. In cases where the authors could not reach a consensus on studies, a third person was involved to appraise using same checklist, in the hope of helping to make a final decision. The studies selection process adhered to the PRISMA flow diagram [43] (Fig. 1).

Measurement of outcomes and exposures

The two phrases [domestic violence and intimate partner violence (IPV)] were interchangeably used as an outcome variable in this systematic review process. The outcome was assessed based on the prevalence of domestic/intimate partner VAW (psychological, physical, sexual and concurrent). IPV was presented in two forms (lifetime versus current). The lifetime IPV was assessed using the studies' report of women's experience of IPV during their lifetime. Furthermore, women's experience of IPV over the last 12 months preceding the survey was labeled as current IPV. Exposure variables were classified according to the ecological model (individual, relationship, community and societal level factors).

Quality assurance of the systematic review

Published and unpublished studies were searched for and considered for this systematic review to minimize publication bias. The electronic, manual and email search strategies were carried out to ensure comprehensive retrieval of studies from main databases and other relevant sources. Eligibility, quality assessment criteria,

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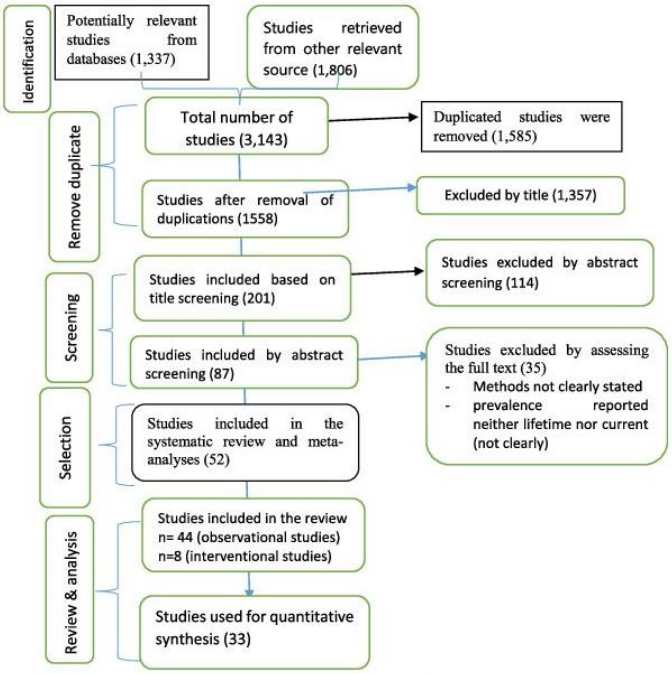


Fig. 1 Diagramatic presentation of the selection process of studies for systeamtic review

selection process and data extraction templates were properly designed by the authors to assure quality. Methodological quality assessment of the studies was carried out using the Joanna Briggs Institute (JBI) critical appraisal checklist for observational studies [46], for more detail of the critical appraisal is presented as Additional file 3. The authors (AS and GT) performed the selection of studies and data abstractions. Any disagreements were resolved through consensus, and sometimes, other authors who were not involved in data extraction adjudicated to make final decision. Potential publication biases were explored using the funnel plot. Detail of funnel plots for each outcome variables is included as Additional file 4: 4-1. Heterogeneity between included studies was assessed using I^2. Sub-group analysis, random effects model and qualitative narration were carried out to minimize the risk of bias. In addition, the risk of bias (ROB) for interventional studies was assessed. The detail of the risk of bias assessment is attached as Additional file 4: 4-2.

Study description and data extraction

The studies' characteristics (authors-date, study area/country), its aims, designs, sample size, sampling procedure, response rate, key findings and recommendations are described on a template. More details of the studies characteristics description are presented on tables [see Tables 1 and 2]. Two authors (AS and GT) abstracted the data from selected studies and labeled the data extraction template using Microsoft Excel sheet. Quantitative data, number of women who had experienced VAW (labeled = Yes), who had not experienced VAW (labeled = No) and total participants (n) were separately recorded in a Microsoft Excel sheet. The more detail of abstracted data is stored in Excel Sheet (see Additional file 5).

Data synthesis

The pooled estimate of domestic VAW was computed using the Comprehensive Meta-Analysis (CMA) software [91]. Substantial heterogeneity was assumed to be I^2 (> 75%) [92, 93]. Potential publication bias was checked through visual assessment of the funnel plot [94, 95]. The random effects model [96] was used to moderate the sample size variation which might have had an influence on the pooled estimate. In addition, sub-group meta-analysis was performed by study settings and types of domestic VAW (lifetime, current, psychological, physical and sexual violence). Furthermore, the associated factors with VAW were qualitatively synthesized according to the ecological framework

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Table 1 description of observational studies included in the systematic review and meta-analysis

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
Sapkota et al. 2016, Nepal [47]	To estimate the magnitude of different forms of domestic violence and identify its associated factors	Cross-sectional	Married women (15–49 years)	Systematic random sampling	355	NR	The prevalence of lifetime and current physical IPV were 29.6 and 15.2%, respectively. While sexual IPV was 6.8 and 2.3%, and psychological IPV was 31.0 and 18.3%. The overall lifetime and current IPV were 38.6 and 23.1%,, respectively. Furthermore, concurrent IPV was12.4%. Husband's controlling behavior and having poor mental health were found to be at higher risk of IPV.	Domestic/ IPV is still rampant in the society with several forms. Differentials power in relationship and poor mental health was found to be positively associated with violent episodes.
Fikree F. et al., 2006, Pakistan [48]	To assess the magnitude and determinants of IPV before and during pregnancy	Cross-sectional	Pregnant women (15–49 years)	Systematic sampling	300	NR	Women's lifetime physical and sexual IPV were 44 and 36%, respectively. Women who were ever physically abused and all reported verbal abuse. Wife's education and duration of marriage were significantly associated to violence. 55% of the women believed that antenatal care clinics were a good time to enquire about IPV.	Almost one million Pakistani women are physically abused at least once in lifetime. RH stakeholders should be encouraged to advocate for domestic violence screening
Semahegn et al., 2013. Ethiopia [49]	To determine magnitude of domestic violence and identify its predictors	Cross-sectional	married women (15–49 years)	Systematic sampling	682	100%	The prevalence of DVAW was 78.0%. Psychological, physical and sexual violence were 73.3, 58.4 and 49.1%, respectively. Husband alcohol consumption, being pregnant, low decision making power and annual income were predictors of domestic violence	Awareness creation to avoid traditional gender norm, and support wife via integrating with community health program.
Ali et al., 2014. Sudan [50]	To investigate level and factors associated with VAW	Cross-sectional	Women (15–49 years)	Multistage sampling	1009		The prevalence of physical, psychological and sexual violence was 33.5, 30.1 and 47.6%. Husband education, polygamous marriage, and alcohol consumption were significantly associate factors.	The prevalence of domestic VAW is high in eastern Sudan.
Hayati et al. 2011, Indonesia [51]	To examine associations between IPV and husbands, psychosocial, behavior,	Longitudinal	Women (15–49 years)	Random sampling	765	NR	Lifetime exposure to sexual and physical IPV were 22 and 11%. Sexual IPV was	Women who did not support the right of women to refuse sex were more likely to

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
	attitudes and gender roles						associated with husbands' age (less than 35 years and educated less than 9 years). Exposure to physical violence was strongly associated with husbands' being unfaithful, using alcohol, fighting, having childhood witnessed and the attitudes and norms expressed by the women confirm that unequal gender relationships.	experience physical IPV. Those who justified wife-beating were more likely to experience sexual IPV. Women's risk of IPV is due to traditional gender-norms.
Doku and Asante, 2015, Ghana [52]	investigates factors that influence women approval of domestic physical violence	Longitudinal survey	Women (15–49 years)	Two stage sampling	10,607	NR	IPV was 39%. Women aged (< 34 years) were more likely to approve physical IPV than aged 35 years and above. Women with no education (OR = 3.1, CI:2.4–3.9), primary education (OR = 2.6, CI:2.1–3.3) and secondary education (OR = 1.8, CI:1.4–2.2) had higher risk to physical IPV than women who had secondary education or higher. Women belonging Muslims (OR = 1.5, CI:1.3–1.8) and traditional believer (OR = 1.7, CI:1.2–2.4) were more likely to physical VAW. Women in the richest, rich and middle wealth index were less likely to physical VAW of wives compared to the poorest.	Interventions and policies should be geared at contextualizing intimate partner violence in terms of the justification of this behavior, as this can play an important role in perpetration and victimization.
Dalal K et al., 2014, Nepal [53]	To examines the associated factors at various level of the victims of IPVAW	Cross-sectional	Women (15–49 years)	Multistage sampling	4210	NR	IPV was 32.4%. Emotional, physical and sexual IPV were 17.5, 23.4 and 14.7%, respectively. Joint decision making for contraception, husband's non-controlling behavior and friendly feelings were emerged as less likely to be IPV.	The findings have immense policy importance as a nationally representative study and indicating necessity of more gender equality.
Sambisa W. et al., 2011 Bangladesh [54]	explored the prevalence and correlates of past-year physical VAW	a population-based survey	Women (15–49 years)	multi-stage cluster sampling	9122		The current physical IPV was 31%. The risk of physical IPV was lower among older women, women with post-primary education and belonging to rich households	Physical IPV in urban Bangladesh demonstrating the seriousness of multifaceted phenomenon as a social and public health issue that needs a

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Table 1 description of observational studies included in the systematic review and meta-analysis *(Continued)*

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
							and women whose husband considered their opinion in decision-making. Women were at higher risk of abuse if they lived in slums, had many children and approved wife beating norms.	comprehensive intervention strategies.
Abate et al. 2016. Ethiopia [27]	To assess the prevalence and associated factors of IPV during recent pregnancy	Cross-sectional	women (15–49 years)	Simple random sampling	282	94.3	The prevalence of IPV was 44.5%. More than half (55.5%) experienced all three forms of IPV. The joint occurence of IPV was 56.5%. Dowry payment decreases IPV (AOR 0.09, 95% CI 0.04, 0.2) and pregnant women whose marriage didn't undergo marriage ceremony were 79% were less likely to experience IPV (AOR 0.21, 95% CI: 0.1, 0.44).	Increasing community awareness about the consequences of the practice could be important through community health workers.
Rapp et al., 2012, Bangladesh & India DHS [55]	To investigate the association between spousal education gap and domestic violence	Population based surveys (DHS)	Married women (15–49 years)	Multi stage random sampling	69,805	NR	IPV was 52.1% in Bangladesh and 69.7% in India. Wives with higher education than their husband were less likely experience violence as compared with equal or less education. Equally high educated couples raveled the lowest likelihood of experiencing domestic violence.	Further research should be done to reveal unknown determinants so that suitable interventions to reduce DV can be developed
Dhakal L et al., 2014. Nepal [14]	To examine the relationships between IPV and STIs	Cross-sectional DHS survey	Women (15–49 years)	Two stage stratified cluster sampling	3114	NR	Approximately 15% of married women experienced some form of IPV. The odds of getting STI were 1.88 [95% CI:1.29, 2.73] times higher among women exposed to any form of IPV in compared to women not exposed to any form of IPV	IPV was common issue. Integration of IPV prevention and RH programs is needed to reduce the burden of STIs.
Rahman M, 2015. Bangladeshi [38]	To assess the association between IPV and TOP among married women	Population based survey (DHS)	Married pregnant women (15–49 years)	A stratified, multistage cluster sample	1875	NR	The experience of IPV was 31.4%. The experience of sexual and physical IPV were 13.4 and 25.8%, respectively. Physical IPV was significantly associated with both TOP ever (OR = 1.36; 95% CI: 1.05–1.77) and TOP in last 5 years (OR = 1.72; 95% CI: 1.11–2.06).	Prevention of IPV which was associated with pregnancy termination may reduce the high incidence of termination of pregnancies in Bangladesh.

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
Tumwesigye et al. 2012 Uganda [56]	To assess the pattern and levels of PIPVAW and its associated factors	(UDHS 2006)	Women (15–49 years)	Two stage cluster systematic sampling	1743	99.7%	Physical IPV was 48%. Women whose partner got drunk often were 6 times more likely report PIPV (95% CI: 4.6, 8.3) as compared with never drunk. The higher the education level of women the less likelihood of experience of IPV.	IPV preventive measure should address reduction of drinking among men, empowerment of women via education, employment and increased income.
Yigzaw T et al., 2004. Ethiopia [25]	To assess the prevalence of domestic violence and associated factors	Cross-sectional	Women (15–49 years)	Systematic sampling	1104	NR	IPV was 50.8%. Physical violence was found to be 32.2%, while that of forced sex and physical intimidation amounted to 19.2 and 35.7%, respectively. Exposure to parental violence as a girl was the strongest risk factor for being victim of violence later in life while alcohol consumption was the major attribute of IPV.	IPV is highly prevalent. Its prevention should be comprehensive and multi-faceted. Women prefer educational approach to minimize IPV through IEC, empowerment and legal reform.
Delamou et al., 2015, Guinea [57]	To describe the prevalence and correlates of IPV Family Planning users	cross-sectional study	Women (15–49 years)	All women who attend the clinic	232	NR	Lifetime, IPV was 92%. Where, psychological, sexual and physical IPV were 79.3, 68.1 and 48.4%, respectively. Joint occurrence IPV was 24%. IPV was higher in women with secondary level of education than higher level of education (AOR: 8.4; 95% CI 1.2–58.5).	A holistic approach that includes promotion of women's rights and gender equality, existence of laws and policies is needed to prevent and respond to IPV.
Kabir Z et al., 2014 Bangladeshi [58]	To investigate the association between IPV and maternal depression	Longitudinal study	Women (15–49 years)	Convenient	660	NR	Prevalence of physical, sexual and emotional IPV were 52, 65 and 84%, respectively. The husband's education (OR: 0.41, CI: 0.230.73) and a poor relationship with the husband (OR: 2.64, CI: 1.076.54) were significantly associated with IPVAW.	It is important to screen for both IPV and depressive symptoms during pregnancy and postpartum.
Kazaura et al., 2016. Tanzania [59]	To determine the magnitude of IPV and associated factors	Cross section	Women (15–49 years)	Systematic sampling	471	NR	The lifetime IPV was 65% with 34, 18 and 21% reporting current emotional, physical and sexual violence, respectively. The prevalence of women perpetration to physical IPV was above 10% regardless to their exposure to emotional, physical or sexual IPV.	IPV towards women was high. Based on hypothesis of IPV and HIV co-existence, there should be strategies to address the problem of IPV especially among women

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
Kouyoumdjian et al.2013, Uganda [60]	To identify risk factors for IPV in women of the reproductive age in Rakai district of Uganda	Rakai community Cohort (2000–2009)	Women (15–49 years)	Cluster sampling	15,081	NR	Lifetime and current IPV were 49.8 and 29.0%, respectively. The risk of IPV associated with sexual abuse during young age, early age of first sex, lower level of education, forced first sex, relationship of short duration, having partner of same age or younger, alcohol use and thinking that violence is acceptable.	These findings are useful for the development of prevention strategies to prevent and mitigate IPV in women.
Rahman et al. 2012, Bangladeshi [41]	To explore the association between IPV and use of RH care	DHS, 2007	Married women (15–49 years)	multi-stage cluster sampling	2001	NR	Physical IPV was 48%, Sexual IPV violence was 18.7, and 14.1% was experienced both physical and sexual IPV. Maternal experience of IPV was associated with low use of receiving sufficient ANC.	There is an association between exposure to IPV and lower use of reproductive health care services
Deyessa N. et al., 2010 Ethiopia [61]	To explore VAW in a low-income setting	Cross-sectional	Women (15–49 years)	simple random sampling	1994	NR	Women had beliefs and norms favoring VAW, living in rural and illiterate women were more likely to experience VAW. Literate rural women who were married to an illiterate spouse had the highest odds of IPV (AOR, 3.4; 95% CI: 1.76,9).	Semi-urban lifestyle and literacy promote changes in attitudes and norms against IPV.
Karamagi et al., 2006. Uganda [62]	To determine prevalence of IPV and identify risk factors	Cross-sectional	Women (15–49 years)	Cluster survey method	457	NR	The life time and current IPV were 54 and 14%, respectively. Women having higher education and satisfied marriage were associated with low risk of IPV, while alcohol consumption, rural residence and husband having multiple sexual partner were associated with high risk of IP.	IPV is linked with gender inequality, alcohol, poverty and multiple sexual partner. Programs for the prevention of IPV need to target these underlying factors.
Das et al.2013 India [63]	To describe the level of IPV and its social determinants	Cross sectional	Women (15–49 years		2139	NR	The prevalence of IPV was 15% in which physical, sexual and psychological IPV were 12, 2 and 8%, respectively. Almost one- third (35%) of IPV was justifiable. The experience of IPV was associated with poorer families and husband alcohol use.	The element of violence are mutually reinforcing and need to be taken into account collectively and framing public health initiatives.

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
Burgos-Soto J. et al., 2014. Togo [35]	To describe the effect of IPV on care-seeking behaviors of women	Cross-sectional	Women (15–49 years)	Systematic sampling	454	NR	Lifetime physical and sexual IPV among HIV-infected women were significantly higher than among uninfected women (63.1 vs. 39.3% and 69.7 vs. 35.3%). IPV was strongly associated with male partner multi-partnership, early start of sexual life and gender submissive attitudes.	IPV screening should be carried out at health-care settings. Couple-oriented HIV prevention interventions and couple dynamics in terms of IPV is needed.
Yimer T. et al., 2014. Ethiopia [64]	To assess the magnitude of domestic violence and its associated factors among pregnant women	Cross-sectional	Women (15–49 years)	multistage sampling	425	97.9%	IPV was 32.2%. Psychological, sexual, and physical IPV were 24.9, 14.8, and 11.3%, respectively. Married women (≤15 years) (AOR, 4.2,95% CI;1.9–9.0); childhood witness (AOR = 2.3,95%CI; 1.1–4.8), having drinker partner (AOR = 3.4, 95% CI 1.6–7.4), and undesired pregnancy by partner (AOR = 6.2, 95% CI 3.2–12.1) were the main significant factors.	Domestic violence during current pregnancy is high which may lead to a serious health consequence both on the mothers and on their fetus.
Dalal K et al., 2013. Bangladeshi [65]	to examine the associations between microfinance programme membership and IPV	Cross-sectional	Married women (15–49 years).		4465	NR	Physical IPV was 48%. For women with secondary or higher education, and women at the two wealthiest levels of the wealth index, microfinance programmes membership increased the exposure to IPV. Educated women who were more equal with their spouses in their family relationships in decision-making increased their exposure to IPV.	Microfinance plans are associated with an increased exposure to IPV among educated and empowered women.
Eme T Owoaj et al., 2012, Nigeria [66]	To determine the prevalence of physical violence and the factors predisposing women in a low-income community	Cross-sectional	Women (15–49 years)	cluster sampling	924	98.6%	The prevalence of lifetime experience of physical IPV was 28.2%. The significant predictors for physical IPV were previous experience of psychological abuse (aOR: 4.71; 95% CI: 3.23–6.85); sexual abuse (aOR: 5.18; 3.21–8.36); having attitudes supportive of IPV (aOR: 1.75; 1.2–2.4); partner's daily alcohol consumption (aOR: 2.85; 1.50–5.41); and previous	Community based IPV prevention programmes targeted at breaking the cycle of abuse, transforming gender norms which support IPV and reducing alcohol consumption should be developed

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
							engagement in a physical fight (aOR: 3.49; 1.87–6.50).	
Laisser et al. 2011. Tanzania [67]	To explore community members' understanding and their responses to IPV.	Ground theory/ qualitative study	Community members	Purposive sampling	75	NR	Moving from frustration to inquiring traditional gender norms that denoted a community in transition where the effects of IPV had started to fuel a wish for change. Justified as part of male prestige illustrates how masculinity prevails to justify violence. Results in "emotional entrapment" shows the shame and self-blame that is often the result of a violent relationship.	Raising of the human rights perspective, as well as actively engaging men, re-enforcement of legal rights, and provision of adequate medical and social welfare services.
Deribe K et al., 2012 (Ethiopia) [68]	to assess the magnitude of IPV in Southwest Ethiopia in predominantly rural community	Cross-sectional	Women (15–49 years)	Systematic sampling	845	100%	The lifetime prevalence of sexual or physical IPV, or both was 64.7%. The lifetime sexual and physical violence were 50.1 and 41.1%, respectively. 41.5% of women experienced physical and sexual IPV concurrently, in the past year. Men who were controlling were more likely to be violent against their partner.	Physical and sexual VAW is common. Interventions targeting controlling men might help in reducing IPV.
Antai and Adaji, 2012. Nigeria [40]	To examine the role of community-level norms and association between IPV and TOP	cross-sectional study	Women (15-49 years)	Multistage cluster sampling	19,226		IPV was 22% (physical, sexual and emotional IPV were 15, 3 and 14%, respectively). IPV types were significantly associated with factors reflecting relationship control, relationship inequalities, and educational level, justified wife beating, age of first marriage, and contraceptive use.	Further research recommended on IPV screening on pregnancy terminated site.
Kapiga et al.2017 Tanzania [69]	known about the prevalence of this type of behavior and other related abuses in Tanzania	Cross sectional (baseline for RESPECT RCT study)	Women (15–49 years	Random sampling	1021	97.3%	Lifetime and current IPV were 61 and 27%, respectively. Lifetime economic abuse and current emotional abuse were 34 and 39%, respectively. Age and socio-economic status, physical violence (OR = 1.8; 95% CI: 1.3–2.7) and sexual violence (OR = 2.8; 95% CI: 1.9–4.1) were associated with increased poor mental health.	The high prevalence of IPV and its strong links with symptoms of poor mental health underline the urgent need for developing and testing appropriate interventions to tackle both IPV and abusive behaviors.

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
Feseha et al.2012. Ethiopia [70]	to assess the magnitude of intimate partner physical violence and associated factors.	Cross-sectional	Women (15–49 years)	Simple random sampling	422	100%	The current physical IPV and lifetime were 25.5 and 31.0%, respectively. Significant risk factors associated with experiencing physical IPV were being a farmer (AOR, 3.0, 95%CI: 1.7, 5.5), knowing women in neighborhood whose husband to beat them (AOR, 1.87, 95%CI: 1.0, 3.5), Muslim (AOR, 2.4, 95%CI: 1.107, 5.5), and having a drunkard partner (AOR = 2.1, 95%CI:1.0, 4.5).	Physical IPV is serious problem among women. Multifaceted interventions such as male counseling, increasing awareness on the consequences of IPV and the effect of substance use like alcohol will help to reduce IPV.
Osinde et al., 2011. Uganda [71]	To assess the prevalence and factors associated with IPV among HIV infected women attending HIV care in Kabale Hospital, Uganda.	Cross-sectional	Women (15–49 years)	Simple SRS	317	NR	The prevalence of lifetime and current IPV were 36.6 and 29.3%, respectively. The prevalence physical and sexual were 17.6 and 12.1%, respectively. There was a significant but inverse association between education level and physical IPV (ARR, 0.50, 95% CI: 0.31–0.82), and sexual/psychological IPV (ARR, 0.47; 95%CI: 0.25–0.87). Likewise, there was a significant inverse association between education level of the spouse and IPV (ARR, 0.57, 95% CI 0.25–0.90). Use of ART was associated with any type of IPV (ARR 3.0, 95%CI 1.2–8.5).	Most of HIV positive women experienced IPV. Likewise, women who were taking antiretroviral drugs for HIV treatment were more likely to report any type of IPV. The implication of these findings is that women living with HIV especially those on antiretrovital drugs should be routinely screened for IPV.
Yigzaw T et al. 2010. Ethiopia [72]	To assess community perceptions and attitude towards violence against women by their spouses Methods	Qualitative	Key informant	Purposive	46	NR	The normative expectation that conflicts are inevitable in marriage makes it difficult for society to reject violence. Acts of VAW represent unacceptable behavior according to existing social and gender norms when there is no justification for the act and the act causes severe harm. There is considerable permissiveness of violent acts. Marital rape is not understood well and there is less willingness to condemn it.	There is insufficient understanding of VAW and many people hold a non-disapproving stance regarding violence against women by their spouses calling for a culturally sensitive information, education and communication intervention.

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
Uthman OA, et al., 2011. Nigeria [73]	To develop and test a model of individual- and community-level factors of IPV	Cross-sectional study (NDHS 2008)	Women (15–49 years)	Stratified multistage cluster sampling	8731	NR	Physical, sexual and emotional IPV were 10.4, 2.3 and 14.3%, respectively. Childhood witnessed, tolerant attitudes towards IPV and women with tolerant attitudes and community with tolerant attitudes were more likely to have reported IPV.	Public health interventions designed to reduce IPVAW must address people and the communities' tolerant attitude in which they live in order to be successful.
Bamiwuye and Odimegwu, 2014, 6 SSA countries [74]	To examine whether women from poor households are more likely to experience violence from husband than other women who are from middle or rich households.	Cross-sectional studies (DHSs)	Women (15–49 years)	Multistage cluster samplings	38,426	NR	The six SSA countries IPV was 40.5%. Physical, sexual or emotional) ranges from 30.5% in Nigeria, 43.4% in Zimbabwe, 45.3% in Kenya, 45.5% in Mozambique, 53.9% in Zambia and 57.6 in Cameron. The two countries (Zambia and Mozambique); the experience of violence is significantly higher among women from non-poor (rich) than (poor and middle). Other two countries (Zimbabwe and Kenya); women from poor households are more likely to have ever experienced IPV than those from non-poor households.	Experience of violence cuts across all household poverty-wealth statuses and therefore may not provide enough explanation on whether household poverty necessarily serve to facilitate the ending of violence. These results suggest that eliminating VAW in SSA requires a comprehensive approach rather than addressing household poverty-wealth alone.
Abeya et al., 2012. Ethiopia [75]	To explore the community attitude, strategies women's suggested measures to stop VAW	Cross-sectional	Women and men (FGDs)	Purposefully	115	NR	Most discussants perceived, IPV is accepted in the community in circumstance of practicing extra marital sex and suspected infidelity. The suggested measures for stopping or reducing women's violence focused on provision of education for raising awareness at all level using a variety of approaches targeting different stakeholders.	More efforts are needed to dispel myths, misconceptions, traditional norms and beliefs of the community. There is a need of amending and enforcing the existing laws and formulating the news policy.
Bazargan-Hejazia et al., 2013. Malawi [76]	To examine the lifetime prevalence of different types of IPV and its association with age, education, and residence	Cross-sectional	Women (15–49 years)	two-stage systematic sampling	8291	NR	The prevalence of emotional, physical and sexual IPV were 13, 20 and 13%, respectively. Women (15–19 years) were significantly less likely emotional IPV, women (25–29) were significantly more likely to report being physically	The prevalence of different types of IPV in Malawi appears slightly lower than that reported for other countries in SSA. Further studies are needed to assess the attitudes and behaviors of Malawi women

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
							abused (OR 1.35; CI: 1.05–1.73), and women (30–34) were significantly more likely sexual IPV, compared to women (45–49) (OR 1.40; CI: 1.03–1.90). Women who had no ability to read were less likely to report sexual IPV than their counterparts who could read a full sentence (OR 0.76; CI: 0.66–0.87).	towards acceptability and justification of IPV as well as their willingness to disclose it.
Zacarias et al.2012 Mozambique [77]	To examine the occurrence, severity, chronicity and predictors of IPV	Cross-sectional	Women (15–49 years)	Consecutive case	1442	96.1%	The overall IPV during the past 12 months was 70.2%. Physical, psychological and sexual violence were the common IPV in Mozambique. Almost one fourth of women experienced combination of the three type of IPV.	Controlling behaviors over partner, co-occurring victimization and childhood abuse were more important factors.
Meekers et al., 2013, Bolvia [78]	To examine the relationship between IPV and mental health	Cross-sectional survey	Women (15–49 years)	Multistage sampling	10,119	NR	Life time physical and psychological IPV were 71.7 and 42.4%, respectively. Current IPV was 47%. Of these, physical, psychological and sexual IPV were 19.2, 21.1 and 6.9%, respectively.	It showed that mental health service is need for victims of IPV.
Abeya et al., 2011. Ethiopia [79]	To investigate the prevalence, patterns and associated factors of intimate partner violence against women in Western Ethiopia	Cross-sectional	Women (15–49 years)	Multistage systematic sampling	1540	96.3	Lifetime, current and concurrent IPV were 76.5, 72.5 and 56.9%, respectively. Rural residents (AOR 0.58, 95% CI 0.34–0.98), literates (AOR 0.65, 95% CI 0.48–0.88), female headed households (AOR 0.46, 95% CI 0.27–0.76); older women (AOR 3.36, 95% CI 1.27–8.89); abduction (AOR 3.71, 95% CI 1.01–13.63), polygamy (AOR 3.79, 95% CI 1.64–0.73), spousal alcoholic consumption (AOR 1.98, 95% CI 1.213.22), spousal hostility (AOR 3.96, 95% CI 2.52–6.20), and previous witnesses of parental violence (AOR 2.00, 95% CI 1.54–2.56) were factors associated with an increased likelihood of lifetime IPV.	Three out of four women experienced at least one incident of IPV in their lifetime. This needs an urgent attention at all levels of societal hierarchy including policymakers, stakeholders and professionals to alleviate the situation.

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Table 1 description of observational studies included in the systematic review and meta-analysis (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	RR	Main findings	Authors key conclusion and recommendation
Koenig M. et al. 2003. Ugnada [6]	To examine individual risk factors associated with recent IPV and community attitudes	Cross-sectional survey	Women (15–49 years)	Cluster sampling	5109	NR	Overall, 40.1% of women had ever experienced psychological IPV and 30.4% of women had ever experienced physical threats or violence. The male partner's alcohol consumption and his perceived human immunodeficiency virus (HIV) risk in increasing the risk of IPV.	Little progress in reducing levels of IPV is likely to be achieved without significant changes in prevailing individual and community attitudes toward IPV.
Wandera et al. 2015 Uganda [80]	To investigate the association between IPSV and partner controlling behaviors	Cross-sectional survey (DHS 2011)	women (15–49 years)	Multistage cluster sampling	1307	NR	IPV was 27%. Women's IPV experience was higher whose partner were jealous if they talked with other men, if accused them of unfaithfulness, if their partner did not permit them to meet with people, if their partner tried to limit contacts, got drunk, and women afraid of their partner.	Interventions addressing IPSV should be place more emphasis on reducing partners controlling behaviors and the prevention of problem drinking.
Deyessa N et al., 2009, Ethiopia [81]		Cross-sectional	Women (15–49 years)	SRS	1994	94.3%	The lifetime prevalence of any form of IPV was 72.0%. Physical violence was 49.5%.	Recommend public health strategies, interventions and service provision
Valladares E et al., 2005. Nicaragua [82]	To estimate the prevalence and characteristics of partner abuse during pregnancy	Cross-sectional	Women (15–49 years)	Cluster sampling	478	99.8%	The prevalence of emotional, physical, sexual and concurrent IPV were 32.4, 13.4, 6.7 and 1.7%, respectively. Factors such as women's age below 20 years, poor access to social resources and high levels of emotional distress were independently associated with violence during pregnancy.	Although these women have poor access to social resources and high levels of emotional distress, they are rarely assisted by the health services.

RR Response Rate, *NR* Not Reported

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Table 2 description of the interventional studies

Author, country	Study aim	Design	Population	Sampling procedure	sample	Intervention	Main findings	Key conclusion and recommendation
Abramsky et al.2014. Uganda [83]	To assess the community-level impacts of SASA! a community mobilization intervention to prevent violence and reduce HIV-risk behaviors	Cluster RCT	Women (15–49 years)	SRS	Baseline = 1583 Post-line = 2532	Control: existing service Intervention: SASA: Community mobilization(start, awareness, support and action)	The intervention was associated with significant lower social a cceptance of IPV among women (ARR, 0.54, 95% CI: 0.38–0.79) and lower acceptance among men (0.13, 95% CI: 0.01, 1.15); significantly greater acceptance that a women can refuse sex among women (1.28, 95% CI:1.07, 1.52) and men (1.31,95% CI:1.00 to 1.7); 52% lower physical IPV (0.48, 95% CI:0.16,1.39); and lower levels of sexual IPV (0.76,95% CI: 0.33 to 1.72). IPV was more likely to receive supportive community responses. Sexual concurrency was significantly lower (0.57, 95% CI: 0.36, 0.91).	Community mobilization program on the social acceptability of IPV, past year prevalence of IPV and level of sexual concurrency archived important community impact and now delivered n control communities and replicate in other countries.
Gupta et al.2013. Cote d'Ivoire [84]	To evaluate the incremental impact of adding gender dialogue groups to an economic empowerment group savings program on level of IPV	RCT	Women (15–49 years) and men	Simple random sampling	934	Control: VSLA Intervention: combined (VSLA+GDG)	Slightly lower odds of reporting past year physical and or sexual IPV in the combined group than VSAL alone (OR, 0.92, 95% CI: 0.58, 1.47). Women in the combined group were significantly less likely to report economic abuse than control (OR, 0.39, 95% CI: 0.25, 0.60). Acceptance of wife-beating was significantly reduced on intervention group (OR: −0.97, 95% CI: −1.67, − 0.28).	Combined intervention significantly reduce economic abuse and justified wife beating. But, no significant reductions on physical and or sexual IPV or sexual IPV alone.
Pulerwitz J et al., 2015. Ethiopia [85]	assessed the effects of a community-based project in Ethiopia that worked with young men to promote gender-equitable norms and reductions in IPV	Quasi-experimental	young people (15–24 years)	Randomly assigned	809	Control: existing service Active comparator: community education Intervention: combined (group education and community education)	Participants in the GE + CE intervention were twice as likely ($P < .01$) as those in the comparison group to show increased support for gender-equitable norms. Also, the percentage of GE+ CE participants who reported IPV toward their partner decreased from 53 to 38% between baseline and end line, and the percentage in the CE-only group decreased from 60 to 37%; changes were negligible in the control group.	Promoting gender equity is an important strategy to reduce IPV
Falb LK, et al., 2015. Cote d'Ivoire [86]	To assess treatment heterogeneity based on child marriage status for an intervention seeking to reduce IPV	RCT	Women (15–49 years)	Random sampling	682	Control: VSLA Intervention: combined (VSLA+GDG)	For child brides; there were no statistically or marginally significant decreases in physical and or sexual IPV. The odds of reporting economic abuse in the past year were lower in the intervention arm for child brides	Intervention participants with a history of child marriage may have greater difficulty benefiting from interventions that seek to reduce IPV.

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Table 2 description of the interventional studies (*Continued*)

Author, country	Study aim	Design	Population	Sampling procedure	sample	Intervention	Main findings	Key conclusion and recommendation
							relative to control group child brides (OR, 0.33, 95% CI: 0.13, 0.85). For non-child brides; women were less likely to report physical and or sexual IPV (OR, 0.54, 95% CI: 0.28, 1.04), emotional violence (OR, 0.44; 95% CI: 0.25, 0.77), and economic abuse (OR, 0.36, 95% CI: 0.20, 0.66) in the combined intervention arm than savings only groups.	
Krishnan S. et al., 2012. Tanzania [87]	Examined men's and women's attitudes about IPV, relationship power, and sexual decision making and couples'	RCT	Couples	Random sampling	567	Intervention: Conditional cash transfers (CCT) promoted safe sex	Women who reported that violence was ever justified if a woman refuses sex were more than twice as likely to report IPV (aOR = 2.29,95% CI:1.65–3.17). Furthermore, women were less likely to report IPV when both partners shared sexual decision making (aOR = 0.70, 95% CI: 0.5–0.98), as compared to women's partner controlled sexual decision making. Notably, women were less likely to report IPV when both partners had equal power (aOR = 0.43, 95% CI: 0.21–089) or they controlled more power (aOR = 0.91, 95% CI: 0.28–2.94).	RESPECT study indicate that concerted efforts to reduce IPV and promote gender equity have the potential to make a positive difference in the relatively short term.
Wagman AJ. et al.2015. Uganda [88]	assess whether provision of a combination of IPV prevention and HIV services would reduce IPV and HIV incidence	Cluster RCT	Women (15–49 years)	Random sampling	11,448 individuals	standard of care HIV services plus a community-mobilization intervention the Safe Homes and Respect for Everyone (SHARE) Pro	Compared with control groups, the SHARE intervention groups had fewer self-reports of past-year physical IPV (16%) in control groups vs. (12%) in intervention groups: aPRR 0·79, 95% CI 0·67–0·92) and sexual IPV (13%) to (10%); 080, 0·67–0·97). Incidence of emotional IPV did not differ (20% vs 18%); 0·91, 0·79–1·04). SHARE had no effect on male-reported IPV perpetration.	SHARE could reduce some forms of IPV towards women and overall HIV incidence, possibly via reduction in forced sex and increased disclosure of HIV results.
Green PE, et al., 2015. Uganda [89]	To assess the effect of successful poverty alleviation on women empowerment and intimate partner relationship	Cluster RCT	Women (15–49 years)	Random sampling	1800	5 days business advice, 150USD and supervision	The program doubled the business ownership and incomes. It showed small increases in marital control, self-reported autonomy and quality of intimate partner relationship), but essentially no change in IPV and no effects on women's attitude towards gender-norms and a non-significant reduction in autonomy.	Increasing women's earnings has no effect on IPV.
Abramsky et al., 2016	To explore the community mobilization intervention	Cluster RCT	Women aged	Cluster sampling	baseline = 1583	Control: existing service	SASA was associated with reductions in women's current physical IPV	It highlights the important role of community-level norm-change in

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Table 2 description of the interventional studies *(Continued)*

Author, country	Study aim	Design	Population	Sampling procedure	sample	Intervention	Main findings	Key conclusion and recommendation
Uganda [90]	to prevent VAW achieved community-wide reductions in physical IPV		18–49 years		Endline = 2532	Intervention: SASA: Community mobilization(start, awareness, support and action)	(0.48, 95% CI 0.16–1.39), as well as men's perpetration of IPV (0.39, 95% CI 0.20–0.73). Community-level normative attitudes were the most important mediators of intervention impact on physical IPV risk, with norms around the acceptability of IPV explaining 70% of the intervention effect on women's experience of IPV and 95% of the effect on men's perpetration.	achieving community-wide reductions in IPV risk.

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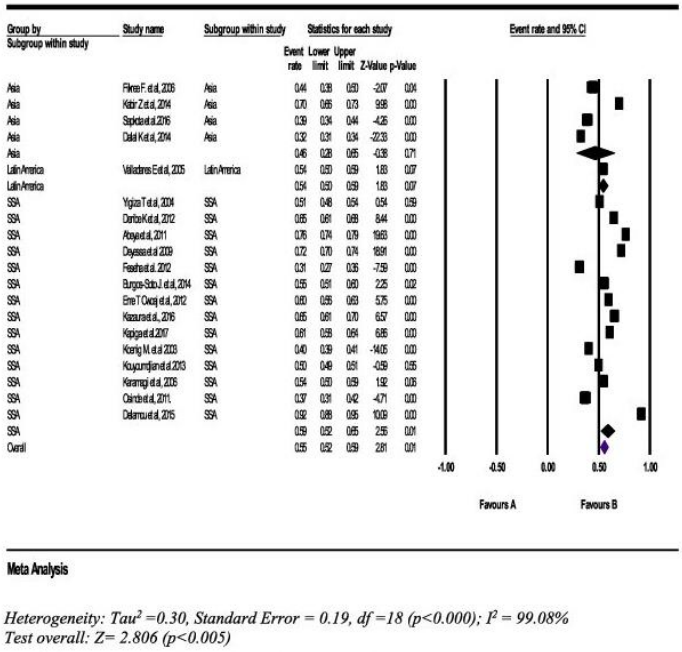


Fig. 2 Forest plot of the lifetime intimate partner violence in LLMICs ($n = 19$)

model (individual, relationship, community and societal factors) [97].

Results

Intimate partner violence in LLMICs

Lifetime intimate partner violence

Nineteen studies with a sample of 35,974 women (15–49 years), the pooled estimate of lifetime IPV was 55% (95% CI: 52, 59%). IPV in sub-Saharan Africa (SSA) (14 studies) and Asian countries (4 studies) were 59% (95% CI: 52, 65%) and 46% (95% CI: 28, 65%), respectively (Fig. 2).

Physical intimate partner violence

From 18 studies with a sample of 44,664 women (15–49 years, the pooled prevalence of lifetime physical IPV was 39% (95% CI: 33, 45%). Furthermore, lifetime IPV in SSA was 43% (95% CI: 35, 50%) (Fig. 3).

Psychological intimate partner violence

From 15 studies with a sample of 42,600 women (15–49 years), the pooled prevalence of lifetime psychological IPV was 46% (95% CI: 40, 52%). The sub-group analysis shows consistent findings with the overall pool prevalence across the regions (Fig. 4).

Sexual intimate partner violence

From 15 studies with a sample of 29,127 women (15–49 years), the pooled prevalence of sexual IPV was 20% (95% CI: 17, 23%). The lifetime sexual IPV was the highest in SSA [42% (95% CI: 32, 54%)] (Fig. 5).

Current intimate partner violence

Thirty three studies with a sample of 216,043 women (15–49 years), the pooled prevalence of IPV was 38% (95% CI: 34, 43%). The prevalence in SSA is almost similar with the pooled prevalence (Fig. 6).

Types of current intimate partner violence

Physical intimate partner violence

From thirty one studies with a sample of 141,820 women (15–49 years), the pooled prevalence of physical IPV during the past 12 months was 25% (95% CI: 21, 28%). The subgroup analysis of seven studies in Asian countries was 31% (95% CI: 22, 41%) (Fig. 7).

Psychological intimate partner violence

From 20 studies with a sample of 115,798 women (15–49 years), the pooled prevalence of psychological IPV was 30% (95% CI: 24.0, 36%) (Fig. 8).

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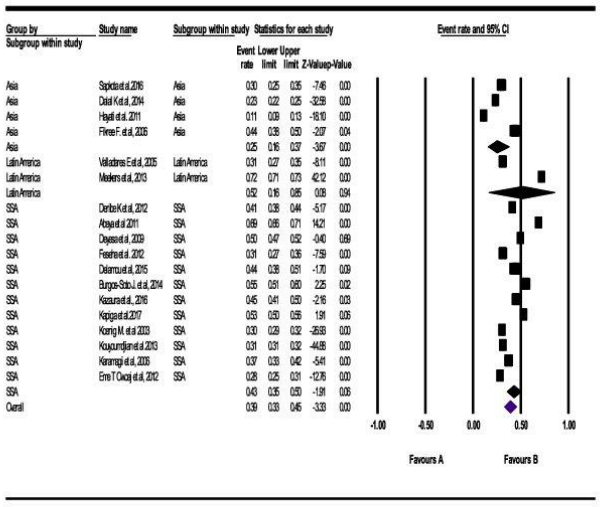


Fig. 3 Forest plot of the Lifetime physical intimate partner violence against women ($n = 18$)

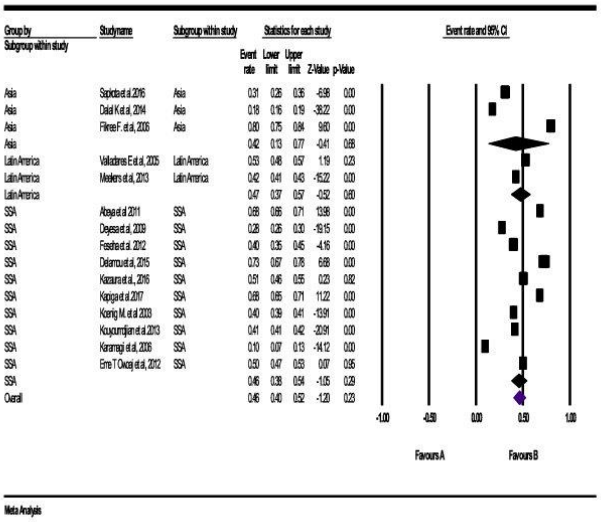
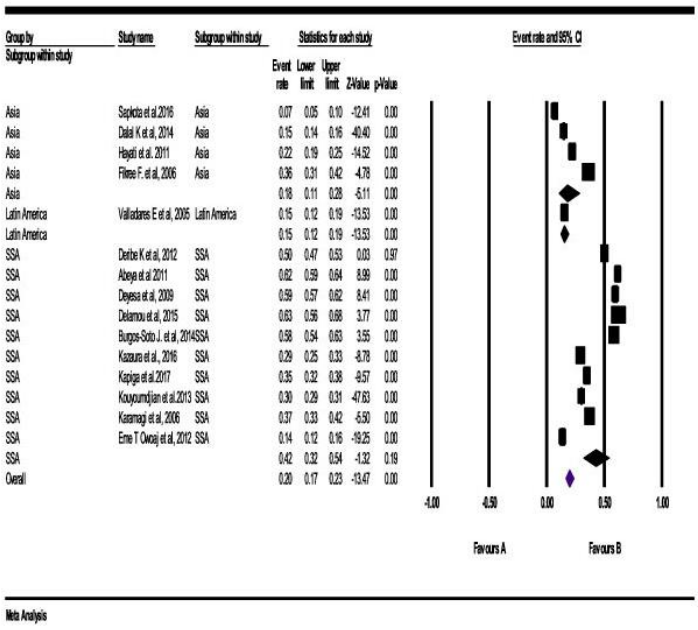


Fig. 4 Forest plot of the lifetime psychological intimate partner violence against women ($n = 15$)

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Heterogeneity: Tau² =0.610, Standard Error = 0.403, df =14 (p<0.000); I² = 99.41%
Test overall: Z= -3.567 (p<0.000)

Fig. 5 Forest plot of the lifetime sexual intimate partner violence against women ($n = 15$)

Sexual intimate partner violence

From 27 studies with a sample of 124,739 women (15–49 years), the pooled prevalence of current sexual IPV was 7% (95% CI: 7, 8%). However, the subgroup pooled prevalence was a bit higher than the overall pooled prevalence. It was 19% (95% CI: 13, 27%) in SSA countries (Fig. 9).

Concurrent intimate partner violence

From eleven studies with a sample of 8315 women (15–49 years), the pooled prevalence of women's experience of IPV concurrently was 13% (95% CI: 12, 15%). In the meantime, the prevalence of concurrent IPV in SSA was 27% (95% CI: 16, 42%) which is two times higher than the overall pooled IPV prevalence in LLMICs (Fig. 10).

Contributing factors of domestic violence against women

Individual level factors

Socio-demographic factors The socio-demographic characteristics of the couples were identified as factors associated with IPV. In six studies, place of residence was one of the factor associated with IPV whereby women living in rural area were more likely to experience IPV than urban dwellers [25, 52, 61, 62, 65, 79]. Similarly, in two studies, women's religion was a factor associated with IPV, such that women belonging to Islam were more likely to experience IPV than non-Muslim [65, 70]. In addition to Muslim women, women belonging to the traditional religion (worshipers) and being in other faith(s) were more likely to accept physical IPV than women belonging to Christianity [52].

Age Differences between women's and their husbands' age had an inconsistent relationship with the experience of IPV. In three studies, physical IPV was significantly associated with women's age and age at first marriage [40, 48, 56]. Women's age 20 years and younger was a risk factor associated with IPV [82]. In one study, women who married at age 15 or young were four times more likely to experience IPV than women got married older than 15 years [64]. While women (15–19 years) were less likely to report emotional IPV, women (25–29 years) and women (30–34 years) were more likely to report being physical and sexual IPV, respectively than women (45–49 years) [76]. Nevertheless, in two studies, older age women (35–49 years) were three times more likely to report lifetime and current IPV than women (15-19 years) [53, 79]. In addition, the age of husbands was a positive predictor of IPV [40, 49], but sexual IPV was associated with husbands younger than 35 years [51].

Education Women's lifetime IPV remained significantly associated with women's level of education. In six studies, uneducated or primary educated women had almost

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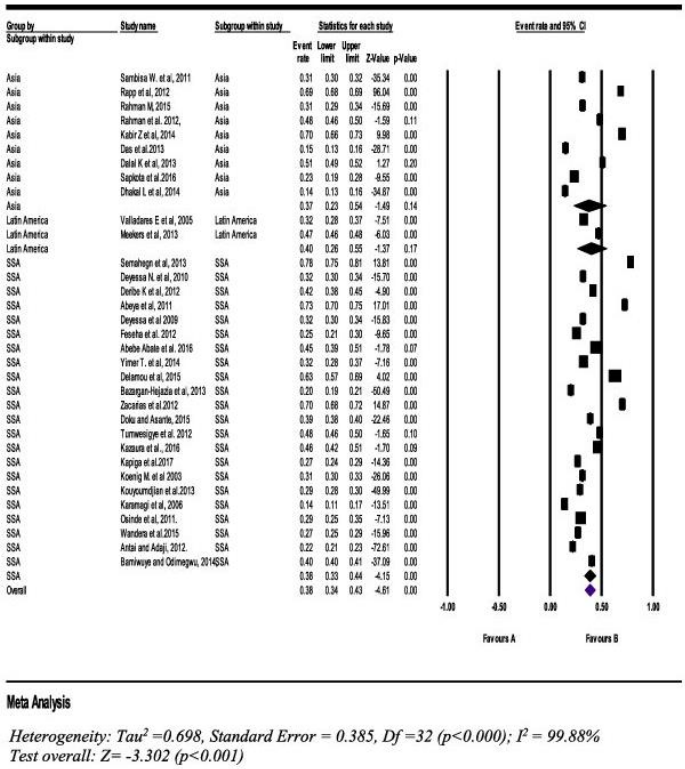


Fig. 6 Forest plot of the current intimate partner violence against women ($n = 33$)

double the prevalence rate of any form of IPV who attended secondary or higher education [6, 48, 52, 53, 60, 65]. In five studies, the higher the women's educational level, the lesser the likelihood of experiencing physical IPV. Women with higher education than their husbands were less likely to experience IPV than women with equal or less education than their husbands [40, 55, 56, 62, 71]. In two studies, women in equally high educated marriages revealed the lowest likelihood of experiencing IPV. Education was found to be significantly protective from IPV, for both women as victim and men as perpetrator [55, 79]. Furthermore, the educational status of husbands was associated with women's experience of less IPV and less violent behavior to their wives [27, 50, 53, 54, 58]. On the other hand, women with no education were about three times more likely to approve (accept) IPV than women with secondary or higher education [52]. IPV remained higher and even increased in the case of women with secondary to vocational levels of education as compared to those with a higher level of education [57, 66].

Occupation In two studies, women who were engaged in manual labor (farming) were three times more likely to be exposed to IPV than women with non-farming occupations [66, 70]. In one study, women who has been in the poorest microfinance group under supported by the microfinance programmes in Bangladesh have no significant change on IPV exposure, except some improvement on economic empowerment [65]. Likewise, the women whose partners are employed (earned in cash) were 93% less likely to experience physical IPV than those women whose partners were farmers (earned in kind) [70]. Likewise, in three studies, women were economically dependent, and or did not have their own means of earnings and controlling their earnings were more likely to report sexual IPV than their counterparts [49, 51, 72]. Similarly, women heading business or engaged in different types of jobs were 50% less likely to report lifetime IPV than women have not heading business (almost jobless women) [79]. On the contrary, housewives were less likely to be experienced sexual IPV than women who have a job different from housewives [68].

Childhood witness Domestic IPV was significantly associated with women and their husband childhood wittiness of parental violence. Although the strength of association varies (ranged from four to thirteen times), those women whose mothers were hit by their fathers

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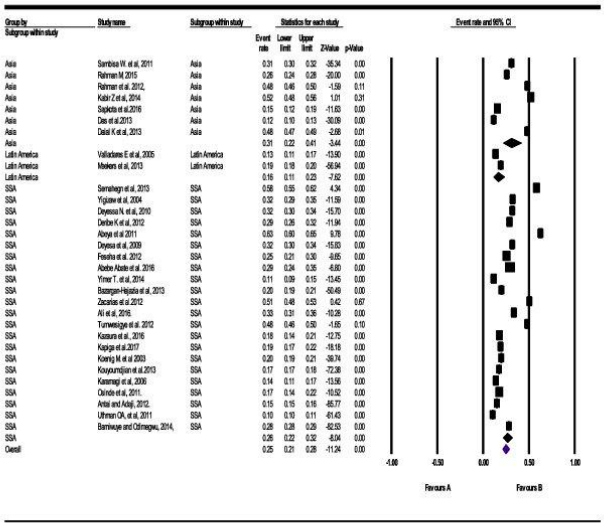


Fig. 7 Forest plot of the current physical intimate partner violence against women ($n = 31$)

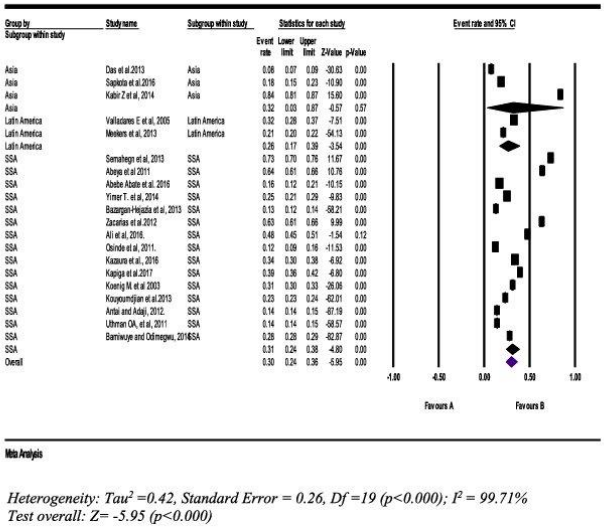
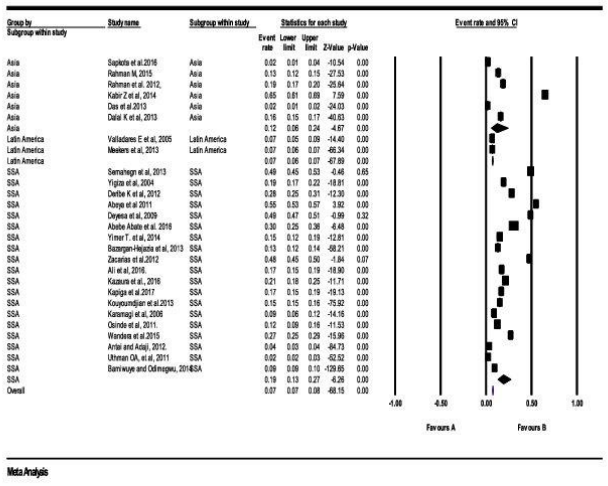


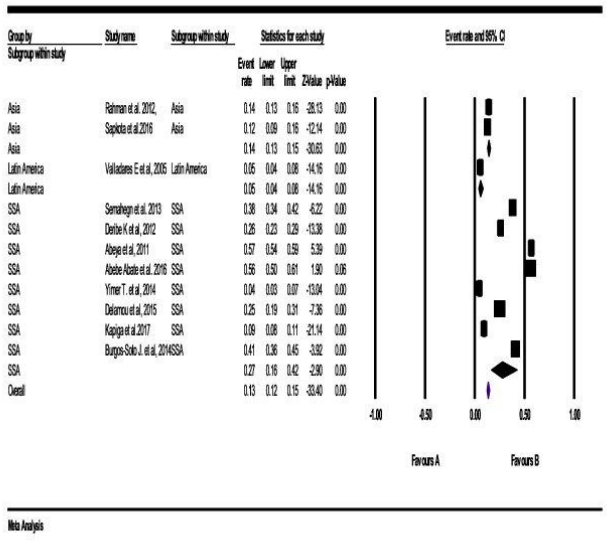
Fig. 8 Forest plot of the current psychological intimate partner violence against women ($n = 20$)

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Heterogeneity: Tau² =0.955, Standard Error = 0.468, df =26 (p<0.000); I² = 99.73%
Test overall: Z= -6.779 (p<0.000)

Fig. 9 Forest plot of the current sexual intimate partner violence against women ($n = 27$)



Heterogeneity: Tau² =1.102, Standard Error = 0.638, df =10 (p<0.000); I² = 99.19%
Test overall: Z= -4.095 (p<0.000)

Fig. 10 Forest plot of the pooled prevalence of concurrent intimate partner violence against women ($n = 11$)

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during their childhood were more likely to report lifetime and current IPV than their counterparts [25, 53, 61, 72, 79]. Likewise, in some studies, women whose husbands were beaten by someone in their family during their childhood were two times more likely to report experiences of IPV than those who were not beaten during childhood [53, 72, 79]. In addition, women's exposure to physical IPV was 5 to 6 times more likely to be higher on women whose husband having witnessed that their mothers being beaten by their fathers than women whose husband had no history (witness) of maternal IPV [51, 66, 70]. Furthermore, in one study, IPV was associated with women who had a history of sexual abuse during childhood, adolescence or even an early age of first sex [60].

Husbands' controlling behaviors and mental health condition IPV was higher among women who were afraid of their husbands [53, 80]. Women whose husbands had controlling, hostile and or rude behaviors were almost three to four times more likely exposed to any type of IPV than their counterparts [47, 53, 68, 77, 79]. Women who had high levels of emotional distress were associated with IPV [82]. Furthermore, women whose husbands previously engaged in physical fight were 3.5 times more likely to experience IPV than others. In a similar way, women with an unhealthy mental status were two times more likely to experience IPV than women with a healthy mental status [47].

Husband alcohol consumption Women whose husbands' drank alcohol were more likely to experience IPV than women whose husbands did not drink alcohol. As we found from several studies, husbands' alcohol consumption is the most commonly reported factor associated with IPV [6, 25, 49–51, 56, 60, 62–64, 66, 70, 79, 80]. Furthermore, in one study, IPV was significantly associated with husband's use of psychoactive substances [66].

Pregnancy status In three studies, pregnant women with high parities had a higher probability of experiencing lifetime IPV than non-pregnant women [48, 49, 66]. Furthermore, in one study, women whose pregnancies were undesired by their partners was six times more likely to have risk of current IPV than pregnancy desired by partner [64]. Likewise, in two studies, the likelihood of women's experience of lifetime IPV was consistently higher as the number of children increased [48, 54].

Relationship factors

Women's decision making status Decision making power was a predictor of IPV [49]. Generally, the odds of IPV was less by 50% for women who had an equal say in household decision-making. Sexual violence was 35% less likely to occur among women who had a share in household decision-making [25]. Interestingly, the probability of women being physically abused decreased by 8.2% for those women whose husbands dominated household decision-making, whereas wife-dominance in household decision-making had a marginal effect on physical violence [54]. However, women who decided on spending their own or husband's earning with a joint decision-making approach in view of their own healthcare utilization, large household purchase, or contraceptive use were less likely to be victims of IPV than women who made decisions by themselves [53].

Infidelity and lack of satisfaction in marriage In four studies, women whose husbands had engaged in extramarital sex or had multiple sexual partners (unfaithful) were two times more likely to be at risk of IPV than their counterparts [51, 62, 72, 80]. Yet, exposure to physical IPV was associated with being unfaithful. Women who agreed that a woman was obliged to have sex with her husband had a lower risk of exposure to physical IPV than those who disagreed [51]. Women who had poor relationships with their husbands were 2.6 times more likely to experience physical IPV [58]. Furthermore, women who had a satisfaction in their marriage were noted to face a low risk of IPV [62]. Sexual IPV was higher among women whose partner were jealous if they talked with other men, suspected them of unfaithfulness, did not permit them to meet even female friends, limit their contact with family [80]. Those women who did not believe a wife could do anything if a husband wanted a girlfriend were three times more likely to be exposed to physical IPV [68]. In the same view, women who could refuse sex with their partners or ask their husbands to use condoms were two times more likely to be victims of IPV than their peers who could not [53]. Women who had worries on issues about their daily activities and did not discuss them with their partners were more likely to experience IPV than women who did discuss their issues [66].

Type of marriage In five studies, the type of marriage was significantly associated with IPV. Women who were married or cohabitated by abduction; women married to distant relatives; women with a polygamous partner or in a polygamous marriage; payment of dowry and marriage undergone without ceremony

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were more likely to experience IPV than their counterparts [27, 48, 50, 61, 79].

Duration of marriage In two studies, this factor was significantly associated with higher experience of physical abuse. Women who were married for 5–9 years (OR, 3.8) or ten or more years (OR, 3.7) were at higher risk of being abused than women who were married for less than 5 years [48, 60].

Wealth index and economic status IPV and wealth index had an association but an inconsistent relationship across the wealth quintiles. In six studies, women belonging to the poorest wealth index categories were most likely to be exposed to IPV than women in the rich wealth index [51, 52, 54, 63, 65, 74]. Other studies, microfinance program membership was associated with a two-three-fold increase in exposure to IPV [65], as were family and financial problems associated with IPV [66, 79].

Community level factors

Presence of the traditional gender norms In two studies, women's exposure to IPV were more likely to be high in communities who adhered to traditional patriarchal gender norms or beliefs and supported (accepted) attitudes towards wife beating [51, 54]. Meanwhile, women who agreed that "a good wife obeys her husband" and/ or "a man should show who the boss is" were more likely to experience sexual IPV than women who disagreed. In addition, women who agreed that a woman had no reason to refuse sex with her husband were three times more likely to be exposed to IPV as compared to who agreed for some reasons [51]. In addition, women who worked outside the home but whose husbands did not make enough money had an increased risk of IPV by 5.2% than women whose husbands made enough money [54].

Community attitude towards wife-beating Communities whose attitudes supported IPV [66] by thinking that justified wife-beating is acceptable [60], or encouraged societal gender beliefs or norms [54], reflected relationship control, and relationship inequalities [40, 51] were significantly associated with women's experience of IPV.

What were the key recommendations from the studies?

Transformation of community's traditional gender norms

In seven studies, undertaking a massive and intensive information, education and communication (IEC) approach is a recommended strategy on transforming a community's culture and traditional gender norms in order to enhance gender equality [25, 27, 38, 47, 49, 51, 61]. Similarly, in eight studies, there is a need to employs comprehensive and culturally acceptable approaches including medical (psychiatric) counseling, community mobilization, gender advocacy and effective development of IEC to dispel myths, misconceptions, negative traditional norms and beliefs, gender inequality and to reduce the costs of IPV [6, 40, 54, 68, 70, 72, 75, 79].

Human right based approach

In one study, community level awareness of human rights as well as advocacy for women's rights is crucial [67]. In four studies, more investments in IPV prevention strategies are needed to address the intergenerational transfer of deeply entrenched cultural-norms which support male dominance and gender inequality [57, 66, 73, 90].

Stakeholder engagement

The urgent attention of policymakers, stakeholders, professionals and other concerned bodies is needed at all levels of society. Stakeholders should design interventions targeting behavioral and social factors which can help to prevent IPV [79]. Likewise, resources should be mobilized by policy-makers, public health experts, researchers and other stakeholders to prevent IPV [48, 59, 63, 72]. Advocacy is very important and can be done as religious institutions, media, government and non-governmental associations encourage gender equality by [66, 67, 70, 73].

Policy formulation and legal framework

The issue of gender equality, women's rights and legal sanctions need due attention during policy formulation and endorsement of laws to prevent VAW are crucial. In many instance of VAW, the punishment to perpetrators were light and not commensurate with the offence victims filed. The law should be more responsive to VAW to help address this challenge [25, 68]. Perhaps, survivors are encouraged to disclose their experience of IPV to people who are in position or have an autonomy, and implementing the existing law for punishment [70]. Policymakers should take immediate action to break hierarchical barriers between spouses, and promote gender equality while amending the existing laws or formulating new policies [52, 53, 75]. However, evidence based efforts are needed to re-enforce legal rights or existing laws and policies and ensure their effective implementation to prevent and respond to VAW [54, 57, 67].

Women empowerment

Six studies have recommended that building women's capacity through education, employment, income and other economic opportunities, and addressing imbalance of power between men and women are crucial to

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prevent IPV [25, 47, 52, 53, 56, 79]. Likewise, promising public health strategies (increasing awareness of the consequences of IPV, strengthening the self-esteem of women and girls and promoting equity in marital relationships) are needed to change attitudes towards gender inequality, and are essential to avert IPV [47, 70, 79]. Furthermore, addressing household poverty-wealth comprehensively [74], enhancing the safety of women, promoting fertility control methods and women's reproductive health service [40] are some other recommended interventions to prevent and control IPV.

Intervention integration

Innovative strategies are needed to provide support and counselling to IPV survivors, who are rarely assisted by health care professionals [82]. Research findings have strongly recommended that IPV prevention interventions be integrated with community health programs; reproductive health and other health services to be more comprehensive, close to household level and accessible to IPV survivors [27, 49, 53, 67, 70]. Integration may help to enhance medical screening of survivors for STI including HIV, provide male partner counseling and other health care support. Furthermore, the authors [38, 48, 67, 78] recommended that reproductive health service providers should be encouraged to advocate for IPV and mental health screening during antenatal care.

Engaging men and other influential persons on IPV prevention

Research findings have proposed that community programs that have a couple-centered approach are needed to promote non-violent masculinity values and norms [47, 51, 58]. Moreover, working with men is a win-win-approach to prevent IPV. Efforts are needed to focus societal, community, relationship and individual level approaches which engage men to promote men's non-violent behavior and gender equality and to minimize infidelity [51, 62, 67]. In addition, interventions addressing IPV should place more emphasis on reducing partners' controlling behaviors and to prevent men's alcohol drinking habits [56, 62, 66, 80]. Furthermore, involving mother-in laws would be a significant move [47]. Also, community health workers could be active players in raising community awareness about IPV [27, 49].

What are the proven evidence?

We systematically selected eight interventional studies that had been conducted in LLMICs [83–90]. The detail of GRADE for the summary of evidence for different outcomes is attached as an Additional file 6. In two studies, the social accepting attitude of IPV was lowered by community mobilization intervention. Women's attitude towards sex refusal when necessary was 1.3 times more likely higher in the community mobilization intervention than control group. Likewise, current physical, sexual and concurrent IPV were lowered in the intervention group by 52, 24%, and 435 respectively than the control group. In addition, women experiencing IPV in intervention communities were more likely to receive supportive community responses. [83, 90]. In one study, the community-level normative attitude towards physical IPV and IPV acceptability norms were improved in the intervention group than the control. In addition, men's suspicion of their partner for infidelity and communication about sex were improved [90]. Similarly, in one study, community engagement and group education combined interventions reduced IPV almost by 20% while the CE-only group reduced it by 23%, and enhanced gender equitable norms [85].

In the two interventional studies which is mainly focused on women's economic empowerment through a village loan and saving association approach, women in the combined groups were significantly less likely to report economic abuse than control group (OR, 0.39, 95% CI: 0.25, 0.60) [84, 86]. In one study, while attitude towards refusal of sex did not significantly change, women in the combined (VLSA and GDG) intervention group reported a lower experience of current IPV and also acceptance of justified wife-beating than VLSA alone, but it was not statistically significant [84]. In one study, women who got married when they were children were 46% less likely to report physical and or sexual violence in the combined intervention group than the control. The reduction was however, not statistically significant in the overall IPV [86].

Women's attitudes about IPV and power relationships were associated with their IPV experience. In one study, women who report violence was ever justified if a woman refuses sex were two times more likely to experience IPV than control group. Furthermore, women in joint (both partners) sexual decision making relationships were 30% less likely to report IPV as compared to women whose partners controlled sexual decision-making. Notably, women were 57% less likely to report IPV when both partners had equal power [87]. However, women's economic empowerment was doubled for those women in the safe home and respect for everyone (SHARE) intervention group. Likewise, women in the intervention group were 20% less likely to experience IPV than those in the control group. Nevertheless, SHARE had no significant effect on emotional IPV, men's behavior (perpetration) [88], overall IPV, women's autonomy and women's attitude towards gender norms [89].

Discussion

This systematic review and meta-analysis determined the prevalence of domestic IPV and its types, associated

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factors, effective interventions and key recommendations to prevent domestic VAW. We found out that the pooled prevalence of lifetime IPV was 55% (95% CI: 52, 59%). Of these, lifetime physical, psychological and sexual violence were 39, 45 and 20%, respectively. Furthermore, the pooled prevalence of current IPV was 38% (95% CI: 33.0, 43%). Of these, prevalence of current physical, psychological and sexual violence were 25, 30 and 7%, respectively. In addition, the pooled prevalence of women's experience of concurrent IPV was 13% (95% CI: 12, 15%). This finding is consistent with the WHO's global estimates and multicounty study whose findings indicated that one-in- three women experienced domestic VAW in their lifetime [1, 98, 99].

As evidence shows that IPV was significantly associated with educational level, place of residence, economic status, having witnessed abuse during childhood, husbands' having controlling behavior, husbands' alcohol consumption, pregnancy status and parity. Notwithstanding, sexual violence was common among women who had husbands younger than 35 years. Furthermore, women in unfaithful relationships and unsatisfied marriages as well as women who married early and have experienced forced first sex, short duration of marital life, and poor mental health had a higher risk of experiencing IPV. In addition, the presence of traditional gender-norms and wife-beating accepting attitudes were linked with a high risk of domestic violence. This finding is also consistent with the ecological model formulated in 1998 [97, 100] which is very applicable in low and lower-middle income settings and is targeted at the deep rooted causes.

This systematic review found out that IPV prevention should focus on community culture or traditional gender-norm transformation; stakeholders' engagement; women empowerment (capacity building); engaging men and other influential people (mother and/ or father in-laws, sister-in-law, neighbors); intervention should focus on service integration with other relevant sectors (mainly health sector for screening and other care and support); policy formulation and provision of legal framework and implementation of human right based approaches. This finding is consistent with other reviews that recommended focus on the structural drivers of unequal power in relationships to prevent VAW [98, 100–102].

We included observational and interventional studies. However, we interpreted the findings to meet our review objectives. Nevertheless, we did not mix-up the findings of the observational and interventional studies. Though, this systematic review and meta-analysis used relatively comprehensive search of the major databases; included both quantitative and qualitative studies; published and unpublished studies and sub-group analysis by setting and violence types, it had some limitations. One of the main limitations was the inconsistent definition of IPV across some studies. Hence, we used both IPV and domestic VAW synonymously. The second limitation of this systematic review and meta-analysis is that it did not carry out quantitative synthesis on the factors associated with domestic VAW due to the high heterogeneity between included studies. However, it is difficult to find absolutely homogeneous studies in terms of setting, method, analysis and interpretation.

Implication of the review

Domestic violence against women is a common women's life experience and mostly perceived as minor and socially tricky by many governments. However, its consequences have a devastating impact on national gross domestic product and costs much higher than the budget allotted for primary education. Hence, generating evidence on the prevalence, associated factors and identifying effective interventions applicable in poorly resourced settings is very crucial. This systematic review and meta-analysis can give critical insight about VAW, associated factors, and effective interventions. Therefore, concerned stakeholders can use the findings of this study as main evidence to inform policymakers, program designers and local planners construct and for implement policies to prevent IPV in LLMICs.

Conclusion

Both lifetime and current domestic IPV are still high in LLMICs. More than half of the women in the studies had experienced lifetime domestic IPV, and almost one-third of the women had experienced current IPV. In addition, almost one-in-ten women experienced more than one type of IPV concurrently. Domestic IPV is a complex public health and human rights violation which is associated with factors at the individual, relationship, community and entire system level. However, most of the associated factors are preventable. Interventions integrating legal framework and programs that focus on transformation of traditional gender-norms are most important to prevent IPV. Community mobilization and awareness creation to transform gender-norm reduced IPV by half. However, the economic empowerment intervention had reduced some influences on women (reduced economic abuse), but it was not statistically significant in the prevention of IPV. Therefore, we suggest that researchers, program planners, policy makers, clinicians and other concerned stakeholders should invest in the implementation of gender-norms focused on community based interventions to prevent IPV.

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Additional files

Additional file 1: PRISMA checklist. (DOC 85 kb)

Additional file 2: **2-1** & **2-1-1**: Searching strategy on PubMed database. **2-2** Searching strategy on Medline database. **2-3** Searching strategy on EMBASE database. **2-4** Searching strategy on CNHAL database. (ZIP 2206 kb)

Additional file 3: Studies quality assessment using JBI critical appraisal checklist. (DOCX 24 kb)

Additional file 4: **4-1** Heterogeneity between studies illustration using funnel plot. **4-2** Risk of bias (ROB) assessment. (ZIP 69 kb)

Additional file 5: The extracted data stored on Microsoft Excel sheet for met-analysis. (XLSX 19 kb)

Additional file 6: GRADE for the summary of evidence for different outcomes. (DOCX 18 kb)

Additional file 7: Confirmation letter for funding. (PDF 1930 kb)

Abbreviations

AOR: Adjusted Odds Ratio; CE: Community engagement; CI: Confidence interval; GDG: Gender Dialogue Group; IEC: Information, education and communication; IPV: Intimate partner violence; JBI: Joana Briggs Institute; LLMICs: Low and lower-middle income countries; SHARE: Safe Home and Respect for Everyone; SSA: Sub-Saharan Africa; TDR: Tropical Disease Research; VAW: Violence against women; VSLA: Village Save and Loan Association; WHO: World Health Organization

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Availability of data and materials

The data that support the review findings of this study are available upon submitting a reasonable request to the corresponding author (see Additional file 5).

Authors' contributions

AS*, KT, AM, and AA conceived and designed the review. AS* carried out activities from inception to the draft of the manuscript and is the guarantor of the review. AS* and GT developed the search strings, selection, analysis and interpretation. AS*, KT, AM, NA, GT and AA rigorously review the manuscript. All authors read and approved the final version of the manuscript.

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

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Author details

[1]Department of Population, Family and Reproductive Health, School of Public Health, College of Health Science, University of Ghana, Legon, Accra, Ghana. [2]College of Health and Medical Sciences, Haramaya University, Po. Box 235, Harar, Ethiopia. [3]Population Council/Ghana, Yiyiwa Drive, Accra, Ghana.

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Appendix 2: Published study protocol

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Reproductive Health

STUDY PROTOCOL Open Access

Community based intervention to prevent domestic violence against women in the reproductive age in Northwestern Ethiopia: a protocol for quasi-experimental study

Agumasie Semahegn[1,2*], Kwasi Torpey[1], Abubakar Manu[1], Nega Assefa[2] and Augustine Ankomah[1]

Abstract

Background: Violence against women is a well understood devastating global pandemic, and human right violation. One in three women experienced intimate partner violence worldwide. In Ethiopia, the level of domestic violence against women is one of the highest in the world. However, Ethiopia is signatory for various conventions and incorporated in legal frameworks. Nevertheless, effective implementation of the existing policy documents, and engaging different stakeholders is very limited. Therefore, we aimed to pilot feasibility of implementing available research evidence and policy documents at community level to prevent domestic violence against women in Awi zone, northwestern Ethiopia.

Methods: A community-based quasi-experimental study design will be employed using mixed method. Multistage stratified systematic sampling and purposive sampling will be used to recruit quantitative and qualitative study participants, respectively. A total of 1,269 women will be participated in the intervention, active comparator and control groups. Pre and post-test quantitative data will be collected using face-to-face interview. Qualitative data will be collected through in-depth, key informant interview and focus group discussions. Intervention: advocacy meeting will be held to persuade local politicians and sustain the implementation of community based intervention to prevent domestic violence against women. Community representatives will be trained to enhance peer education to promote community awareness and engage stakeholders to transform the traditional gender norm within local context. Awareness creation and husband involvement will be made through integrating the intervention with community health extension program. Only husband involvement will not be promoted in the active comparator to test the role of husband involvement on the domestic violence prevention activities. Intervention progress will be monitored regularly. Gathered data will be entered in Epidata and exported to SPSS (23.0) software for analysis. Descriptive statistics, logistic regressions, intention to treat analysis and difference in differences will be computed. Qualitative data will be transcribed, color coded, thematically analyzed and arranged using Nvivo.

Discussion: This interventional study is aimed to design, pilot and translate proven research evidence, agreed conventions and country policy document to real setting implementation. We are expecting to initiate implementation of culturally acceptable intervention through engaging stakeholders. Policy makers, planners and any concerned bodies will be benefited.

Trial registration: ClinicalTrials.gov ID: NCT03265626

Keywords: Domestic violence, Women, Intervention implementation, Community, Ethiopia

* Correspondence: agucell@yahoo.com
[1]Department of Population, Family and Reproductive Health, School of Public Health, College of Health Science, University of Ghana, Legon, Accra, Ghana
[2]College of Health and Medical Sciences, Haramaya University, Po. Box 235, Harar, Ethiopia

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Plain English summary

Violence against women is a well-recognized reproductive health issue. It is a cross-cutting issue which is interlinked with every day's routine activity and overall development agenda in the world. Several primary studies have been conducted on the area that briefly report the level and associated factors of the domestic violence against women. Moreover, some interventional studies also conducted in different parts of the world revealed that interventions mainly focused on gender norm, societal culture and other behavioral change communication can improve the prevention strategies to tackle domestic violence against women. Nevertheless, many countries still have a limited motivation to implement their policy in real setting to prevent violence against women. One of the most dilemmatic issue is considering violence against women as a private matter, and still there is lack of clear understanding on the difference of private and public matters. Therefore, this study aims to mobilize community to prevent domestic violence against women. It will contribute evidence to program planners, policy makers, clinicians and other stakeholders to have informed decision on the issue of domestic violence against women.

Background

Gender based violence against women is a well-recognized public health problem, gross pervasive abuse of human rights, and major obstacle for achieving the sustainable development goals worldwide [1–6]. Globally, one in three women experience violence against women (VAW) [4, 7, 8]. About 38–60% of murders of women are committed by intimate partners every year. Domestic VAW is not only an exhibit of unbalance of power, and a bad women's life experience at their home [9, 10], it accounts for 5% loss of women's healthy years. The morbidity and mortality due to VAW is more than a cumulative burden of cancer, road traffic accidents and malaria, a huge threat and unmanageable global burden to public health for the future [10]. According to World Health Organization (WHO) multicounty study indicated that intimate partner violence in Ethiopia was 71%, which is the highest in the world [11]. Research evidence show that domestic violence is strongly linked with gender inequality that affect women's ability to have a discussion on several reproductive health issues including human immunodeficiency virus (HIV) and negotiate on condom use [12–14]. The cost of VAW is estimated from 1.2–3.7% of the country's gross domestic product, which is equivalent to what many governments spend on primary education [8]. Nevertheless, most governments have considered domestic VAW as minor social tricky, private matter and not taken as crime [1, 10, 12].

The United Nations aims to create an enabling household environment, improve women's right, political, economic empowerment and legal protection [15]. Consistently, the Maputo Plan of Action (2016–2030) gives due attention to the implementation of international, regional and national legislations to tackle VAW [16]. On the other hand, a systematic review suggested that women empowerment and community mobilization averted $13–19 per disability adjusted life year. Hence, gender responsive interventions that target traditional gender norms, behavior change communication and structural drivers are cost effective approaches to prevent VAW [17]. Likewise, domestic VAW is strongly associated with gender norms, poverty, denied access to education, embedded in social customs, lack of autonomy, inequitable gender attitudes, women accept justified wife beating and alcohol use [1, 2, 5, 18–23].

Moreover, domestic VAW is significantly associated with various poor health outcomes (low birth weight, premature birth, malnutrition, suicide, homicide, mental illness, physical injuries, disability and non-communicable diseases) [1, 6, 7, 18, 20, 24–29]. In addition, VAW has been associated with HIV and other sexual transmitted infections (STIs) acquisition, unintended pregnancy, induced abortion and other poor reproductive health conditions [1, 5, 7, 10, 14, 19–21, 23, 27, 30–43]. It is a cross cutting issue which requires comprehensive approach to address it (microfinance support, equality norm or culture transformative training; communication skill in relationship; minimize access to alcohol use and community health education [1, 20, 44]. The conceptual framework that shows the detail of factors associated with domestic VAW included as an additional file (Fig. 1).

In Ethiopia, domestic VAW is a common women's life experience. A systematic review on studies done in Ethiopia (2000–2014) indicated that any intimate partner violence (IPV) is a known phenomenon in the country which ranged from 20 to 78% [45]. In response to this, the government of Ethiopia has incorporated the issue of women's right and gender equality in the constitution (Article 35 and 89(7)) [46], criminal code under proclamation NO.414/2004 *(Article 564)* [47] and Family Code Proclamation No. 213/2000 [48]. Violence against a marriage partner or a person cohabiting in an irregular union is prohibited. In addition, access to and control over resource including other rights and responsibilities of partners in marriage or cohabitation are clearly addressed in the policy documents. Moreover, Ethiopian Ministry of Health has developed a standard operating procedure for the response and prevention of sexual violence in Ethiopia in 2016 [49]. Community mobilization, stakeholder engagement and partner involvement are the most prioritized intervention programs which need effective implementation, but these are still very limited. Furthermore, this implementation research will give an insight to mobilize resource, involve stakeholders to put the existing law and regulations into action and identify implementation bottlenecks. Given the paucity of evidence, it will provide

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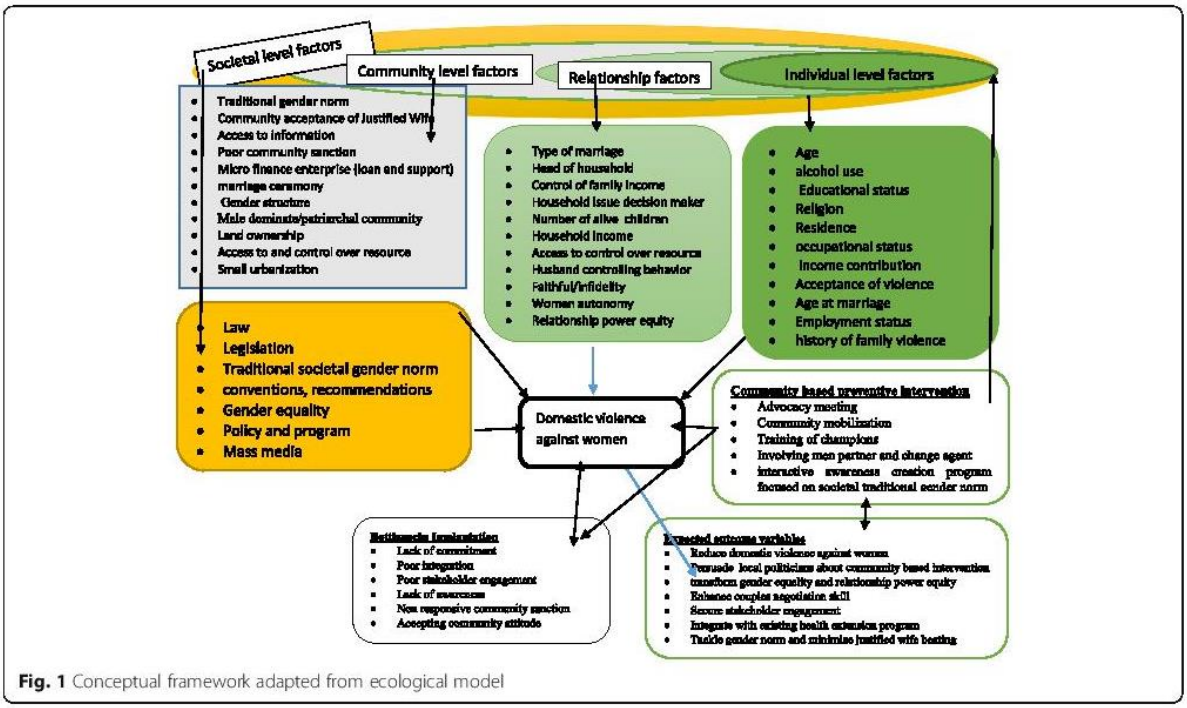


Fig. 1 Conceptual framework adapted from ecological model

information on feasibility and implementation of community based preventive intervention programs.

Study objective

The overall aim of this study is to assess the outcome of community based intervention to prevent domestic violence against married or cohabiting women in the reproductive age and associated factors in Awi zone of the Northwestern Ethiopia from November 15, 2017 to November 15, 2018.

Specific objectives

1. To assess the baseline level of domestic VAW in the study area
2. To identify associated factors of domestic VAW in the study area
3. To explore implementation bottlenecks in VAW program in the study area
4. To implement culturally acceptable interventions to address domestic VAW
5. To assess the outcome of community based intervention on domestic VAW

Methods

Study setting

This study will be conducted in Awi zone, Amhara regional state, Northwestern Ethiopia. Enjibara town is the administration center of Awi zone which is located 447 km from Addis Ababa. Based on the 2007 Census, it has a total population of 982,942 and 491,077 of them are women. Only 12.5% of population are based in urban. Based on the preliminary assessment; Awi zone administration has nine districts with a total of 204 sub-districts and 6463 development armies. *Sub-district is the smallest administrative unit which has an estimated 1000–1500 households or 5000 total population.* In one of the district of the Awi zone, Faggetalekoma district has one of the highest record in domestic VAW [45, 50]. The women and children affair office has structured by the government to execute such type of issues. The zonal health department and district health offices have been implementing the standard operating procedures to respond and prevent sexual violence.

Study design and participants selection

Community based three arm quasi-experimental design will be employed usingquantitative and qualitative techniques (mixed methods).

Quantitative study participants

Married or cohabiting women (15–49 years) will be recruited for the quantitative study. Study participants will be allocated into intervention, active comparator and control groups. Three districts will be selected out of nine districts considering stability or mobility status, convenience to implement intervention and monitor the

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control. The study design and participant allocation is illustrated as an additional file (see Fig. 2).

Qualitative study participants

Community representatives (local leaders, religious leaders and elders), husbands, health care providers, police and women affair office representatives will be involved.

Inclusion criteria

- Women (15–49 years) from the general population
- Married/cohabited women who have stayed at least 12 months with the current husband
- Women and community representatives who have registered or recognized as permanent resident at least for 6 months

Exclusion criteria

- Women and or community representatives who will unable to respond due to severe physical or mental illness

Sample size determination

The sample size is determined considering both the intervention and control using a formula recommended for dichotomous outcome variable. We assumed that implementation of community based intervention program to prevent domestic VAW is superior as compared with the standard service [51]. In addition, we considered 5% margin of error, 95% significance level and 80% power.

$$N = 2 \times \left(\frac{z_{1-\alpha} + z_{1-\beta}}{\text{d-}\delta_0}\right)^2 \times p \times (1-p)$$

Where as; N is the sample size of each group, P is prevalence in standard intervention (control arm), d: the real difference between two treatment effects ($d = P_o\text{-}P_x$); 22%–9% = 13% = 0.13: study done in Uganda (22%) in the standard intervention group [52]; δ_0: statistical acceptable margin (5%); α: significance level at 95% (α = 1–0.95 = 0.05 = 1.645), ß: 80% power (ß = 1–0.8 = 0.2 = 0.845. Then, 15% is added for potential non-achievements. Furthermore, due to the multistage sampling, design effect is considered to boost the power and precision that taken from the design effect of women experienced physical or sexual violence in the study area (Amhara region) in the last 12 months was 1.11 [53]. Eventually, a total 1269 women is obtained for the three arms (i.e. 423 for each group). The number of qualitative study participants will be determined by information saturation. However, a minimum 12 in-depth interviews and two focus group discussions (FGDs) (male versus female groups) which comprise 8–10 discussants will be conducted.

Sampling procedure

Multistage, stratified and systematic sampling will be used to recruit study participants at their permanent place of residence. Three districts are selected out of nine districts in Awi zone (comprehensive intervention, active comparison and control). Then, six sub-districts (two sub-districts from each district) will be selected purposefully considering appropriateness for intervention, resource, and geographical non-proximity to control information contamination between intervention and controls. Then, sub-districts will be stratified (urban versus rural) to control the awareness level,

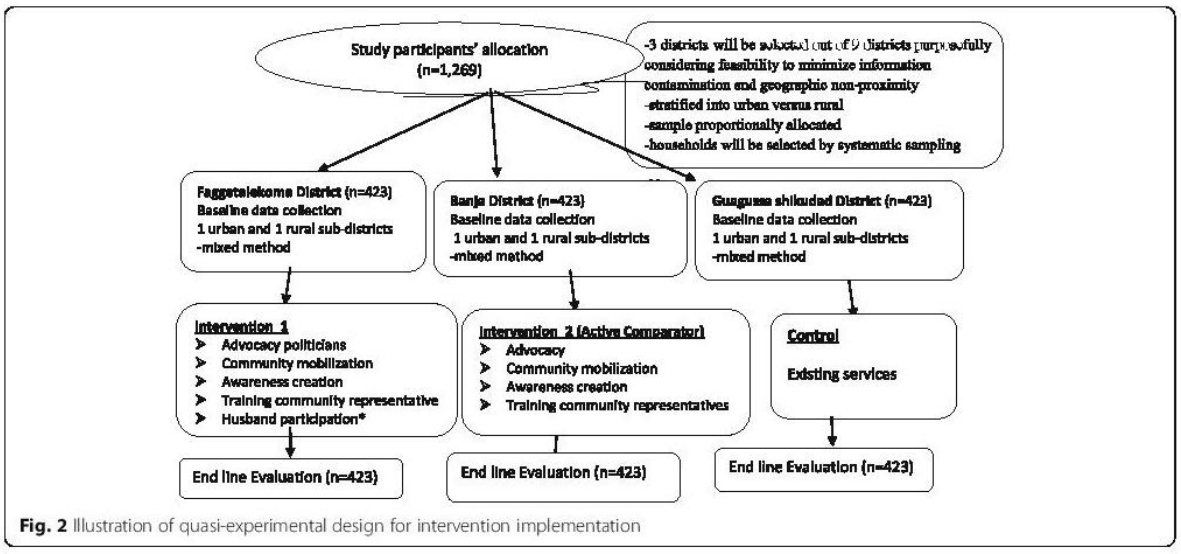


Fig. 2 Illustration of quasi-experimental design for intervention implementation

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access to information and community traditional gender norm variability between urban and rural dwellers. After that, the sample of the group will be proportionally allocated to size of each selected sub-district. The number of eligible households for this study will be identified using the community based health extension workers registry. Eventually, systematic sampling will be employed to select actual study participants at household level. Unique code will be given to selected households for intervention monitoring and finally endline evaluation purpose. In the meantime, if two married women are present in one household, only one woman will be selected using lottery method for interview.

Purposive sampling method will be used to select study participants for in-depth interview, key informant interview (KII) and FGDs. Community leaders will be consulted and actively involved on the recruitment of the most knowledgeable community representatives for in-depth interview, KII and FGDs. It will be conducted to explore individual and community perception about domestic VAW, sex negotiation, decision making, community gender norm, wife beating attitudes and community responses.

Measurement tools

Data will be collected using structured and semi-structured questionnaire that is adapted from various literature [29, 41, 50, 54–70]. The tool will be pretested and modified to suit with the local context. It will consist of demographic, socio-economic variables about the women, relationship, community and societal level factors of domestic violence. In addition, the tool will comprise questions about the experience of psychological, physical and sexual violence. Moreover, semi-structured interview guide will be designed for qualitative study to explore the underlying bottlenecks in the community that hinder intervention implementation.

Data collection procedure

Data will be collected using sequential explanatory mixed method (quantitative 1 and 2, and qualitative 1 and 2) for baseline, monitoring and endline assessment. It is illustrated and attached as additional file (see Fig. 3) that is adapted from other study [71]. Face-to-face interview will be used for quantitative data collection. In-depth interview, KII and FGDs will be carried-out for qualitative study. The KII will be conducted on community representatives, district council members, women affair office, police officers, lawyers, health care providers and nongovernmental organization. Gender specific FGDs will be held on men and women to assess societal perception about domestic VAW. All participants' socio-demographic data will be captured using anonymously coded structured questionnaire. Voice recorder, note taking and non-verbal communication during the discussion will be recorded as much as possible. An estimate of 60 to 90 min will be taken to conduct one FGD. Eventually, endline evaluation will be carried-out using the same structured questionnaire, data collectors and supervisors as of the formative assessment. Twelve female nurses, midwives or public health officers will be recruited to collect the data.

Data quality assurance activities

- Participants Allocation: Intervention and control group participants will be allocated based on their geographic non-proximity to minimize information contamination. In addition, regular monitoring will be carried out on both intervention and control groups.
- Data Collector's Recruitment and Training: Data collectors will be recruited through consulting local leaders to get appropriate data collectors. Then, female nurses, midwives and or public health officers who have diploma or above qualification will be recruited as data collector (research assistant) to enhance quality of the data to be collected. Two supervisor who have Master of Public Health and had previous field experience will be recruited. Three days training will be given for research assistants by the principal investigator which will

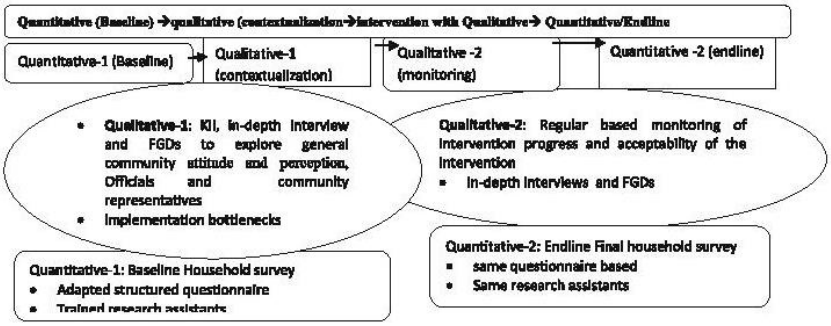


Fig. 3 diagrammatic show of the sequential explanatory mixed-method data collection process

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mainly focus on study objectives, sampling methods, data collection tool and procedures, interview techniques and ethics. Biomedical research ethical principles and WHO gender based violence research ethical guideline will be explained to research assistants. Regular supportive supervision will be given by principal investigator and supervisors.

- Implementers Recruitment and Training: Four community health extension workers as implementer and one supervisor will be recruited and deployed during the entire intervention period. Health extension workers who have been working in the sub-district will recruited as intervention implementer to ease integration with the existing innovative community based health extension program and working very closely with the community. Health Extension Workers (HEWs) will be re-oriented on the objectives, domestic VAW, gender inequality norm and how to integrate with their health extension package. Regular discussion and close supportive supervision will be given by principal investigator and facilitators.
- Pretest questionnaire: Pretest will be done on 5% of the sample size from nearby district to test sensitive words in the questionnaire, sequence of questions, sampling, data collection procedure, consent taking, interview skill and note taking. Necessary amendment will be made accordingly.
- Tool Development and Validation: Intervention materials will be adapted from WHO and United Nation Population Fund (UNFPA) materials, research evidence, human right protection instrument and national policy documents. Most of domestic VAW research findings recommend addressing of wife beating accepting attitude, gender norm, gender equality, women empowerment, male involvement and legal sanctions. The adapted intervention materials for community mobilization, awareness creation and training of community representatives will be peer reviewed for validation. The research team will review it and necessary modification will be made accordingly. In addition, any feedback about the material will be received from advocacy meeting participants to contextualize with the community setting.

Data processing and statistical analysis

Both baseline and endline data will be checked and edited for completeness and consistency at field as well as at office. Explanatory and outcome variables will be clearly predefined prior to data entry, in which domestic VAW will be coded as if a woman reports at least one type of experience of either physical, psychological or sexual violence coded as "Yes = 1" and "No = 0". Similar coding will be done for physical, sexual and psychological domestic violence against women to carry out subgroup analysis. On the other hand, women's wife beating accepting attitude will be measured using six questions or measurements, and also if women respond at least one justifying wife beating [58, 59, 61]. Similarly women autonomy will be measured in four indicators such as economic decision-making, reproductive health service utilization decision-making, extent of freedom of movement, and women's attitudes toward violence [54].

Then, data will be entered in Epidata (3.5.1) and exported to SPSS (23.0) for further cleaning and analysis. Multiple imputation will be done to handle missing data as necessary. Descriptive statistics, binary and multiple logistic regressions and Intention to Treat Analysis (ITTA) will be computed. Moreover, Difference in Differences (DID) will be calculated to determine the net intervention effect. Finally, statistical significance of intervention effect will be measured using adjusted prevalence ratio, adjusted odds ratio/risk ratio at 95% confidence interval (CI) and *P*-Value less than 0.05. On the other hand, qualitative data will be transcribed through playing and replaying the voice recorder and also narrating the note taken during interviews or FGDs. The voice recorder audio will be listen as much as possible in quiet place. It will be transcribed independently by research assistant and principal investigator according to the verbatim of participants'. Then transcribed qualitative data will be translated from local language (Amharic) to English. The quotes will be narrated and cited using participant's code. Thematic areas will be identified and arranged based on their themes. Ideas will be color coded, and then merged accordingly. Qualitative data will be analyzed or arranged using Nvivo software.

Implementation Design of the Community Based Intervention

Evidence from clustered randomized controlled trials, community based quasi-experimental trials, longitudinal studies and systematic review on domestic VAW have been used to design intervention. In addition, recommendation of various community based research evidence, WHO recommendations, existing legal sanctions or policy documents (constitution, civil code, family laws and standard operation procedure to respond and prevent domestic VAW) will be used to implement the intervention. Intervention will be implemented using culturally appropriate and integrating with existing innovative community based health extension program. Interventions will be more focused on traditional gender norm, negotiation skills and involve men on domestic violence prevention activities. The intervention implementation will have contextualization, tool development and validation, advocacy, stakeholders' engagement and overall community mobilization activities.

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Advocacy meeting and stakeholders engagement

Advocacy meeting will be held to enhance awareness about domestic VAW problem, socioeconomic consequences, political implications, evidence based prevention strategies and country legal sanctions towards VAW. The advocacy meeting will be held every three months regularly for a year. It will create an entry point into the community and also involve stakeholders. Both the zonal and district health offices, women and child affair offices, police and security, office of justice, agriculture and land management office, women lawyer associations, nongovernmental organizations, community representatives (religious fathers, local leaders and elders) will be considered as potential stakeholders. However, stakeholder analysis will be made in Awi zone perspective to identify key stakeholders. Then, identified key stakeholders will be expected to be actively involved on the implementation process as per their hierarchy. Gender expert from health office and women and children affair office will be actively involved in the intervention implementation process.

The intervention will be implemented to address the risk factors according to Ecological Model (individual, relationship, community and societal level factors). Furthermore, piloting implementation intervention will focus on the five domain of implementation research domains (intervention, inner, outer, individual behavior and process settings) which clearly illustrated on Consolidated Framework for Implementation Research (CFIR) model, and presented in detail as additional file (see Fig. 4).

Arm 1: Comprehensive intervention group: comprehensive intervention to prevent domestic VAW and enhance existing policies will be conducted. The intervention will be focused on physical, psychological and sexual violence, decision making, negotiation, communication on household matters, gender equality and equity norms, and their relationship with women's health. Gender based training will be addressed about transformative gender norm. Comprehensive intervention will be comprised of the advocacy meeting, community mobilization activities, husband involvement and other awareness creation activities.

- Advocacy meeting/workshop: will be made to convince local people who are in position (authority) (police, women association, women affair office, health professionals) that have direct contribution to tackle VAW. Research evidence that show the magnitude, associated factors and proven solutions will be presented by the principal investigator. Thorough discussions will be made on the issue of VAW as per the local setting. It will allow to convince as well as dig out implementation bottlenecks. Leaflets, posters and any other awareness creation materials will be distributed to improve community attitude about VAW.
- Community mobilization: will be done at different public places (church and other social gathering events) about harmfulness of VAW, gender equality and equity, women autonomy on reproductive health, decision making on household issues and negotiation/communication skill. In addition, awareness creation activities will be carried out as

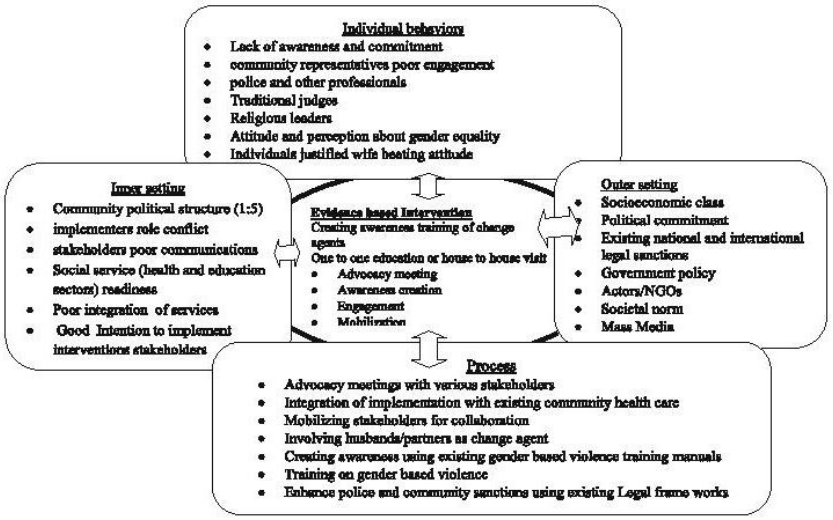


Fig. 4 Schematic presentation of Interacting domains using CFIR

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community conversation to reach the entire community within the study sites.

- Training: will be provided to community representatives as a change agent (leaders, religious fathers, elders, health care provider, police, local politicians and associations). Community believes, culture and religion are the main factors that affect attitude and gender norms. The training aims to improve awareness of public figures towards gender norm specifically on VAW. On each session of the training, discussion will be entertained to have common understanding of issues and discuss possible solutions.
  All trainees are expected to disseminate information while going back to their home or religious place, community gathering areas (*Idir*, *Equib*, etc.) and also Sunday coffee ceremonies. Regular trainings to community representatives will be given every three months for a year in each intervention group.
- Awareness creation information dissemination: well oriented health extension workers will implement the awareness creation activities through house-to-house by integrating with the health extension package. The awareness creation will be more focused on gender equality, equity, decision making autonomy, negotiations skill in relationship and etc. this intervention will be given mainly to the women.
- Husband or partner involvement on domestic violence prevention: group health education and discussions will be held with husband or partners. Gender equality, equity, decision making, communication and involving on reproductive health issues as part of human right are the main issues that will be mentioned in this target group. Women's contribution in development and their right involving on household issues decision making will be raised and discussed.

ARM 2: Active comparator group: are all interventions listed above under comprehensive intervention (advocacy, community mobilization, awareness creation and training community representatives) will be provided to this group except active husband involvement intervention. The ultimate objective is to test the contribution of husband involvement on domestic VAW prevention.

Arm 3: Standard services (control group): the standard service will be sustained. We will regularly monitor to know what is going on in addition to the standard service during the study period for documentation purpose only.

Expected outcomes

Expected Outcomes of the Community Based Intervention	
Specific objective 1	Conduct baseline assessment of domestic VAW in the study area
	- determine the prevalence of domestic VAW (physical, sexual, psychological)
Specific objective 2	Identify associated factors of domestic VAW
	- Identify the associated factors - explore community perception - Explore stakeholders engagement level - explore implementation barriers or bottlenecks of VAW program at implementers side
Specific objective 3	Design intervention implementation strategy to tackle domestic VAW
	- Prepare the intervention material and validate according to the local culture - Integrate with community based health extension program - Conduct advocacy workshop and work with the local administrative bodies
Specific objective 4	Implement culturally acceptable interventions to address bottlenecks and DVAW
	*advocacy workshop four times a year (4 session)
	- create awareness on politicians - create champions of domestic VAW prevention - enhance commitment to implement policy documents at community level
	*community mobilization monthly for a year (12 sessions)
	- involving the community in the domestic VAW prevention - engaging stakeholders - create community ownership
	*Awareness creation to the women (at least once per month)
	- enhance their communication and negotiation skill - enhance their awareness about gender equality - transform their wife-beating acceptance attitude
	*involving husbands (6 to 12 sessions)
	- participate husbands/partner as change agent - enhance their awareness about gender equality - improve masculine attitude and transform
Specific objective 5	To assess the outcome of community based intervention on domestic VAW
	- conduct endline assessment - perform data analysis to determine the prevalence of domestic VAW - compute the difference between endline and baseline (prevalence, community acceptance, factors) - integrate with health extension program - scale up to other sites - learn from success and failure

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Phase of intervention and monitoring and evaluation (M&E)

Phase 1: Baseline	Phase 2: intervention implementation	Phase 3: endline	Phase 4: dissemination and scale up
-Baseline data collection -Instrument validation -Contextualization of the intervention -explore community perceptions	-advocacy meeting with local administrative bodies and stakeholders to explore implementation barriers and also enhance engagement of stakeholders -community mobilization -awareness creation to the women on gender equality, rights and community norm -awareness creation and enhance husband/partner involvement -Training of community representatives to involve them in the traditional norm change agent -traditional coffee ceremonies and community conversation	-endline data collection - statistical analysis to investigate the intervention effect between baseline and endline -identify barriers and enablers for the future domestic violence prevention	*Dissemination -Advocacy meeting -policy Brief -publication in peer review journals -local Media -use social media -present in conference s *Scale up of successful experiences -learn from barriers and propose alternative solutions -integrate with health extension program -engaging stakeholders/ community
M& E	M& E	M& E	
-measurement tool and intervention material validation -number of women interviewed per day and completeness and consistency of questionnaire	-number of advocacy workshop -pre-posttest of the participant -feedback from participants -number of women involve in awareness creation -number of community representatives trained and involve on community mobilization -number of husbands/involved and attend awareness creation program - implementers briefing and debriefing regular session -KII and FGD on the progress of the intervention and acceptability of the intervention by the community	-re-orientation of data collectors -use same data collectors and same site -using same household and make sure that the women is the former participant -determine prevalence of domestic VAW -identify barriers -determine difference in difference -note that; the control group will be monitored regularly on what is going on in addition to the standard care and findings will be documented using reporting checklist.	

Discussion

This study will pilot the feasibility and effectiveness of the community based intervention to prevent domestic VAW in the northwestern Ethiopia. Interventional studies conducted in Uganda indicated that community-based intervention successfully avert VAW and reduced unnecessary spending on related costs [72, 73], On the other hand, a study done in South Africa revealed that integrated alcohol and HIV prevention intervention reduced VAW by 70%, and also the gender based violence with HIV prevention intervention had reduced significantly the intention of perpetration by 50% [74]. Another study in Ethiopia showed that combined intervention (community engagement with group education) reduced IPV by 60% [75]. Furthermore, microfinance based intervention brought significant change in three African countries. A study done in Uganda shows that microenterprise as economic empowerment to prevent IPV brought significant improvement on income, women perception on their autonomy, control behaviors and quality of marital relationship [76]. Studies in Côte d'Ivoire (2010–2012) revealed that economic VAW reduced by 61% [77, 78]. In addition, financial support to promote safe sex, balance relationship power and transform couple's attitude in Tanzania reduced VAW by 30%. Remarkably, VAW also reduced by 57% in couples who had equal power [79].

Likewise, a quasi-experimental study employed in Tanzania (2012) confirmed that community based intervention using local mass media and advocacy meeting improve knowledge on sexual VAW significantly from 57.3 to 80.6%. The combined intervention had a substantial effect on awareness raising and improve attitude towards VAW norms ($p < 0.001$) [80]. Therefore, evidence from randomized controlled trail, quasi-experimental and longitudinal studies concluded that community based comprehensive intervention such as integrated IPV prevention

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services (economic empowerment, gender norm transformation to promote gender equality and equitable relationship power, involving men, mass media and advocacy meeting) are some of proven evidences based interventions to prevent IPV. These intervention could tremendously reduce IPV [74–76, 79, 81, 82]. Primary prevention strategies (combined microfinance with addressing gender equality norm or culture transformative training; communication and relationship skills; minimize access to alcohol use, sensitization, health education and other services) are recommended by WHO to prevent VAW [20]. Similarly, the government of Ethiopia has developed a standard operation procedure for responding and prevention sexual VAW, and clearly stated the implementation to the real setting is very limited [49]. Therefore, this piloting feasibility and effectiveness study will address bottlenecks, design community based intervention strategies and mobilize the community effort to tackle domestic VAW.

Plan for dissemination of research findings

At the end of the interventional study, a study finding will be compiled. The finding will be disseminated to key stakeholders involving in the study. Scale upping and follow up will be made to ensure the sustainability of the intervention to prevent domestic VAW. The principal investigator will take the leading role of the finding dissemination activities. Short communications (poster, policy brief, abstract presentations) will be carried out. Efforts will be made to publish the finding in international peer reviewed and reputed journals.

Abbreviations

CEDAW: Convention on Elimination of any Discriminations against Women; CFIR: Consolidated Framework for Implementation Research; CI: Confidence Interval; DID: Difference in Differences; FGD: Focus Group Discussion; HEW: Health Extension Worker; HIV: Human Immunodeficiency Virus; IPV: Intimate Partner Violence; ITTA: Intention to Treat Analysis; KII: Key informant Interview; M&E: Monitoring and Evaluation; NGO: Nongovernmental Organization; STI: Sexual Transmitted Infection; TDR: Tropical Disease Research; UNFPA: United Nations population Fund; VAW: Violence against Women; WHO: World Health Organization

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Availability of data and materials

Not applicable

Authors' contributions

AS conceived and designed the study. AS, AA, KT, AM and NA have developed the research protocol. AS wrote the protocol manuscript. All authors extensively review the manuscript and incorporate their intellectual inputs in the protocol development. All authors read and approved the final version of the manuscript.

Ethics approval and consent to participate

Ethical approval is obtained from Institutional Health Research Ethical Review Committee at College of Health and Medical Sciences at Haramaya University (*Ref.No.IHRERC/146/2017*). The purpose of the study will be explained and informed consent will secured from study participants. All participants' information will be kept confidential anonymously. Alternative questionnaire will provide to data collectors to minimize breach of confidentiality in case of third person comes while interviewing.

Consent for publication

Not applicable

Competing interests

The authors declare that have no competing interests.

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Appendix 3: Published adapted tool

International Journal of Women's Health

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ORIGINAL RESEARCH

Adapted tool for the assessment of domestic violence against women in a low-income country setting: a reliability analysis

This article was published in the following Dove Medical Press journal:
International Journal of Women's Health

Agumasie Semahegn[1,2]
Kwasi Torpey[1]
Abubakar Manu[1]
Nega Assefa[2]
Augustine Ankomah[1,3]

[1]Department of Population, Family and Reproductive Health, School of Public Health, College of Health Science, University of Ghana, Legon, Accra, Ghana; [2]School of Nursing and Midwifery, College of Health and Medical Sciences, Haramaya University, Harar, Ethiopia; [3]Population Council, Accra, Ghana

Background: One-in-three women has experienced domestic violence, which is a serious public health problem and a human right violation. Domestic violence is a common life experience among women in Ethiopia. The tool used to assess violence against women (VAW) has not been validated to assess its consistency. Cronbach's alpha (α, or coefficient alpha) is a measure of internal consistency, or reliability, that is, how closely a set of items are related as a group. Reliability is how well a test measures what it should. Therefore, the aim of this study was to estimate the inter-item correlation (reliability) of the tool adapted from literature.

Methods: A community-based study was conducted in Northwestern Ethiopia between November 15, 2017 and December 31, 2017. A total of 1,269 women at their permanent place of residence (specifically at their households) were recruited using the multistage stratified systematic sampling method. A structured questionnaire was adapted from literature. Also, 12 trained female data collectors collected the data using the face-to-face interview method. Data were entered into EpiData 3.1.0 and exported to SPSS 23.0 for analysis. Descriptive statistical analysis was carried out to estimate the reliability of the response(s).

Results: Overall, Cronbach's alpha was higher than the minimum recommended value of 0.70. Cronbach's alpha for specific sections were 0.764 for women's decision-making autonomy (13 items); women's accepting attitude toward justified wife-beating (five items, 0.894); physical violence (seven items, 0.876); psychological violence (15 items, 0.925); sexual violence (five items, 0.812); and inequitable gender-norms (seven items, 0.867).

Conclusion: The tool used to assess domestic VAW in Northwestern Ethiopia had a high reliability. Therefore, researchers can adapt the tool and further assess its reliability in other settings to have a common and validated tool to study VAW in a low-income countries.

Keywords: violence against women, tool reliability analysis, low-income countries

Introduction

Violence against women (VAW) is a global public health pandemic and a serious human rights violation. Worldwide, one-in-three women has experienced VAW.[1–8] Domestic VAW is a common experience in the lives of women in Ethiopia. A World Health Organization's (WHO's) multi-country study indicated that domestic VAW in Ethiopia was 71%, which is the highest in the world.[9] A systematic review conducted in Ethiopia (2000–2014) indicated that domestic VAW is a common phenomenon ranging from 20% to 78%.[10] Women's favorable attitude toward justifiable wife-beating, exacerbated by traditional gender-norms is a key underlying factor explaining domestic VAW. Currently, women's receptive attitude toward justified wife-beating has declined from 81%[11] to 69%;[12] however, this is still unacceptably high.

Correspondence: Agumasie Semahegn
School of Nursing and Midwifery, College of Health and Medical Sciences, Haramaya University, PO Box 235, Harar, Ethiopia
Tel +251 91 335 9717
Email agumas04@gmail.com

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In response to the high prevalence of domestic VAW, the government of Ethiopia has incorporated women's right and gender equality in the constitution [Art-35 and 89(7)[13] and other proclamations: Criminal code under proclamation No 414/2004 (Art 564)[14] and Family Code Proclamation No 213/2000].[15] Violence against a marriage partner or a person cohabiting, even in an irregular union, is prohibited. Moreover to help implement this, the Ethiopian Ministry of Health has developed a standard operating procedure for the response and prevention of VAW in 2016.[16] Most of the studies on domestic VAW that have been conducted in Ethiopia, like ours, have adapted tools from existing literature, including the WHO's domestic VAW assessment tool.[13,16–34]

Cronbach's alpha (α, or coefficient alpha) is a measure of internal consistency, or reliability, that is, how closely a set of items are related as a group. Cronbach's alpha is developed by Lee Cronbach in 1951, which measures reliability of the tool. Reliability is how well a test measures what it should.[17,18] A review of all the studies showed that the level of Cronbach's alpha of the domestic VAW assessment tools is not reported in most of the studies, which have been conducted in low-income countries (particularly Ethiopia). The consistency of the items of domestic VAW assessment tool is a core component of the studies, and Cronbach's alpha is not estimated and reported. We could not find a literature that reported the reliability (Cronbach's alpha) estimates of the domestic VAW assessment tool. Hence, the main objective of this study was to estimate the inter-item-correlation (reliability) of the tool adapted from any literature on domestic VAW in low-income country settings. This study tool was adapted from literature to assess the level of domestic VAW in the Northwestern Ethiopia. Therefore, this study may contribute to filling the literature gap of reliability estimates of tools that often used to assess domestic VAW.

Methods

Study design and setting

A community-based cross-sectional study was conducted in the Awi zone of Northwestern Ethiopia from November 15, 2017 to December 31, 2017. This was to serve as a baseline survey for a three-arm quasi-experimental study. Awi zone has nine districts, of which three districts were included in the study. It is located 447 km from Addis Ababa. According to the Awi zonal health department report published in June 2018, this zone has a total population of 1,285,242, of whom 631,054 (49.1%) are men and 654,188 (50.9%) are women. About 12.5% of the population in Awi zone live in urban areas. Almost 93.5% of the population are Ethiopian Orthodox Christian while 5.4% of the population are Muslim.[11] Very little is known about domestic VAW in Awi zone, but one study shows the level of VAW to be as high as 78.0%.[13]

Sample size determination and sampling procedures

Sample size was calculated using a statistical formula[19] with 5% margin of error, 95% significance level, 80% power, desired intervention effect of 13%, and design effect of 1.11.[12] Eventually, the final sample size was 1,269 married or cohabitating women (15–49 years). Married or cohabitating women (15–49 years) who had lived at least 12 months with their current husband and lived at least 6 months in the selected sub-districts were eligible. Three out of nine districts were selected randomly in the Awi zone by a lottery method. Then two (urban and rural) sub-districts were selected purposefully considering their appropriateness, resource, time, and geographical non-proximity to reduce threats to validity arising from possible information contamination. Sampling frame was constructed from the health extension workers' household registry (family-folder) to recruit eligible women from each selected sub-district. Multistage, stratified, and systematic sampling methods were used to recruit women at their permanent places of residence. The first household (random start) was recruited by lottery method using the first eligible household numbers (1 to kth value =2). In the case of two eligible women being present in a single household, one woman was selected for the interview using the lottery method (Figure 1). For further details, the protocol has been registered (ClinicalTrials.gov ID: NCT03265626) and published elsewhere.[20]

The protocol was reviewed and approved by the Institutional Health Research Ethical Review Committee, College of Health and Medical Sciences, Haramaya University (Ref. No IHRERC/146/2017). This study was conducted in accordance with the Declaration of Helsinki,[21] and written informed consent was obtained from each study participant (woman), and the information was kept confidential and anonymous. Confidentiality of the information was maintained, among others by avoiding personal identifiers, locking the metallic cabinet for hardcopy questionnaire and investigators placing password on computers with stored data. Participant's deidentified data that support the analysis finding of this study as well as further analysis works will be shared as per official and valid request to the corresponding author (AS). Participant deidentified data will also be available online in the protocol registration database (ClinicalTrials.gov ID: NCT03265626), and also this journal web-pages as necessary as soon as further analysis for additional manuscripts is

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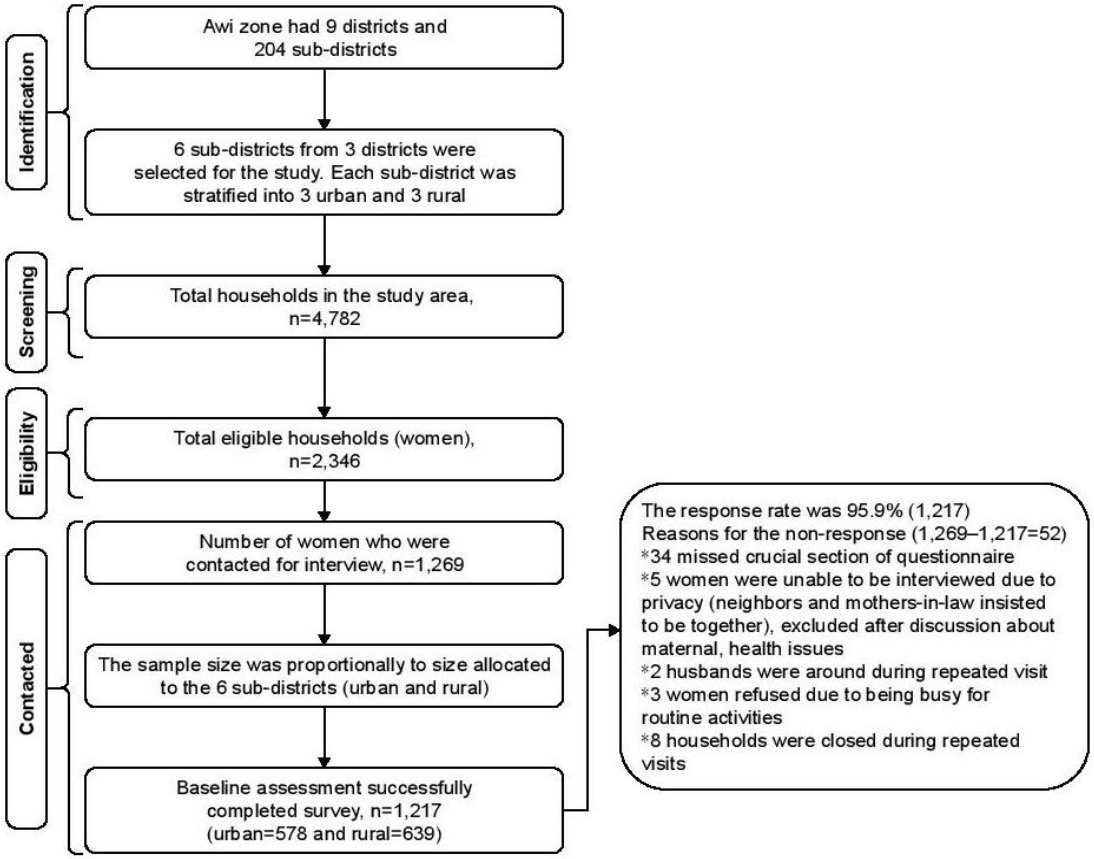


Figure 1 Illustration of participant recruitment process.

completed on SPSS (23.0) software after May 2019. In addition, ethical approval letter is available at any time.

Tool development and data collection methods

The data collection tool was adapted from several source in the literature[13,16–34] (Table 1). Face-to-face interviewer-administered method was carried out using the structured questionnaire administered by the 12 trained female data collectors. Data collectors' training, pretest, and supportive supervision were provided by the principal investigator to assure the quality of data collected. Qualified female professionals (midwives, nurses, or public health workers) who have experience in field surveys and were neither resident nor deployed at nearby health facilities were hired as data collectors in order to increase the trustworthiness of the information. The training of data collectors was focused on the questionnaires, interview techniques, sampling methods, protection of confidentiality, ethical issues of domestic VAW research, and data quality assurance. Necessary amendments were made based on feedback from study participants and comments from data collectors.

Data processing and analysis

Overall, the domestic VAW assessment tool comprised nine sections. Three of the sections were sociodemographic and economic characteristics of women; access to sources of information about VAW and gender equality; and their husbands' sociodemographic characteristics. The latter was not included in the reliability analysis. Six of the sections that covered the women's decision-making potential and women's access to household resources and control over autonomy (13 items);[35] women's accepting attitude toward justified wife-beating (five items),[28,36] physical violence (seven items), psychological violence (15 items), sexual violence (five items),[37,38] and gender inequitable norm (seven items).[23] The reliability analysis was carried out for the six sections of the tool. The gathered data were entered into

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Table 1 Adapted tool to measure domestic violence against women in a low-income country setting

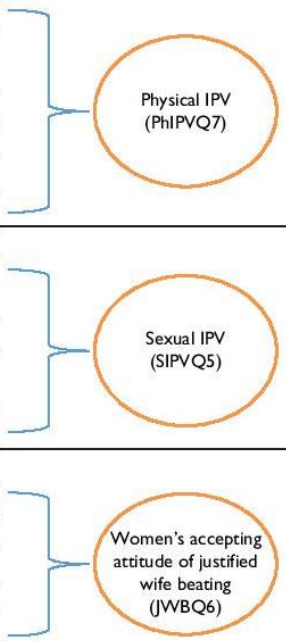
	Items	Outcome
Women's decision-making autonomy on household matters (WDMAQ) (1 – husband, 2 – wife, and 3 – joint)		Women decision making autonomy (WDMAQ13)
WDMAQ1	Who is the head of the household?	
WDMAQ2	Who should decide on the household matters in your family?	
WDMAQ3	Who makes large household purchases?	
WDMAQ4	Who makes small daily household purchases?	
WDMAQ5	Who is the decision maker when you want to visit family, friends, or relatives?	
WDMAQ6	Who is the decision maker on contraceptive to have planned family service?	
WDMAQ7	Who is the decision maker on antenatal care service utilization?	
WDMAQ8	Who is the decision maker on vaccination service utilization?	
WDMAQ9	Do you discuss about family planning with your husband?	
WDMAQ10	Who in your family makes decisions about health care for yourself?	
WDMAQ11	Do you have an autonomy to decide by yourself and go to health care facility to seek care for you and your children?	
WDMAQ12	Who is the decision maker to seek health care when one of family member get sick?	
WDMAQ13	Who is the decision maker if you want to attend workshop?	
Measures for gender inequity norms index assessment (GINQ) (yes/no)		Women's accepting attitude toward inequitable gender norm (GINQ7)
GINQ1	Is it fine for men to have more than one (sexual) partner?	
GINQ2	Is it a woman's duty to have sex with her spouse/partner even if she does not want to have?	
GINQ3	Is it more important for a woman to respect her spouse/partner than it is for a man to respect his spouse/partner?	
GINQ4	May a man beat his spouse/partner if she disobeys him?	
GINQ5	Can a man beat his spouse/partner if he believes she is having sex with another man?	
GINQ6	Is it more important for a boy to get an education than a girl?	
Psychological intimate partner violence assessment scale (PsIPVQ)		Psychological IPV (PsIPVQ15)
PsIPVQ1	Is/was he jealous or angry if you (talk/talked) to other men?	
PsIPVQ2	Has he (insists/insisted) on knowing where you (are/were) at all time?	
PsIPVQ3	Have you ever been insulted by your husband using abusive language that made you feel bad about yourself?	
PsIPVQ4	Have you ever been threatened by your husband with an object such as a stick, belt, knife, gun, or other type of weapon, etc?	
PsIPVQ5	Have you ever been created financial hardship/not trust you by your husband to making money available to you?	
PsIPVQ6	Have you ever been frightened your husband by looking angrily at you?	
PsIPVQ7	Have you ever expressed suspicion/accused him that he is unfaithful to you?	
PsIPVQ8	Have you ever been ignored or shown indifference by your husband?	
PsIPVQ9	Have you ever been deprived from privileges in the family by your husband?	
PsIPVQ10	Have you ever been denied by your husband on your basic personal needs?	
PsIPVQ11	Have you ever been intentionally not involved by your husband on decision-making in the family?	
PsIPVQ12	Has he belittled or humiliated you in front of other people?	
PsIPVQ13	Has he done things to scare or intimidate you on purpose?	
PsIPVQ14	Have you ever been restricted by your husband from going to your parent's home or other places like friends'/relatives' house, places of worship, etc?	

(*Continued*)

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Table 1 (*Continued*)

	Items	Outcome
Physical intimate partner violence assessment scale (PhIPVQ)		
PhIPVQ1	Has he pushed or shoved you, shaken you, or thrown something at you?	
PhIPVQ2	Has he punched or hit you with his fist, or twisted your arm or with something that could hurt you?	
PhIPVQ3	Has he slapped, kicked, dragged, or beaten you?	
PhIPVQ4	Has he attacked you with a knife, gun, or other type of weapon?	
PhIPVQ5	Have you ever been scalded or burnt purposefully by your husband?	
PhIPVQ6	Has he choked at you that may disgracing you?	
Sexual intimate partner violence assessment scale (SIPVQ)		
SIPVQ1	Have you ever been physically forced by your husband to have sex when you did not want to?	
SIPVQ2	Have you ever been intentionally denied or avoided sex by your husband?	
SIPVQ3	Did you ever have sexual intercourse when you didn't want because you were afraid of what he might do?	
SIPVQ4	Has he forced you to do something sexual that you found degrading or humiliating?	
Husbands can beat their wives if they have justifiable reasons (JWBQ)		
JWBQ1	If wife goes out without informing her husband?	
JWBQ2	If wife neglects the children?	
JWBQ3	If wife argues with her husband?	
JWBQ4	If wife burns the food?	
JWBQ5	If wife refuses to have sex with him?	



EpiData 3.1.0 and exported to SPSS 23.0 for further analysis. The frequency, percentage, mean, and standard deviations were computed for the participants' sociodemographic characteristics. To examine the reliability of the tool to assess domestic VAW, the following analyses were performed: mean, standard deviation, scale mean if item deleted, scale variance if item deleted, corrected item total correlation, and Cronbach's alpha if item deleted.

Results

The overall response rate of the survey was 95.9% (1,217/1,269). The reasons for non-response were described in detail in Figure 1. The mean age of the women was 30.0 (±7.1) years. The majority of women (98.8%, n=1,202) were formally married. Slightly more than half (52.5%, n=639) of the women were rural residents. The mean of women's marital duration was 11.5 (±7.9) years. Furthermore, the mean age of their husbands was 37.3 (±9.3) years. About one-quarter (24.9%, n=303) were unable to read and write. About half (50.7%, n=617) engaged in trade or income-generating activities. Three-fourth (75.0%, n=913) of the women's husbands had a history of addictive substance misuse. Of these, 99.9% (n=912) of husbands had a history of alcohol consumption. Almost one-quarter (26.4%, n=321) of the women knew their husbands' earning (Table 2).

Cronbach's alpha estimate of the domestic VAW questions

Cronbach's alpha is a measure of internal consistency (reliability) of the items in the tool, usually a scale. It shows how closely a set of items are rated as a group. It is expressed as a number between 0 and 1, the closer it is 1, the higher the reliability. Internal consistency describes the extent to which all the items in a tool measure the same concept, and hence, it is connected to the inter-relatedness of the items within the tool.[44] The overall Cronbach's alpha of the tool was higher than the minimum recommended value of 0.70. The women's decision-making and household resource control autonomy were assessed using 13 items and its mean was 30.2 (±5.4). The women's accepting attitude of justified wife-beating was assessed using five items with a mean of 10.6 (±2.6). The women's attitude toward inequitable gender-norms was assessed using seven items with a mean of 11.1 (±2.5). Cronbach's alpha for the women's decision-making autonomy, women's accepting attitude toward justified wife-beating, and inequitable gender-norm were 0.764, 0.894, and 0.867, respectively.

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Table 2 Sociodemographic characteristics of women, Northwestern Ethiopia, December, 2017 (n=1,217)

Variables	n	%
Mean age of women (years)	30.0 (±7.1)	
Age of women (years)		
≤29	604	49.6
≧30	613	50.4
Relationship status		
Formally married	1,202	98.8
Cohabitating	15	1.2
Residence of women		
Rural	639	52.5
Urban	578	47.5
Marital duration of women (years)		
<10	665	54.6
>10	552	45.4
Educational status of women		
Illiterate	621	51.0
Able to read and write	152	12.5
1–6 grades	168	13.8
7–12 grades	216	17.7
12+	60	4.9
Occupational status of women		
Housewife/farmer	1,037	85.2
Trade/business	125	10.3
Employee (government/NGOs)	55	4.5
Pregnancy last 12 months (1,160)		
Yes	287	24.7
No	873	75.3
Number of children alive		
0	201	16.5
≦2	460	37.8
>2	556	45.7
Age of husband (years)	37.3 (±9.3)	
Age of husband (years)		
≤36	637	52.9
>36	568	47.1
Educational status of husband		
Illiterate	303	24.9
Able to read and write	379	31.1
1–6 grades	222	18.2
7–12 grades	227	18.7
12+	86	7.1
Occupational status of husband		
Trade/business	617	50.7
Farmer	489	40.2
Employee (government/NGOs)	111	9.1
Do you know your husband earnings		
Yes	321	26.4
No	896	73.6
Husbands' substance use (mainly alcohol)		
Yes	913	75.0
No	304	25.0

Abbreviation: NGO, nongovernmental organization.

In addition, physical domestic VAW was assessed using seven items, and the mean was 12.9 (±1.8). Psychological domestic VAW was assessed using a tool with 15 items with the mean of the scale analysis of items being 27.1 (±4.0). Sexual domestic VAW was assessed using a five-item questionnaire with the mean of the scale analysis of items being 9.2 (±1.3). The Cronbach's alphas for physical, psychological, and sexual domestic VAW assessment questions were 0.876, 0.925, and 0.812, respectively. The overall Cronbach's alpha of the domestic VAW assessment tool was 0.785 (Table 3).

Discussion

This reliability analysis estimated the consistency of response from the adapted structured questionnaire(s) that were used to assess domestic VAW. Generally, the adapted survey tool had Cronbach's alpha score of 0.785, higher than the recommended minimum of 0.70. Specifically, Cronbach's alphas were women's decision-making autonomy (13 items, 0.764); women's accepting attitude of justified wife-beating (five items with 0.894); physical violence (seven items, 0.876); psychological violence (15 items, 0.925); sexual violence (five items, 0.812); and gender inequitable norm (seven items, 0.867). This tool had a Cronbach's alpha consistent with other studies with a range of 0.68–0.80,[39] higher than 0.80,[40] and greater than 0.90.[41] Furthermore, this finding is similar to that of a study conducted in Sweden which showed that the Cronbach's alpha of the VAW assessment tool was higher than the minimum recommended value (>0.70).[42]

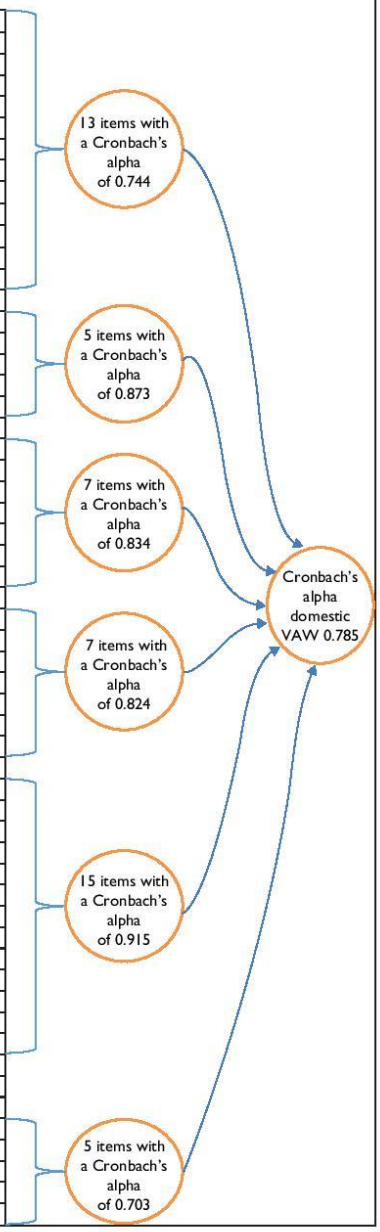
In addition, the Cronbach's alpha of the tool is also consistent with the tools used to assess the risk of domestic VAW in China which indicated a Cronbach's alpha of 0.76.[43,44] However, this study finding is a bit lower than a study conducted in the USA to assess VAW which showed that Cronbach's alpha of 0.96.[45] Nevertheless, this finding shows a relatively higher reliability than a study conducted on measurement tool used for physician assessment which has a Cronbach's alpha of >0.65.[46] There are some arguments behind the value of Cronbach's alpha. It is argued that it is a coefficient of the reliability or internal consistency of the items, but not a statistical test.[44] In addition, a high value for alpha does not imply that the measure is unidimensional.

The study's finding can motivate researchers to adopt this consistent tool, which would have a great implication on the analysis of data to inform evidence-based decision-making. This is important since concrete evidence on the level of domestic VAW to understand the problem is needed to help make appropriate decisions. Therefore, this tool can be used by researchers, policy makers, clinicians, and other key stakeholders in sub-Saharan

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Table 3 Item characteristics, item-total correlation, and alpha if item-deleted of the different types of domestic violence against women (VAW) assessment items (n=1,217)

Items	Range	Mean (SD)	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted	Overall Cronbach's alpha from all participants and items
Women decision-making autonomy assessment items							
WDMAQ1	[1,3]	1.81 (0.975)	28.34	23.176	0.555	0.728	
WDMAQ2	[1,3]	1.83 (0.957)	28.32	22.713	0.626	0.719	
WDMAQ3	[1,3]	1.84 (0.974)	28.31	22.896	0.589	0.724	
WDMAQ4	[1,3]	2.28 (1.153)	27.87	23.781	0.376	0.755	
WDMAQ5	[1,3]	2.55 (0.813)	27.60	24.313	0.544	0.732	
WDMAQ6	[1,3]	2.68 (0.630)	27.47	25.101	0.608	0.732	
WDMAQ7	[1,3]	2.77 (1.031)	27.38	25.296	0.287	0.763	
WDMAQ8	[1,3]	2.73 (0.521)	27.42	26.153	0.547	0.741	
WDMAQ9	[1,3]	1.27 (0.480)	28.88	30.154	−0.199	0.786	
WDMAQ10	[1,3]	2.80 (0.531)	27.35	26.594	0.450	0.747	
WDMAQ11	[1,3]	2.00 (0.980)	28.15	28.385	−0.001	0.795	
WDMAQ12	[1,3]	2.83 (0.536)	27.33	26.719	0.420	0.749	
WDMAQ13	[1,3]	2.76 (0.599)	27.39	26.100	0.470	0.744	
Women's acceptance attitude toward justified wife-beating assessment items							
JWBQ1	[1,2]	1.43 (0.495)	9.19	4.957	0.697	0.878	
JWBQ2	[1,2]	1.43 (0.496)	9.18	4.881	0.735	0.874	
JWBQ3	[1,2]	1.52 (0.500)	9.10	4.826	0.756	0.871	
JWBQ4	[1,2]	1.58 (0.493)	9.04	4.960	0.698	0.878	
JWBQ5	[1,2]	1.50 (0.500)	9.11	4.852	0.742	0.873	
Women attitude toward inequitable gender-norm assessment items							
GINQ1	[1,2]	1.87 (0.334)	9.14	5.286	0.387	0.876	
GINq2	[1,2]	1.53 (0.500)	9.48	4.386	0.648	0.847	
GINQ3	[1,2]	1.45 (0.498)	9.56	4.239	0.735	0.834	
GINQ4	[1,2]	1.61 (0.487)	9.39	4.379	0.676	0.843	
GINQ5	[1,2]	1.64 (0.479)	9.37	4.464	0.641	0.848	
GINQ6	[1,2]	1.58 (0.4)	9.43	4.420	0.640	0.848	
GINQ7	[1,2]	1.32 (0.468)	9.69	4.328	0.742	0.834	
Physical VAW assessment items							
PhIPVQ1	[1,2]	1.78 (0.417)	11.21	2.078	0.830	0.833	
PhIPVQ2	[1,2]	1.80 (0.401)	11.18	2.103	0.848	0.830	
PhIPVQ3	[1,2]	1.80 (0.401)	11.19	2.127	0.822	0.834	
PhIPVQ4	[1,2]	1.98 (0.155)	11.01	3.030	0.360	0.889	
PhIPVQ5	[1,2]	1.98 (0.155)	11.01	3.030	0.360	0.889	
PhIPVQ6	[1,2]	1.92 (0.267)	11.06	2.726	0.513	0.875	
PhIPVQ7	[1,2]	1.78 (0.417)	11.25	1.960	0.887	0.824	
Psychological VAW assessment items							
PsIPVQ1	[1,2]	1.67 (0.469)	25.39	13.267	0.729	0.917	
PsIPVQ2	[1,2]	1.67 (0.470)	25.39	13.276	0.725	0.917	
PsIPVQ3	[1,2]	1.73 (0.442)	25.33	13.531	0.693	0.918	
PsIPVQ4	[1,2]	1.97 (0.174)	25.09	15.394	0.404	0.926	
PsIPVQ5	[1,2]	1.83 (0.371)	25.23	14.078	0.632	0.920	
PsIPVQ6	[1,2]	1.74 (0.441)	25.33	13.434	0.726	0.917	
PsIPVQ7	[1,2]	1.74 (0.437)	25.32	13.400	0.745	0.916	
PsIPVQ8	[1,2]	1.87 (0.341)	25.19	14.196	0.648	0.920	
PsIPVQ9	[1,2]	1.89 (0.308)	25.17	14.387	0.640	0.920	
PsIPVQ10	[1,2]	1.85 (0.354)	25.21	14.163	0.633	0.920	
PsIPVQ11	[1,2]	1.89 (0.311)	25.17	14.350	0.649	0.920	
PsIPVQ12	[1,2]	1.92 (0.276)	25.14	14.827	0.505	0.924	
PsIPVQ13	[1,2]	1.89 (0.313)	25.17	14.666	0.505	0.923	
PsIPVQ14	[1,2]	1.83 (0.379)	25.24	13.973	0.656	0.919	
PsIPVQ15	[1,2]	1.56 (0.496)	25.50	12.941	0.781	0.915	
Sexual VAW assessment items							
SIPVQ1	[1,2]	1.72 (0.449)	7.52	0.842	0.771	0.722	
SIPVQ2	[1,2]	1.95 (0.218)	7.29	1.395	0.456	0.818	
SIPVQ3	[1,2]	1.93 (0.263)	7.32	1.283	0.546	0.795	
SIPVQ4	[1,2]	1.93 (0.260)	7.32	1.284	0.552	0.794	
SIPVQ5	[1,2]	1.72 (0.448)	7.52	.817	0.814	0.703	



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Africa and other low-income settings to enhance studies on domestic VAW. It can also be used for need assessments, program implementation monitoring, and impact evaluations.

Strengths and limitations

This study has notable strengths including it being community-based, urban–rural mix of sample, well-defined study participants, and representative sample size that can allow for generalization of findings to the general community. However, this study also has some limitations. The disclosure of domestic VAW issues can be a sensitive private issue kept as family secret in most instances. This may be affected by social desirability bias. In addition, some women may suffer from recall bias, unable to remember some of the domestic VAW experiences that they may have accepted as a part of marital life. So social desirability and recall biases may result in underreporting of domestic VAW by the study participants.

Conclusion

The adapted tool used to assess domestic VAW in Ethiopia had high reliability. Therefore, the researcher can adapt the tool for future studies. Furthermore, assessment of the reliability of the tool in other settings is recommended to confirm its applicability as a tool for low-income countries to determine the level of domestic VAW.

Availability of data and materials

The data that support the findings are available upon submitting a reasonable request to the corresponding author.

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Author contributions

AS, KT, AM, and AA conceived and designed the study. AS carried out activities from inception to the draft of the manuscript. AS, KT, AM, NA, and AA extensively reviewed the manuscript. All authors contributed to data analysis, drafting and revising the article, gave final approval of the version to be published, and agree to be accountable for all aspects of the work.

Disclosure

The authors report no conflicts of interest in this work.

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Appendix 4: English version questionnaire for quantitative study

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Information sheet and informed voluntary consent form for study participants

Good Morning/Afternoon? My name is _____. I am working as a data collector for the study being conducted in this community by Agumasie Semahegn who is studying for his PhD at University of Ghana, School of Public Health, and a staff at Haramaya University, Harar, Ethiopia. I kindly request you to lend me your attention to explain you about the purpose of the study and how you are being selected as the study participant.

Title: Community-based intervention to prevent domestic violence against women (15 - 49 years) in Awi Zone, Northwestern Ethiopia; An Implementation research

Aim of the study: The objective of this study is to explore bottlenecks of intervention implementation and enablers in preventing domestic VAW and pilot interventions effect. It is important worldwide concern in community health and serious human rights abuse which is causing enormous economic and social consequences. Domestic VAW and its associated factors are not well investigated problem, and also it one of the most serious problem but lacks due attention to tackle from its root causes. As country, the uppermost prevalence of domestic VAW is recorded from studies in Ethiopia in the multi-country study. Therefore, this implementation research is aimed to generate information on extent of community perceptions about domestic VAW, their response and implement intervention to prevent and control the problem through community mobilization and collective effort. This research project is done for a major purpose to fulfil the partial requirement of acquiring a PhD degree in public health.

Procedure and duration: This study will be conducted for 12 months which is consisted of data collection, intervention implementation and final evaluation program. The data collection will be conducted using face-to-face interviewer administered questionnaire method. The interviewer administered interview will finish from 45-60 minutes. So you are kindly requested to spend your precious time for the interview and to provide me permission to proceed the data collection process.

Risks and benefits: The risk of being participating in this study is minimal, only taking almost one and half hours of your precious time. The research team was strictly followed World Health Organization (2016) recommendations for research on domestic VAW. But the data collection would not interrupt your routine household activity. Study participants will use their free time only and also they will be interviewed in separate and confidential place. We did not give direct incentive for participating in this study. However, in case of some disputes between you and your partner, all necessary helps will be provided through linking you to the local police as per your informed consent. The findings from this research will also benefit you and other women, the region as well it can be used as baseline data to implement other interventions. Implementation of interventions to create awareness will bring gender equality and enhance partners and other men's involvement

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on gender issues. This will also help you and other women in the community to reduce work burden and being victim of domestic VAW in the reproductive age in general.

Confidentiality: The information from you will be kept confidential anonymously. All the study participants' private data were de-identified. The findings of the study will be generalized and your profile will not reflect anything particular of individual persons as well as specific group of community.

Rights: All participation in the study was based on full voluntary basis of the study participants. Each participant had the rights to declare to be participate or not to be participated in this study. If you can choose to participate, and also you have the rights to withdraw from the study during any stage of the interview. Withdrawal from the study will not label you for any loss of benefits which you otherwise are entitled. You will not be enforced to answer any question that you do not want to answer.

Contact address: If you have any enquires anytime about this study or the procedures please contact: Agumasie Semahegn (**Principal Investigator**): +251913359717/ +233279958725, and Haramaya University, College of Health and Medical Sciences, IHRERC: +251254662011, Po. Box; 235, Harar, Ethiopia

Declaration of informed voluntary consent:

I had read / was read to me the information sheet and consent form written to us. I had clearly understood the main objective of the study, the methodology or approaches, the minimal bad and goods related to being participated in this study, information confidentiality, our right and the telephone numbers for further explanation for any questions. I had free choice to ask any questions if I had inquires during at any stage of the interview or discussion if any point was not clear. I was informed about the right to withdraw from the study whatever any stage of the data collection or withholding information if the participants do not want. Therefore, I choose that we are agree to participate in this study to be conducted here in the locality.

Respondents' name and signature _____

Field research assistants' name and signature _____

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Questionnaire for quantitative study

Questionnaire identification/code: _____ Region: Amhara, Awi Zone; District Code_____ Kebele code_____; Household code_____

Section I: Socio - demographic characteristics of study participants

ID	Questions	Code of variables	Skip
Q101	Age of women	_____ (completed years)	
Q102	Marital duration from marriage to now	_____ completed years	
Q103	Relationship Status	1. Formally married 2. Cohabitated	
Q104	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Other(specify)_____	
Q105	Educational status of women	1. Illiterate 2. Read and writes 3. 1-6 grade 4. 7-12 grade 5. 12+ 6. Other(specify)_____	
Q106	Residence	1. Rural 2. Urban	
Q107	Occupational status of the women: [that is, what kind of work you mainly do?]	1. Housewife 2. Farmer 3. Merchant 4. Government employee 5. NGOs employee 6. Engage in private business/Micro 7. Others/Specify)_____	
Q108	Have you been pregnant in the last 12 months?	1. Yes 2. No	

Section II: Women access to the media or information and some economic characteristics

No	**Question**	**Response**	**skip**
Q201	Do you have the following in your house? Tick applicable one (multiple responses are possible)	1. TV 2. Telephone 3. mobile 4. Radio 5. Other/specify	
Q202	Have you ever heard about gender equality?	1. Yes 2. No	
Q 203	Have you ever heard about violence against women?	1. Yes 2. No	
Q204	If yes for question 202 or 203, where did you hear of the information? (multiple responses are possible)	1. Mass media 2. Neighbors 3. Religious fathers 4. Health extension workers 5. Local leaders 6. Elders 7. Women affair personnel 8. Others/specify-------	
Q205	If the answer for Q202 and 203 is 'Mass Media'; which one of the following mass media is more accessible to you? *Multiple responses are possible*	1. TV 2. Radio 3. News letter 4. Magazines 5. Others/specify--------	

Section III: Women's partner and family related information

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Q301	Age of the partner	_____ (in completed years)	
Q302	Educational status of your partner:	1. Illiterate 2. Read and writes 3. 1-6 grade 4. 7-12 grade 5. 12+ 6. Other(specify)____	
Q303	Occupational status of your partner [*That is, what kind of work he mainly does?]*	1. Farmer 2. merchant 3. Government employee 4. Private or NGOs employee 5. Engaging small business group 6. Others (Specify)_____	
Q304	Do you think his job stressful?	1. Yes 2. No	
Q305	Do you know how much your partner earns a monthly salary or annual income?	1. Yes 2. No	
Q306	How many children are living the household?	----------	
Q307	Does your partner use any substance(s)?	1. yes 2. No 3. Do not know	Skip Q309-312
Q308	If yes for Q308, answer was "alcohol", Where was he drink alcohol? [*MULTIPLE ANSWERS IS POSSIBLE*]	1. Home 2. Relatives or neighbors invitation 3. Town nearby the village 4. Village alcohol sellers (rural) 5. Other specify---------	
Q309	If yes (Q308), the type of substance(s) that your partner use is: (multiple responses are possible)	1. Alcohol 2. Chewing chat 3. Cigarette smoking 4. Other(specify)_____	
Q310	How often does he get drunk: very often, only sometimes, or never?	1. Very often 2. Sometimes 3. Never	
Q311	If yes for Q308, do you argue over the use of money for substance use and other thing?	1. Yes 2. No	
Q312	Do men in your community believe that the use of violence is acceptable?	1. Yes 2. No 3. Do not know	
Q313	Is there social norm that support wife violating?	1. Yes 2. No 3. Do not know	
Q314	Does the culture in the community tolerate interpersonal violence?	1. Yes 2. No 3. Do not know	
Q315	Does the culture in your community tolerate physical chastisement of women?	1. Yes 2. No 3. Do not know	
Q316	Does the man think that he has a right to chastise his wife?	1. Yes 2. No 3. Do not know	
Q317	Do you accept wife beating (violence)?	1. Yes 2. No	
Q318	Do you consider yourself inferior or as the property	1. Yes	

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	of your partner)?	2. No	
Q319	Does your partner called you by your name or unique name rather than "you"?	1. Yes 2. No 3. Rarely call my name	

Section IV: women's participation on household socio-economic decision-making

Q401	Who is the head of the household?	1. Partner 2. Wife 3. Joint	
Q402	Who is making decisions on household matters and family issues?	1. Partner 2. Wife 3. Joint	
Q403: Women's autonomy and participations on decision-making and leadership on household and family matters?			
Q403.1	Who is making decisions on large household purchases?	1. The partner 2. The wife or 3. joint decision	
Q403.2	Who is making decisions on small household purchase?	1. The partner 2. The wife 3. joint decision	
Q403.3	Who is making decisions on family, friends or relatives visit travels?	1. The partner 2. The wife 3. joint decision	
Q404	Who is the decision maker on using contraceptive?	1. Mainly partner 2. Mainly Wife 3. joint decision	
405	Who is the decision maker to use antenatal care services?	1. Mainly partner 2. Mainly Wife 3. joint decision	
406	Who is the decision maker on immunization for children and for women?	1. Mainly partner 2. Mainly Wife 3. joint decision	
Q407	Have you ever had discussion about family planning with your partner?	1. Yes 2. No	
Q408	Who is the decision maker on health care use for yourself?	1. The partner 2. The wife 3. Both equally	
Q409	Do you have an autonomy to make decisions independently about children's health care use?	1.Yes 2. No 3. Partially	
Q410	Who is making the decisions about family members' health care use?	1. Mainly Wife 2. Mainly partner 3. Joint decision(both)	
Q411	Who is making decision when the wife (you) want to attend academic conference?	1. The partner 2. The wife 3. Both equally	
Q412	Sometimes a partner is annoyed by things that his spouse does. In your opinion, Is a partner justified in beating his spouse in which one of the situations present? [*Multiple Response Possible]*	If she goes out without informing her partner 1. Yes 2. No If she neglects the children. 1. Yes 2. No If she argues with her partner.1. Yes 2. No If she burns the food. 1. Yes 2. No If she refuses to have sex with him. 1. Yes 2. No Other specify)_____	
Q413	To PI only; verify whether answered Yes to any question on wife-beating accepting attitude (Q 412)	1, YES, Accept justified wife beating 2. NO, accept justified wife beating	

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Section V: Physical violence; questions regarding the type of physical VAW by partner in the last 12 months

Code	Questions	1	0
Q501.1	Has he shoved, pushed, shaken, or throw something at you?	Yes	No
Q501.2	Has he twisted your hand, punched or hit you with his fist, throw with something that could hurt you?	Yes	No
Q501.3	Has he beaten, kicked, slapped, and dragged you?	Yes	No
Q501.4	Has he attacked you using weapon such as knife, gun, or any other type?	Yes	No
Q501.5	Have you ever been burnt or scalded purposefully?	Yes	No
Q501.6	Has he choked at you that may disgracing you?	Yes	No
Q501.7	PI Only; "*verify whether answered yes to any question on physical violence" see Question 501.1-6*	Yes	No

***Section-VI*:** Psychological violence question (some questions about women's experience of various items of emotional violence by their partner for the last 1 year)

	Questions	1	0
Q502.1	Has your partner been jealous /angry if you (talk/talked) man?	Yes	No
Q502.2	Has your partner insisted on knowing where you were at all time?	Yes	no
Q502.3	Have you ever been insulted by your partner using abusive language that made you feel bad about yourself?	Yes	No
Q502.4	Have you ever been threatened by your partner using something like stick/belt/knife/gun, or other type of weapon etc.?	Yes	No
Q502.5	Have you ever been created financial hardship by your partner?	Yes	No
Q502.6	Have you ever been scared your partner by looking angrily at you?	Yes	No
Q502.7	Have you ever expressed suspicion him for unfaithful to you?	Yes	No
Q502.8	Have you ever been ignored or shown indifference by your partner?	Yes	No
Q502.9	Have you ever been deprived by partner from privileges in the family	Yes	No
Q502.10	Have you ever been denied by your partner on your basic needs?	Yes	No
Q502.11	Have you ever been intentionally not involve by your partner on DM?	Yes	No
Q502.12	Have you ever belittled or humiliated in front of other people?	Yes	No
Q502.13	Have you ever intimidated, scared or done something purposely?	Yes	No
Q502.14	Have you ever been restricted by your partner from going to somewhere, family/friends/worship, etc.?	Yes	No
Q502.15	PI ONLY: "*verify whether answered yes to any question on psychological violence, see question", 502.1-14.*	Yes	No

Section-VII: Sexual violence assessment questions partner

NO.	Questions	1	0
Q503.1	Has your partner physically forced you to have sex when you did not want to?	Yes	No
Q503.2	Has your partner intentionally denied you or avoided sex?	Yes	No
Q503.3	Has your partner had sexual intercourse when you didn't want because you were afraid of what he might do?	Yes	No
Q503.4	Have you ever been forced by your partner to do something sexual that you found degrading or humiliating?	Yes	No
Q503.5	PI ONLY: Verify answered yes to any Question on sexual violence, see Q503.1-4"	Yes	No
Sexual negotiation and attitude towards sex refusal			
Q 503.6	When can a wife refuse her partner to have sex? *[Multiple Response Possible]*.	1. She knows/suspects her partner has a STIs 2. She knows her partner has sex with other women. 3. She is tired or not in the mood 4. She has no power to refuse sex	
Q503.7	What does the partner do if the wife refuse sex with her partner? [*Multiple Response Is Possible*]	1. Get annoyed and reprimand her 2. Refuse to give her money or other means of financial support 3. Use force and have sex with her even if she does not want to 4. Go and have sex with another woman	

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Q503.8	When a wife knows her partner has a disease that can be transmitted through sexual Contact, is she justified in asking that they use a condom when they have sex?	1.Yes 2. No 3. Don't know.	
Q503.9	Have you ever asked your partner to have sex when you are in need to have sexual intercourse?	Yes	No
Q503.10	Have you ever requested a consent or your willingness to have sex by your partner?	Yes	No
Q503.11	Have you ever discussed about sexual intercourse with your partner?	Yes	No
Section VIII: Some questions to assess gender inequity-norms among men and women			
Q 503.12	Is it acceptable for a man to have more than one sexual partner?	Yes	No
Q503.13	Is it a women's task to have sex with her partner even if she does not have the mood?	Yes	No
Q503.14	Is it more important for a woman to respect her partner than a man having a respect his spouse?	Yes	No
Q503.15	Can a man beat his spouse if she disobeys him?	Yes	No
Q503.16	Can a man beat his spouse if he believes she is unfaithful?	Yes	No
Q503.17	Is it more vital for a boy who supposed to go to school than a girl?	Yes	No
Q503.18	PI ONLY: *verify whether answered yes to any question label as accept gender inequitable, see Question, 503.13-18*	Yes	No

Part: IX. Some questions on your disclosure of the domestic VAW experience for the past twelve months

Q601	Have you ever disclosed your domestic VAW experience to someone to seek a help?	1. yes 2. No ←	Skip Q 602,603,604
Q602	From whom have you sought help***?*** *[multiple response possible*]	1. Family/Relatives 2. Neighbors/Friends 3. local leaders/ local authority 4. Religious leader (Priest, Pastor, Imam) 5. Local elders/Marriage Judges 6. Health care providers 7. police/lawyer 8. women's association/affair 9. other (specify)_____	
Q603	Did they offer any advice or support after you reported to them?	1. Yes 2. No 3. Can't remember	
Q604 If 'yes' for Q603, can you list the advice or support given by the consulted body above?			
Q605	If the answer for Q603 is 'No', What is the main reason you have never sought help? *[multiple response possible*]	I thought that it is not useful ------1. Yes 2. No I took it as a part of life----------1. Yes 2. No I afraid of divorce---------- 1. Yes 2. No I afraid of further beatings ------- 1. Yes 2. No I afraid of getting person---------- 1. Yes 2. No I took it will put me into trouble-- 1. Yes 2. No It has embarrassed me---------- 1. Yes 2. No I don't want to disgrace family ---- 1. Yes 2. No Due to family pressure---------- 1. Yes 2. No other (specify)_____	
Q606	You can give additional remark and comments regarding to domestic VAW____		

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Section X: Exposure questions to assess participants exposure status to VAW prevention interventions

700.1	How many times did you attend the awareness creation sessions by this project for the past one year?		---------- -		
700.2	How many times did you receive a home visit		----------		
700.3	What was the content of the awareness creation about VAW prevention intervention sessions for the last 12 months?	Gender equality		1. Yes	2. No
		Violence against women and its consequences		1. Yes	2. No
		Violence against women and health sector responses		1. Yes	2. No
		Discussion with local priest leaders/elders		1. Yes	2. No
		Discussion with women development 'army' members		1. Yes	2. No
		Partner engagement and open discussion		1. Yes	2. No
		Mass community awareness creation		1. Yes	2. No
700.4	When was the last time that you were visited by Health extension Workers at your home?				
700.5	What are some of the key messages you remember form the project?		A…….. B---------- C---------- D---------- E. others ---------		
700.6	What is your impression about the intervention so far?		----------		
700.7	What was the main challenges in the intervention delivery?		---------- ----------		
700.8	What is your suggestion on the intervention and anything needs improvement?		---------- ----------		

Thank you!

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Appendix 5: Local language (Amharic) version questionnaire

የምርምር መጠይቆች የአካባቢዉ ቋንቋ (አማረኛ) ትርጉም

የጥናቱ ተሳታፊዎች መረጃ እና ፈቃደኝነት መተማመኛ ቅጽ

እንዴት አደሩ (ርሽ) / ዋልሽ(ሉ)? የኔ ስም _____ነዉ። እኔ የምሰራዉ በዚህ ማህበረሰብ ላይ በሚሰራዉ የምርምር ስራ በመረጃ ሰብሳቢነት ሲሆን በተመራማሪ አጉማሴ ሰማኸኝ መሪ ተመራማሪነት ፒ.ኤቺ.ዲ መርሀ-ግብር ትምህርታቸዉን ለማማላት“ በጋና ዩኒቨርስቲ፣ የሕብረተሰብ ጤና ትምህርት ቤት፣ ስነ-ህዝብ፣ ቤተሰብ እና ስነ-ተዋልዶ ትምህርት ክፍል፣ እና ሐረማያ ዩኑቨርስቲ፣ ጤና እና ህክምና ሳይንስ ኮሌጅ መምህር ናቸዉ። እርስዎ ለዚህ ጥናት የተመረጡ በዕድል ሲሆን፣ የጥናቱን አላማ እና ሌሎችንም ሙሉ ገለፃ ስለማደርግልዎ በጥሞና የደምጡኝ ዘንድ በትህትና እጠይቅዎታልሁ ።

የጥናቱ ርዕስ: “ማህበረሰብ አቀፍ የሴት ልጅ/ሚስት የቤት ዉስጥ ጥቃትን የመከላከል ትግበራ የምርምር በኢትዮጵያ; ያተገባበር ምርምር ኢሀቃዊ-ሙካራ ዘዴ”

የጥናቱ ዋና ዓላማ: የሴት ልጅ/ሚስት የቤት ዉስጥ ጥቃት የታወቀ አለማቀፋዊ የማሕበረሰብ ጤና እና የሰባዊ መብት ጥሰት ነዉ። በመሆኑም ታላላቅ ኢኮኖሚያዊ እና ማህበራዊ ቀዉሶች መንስኤ እየሆነ ይገኛል። ነገር ግን የሴት ልጅ/ሚስት የቤት ዉስጥ ጥቃት እና ምክንያቶቹ በደንብ አልተዳሰሱም/አልተጠኑም። እንዲሁም መንስኤዎቹ ላይ የመፍትሄ ዕርምጃ መዉሰድ ላይ የትኩረት ማነስ ይታያል። ይህ ችግር በኢትዮጵያ የዓለምን ከፍተኛዉን ቁጥር ይዞ ይገኛል። ስለዚህ ይህ የሙከራ ጥናት የማህበረሰቡን አመለካከት፣ ወግ፣ ለመከላከልና ለመቆጣጠር የትግበራ ሁኔታዎችን ለመዳሰስና ማህበረሰቡን ማንቀሳቀስን ዓላማ ያደረገ ነዉ።

የጥናቱ ሂደት እና የሚወስደዉ ጊዜ: ይህ ጥናት ለ12 ወራት የሚካሄድ ሲሆን፡ መረጃ ስብሰባ፣ መከላከል ላይ መሰረት ያደረገ ትግበራ እና የአተገባበር ግምገማ ይካሄዳል። መረጃ የሚሰበሰበዉ በቃለ-መጠይቅ ነዉ። ቃለ-መጠይቆች 45-60 ደቂቃ ሊጨርስ ይችላል። ስለሆነም ዉድ ጊዜዎን ሰዉተዉ በዚህ ጥናት ለመሳተፍ ፈቃደኛ ስለሆኑ እናመሰግናልን።

የጥናቱ ጥቅምና ጉዳተ/ተጋላጭነት: ይህ ምርምር ላይ መሳተፍ ምንም አይነት ጉዳት የለዉም። ትቂት ደቂቃ (60-90 ደቂቃ) ብቻ የሚወስድ ይሆናል። የዚህ ምርምር ስነ-ምግባር እና የተሳታፊዎች ደህንነት መርሆች በአለም ጤና ድርጅት (ቅድሚያ ለሴቶች ደህንነት) (2016) እና የአትዮጰያ የምርምር አተገባበር ምክሮችን መሰረት አደርጎ ተፈጻሚ ይሆናል።. የዚህ ጥናት መረጃ የሚሰበሰበዉ እርስዎ በሚኖራት ትርፍ ጊዜ ሲሆን ምንም አይነት የተለመደ የቤት ዉስጥ እለት ተለት ስራዎን በማያቆርጥ ሁኔታ የሚካሄድ ይሆናል። ይህ በዚህ እንዳለ እርስዎ መረጃ የምትጠየቀዉ በቆሚነት በሚኖሩበት ቤተ ሲሆን በተቻለ መጠን ሚስጥራዊነቱ በተጠበቀ ቦታ የካሄዳል። ይሁን እንጂ በዚህ ጥናት በመሳተፍዎ ምንም አይነት ቀጥተኛ ገንዘብ አይበረከተልዎትም/አይሰጥም። ይህ ጥናት በሚያስገኘዉ ዉጤት በሚመጣዉ ለዉት እርስዎ እና ሌሎች ሴቶች ተጠቃሚ ሆናሉ። የአካባቢዉ አስተዳደር ለሚቀጥል የመፍትሄ እርምጃ እንደ መነሻነት ሊጠቀምበት ይችላል። በተጨማሪም የማህበለሰቡ ንቃተ-ህሊና/ግንዛቤ ይጨምራል፣ የጾታ እኩልነት ይከበራል፣የወንዶች/የባሎች ተሳትፎ ይነቃቃል። ከዚህም በላይ መንግስት በጉዳዩ ላይ የመፍትሄ እርምጃ ለመዉሰድ ልዩ ትኩረት ያለዉ ሲሆን፤ ይህ ጥናት ደግሞ ማህበረሰብ አቀፍ ትግበራን መሰረት አድርጎ የአተገባበር ስልት ቅለትን በመፈተሽ ዉጤቱን ያቀርባል።

የመረጃ ሚስጥራዊነት: ማነኛዉም እርስዎ የሚሰጡት መረጃ ሚስጥራዊነቱ የተጠበቀ ነዉ፡የእርስዎ ስም ወይንም ልዩ ገላጭ ነገሮች አይጠቀሱም። እንዲሁም ልዩ ገላጭ ነገሮች የመረጃ መሰብሰቢያዉ ቅጽ ላይ አይገለጹም። መረጃዉ ተጠናክሮ እና ተተንትኖ ሲቀርብ፤ የእርስዎ እና ሌሎች ተሳታፊዎች ግላዊ/ግለሰባዊ እንዲሁም በተናጠል ቡድናዊ መልስ ወይም መረጃ አይቀርብም። ማነኛዉም በጽሁፍ ወይም በአፍ በሚቀርበ የምርምር ዉጤት ላይ ተጠቃሽ ሆኖ የሚቀርብ ልዩ ገላጭ ነገር ኤኖርም።

መብት: በዚህ የምርምር መሳተፍ በእርስዎ ሙሉ ፈቃደኝነት ላይ መሰረት ያደረገ ነዉ። የእርስዎ የመሳተፍ ወይም ያለመሳተፍ መብት የተጠበቀ ነዉ። እንዲሁም ለመሳተፍ ፈቃደኛ ከሆኑ በኃላ የማይመች ሁኔታ ከተፈጠረ እና ለማቆረጥ ከፈለጉ ማቆረጥ መብት አለዎት። ነገር ግን መረጃ መስጠቱን በማቆረጣቸዉ ምንም አይነት የሚያጡት ጥቅምም ሆነ የሚደርስባቸዉ ጉዳትአይኖርም። በተጨማሪም መረጃ እንዲሰጡ ፈጽሞ አይገደዱም።

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አድራሻ: ምናልባት ድንገት የምርምር ስራ ሂደት ላይ ማነኛዉንም አስተያየት/ጥቆማ የሚከተሉትን ስልክ ወይም ፖስታ ይጠቀሙ።

የተመራማሪዉ አድራሻ: አጉማሴ ሰማኸኝ: ስልክ፡ በኢትዮጵያ፡+251913359717 ወይም የጋና፡+233279958725

የምርምር ስነ-ምግባር ገምጋሚ እና አጽዳቂ ኮሚቴ፡ ሐረማያ ዩኑቨርስቲ፣ ጤና እና ህክምና ሳይንስ ኮሌጅ, የምርምር ስነ-ምግባር ገምጋሚ እና አጽዳቂ ኮሚቴ ቢሮ ስልክ: +251254662011, ፖስታ ሳጥን ቁጥር; 235, ሐረር, ኢትዮጵያ

<u>ተረድቼ እና በፈቃደኝነት መስማማቴን ማሳዉቅብት/ማረጋገጫ</u>

የምርምር ስነ-ምግባር እና ሙሉ መረጃዎች የቃል ወይም የጽሁፍ ስምምነት ለማድረግ አንብቢያቸዋለሁ/ተነበዉልኛል። የምርምር ስራዉ ያለዉን አላማ፣ የመርምር ስልት/አካሄድ፣ ጥቅም፣ ሊያመጣ የሚችለዉን ጉዳት፣ የመረጃ ሚስጥራዊነት፣ የተሳታፊ መብት፣ እና ሌሎች አስፈላጊ ነገሮች በጥሞና መርምሬ ተረድቻለሁ። በጊዜዉ ያልገባኝን ነገር እንድጠይቅ እድል ተሰጥኛል። በማነኛዉም ጊዜ ያልተመቸኝ ነገር ካለ ያለመሳተፍ ወይም የማቆረጥ መብት እንዳለኝ ተገልጾልኛል። ስለዚህ ማብራሪያ በተደረገልኝ መሰረት ተስማምቸ በሙሉ ፈቃደኝነት በዚህ ጥናት ለመሳተፍ ወስኛለሁ።

1. ተሰማምቻለሁ 2. አልስማማም

የተሳታፊ ስም---------- ፊርማ: _____ቀን----------

የመረጃ ሰብሳቢዉ ስም----------ፊርማ: _____ቀን----------

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የመጠይቅ

መለያ ኮድ: ____ክልል: አማራ, ዞን፡ አዊ ወረዳ፡_____ቀበሌ ኮድ _____ የቤት ሚስትራዊ ኮድ_____

ክፍል 1፡ የጥናቱ ተሳታፊዎች ማህበራዊ እና ዲሞግራፊያዊ መገለጫዎች

ተ.ቁ	ጥያቄ	መልስ	
ጥ101	እድሜ	----------ሙሉ አመት	
ጥ102	ከጋብቻ በኃላ ምን ያክል ጊዜ ቆያችሁ	---------- ሙሉ አመት	
ጥ103	የጋብቻ ሁኔታ	1. ህጋዊ ጋብቻ 2. አብሮ የሚኖሩ	
ጥ104	የሐይማኖት ሁኔታ	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ሌላ/የገለጥ--------	
ጥ105	የትምህርት ሁኔታ	1. ማንበብ እና መጣፍ የማትችል 2. ማንበብ እና መጣፍ የምትችል 3. 1-6 ክፍል 4. 7-12 ክፍል 5. 12 እና በላ 6. ሌላ----------	
ጥ106	የመኖሪያ ቦታ	1. ገጠር 2. ከተማ	
ጥ107	የስራ ሁኔታ	1. የቤት እመቤት 2. ገበሬ 3. ነጋዴ 4. የመንግስት ሰራተኛ 5. መንግስታዊ ያልሆነ ድርጅት 6. የግል ቢዝነስ 7. ሌላ-------	
ጥ108	ባልፉት 12 ወራት ነፍሰጡር ነበር	አዎ	አይደለም

ክፍል ሁለት፡ የንብረት ሁኔታ እና የስነ-ፆታ መረጃ ሁኔታ ጥያቄዎች?

ተ.ቁ	**ጥያቅ**	**መልስ**	**ዝለል**
ጥ201	በቤትዎ ያለዉን ሁሉ በመምረጥ አክበብ	1. ቲቪ 2. መደበኛ ስልክ 3. ሞባይል ስልክ 4. ሬዲዮ 5. ሌላ/ይገለጽ----------	
ጥ202	ስለ የጾታ እኩልነት እና ጾታዊ ጥቃት ከዚህ በፊት ሰምተሽ ታዉቂያለሽ	አዎ	አደለም
ጥ203	ስለ የሴት ልጅ የቤት ዉስጥ ጥቃት ሰምተሽ ታዉቂያለሽ	አዎ	አደለም
ጥ204	የጥ 202 መልስ፣ አዎ ከሆነ፣ ስለ የጾታ እኩልነት እና ጾታዊ ጥቃት ከየት ሰማሽ;	1. ከመገናኛ ብዙሀን 2. ከጉረቤት 3. ከሐይማኖት አባቶች 4. ከጤና ኤክስቴንሽን 5. ከአካባቢ መሪዎች 6. ከአካባቢ አባቶች 7. ከሴቶች ጉዳይ ባለሙያ *8. ሌላ/ይገለፅ……*	
ጥ205	የጥ203፣ አዎ ከሆነ፣ከመገናኛ ብዙሀን ከሆነ፡ የትኛዉን የመገናኛ ብዙሀን ዘዴ አቅርቦት አለዎት ብዙ መጥቀስ ይፈቀዳል!	1. ቲቪ 2. ሬዲዮ 3. ጋዜጣ 4. መፅሔት 5. ሌላ/ይገለፅ……	

ክፍል ሶስት፡ የትዳር አጋር *ማህበራዊ እና ዲሞግራፊያዊ መገለጫዎች እንዲሁም የመሰሰሉትን ቤተሰባዊ መረጃዎች*

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ጥ301	የትዳር አጋር እድሜ	_____ (ሙሉ አመት)	ዝለል
ጥ302	የትዳር አጋር የትምህርት ሁኔታ	1. ማንበብ እና መፃፍ የሚችል 2. ማንበብ እና መፃፍ የሚችል 3. 1-6 ክፍል 4. 7-12 ክፍል 5. 12 እና በላይ 6. ሌላ--	
ጥ303	የትዳር አጋር የስራ ሁኔታ/ የሚሰራዉ የሥራዉ አይነት ይገለፅ?	1. ገበሬ 2. ነጋዴ 3. የመንግስት ሰራተኛ 4. መንግስታዊ የልሆነ ድርጅት ሰራተኛ 5. የግል ቢዝነስ 6. ሌላ_____	
ጥ304	የትዳር አጋርዎ ስራ ሁኔታ ለጭንቀት ይዳርቸዋል?	አዎ	አይደለም
ጥ305	የትዳር አጋርዎ አመታዊ ገቢ ወይም ወራዊ ደሞዝ ምን ያክል እንደሆነ ታዉቂያለሽ	አዎ	አይደለም
ጥ306	አጠካላይ በህይዎት አሁን ያለዎት የልጆች ብዛታ?	----------	
ጥ307	የትዳር አጋርዎ ማነኛዉንም አይነት ዐፅ ተጠቅሞ ያዉቃል?	አዎ / አደለም	ዝለል ጥ308-310
ጥ308	የ ጥ308 መልስ አዎ ከሆነ፣ የአልኮል መጠጦችን የሚገዙት/የሚያገኙት የት ነዉ? [ብዙ መጥቀስ ይፈቀዳል!]	1. መኖሪያ ቤት 2. ዘመድ/ ጉረቤት ቤት ግብዣ 3. መንደር አቅራቢያ ከምትገኝ ትን ከተማ 4. የገጠር አረቄ/ጠላ መቸጫ 1. ሌላ/ይጠቀስ---------	
ጥ309	የጥ308፤ አዎ ከሆነ፣ ከሚከተሉት አደንዛዥ ዕፆች ዉስጥ የትኛዉን ተጠቅሞ ያዉቃል? [ብዙ መጥቀስ ይፈቀዳል!]	አልኮል መጠጦች ጫት መቃም	ሲጋራ ማጨሰ ሌላ(ይጠቀሰ)__
ጥ310	አደንዛዥ ዐፅ ተጠቅሞ የሚያዊቀዉ ለምን ያክል ጊዜ ነዉ?	ብዙ ጊዜ	አንዳንድ ጊዜ / አላዉቅም
ጥ311	የጥ308 መልስ አልኮል ከሆነ፤የትዳር አጋርዎ ጋር ለአልኮል መጠጫ ገንዘብ የተነሳ ተነጋግረዉ/ተጨቃጭቀዉ ያዉቃል?	አዎ	አደለም
ጥ312	በአካባቢያችሁ ያሉ ወንዶች ሴትን/ሚስትን መደብደብ ጥሩ ነዉ ብለዉ ያምናሉ/አመለካከት አላቸዉ?	አዎ	አደለም / አላዉቅም
ጥ313	በአካባቢያችሁ ማህበረሰባዊ ወግ/ዘልማድ ሴትን/ሚስትን መደብደብን ይደግፋል/ይቀበላል?	አዎ	አይደለም / አላዉቅም
ጥ314	የአካባቢያችሁ ባህል የባል እና ሚስት ፀብን አሜን ብሎ ይቀበላል?	አዎ	አይደ / አላዉቅም
ጥ315	የአካባቢያችሁ ባህል ባል በሚስቱ ላይ አካላዊ ቅጣት አሜን ብሎ /አግባብ ነዉ ብሎ ይቀበላል?	አዎ	አይደለም / አላዉቅም
ጥ316	የአካባቢያችሁ ያሉ ወንዶች/ባሎች ባል በሚስቱን መቅጣት/መደብደብ/መምታት መብት አለዉ ብሎ ይቀበላል?	አዎ	አይደለም / አላዉቅም
ጥ317	የአካባቢያችሁ ወግ/ዘልማድ መሰረት ወንዶች/ባሎች በሚስቱን መቅጣት/መደብደብ/መምታት ጥሩ ነዉ የሚለዉን ትቀበይዋለሽ?	አዎ	አይደለም
ጥ318	እርስዎ በባሌ/የትዳር አጋሬ የበታች / የዕርሱ ንብረት ነኝ ብለሽ አስበሽ ታዉቂያለሽ?	አዎ	አይደለም
ጥ319	እርስዎ ባሌ/የትዳር አጋር በስምዎ ወይም በተለየ ስም ይጠራሻል፡ አንች/እርሶ በማለት ፋንታ በስሙ ትጠሪዋለሽ	አዎ	አይደለም / አንዳንዴ ብቻ

ክፍል: አራት: በቤተሰባዊ ጉዳዮች ላይ እርስዎ ያለዉትን ዉሳኔ ሰጭነት ተሳትፎ እና የማህበራዊ-ኢኮኖሚያዊ ጉዳዮች

	ጥያቄ	1	2	3

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ጥ401	የቤተሰቡ ሀላፊ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ402	ቤተሰባዊ ጉዳዮች ላይ በዋናነት ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ403 አሁን፡ ስለ ሴተነት እና ወንድነት በዉሳኔ ሰጭነት ዙሪያ በቤተሰብ ላየ ያላአዉን መስተጋብር እጠይቅዎታለሁ?				
ጥ403.1	ቤተሰባዊ ጉዳዮች ላይ በዋናነት በታላለቅ ግዥዎች ላይ ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ403.2	ቤተሰባዊ ጉዳዮች ላይ በዋናነት በትንንሽ ግዥዎች ላይ ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ403.3	ቤተሰባዊ ጉዳዮች ላይ በዋናነት በቤተሰብ፤ ጉዋደኛ፣ እና ሌላ ዘመዶች ጉብኝት ላይ ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ404	በቤተሰብ ምጣኔ የጤና አገልግሎት ዙሪያ ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
405	ስነ-ተዋልዶ የቅድመ-ወሊድ ጤና አገልግሎት ዙሪያ ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
406	በክትባት ጤና አገልግሎት ዙሪያ ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ407	ስለ ቤተሰብ ምጣኔ የመጠቀም አገልግሎት ዙሪያ ከትዳር አጋርዎ ጋራ ተወያይተዉ /ዉይይት አድርገዉ የዉቃሉ?	አዎ	አደለም	
ጥ408	በቤተሰብዎ ዉስት ስለ እርስዎ ጤና አገልግሎት ዙሪያ ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ409	የጤና አገልግሎት ለእርስዎ እና ለልጆች ወደ ጠቅም ሄዶ አገልግሎት ለማግኘት በራስዎ የማድረግ ነጣነት አለዎት?	አዎ	አደለም	በከፊል
ጥ410	የቤተሰቡ አባላት በሚታመሙበት ወቅት የጤና አገልግሎት ለማግኘት ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ411	ትምህርታዊ ስልጠና ቦታ ለመሄድ ዉሳኔ ሰጭዉ ማን ነዉ?	ባል	ሚስት	በጋራ
ጥ412	ባል ሚስቱ በምታደርጋቸዉ ድርጊቶች ሊበሳጭ ይችላል፤ በእርስዎ አስተያየት፡ በምን አይነት ምክንያቶች ወይም ቅድመ ሁኔታ ነዉ ባል ሚስቱን መምታት የሚችለዉ? [ብዙ መጥቀስ ይፈቀዳል]	ሚስት ባሉዋን ሳታስፈቅድ ከቤት ዉጭ ከሄደች 1.አዎ 2. አይደለም ሚስት ልጆችን ካልትንከባከበች --- 1. አዎ 2. አይደለም ሚስት ከበል ጋር ከተከራከረች------ 1. አዎ 2. አይደለም ሚስት ምግብ ካበላች/ከሳረረች.----- 1. አዎ 2. አይደለም ሚስት የግብረ-ስጋ ግንኙነት ከከለከለች--1. አዎ 2. አይደለም ሌላ/ይጠቀስ_____			
ጥ413	ለዋና ተመራማሪ ብቻ፤ ከጥ412 አንድ ከመለሱ አዎ ሚለዉንይምረጡ / ይህም የሚስት ድብደባን መቀበልን ይገልጣል.	ይቀበላል	አይቀበልም	

ክፍል: አምስት: አካለዊ ጥቃት: የሚከተሉትን ነገሮች ባለፉት 12 ወራት የትዳር አጋርዎ በእርሶ ላይ ፈፅሞ ያወቃል?

ተ.ቁ	ጥያቄዎች	1	2
ጥ501.1	ገፍቶሽ፣ገፍትሮሽ፣ አመናጭቆሽ ወይም ወርዉሮሽ/ወርዉሮብሽ ያዉቃል?	አዎ	አይደለም
ጥ501.2	ቆንጥጦሽ፣ መቶሽ.፣ ክንድሽን ጠምዝዞሽ ወይም በቦክስ መቶሽ ያዉቃል?	አዎ	አይደለም
ጥ501.3	በጥፊ፣ በኩርኩም፣ በሀይል ጎትቶ መትቶሽ ያዉቃል?	አዎ	አይደለም
ጥ501.4	በጦር መሣሪያ ወይም ቢላዋ፣ በሌላ ብረት ነገሮች መቶሽ/ጎድቶሽ ያዉቃል?	አዎ	አይደለም
ጥ501.5	ባልሽ ሆን ብሎ የሚያቃጥል ነገር ደፍቶብሽ ወይም አቃጥሎሽ ያዉቃል?	አዎ	አይደለም
ጥ501.6	ባልሽ የአንችን ክብር የሚያዋርድ መልኩ ተፍቶብሽ ያዉቃል?	አዎ	አይደለም
ጥ501.7	ለዋና ተመራማሪ ከጥ501.1 -ጥ501.6. ቢያንስ አንድ መልስ አዎ ሚለዉን ከመረጡ አዎ ተብሎ ይቆጠር	አዎ	አይደለም

ክፍል ስድስት: ስነ-ልቦናዊ ጥቃት: የሚከተሉትን ሥነ-ልቦናዊ ጥቃት ባለፉት 12 ወራት የትዳር አጋርዎ በእርሶ ላይ ፈፅሞ ያወቃል?

ተ.ቁ	**ጥያቄዎች**	**1**	**2**
ጥ502.1	የትዳር አጋርሽ ሌላ ወንድ ጋር ስታወሪ የቅናት ባህሪ ወይም ብስጭት/ ቁጣ /አሳይቶሽ ያውቃል?	አዎ	አይደለም
ጥ502.2	የትዳር አጋርሽ በማንኛውም ጊዜ አንቺ የት እንዳለሽ ለማወቅ ይሞክራል ወይም ክትትል ያደርጋል ?	አዎ	አይደለም
ጥ502.3	የትዳር አጋርሽ ውስጥሽን ሊርብሽ / ሊነካሽ የሚችል ቃላትን/ ቋንቋ ተጠቅሞ ሰድቦሽ ያውቃል?	አዎ	አይደለም
ጥ502.4	የትዳር አጋርሽ የተለያዩ ነገሮችን (በትር፣ቀበቶ፣ቢላዋ፣ጠመንጃና የመሳስሉትን የጦር መሳርያዎች) ተጠቅሞ አንገራግሮሽ/ አሰፈራርቶሽ ያውቃል?	አዎ	አይደለም

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ጥ502.5	የትዳር አጋርሽ በገንዘብ ላይ አመኔታ አልጥልብሽ ብሎ የገንዘብ ክልከላ ማሰፈራሪያ ፈጥሮብሽ የገንዘብ ችግር ደርሶብሽ ያውቃል?	አዎ	አይደለም
ጥ502.6	የትዳር አጋርሽ ብስጭት የተሞላበት አስተያየት ተመልክቶሽ ፈርተሽ ታውቂያለሽ?	አዎ	አይደለም
ጥ502.7	የትዳር አጋርሽ የጥርጣሬ መንፈስ አሳደሮብሽ ወይም አልታመንሽ ብሎ ጭቅጭቅ ተፈጥሮ/ ተሳልቆሽ ያውቃል?	አዎ	አይደለም
ጥ502.8	የትዳር አጋርሽ የንቀት ውይም ከተለመደው የተለዩ ነገር አሳይቶሽ (አይተሽበት) ታውቂያለሽ ?	አዎ	አይደለም
ጥ502.9	የትዳር አጋርሽ ሆንብሎ በቤተስብ ውስጥ ያሉ ጥቅማቅሞችን እንዳታገኝ አድርጉ ያውቃል ?	አዎ	አይደለም
ጥ502.10	የትዳር አጋርሽ መስርታዊ ፈላጎቶችሽ እንዳይሚሉልሽ ከልክሎሽ/አግዶሽ ያውቃል ?	አዎ	አይደለም
ጥ502.11	የትዳር አጋርሽ ሆንብሎ አንቺ በቤተስባዊ ጉዳይ ወሳኔዎች ላይ እንዳትሳተፊ አደርጎሽ ያውቃል?	አዎ	አይደለም
ጥ502.12	የትዳር አጋርሽ በሌላ ሰዎች ፊት አንቺን አሳንሶሽ ወይም አዋርዶሽ ያውቃል?	አዎ	አይደለም
ጥ502.13	የትዳር አጋርሽ ሆን ብሎ አንቺን ለማስፈራራት የሆነ አስፈሪ ነገር/ጥምድ አድርጉ ያውቃል?	አዎ	አይደለም
ጥ502.14	የትዳር አጋርሽ በነፃነት ቤተሰቦችሽን፣ ዘመዶችሽን፣ ጓደኖችሽን እና የተለያዩ ሰብሰባዎችን ሄደሽ እንዳትሳተፊ ሆን ብሎ ከልክሎሽ ያውቃል?	አዎ	አይደለም
ጥ502.15	ለዋና ተመራማሪ ብቻ; ከጥ502-502.14: ቢያንስ አንድ መልስ አዎ ሚለዉን ከመረጡ ስነ-ልቦናዊ ጥቃት “አዎ” ተብሎ ይቆጠር።	አዎ	አይደለም

ክፍል ሰባት: *ፆታዊ ጥቃት: ፆታዊ ጉዳዮች ጋር ተያያዥነት ያላቸው ሲሆኑ የእርሶዎ የትዳር አጋር ባለፉት 12 ወራት የትዳር አጋርዎ በእርሶ ላይ ፈፅሞ ያወቃል?*

ተ.ቁ	ጥያቄዎች		1	2
ጥ503.1	የትዳር አጋርሽ አንቺ በማትፈልጊበት ጊዜ ጉልበት ተጠቅሞ የግብረ_ስጋ ግንኙነት ፈፅሞ ያውቃል?		አዎ	አይደለም
ጥ503.2	የትዳር አጋርሽ ሆን ብሎ የግብረ ስጋ ግንኙነት አላደርግም ብሎ ያውቃል?		አዎ	አይደለም
ጥ503.3	አንቺ ሳትፈልጊ ምክንያቱም ምን እንደሚያደርግሽ እየፈራሽና ባለበት ጊዜ ከባለቤትሽ ጋር የግብረ ስጋ ግንኙነት አድርጋችሁ ታውቃላችሁ?		አዎ	አይደለም
ጥ503.4	የትዳር አጋርሽ ጉልበት ተጠቅሞ አንቺ የማትፍልጊውን /አሳፋሪ አይነት የግብረ ስጋ ግንኙነት አድርጐሽ ያውቃል?		አዎ	አይደለም
ጥ503.5	ለዋና ተመራማሪ ብቻ; ከጥ503.1-503.4: ቢያንስ አንድ መልስ አዎ ሚለዉን ከመረጡ ፆታዊ ጥቃት “አዎ” ተብሎ ይቆጠር።		አዎ	አይደለም
	ስለ-ፆታዊ ሁኔታዎች መደራደርንና አመለካከትን የግብረ-ስጋ ግንኙነት መከልከልን ትያቄዎችን			
ጥ503.6	በትዳር መካከል ባል እና ሚስት አለመግባባት ሊፈጠር ይችላል:: በእርስዎ አስተሳሰብ አንዲት ሴት (ሚስት ባልዋን የግብርስጋ ግንኙነት መከልከል የምትችልባችው ምክንያቶች የትኖቹ ናቸው? *[ብዙ መጥቀስ ይፈቀዳል]*.	1. ባል የአባላዘር በሽታ እንዳለበት ሚስት ካወቀች 2. ባል ሌላ ሴት ጋር የግብረ ስጋ ግንኙነት እንዳለው ሚስት ካወቀች 3. ለጊዜው ሚስት ደሰተኛ ካላሆነች/ ካላተመቻት/ ካመማት 4. ሚስት የግብረ-ስጋ ግንኙነት የመከልከል አቅም የላትም		
ጥ503.7	ሚስት የትዳር አጋሯን የግብረ ስጋ ግንኙነት ብትከለክለው ባል ምን ሊያደርግ ይችላል ብለሽ ታስቢያለሽ? *[ብዙ መጥቀስ ይፈቀዳል]*	1. ባል ሚስቱን ሊበሳጭና ሊቀጣ ይችላል 2. ባል ምን አይነት የገንዝብ እርዳታ አለመስጠት ይችላል 3. እርሷ ባትፈልግም ባል ሚስቱ ጋር የግብረ ስጋ ግንኙነት ለማድርግ ጉልበት መጠቀም ይችላል 4. ባል ሌላ ሴት ጋር የግብረ-ስጋ ግንኙነት ሊፈፅም ይችላል::		
ጥ503.8	ሚስት የትዳር አጋሯ የአባላዘር በሽታ እንዳለበት ካወቀች ባሏን ኮንደም እንዲጠቀም መጠየቅ ትችላለችን?		አዎ	አይደለም
ጥ503.9	እርስዎ የግብረ-ስጋ ግንኙነት በፈለጉበት ጊዜ ሩካቤ ስጋ ለማድረግ የትዳር አጋርሽን ጠይቀሽዉ ታዉቂያለሽ?		አዎ	አይደለም
ጥ503.10	የግብለ-ስጋ ግንኙነት (ሩካቤ ስጋ) ለማድረግ የትዳር አጋርዎ የእርስዎን ፈቃደኝነት ጠይቀዉ ያዉቃሉ?		አዎ	አይደለም
ጥ503.11	እርስዎ እና የትዳር አጋርዎ ስለ የግብለ-ስጋ ግንኙነት (ሩካቤ ስጋ) ተወያይተዉ የዉቃሉ?		አዎ	አይደለም
	ክፍል ስምንት:ሥለ ስነ-ጾታ ኢፍትሀዊነት ወጎችና ልማዶች የሚመለከቱ ጥያቄዎች			

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ጥ 503.12	ወንድ ልጅ ከአንድ በላይ የሴት ፍቅረኛ ቢኖረዉ ምንም ማለት ኤደለም አይደል::	አዎ	አይደለም
ጥ503.13	ሴት ልጅ/ሚስት የትዳር አጋሩዋ የግብረ ስጋ ግንኙነት ካስፈለገዉ እርሰዎ ባትፈልግም እንካ ግንኙነት ማድረግ አለባት።	አዎ	አይደለም
ጥ503.14	ሴት ልጅ/ሚስት ባለዋን ማክበር፡ ባል ሚስቱ ከማክበር በላይ ጠቃሚ ነገር ነዉ።	አዎ	አይደለም
ጥ503.15	ባል ሚስቱን ለትዛዙ ተገዥ ካልሆነች መመታት ይችላል።	አዎ	አይደለም
ጥ503.16	ባል ሚስቱ ከሌላ ወንድ ጋር የጾታ ግንኙነት እንደላት ካሰበ/ከጠረጠረ ሚስቱነን መደብደብ ይችላል።	አዎ	አይደለም
ጥ503.17	ወንድ ልጅ ቢማር ከሴት ልጅ የተሸለ ጥቅም አለዉ።	አዎ	አይደለም
ጥ503.18	ለዋና ተመራማሪ ብቻ: ከጥ503.13-18 መልስ ቢያንስ አንድ አዎ ሚለዉን ከመረጡ የጾታዊ እኩልንነት ፍትሀዊነትን ይቀበላሉ በማለት “አዎ” ይቆጠር።	አዎ	አይደለም

ክፍል ዘጠኝ: ባለፉት 12 ወራት ዉስጥ ማንኛዉም የቤት ዉስጥ ጥቃት ከተፈጸመብሽ በኋላ የወሰድሻቸዉ የመፈትሔ እርምጃዎች/ እርዳታ ጋር ተያያዥነት ያላችዉ ጥያቄዎች::

ጥ601	የትዳር አጋርሽ የሚያደርስብሽን የቤት ዉስጥ ጥቃት ለማከላከል ወይም ለማስቆም የወሰድሻቸዉ እርምጃዎች አሉ?	አዎ አደለም ←	ዝለል ጥ502, 503,504

ጥ602	ለጥያቄ ጥ501- መልሱ አዎ ከሆነ፡ ከየትኛው አካል እርዳታ አገኛሽ? [ብዙ መጥቀስ ይፈቀዳል]	1. ከወላጅ/ዘመድ 2. ጉደኛ/ጉረቤት 3. የአከባቢ መሪዎች /ባለስልጣን 4. የሐይማኖት አባቶች/ የአከባቢ ሽማግሌዎች 5. የአካባቢ ሽማግሌች/አጋቢ ሽማግሌዎች 6. የሕክምና ባለሞያዎች 7. የህግ ባለሞያ/ፖሊሶች 8. የሴቶች ማህበራት/ ጉዳዮች 9. ሌላ(ይገለፅ)_____

ጥ603	ሄደሽ እርዳታ የጠይቅሻቸው አካላት አስፈላጊውን እርዳታ/መረጃ ሠጡሽ/ አደረጉልሽ?	አዎ	አይደለም	አላስታዉስም

ጥ604. የጥ603 መልስ አዎ ከሆነ፣ የተሠጡሽል እርዳታዎች መዝርዝር ትቺያለሽ?-_____

ጥ605	የጥ603 መልስ አይደለም ከሆነ፤ እርዳታ ያልፈለግችበት ምክንያት ምንድን ሊሆን ይችላል? **[ብዙ መጥቀስ ይፈቀዳል]	1. ምንም ጥቅም የለዉም ብዬ አስብ ነበር-…….	1. አዎ	2. አደለም
		2. የህይዎት አንዱ አካል ስለሆነ……	1. አዎ	2. አደለም
		3. ፍች/መለያየትን ስለምፈራ ……...……..	1. አዎ	2. አደለም
		4. በቀጣይነት እንዳይብስ ስለምፈራ…….. ..	1. አዎ	2. አደለም
		5. ሰዉን ማግኘት ስለምፍራ……	1. አዎ	2. አደለም
		6. እንዳይባባስ ስለማፍር. ……...	1. አዎ	2. አደለም
		7. ዉርደት ይመስለኛል……..……	1. አዎ	2. አደለም
		8. ክብሬን ማዋረድ ስለማልፈልግ……	1. አዎ	2. አደለም
		9. የቤተሰብ ጫና ……..	1. አዎ	2. አደለም
		10. ሌላ/ይጠቀስ_____		

ክፍል አስር፡ በመዉለድ እድሜ ክልል ያሉ ሴቶች ለምርምሩ ፕሮግራሞች ያላቸዉ ተሳትፎ መጠይቆች

ጥ700.1	ላለፉት 12 ወራት ምን ያክል ጊዜ የግንሃቤ ትምህርት ሲሰጥ ተከታትለዋል?			
ጥ700.2	ላለፉት 12 ወራት ምን ያክል ጊዜ የጤና ኤክስቴንሽን ባለሙያ ቤትሽ ተጎብኝቶል?			
ጥ700.3	ላለፉት 12 ወራት ምን	ሀ. የፆታ እኩልነት የተመለከተ	አዎ	አይደለም
		ለ. የሴት ልጅ የቤት ዉስጥ ጥቃት እና ተዛማጅ ችግሮች	አዎ	አይደለም

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	ዓይነት የግንዛቤ ማስጨበጫ ትምህርት ተከታትለዋል?	ሐ. የሴት ልጅ የቤት ዉስጥ ጥቃት እና የጤና ተቀማት ምላሽ	አዎ	አይደለም
		መ. የሴት ልጅ የቤት ዉስጥ ጥቃት ላይ ከሀገር ሽማግሎች / የሀይማኖት አባቶች ጋራ ዉይይት	አዎ	አይደለም
		ሠ. የሴት ልጅ የቤት ዉስጥ ጥቃት ላይ ከሴቶች የልማት ሠራዊት ጋራ ዉይይት	አዎ	አይደለም
		ረ. ከትዳር አጋር ተሳትፎ እና ግልፅ ዉይይት	አዎ	አይደለም
		ሸ. ማህበረሰባዊ የግንዛቤ ትምህርት	አዎ	አይደለም
ጥ700.4	ላለፉት 12 ወራት ለመጨረሻ ጊዜ የጤና ኤክስቴንሽን ባለሙያ ቤትሽ የተጎብኝ መቸ ነዉ?		----------	
ጥ700.5	ላለፉት 12 ወራት በጤና ኤክስቴንሽን ባለሙያ ከተሰጡት ትምህርት/አገልግሎት በዋናነት ምታስታዉሽውን ጥቀሽ?		ሀ…… ለ---------- ሐ---------- መ ሌላ----------	
ጥ700.6	ላለፉት 12 ወራት የተሰጡት ገልግሎት በዋናነት በጣም ያስደሰተሽ?		----------	
ጥ700.7	ላለፉት 12 ወራት የተሰጡት አገልግሎት በዋናነት በጣም አስቸጋሪ ማነቆ/ተግዳሮቶች ምን ነበሩ?		----------	
ጥ700.8	በፕሮግራማችን ላይ መስተካከል የለባቸዉ የሚሉት አስተያየት ቢሰጡን?		----------	

አመሰግናለሁ!

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Appendix 6: Alternative questionnaire

Good morning/afternoon?

My name is _____. I am working as a data collector for the study entitled "Community-based intervention on maternal and reproductive health among married or cohabitated women in the reproductive age in Ethiopia: Implementation Research.**"** by Agumasie Semahegn who is a PhD candidate at University of Ghana, School of Public Health, and staff at Haramaya University, Harar, Ethiopia. I kindly request you to give me your attention to our short health education (discussion) on issues related to maternal and child health. In addition, you are also allowed to ask question for clarification at any point of our discussion. Now, we will be discussing on the points listed below;

Question 1: Have you heard about maternal health? Where can you get maternal health care? What are the maternal health issues that the women should seek and receive at health institution?

Discussion point: ANC follow up, FP, Institutional delivery, immunization etc.

Question2. What are the danger signs of pregnancy related complications? What can you do if you observe or recognize some danger signs during pregnancy?

Discussion points: Blurred vision, fainting (sudden fallen down); bleeding during pregnancy, severe headache, etc.

Question3: Maternal Nutrition? Supplementation (Iron. folate), iodine fortified salt consumption and use for food preparation

Question 4: Child health? Vaccination, breast feeding (EBF), danger sign of neonatal infections and child illness, hygiene etc.

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Appendix 7: Qualitative study data collection guide

Information sheet and informed voluntary consent form for qualitative study participants

Good Morning/Afternoon? My name is 1_____2_____3_____. We are working as a data collector for the study being conducted in this community by Agumasie Semahegn who is studying for his PhD Degree at University of Ghana, School of Public Health, and a staff member at Haramaya University, College of Health and Medical Sciences. We kindly request you to lend us your attention to explain you about the purpose of the study and how you are being selected as the study participant.

The study title: Community-based intervention to prevent domestic violence against women in Awi Zone, Northwestern Ethiopia; a quasi-experimental implementation research

Purpose/ aim of the study: The objective of this study is to explore bottlenecks of intervention implementation and enablers in preventing domestic VAW. Evidences has shown that domestic VAW is well investigated problem, but implementation has been putting in place to prevent domestic VAW are very limited that might be due to lacks attention to tackle from its root causes. Therefore, this implementation research is aimed to generate information on extent of community perceptions about domestic VAW, implement intervention to prevent and control the problem through community mobilization and collective effort, explore implementation barriers and identify enabling environments for future applicability.

Procedure and duration: This study will be conducted for 12 months which is consisted of data collection, intervention implementation and final evaluation program. The data collection will be conducted using in-depth interview, KII and FGDs. Each in-depth interview and FGD will take 60 to 90 minutes. So you are kindly requested to spend your precious time for the discussion and to provide me permission to proceed the data collection process. This research project is done for a major purpose to fulfil the partial requirement of acquiring a PhD degree in public health.

Risks and benefits: The risk of being participating in this study is minimal, only taking almost one and half hours of your precious time. The research team was strictly followed WHO (2016) recommendations for Research on domestic VAW. But the data collection would not interrupt your routine activity through scheduling ahead to create an enabling situation to plan in weekend time or non-working days through discussion. You will use their free time only and also you will be interviewed or participated in the FGD and you will not obliged to disclose your family secret issue rather you will mention the overall conditions in your community. There is not direct incentive for participating in this study except soft drinks, tea and coffee drinks. However, all necessary helps will be provided through linking to the local police as per the informed consent if you have something to report or disclose. The findings from this research will also benefit the women, and other community members including you, the region as well it can be used as baseline data to implement other interventions. Implementation of interventions to create awareness will bring gender equality and enhance community involvement on gender issues. This will also help community to reduce work burden and being victim VAW.

Confidentiality: The information from you will be kept confidential anonymously. In addition, we have to agree and pledged to keep everyone's idea as confidential as much as possible. Individual suggestions will not be miss-quoted and disclosed to anybody. There will be no information that will identify you in particular. All of you have unique codes but no name mentioned here in the report except your name might mentioned here to ease and make friendly discussion. The findings of the study were general for the study participants and had not reflect anything particular of individual persons as well as specific group of community.

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Rights: All participation in the study was based on full voluntary basis of the study participants. Each participant had the rights to declare to be participate or not to be participated in this study. If you can choose to participate, and also you have the rights to withdraw from the study during any stage of the interview r discussion. Withdrawal from the study will not label you for any loss of benefits which you otherwise are entitled. You will not be enforced to answer any question that you do not want to answer.

Contact address: If you have any enquires anytime about this study or the procedures please contact:

Address of PI: Agumasie Semahegn: +251984091143/913359717/ +233279958725

Haramaya University, College of Health and Medical Sciences, IHRERC: +251254662011, Po. Box; 235, Harar, Ethiopia

Declaration of informed voluntary consent:

I/We had read / were read to me the information sheet and consent form written to us. I/We had clearly understood the main objective of the study, the methodology or approaches, the minimal bad and goods related to being participated in this study, information confidentiality, our right and the telephone numbers for further explanation for any questions. We had free choice to ask any questions if we had inquires during at any stage of the interview or discussion if any point was not clear. We were informed about the right to withdraw from the study whatever any stage of the data collection or withholding information if the participants do not want. Therefore, we choose that we are agree to participate in this study to be conducted here in the locality.

Respondents' name and signature _____

Field research assistants' name and signature _____

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Qualitative study participants' basic information assessment tool

Qualitative study participant's (In-depth interview, KII and FGDs) socio-demographic profile

- Interviewer's Name: _____
- Time of Interview _____

Socio demographic characteristic of participants

S.No	Variable	Response	Skip
1	Code of participants		
2	Age		
3	sex	Male Female	
4	Religion	Orthodox Muslim Protestant Catholic others	
5	Occupational status	Housewife Farmer merchant Government employee Private/ NGOs employee Engaging small business/Micro Others (Specify)_____	
6	Educational status	Illiterate Read and writes 1-6 grade 7-12 grade 12+ Other(specify)_____	
7	Which organization are you representing	Women's and children affair office Police HEW/Health personnel Religious fathers Local elders Local leaders. General community	
8	Resident	Rural Urban	

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Guiding questions for in-depth interviews

	Instruction: Here I am going to make an interview/conversation on women's health and women's life experience by the partner in your sub-districts/locality
1	How the community gender norm accept the issue of gender equality? What do you think about gender equality? [Probe: magnitude, (when it occurs? consequences in terms of health, social & economical]
2	How is the role of women on household issue decision making? What if the women become the head of the household and what the partner as well as the community would perceive?
3	How do you express the community and societal norm or attitude towards wife beating by their partner? What is your feeling? When the partner can have adequate reason to beat his wife?
4	What do you think if your wife refuse to have sex with you for a certain reason she had? Would you accept that she has the right to refuse?
5	What are the contributors or reasons for wife beating? [Probe: family factor, community factors, individuals**]**
6	What actions has been taken to prevent and stop domestic violence against women? **[**Probe: religious father, health professional, local leaders/police/women affair etc.]
7	How do you think that anything done to prevent domestic violence against women? Can you give us a recommendation on which area of women health needs intervention? Community education (Spiritual, community policing, or other thing to create awareness on women's right and equality, judgments?

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Guiding questions and probes for FGDs participants in the study sub-districts/ localities

Name of interviewer: _____

FGD Begin at_____ (Local time) End at _____ duration_____ (hour/s)

group name: _____Sub-districts_____

	Guiding questions for focus group discussions
1	How the domestic VAW is seen by the community in your locality? (Hint: wife beating, wife control, partners controlling behavior?
2	How do you level the influence of domestic VAW on women life your locality? [Probe: contributing factors, consequences in terms of health, social & economical...]
3	How do you see contribution of religious fathers, local leaders, women's affairs, and health personnel's on the prevention of domestic violence? [Probe: roles to solve, problems prevent domestic violence against women on provision of advice…]
4	What are the major barriers (cultural or societal) that make the women highly affected by domestic violence in their home by their partner? [Probe: traditional gender-norms, women's attitude on wife beating]
5	What is the possible solution that the women or victim used to avert or stop the violence? [Probe: where does she sought help? When? To whom?
6	How is the involvement of partner on domestic violence prevention as perpetrator as well as change maker? [Hint: Are they willing to cease wife beating? insulting? or restrict the freedom? joint decision making? involve on reproductive health support? sexual negotiation?
7	Domestic violence prevention starts from calling wife her own or special name as you want instead of calling "you" "she" and sometimes unnecessary plurality? Discuss"

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Appendix 8: Sample intervention materials (Leaflets)

1. Gender equality and policy frameworks in Ethiopia



የፆታ እኩልነት (Gender Equality)

የሥርዓተ-ፆታ እኩልነት /Gender Equality/:- ሴቶችና ወንዶች በብዛዊ መብቶቻቸውን እኩን በመጠቀማና ለሕኮኖሚያዊ፣ ለማህበራዊ ለፖለቲካዊና ባሕላዊ ልጽገት የራሳቸውን አስተዋጽኦ እንዲያበረክቱ ከእርስ በርስ ተጠቃሚ እንዲሆኑ አከል ልደል እንዳላቸው የሚያመለክት ነው።

የሥርዓተ-ፆታ ፍትሃዊነት /Gender Equity/- ማለት በፃብት ምደባ በሚፈጠር መልካም እደጉትና በጠባበቀት ለወንዶችና ለሴቶች ማህናዊ የመሆን ሂደት ነው። ፍትሃዊነት እንጀመዛሪ ሥርዓተ-ፆታ እኩልነት ደረጃው እንደገበ ደታያል።

መሰረታዊ የሥርዓተ-ፆታ ጽንሰ ሃሳቦች

ፆታ (sex)፡ ወሎች ጾበት የሚወለዱ በወንዶና በሴት መካከል ያሉ ሥነ-ሕይወታዊ ልዩነቶች። ለማሳለፕ ሴቶች ጡት ወንዶች ደረጃው ጂሞ አላቸው። ሁሉም ሥነ-ሕይወታዊ ልዩነቶች በሴትነትና በወንድነት የሚገለጹ እውነታዎች ናቸው።

ሥርዓተ-ፆታ /Gender/፡ በወንዶችና በሴቶች መካከል ያሉ ማኅናዎችና ማህበራዊ ግንኙነቶችን የሚያመልክት ነው። በሴቲ አገላለጽ በህብረተሰቡ ውስጥ ሴቶችና ወንዶች ምን መሥራት እንደሚገባቸው የሚያመለክት ሲሆን ይህም በወንዶችና በሴቶች መካከል ሰላሰው የተናጥል ግንኙነት ላይሆን በመህበራዊነገና በተቋም ደረጃ ባሉ ጉዳዮች የሚታይ ነው።

ለሥርዓተ-ፆታ አስተሳሰብ እድገት አስተዋጽኦ የሚያደርጉ አካላት

ሀ. ቤተሰብ፡ ሕፃናት በመጀመሪያ የሚያገኙት ወጎጀምቾቹን እንደመሆኑ መጠን የሴትነትን እና የወንድነትን ሚና ይዘው እንዲያድጉ የባህሪ ቀረጻ የሚጀመረው በቤተሰብ ውስጥ ነው። በተጨማሪም ወላጆች በቤተሰብ ውስጥ የእናትንና የአባትን ሚና እያጠኑ ስለሚያድጉ ዕድሜያቸው ደርሶ ቤተሰብ ሲመሠርቱ ያደጉበትን አስተሳሰብ ያላተደውሞ ተቀብለው ሲያንጸባርቁ ይታያል።

ለ. ህብረተሰቡ፡ ልጆች ከቤተሰብ ቀጥሎ የሚያገኙት መመህራንን፣ ጎረቤቶቻቸውን፣ ዘመዶቻቸውን እና አጠቃላይ ህብረተሰቡን ሲሆን ቤተሰባቸው ውስጥ የተማሩትን ባህሪ ህብረተሰቡ የሚያጸድቀው በመሆኑና በተቃራኒው ለየት ያለ አስተሳሰብን መራመድ ተቀባይነትን የሚያጣጣ ወይም ጩኖ የሚፈጥር ሆኖ ስለሚያገኙት ህብረተሰብ የወንዶችንም ሆነ የሴቶችን ባህሪ በመቅረጽ ትልቅ ድርሻ አለው።

ሐ. የሐይማኖት ተቋማት፡ የሰውን ሥነ-ልቦና በመቅረጽ ረገድ ከፍተኛ አስተዋጽኦ ያላቸው ሲሆን ሐይማኖታዊ ትእዛዛትን በማክበር ወንዶችም ሆኑ ሴቶች እንደየሚከተሉት ሐይማኖት የማጠበቅባቸውን ሚና ይወክላሉ።

መ. ትምህርት ቤቶች፡ ውስጥ መምህራን፣ የመማሪያ መጻሕፍት፣ የተማሪዎች የእረፍት ሰዓት እንቅስቃሴ፣ የሽልማትና የቅጣት አይነቶች ወንድና ሴት ተማሪዎች በሚያልፉበት የእድሜ ደረጃ የሚኖራቸውን ሚና በማስተዋወቅና በማሳደግ ረገድ ከፍተኛ ድርሻ አላቸው። በአብዛኛው እንደሚታየው መምህራኑም ሆኑ በመማሪያ መጽሐፍት የሚሣተፉት ስዎች በህብረተሰቡ ውስጥ የሚኖሩ እንደመሆናቸው መጠን ህብረተሰቡ የተቀበለውን ባህል፣ ልማድና ወግ የሚያንጸባርቁ ይሆናሉ። ከዚሁ ጎን ለጎን ትምህርት ቤቶች አዳዲስ ሃሳቦችን በህብረተሰቡ ውስጥ ለማስረጽ ቀዳሚያውን ቦታ እንደሚይዙ መዘንጋት አይኖርበትም። ስለዚህ መምህራን ስለሥርዓተ ፆታ ማንዛቤ ቢኖራቸው

በህብረተሰቡ ውስጥ አዲስ አስተሣሣብ ለማምጣት የላቡኑ ሃይል ይሆናሉ።

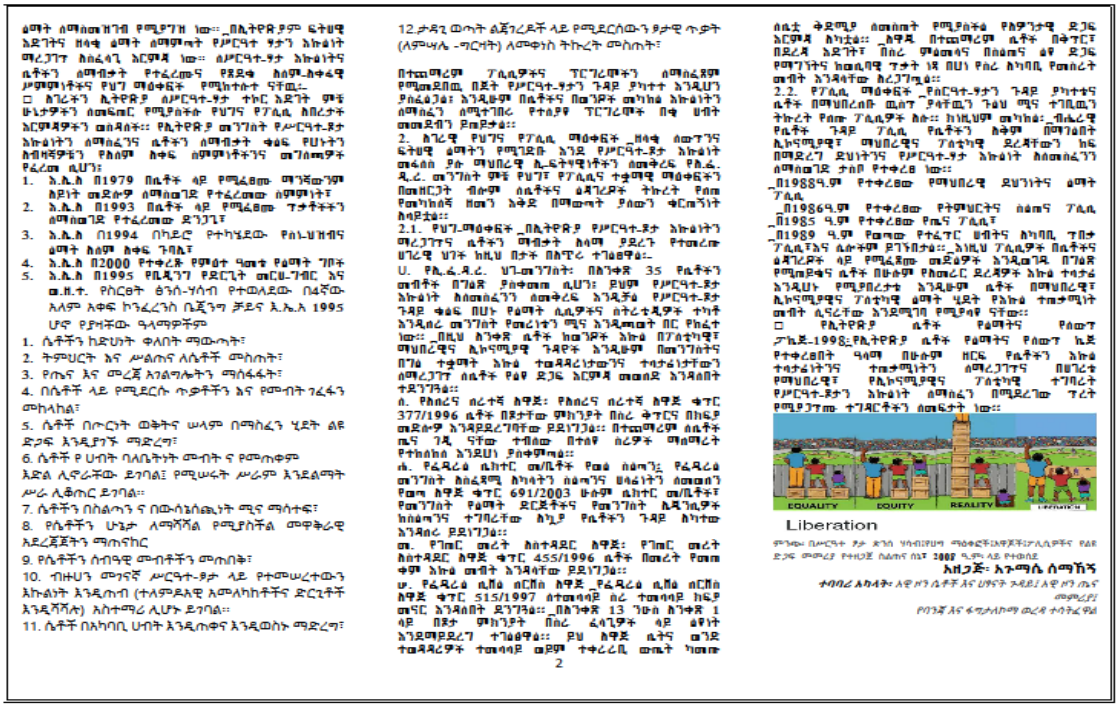
ሠ. መንግሥት ተጠሣን፡- በተጨማሪ በተለያዩ ሚኒስቴሮችና የሚሰራቱ መዳልክቶች ሴቶችና ወንዶች የሚሣሉባቸው ምስል፣ የሚሰራጩ የመልዕክት ይዘት ሚዛናዊ መሆንና ወይም ያለመሆን የትውልዱን አመለካከት በመቅረጽ ሰፊ ድርሻ አለው።

ረ. ሕግ፡ የሰዎችን አደኗር በስርዓት ለመምራት የሚወጡ ልዩ ልዩ ሕጎች ሴቶችና ወንዶች በራሣቸው ፣ በቤተሰባቸው እና በአገራቸው ጉዳይ ላይ ድምጽ እንዲኖራቸው ለማድረግ፣ ንብረት በማፍራትና በማስተዳደር ረገድም የሚኖራቸውን ሚና ለማደላደልና ለማስፈጸም መመሪያ ሆኖ ስለሚያገለግል ሴቶችና ወንዶች በህብረተሰብ ውስጥ ያላቸውን ቦታ ወይም ደረጃ ለመወሰን ትልቅ ድርሻ ይኖረዋል።

ሰ. መንግስት፡- ሕግን ከማዉጣትና ከማስፈጸም ጎን ለጎን ሴቶችን ከጉዳት መከላከል የመንግስት ሃላፊነት እንደመሆኑ መጠን ሴቶችና ወንዶች በህግ ፊት የሚኖራቸውን ተደማጭነትና ሚና ለመወሰን መንግሥት ከፍተኛ ድርሻ አለው።

የሰርዓተ-ፆታ እኩልነትን ተግባራዊ ለማደረግ ያሉ የህግ፣ የፖሊሲና የመዋቅር መፅሐፍት

ሥርዓተ-ፆታ እኩልነት መሰፈን እና ሴቶችን ማብቃት ለሰንጋ ሕገር አደገት ትልቅ አስተዋፅ አላቸው። በዚህም መሠረት የሴቶች የጤና ሁኔታን ማሻሻል የትምህርት ተሳትፎአቸውን ሴቶደረበት ማሳደግ የሕክምና እደራትን ማሻሻገትና ሴ፣ የመገኘት እደራቻቸውን ማስፋት እንዲሁም የመብቱ ጠሮነት ተሳትፎአቸውን ማሳደግ፣ የሴቶችን ደህነት እና ሰደህነት ተጋላጭነት በመቀነስ ሴቶችንና ሕኮኖሚያዊ እና ፖለቲካዊ ሁኒታቸውን በማሳሰል የተሻለ የኑር ደረጃ ለማረጋገጥ እና ቀጣይነት ያለው የሕኮኖሚ እደገትን ለማምጣት ያስችላል። በመሆኑም የሥርዓተ ፆታ እኩልነትን ማረጋገጥ እና ሴቶችን ማብቃት ብዘስዊ መብቶን በማክበር ቀጣይነት ያለው ዘላቂ



ልማት ለማሰመዝገብ የሚያገዝ ነው። በሕሉቀዩ ያም ፍትዘዊ እደገትና ዘላቂ ልማት ለማምጣት የሥርዓተ ፆታን እኩልነት ማረጋገጥ አስፈላጊ እርምጃ ነው። ለሥርዓተ-ፆታ እኩልነትና ሴቶችን ለማብቃት የተፈረሙና የጸደቁ ስልም-አቀፋዊ ሥምምነቶችና የህገ ማዕቀፎች የሚከተሉት ናቸዉ፡-

□ ስገሪችን ኢትዮጵያ ለሥርዓተ-ፆታ ተኮር እደገት ምቹ ሁኒታዎችን ለመፍጠር የሚያስችሉ የህገና የፖሊሲ አበረታች እርምጃዎችን ወስዳለች። የኢትዮጵያ መንገስት የሥርዓተ-ፆታ እኩልነትን ለማፈናገና ሴቶችን ለማብቃት ቁልፍ የሆኑትን አንዳማገባቸው የሚታመንባት ሲሆን ይህም በወንዶችና በሴቶች መካከል ሰላሰው የተናጥል ግንኙነት ላይሆን በማህበራዊ በተቋም ደረጃ ባሉ ጉዳዮች የሚታይ ነው።

1. አ.አ.አ በ1979 በሴቶች ላይ የሚፈፀሙ መንኛዎንም አይነት መደዶም ለማስወገጀ የተፈረመው ስምምነት፣
2. አ.አ.አ በ1993 በሴቶች ላይ የሚፈፀሙ ፕታቶችንን ለማስወገጀ የተፈረመው ዶንንገጀ
3. አ.አ.አ በ1994 በካይሮ የተካሄደው የስነ-ህዝብና ልማት አሰም ስቀፍ ጉባኤ፣
4. አ.አ.አ በ2000 የተቀረጸ የምዕተ ዓመቱ የልማት ገቦች
5. አ.አ.አ በ1995 የቤጂንግ የደርጊት መርዘ-ገብር እና ዉ.ዘ.ተ. የስርፀት ፅንሰ-ሃሳብ የተወሰደው በፊኛው አለም አቀፍ ኮንፈረንስ ቤጂንግ ቻይና እ.አ.አ 1995 ሆኖ የያዛቸው ዓላማዎችም

1. ሴቶችን ከድህነት ቀለበት ማዉጣት፣
2. ትምህርት እና ሥልጠና ለሴቶች መስጠት፣
3. የጤና እና መረጀ አገልግሎትን ማሰፋፋት፣
4. በሴቶች ላይ የሚደርሱ ጥቃቶችን እና የመብት ገፈፋን መከላከል፣
5. ሴቶች በጦርነት ወቅትና ሠላም በማስፈን ሂደት ልዩ ድጋፍ እንዲያገኙ ማድረግ፣
6. ሴቶች የ ሀብት ባለቤትነት መብት ና የመጠቀም እድል ሊኖራቸው ይገባል፤ የሚሠሩት ሥራም እንደልማት ሥራ ሊቆጠር ይገባል።
7. ሴቶችን በስልጣን ና በውሳኔሰጪነት ሚና ማሰተፍፍ፣
8. የሴቶችን ሁኔታ ለማሻሻል የሚያስችል መዋቅራዊ አደረጃጀትን ማጠናከር
9. የሴቶችን ሰብዓዊ መብቶችን መጠበቅ፣
10. ብዙሀን መገናኛ ሥርዓተ-ፆታ ላይ የተመሠረተውን እኩልነት እንዲጠብ (ተለምዶአዊ አመለካከቶችና ድርጊቶች እንዲሻሻሉ) አስተማሪ ሊሆኑ ይገባል።
11. ሴቶች በአካባቢ ሀብት እንዲጠቀና እንዲወስኑ ማድረግ፣

12.ታዳጊ ወጣት ልጃገረዶች ላይ የሚደርሰውን ፆታዊ ጥቃት (ለምሣሌ -ግርጣት) ለመቀነስ ትኩረት መስጠት፣

በተጨማሪም ፖሊሲዎችና ፕሮግራሞችን ለማስፈጸም የማስፈለጉ በጀት የሥርዓተ-ፆታን ጉዳይ ያካተተ እንዲሆን ያስፈልጋል፤ እንዲሁም በሴቶችና በወንዶች መካከል እኩልነትን ለማስፈን ለሚተገበሩ የተለያዩ ፕሮግራሞች በቂ ሀብት መመደብን ይጠይቃል።

2. ስገሪ የህግና የፖሊሲ ማዕቀፍ ከዘላቂ ሰውጉንና ፍትሀዊ ልማትን የማገዝ አንዱ የሥርዓተ-ፆታ እኩልነት መፈጠሪ ያው መህበራዊ ኢፍትሃዊነቶችን ለመቀረፍ የሕፈ. ዲ.ሪ. መንገስት ያዙ የህገና የፖሊሲና ተቋማዊ ማዕቀፎችን በመዘርጋት ብሎም ሰቴችና ልጃገረዶች ትኩረት የሰጠ የመነከስኛ ዘመን አቀድ በማውጣት ያለውን ቁርጠኝነት አሳይቷል።

2.1. የህገ-ማዕቀፍ ከኢትዮጵያ የሥርዓተ-ፆታ እኩልነትን ማረጋገጥና ሴቶችን ማብቃት አሳማ ያደረጉ የተወረዙ ህገሪ ህገች ከዚህ በታች በአጥር ተገልፀዋል፡-

ሀ. የኢ.ፌ.ዲ.ሪ. ህገ-መንገስት፡ በአንቀጽ 35 የሴቶችን መብቶች በገልጽ ያሰቀመጠ ሲሆን፣ ይህም የሥርዓተ-ፆታ እኩልነት አስጠብቆንን ለመቅረፅ እንዲቻል የሥርዓተ-ፆታ ጉዳይ ቁልፍ በሆኑ የልማት ሲሲዎችና ስትራቴጂዎች ተካቶ እንዲሠሪ መንገስት የመሪነቱን ሚና እንዲጠወጣ በር የከፈተ ነው። በዚህ አንቀጽ ሴቶች ከወንዶች እኩል በፖለቲካዊ፣ ማህበራዊና ኢኮኖሚያዊ ጉዳዮች እንዲሁም በመንግስትና በግል ተቋማት እኩል ተወዳዳሪነታቸውንና ተሳታፊነታቸውን ለማረጋገጥ ሰቴችና የልየ ደጋፌ እርምጃ መወሰድ እንዳለበት ተደንግጓል።

ለ. የሕጠና ብረተኛ ሕዋድ፡ የሕጠና ብረተኛ ሕዋድ ቁጥር 377/1996 ሴቶች በጾታቸው ምክንያት በሰረ ቅጥርና በክፍያ መደሰው እንዳይደረግባቸው ደደነገጋል። በተጨማሪም ሰቴችና ጊጂ ናቸው ተብለው በተሰየ በረዎች ማጠማርት የተከለከለ እንደሆነ ያሰቀምጣል።

ሐ. የፌዴራል ሴክተር መ/ቤቶች የወሰ ሰውጊ የፌዳራል መንገስት እስፈጻሚ አካላትን ሰውንና ዘፅፊነትን ለመወሰን የወጣ አዋጅ ቁጥር 691/2003 ሁሉም ሴክተር መ/ቤቶች፣ የመንገስት የልማት ደርጅቶችና የመንገስት ኢጂንሲዎች ከሰውጣንና ተገባሪተው አኳያ የሴቶችን ጉዳይ አካተው እንዳሰሪ ደደነገጋል።

መ. የገጠር መሪት አስተዳደር አዋጅ፡ የገጠር መሪት አስተዳደር አዋጅ ቁጥር 455/1996 ሴቶች በመሪት ባለ ሀብት ሰውም እኩል መብት እንዳላቸው ደደነገጋል።

ሠ. የፌዳራል ሲቪል ሰርቪስ አዋጅ የፌዳራል ሲቪል ሰርቪስ አዋጅ ቁጥር 515/1997 ለተወሰሳዉ በረ ተወሳሳዉ ክፍያ መፍጸም እንዳለበት ደነገጓል። በዚህም 13 ንዑስ አንቀጽ 1 ላይ በፃታ ምክንያት በሰረ ልዩነት እንደማይደረግ ተገልፀዋል። ይህ አዋጅ ሴቶና ወንድ ተወዳዳሪዎች ተመሳሳይ ወይም ተቀራራቢ ውጤት ካገበቱ

በሰቴታ ቅደመያ ሰመጠመት የሚያስችል የስያንታዊ ደጋፌ እርምጃ ስካኋል። አዋጁ በተጨማሪም ሴቶች በቅጥር፣ በደረጃ እደገት፣ በስሪ ምደመሳሳ በዘወና ልዩ ደጋፌ የማገኘትና ከወሲባዊ ጥቃት ነጻ በሆነ የሰሪ አካባቢ የመሰራት መብት እንዳላቸው ዘረጋገጫል።

2.2. የፖሊሲ ማዕቀፍ፡ _የሰርዓተ-ፆታን ጉዳይ ያካተተና ሴቶች በማህበረሰቡ ዉስጥ ያሳተዉን ጉልህ ማና ተገቢዉን ትኩረት የሰጡ ፖሊሲዎች ስለ። ከነዚህም መካከል፡_ብሔራዊ የሴቶች ጉዳይ ፖሊሲ የሴቶችን ስቅም በማጎልበት ሲኮኖሚያዊ፣ ማህበራዊና ፖለቲካዊ ደረጃቸውን ከፍ በማደረግ ደህነትንና የሥርዓተ-ፆታ እኩልነት ስሰመሰፈንገን ለመሰወገጀ ታስቦ የተቀረፀ ነው።

_በ1988ዓ.ም የተቀረፀው የማህበረሰዊ ደህንነትና ልማት ፖሊሲ

_በ1986ዓ.ም የተቀረፀው የትምህርትና ስልጠና ፖሊሲ

_በ1985 ዓ.ም የተቀረፀው የጤና ፖሊሲ፣

_በ1989 ዓ.ም የወጣው የተፈፃሚ ህብትና ስካባቢ ፕበቃ ፖሊሲንና ልሎችም ደገንስታል። እነዚህ ፖሊሲዎች በሴቶችና ልጃገረዶች ላይ የሚፈጀው መደልዎች እንዲወገዱ በገልጽ የሚጠቅሱ ሲሆኑ በሁሉም የስልር ደረጃዎች እኩል ተሳታፊ እንዲሆኑ የማደበረታት እንዲሁም ሴቶች በማህበረሰዊ ሲኮኖሚያዊና ፖለቲካዊ ልማት ሂደት የእኩል ተጠቃሚነት መብት ሲኖራቸው እንደማገባ የሚያሳዩ ናቸው።

□ የኢትዮጵያ ሴቶች የልማትና የሰውን ፖኬጅ-1998ዓ.የኢትዮጵያ ሴቶች የልማትና የሰውፕ ኬጅ የተቀረፀበት ዓላማ በሁሉም ዘርፎ የሴቶችን እኩል ተሳታፊነትንና ተጠቃሚነትን ለማረጋገጥና በዘርፊቱ የመህበረሰቡ የኢኮናሚያዊና የፖለቲካዊ ተገቢ ተገባሪት የሥርዓተ-ደታን እኩልነት ለማስፈን በሚደረገው ጥረት የሚያጋጥሙ ተገዳሮቶችን ለመፍታት ነው።

Liberation

ምንጭ፡ በሥርዓተ ፆታ ጽንሰ ሃሳብ፣በሃይማኖትና በአፈጻጸሞችና የልዩ ድጋፍ መመሪያ የተዘጋጀ ስልጠና ሰነድ 2002 ዓ.ም ላይ የተወሰደ

አዘጋጅ፡- አጉማሴ ሰማኸኝ

ተባባሪ አዳላቾ፡ አዋ ሰንሴቶች እና ህፃናት ጉዳይ ጽ/ቤት አዲስ አበባ ከተማ መመሪያ የሰንጋጀ እና ፋሚሊስመም መረዳ ሰጥቷፈጻል

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2. The cause of domestic violence and corrective measures



የሴት ልጅ ያታን መሰረት ያደረገ የቤት ዉስጥ ጥቃትን መከላከል

መግቢያ

ያታን መሰረት ያደረገ ጥቃት በሴተኞም በወንዶችም ላይ የሚፈፀም ጥቃት ሲሆን በአብዛኛው ሴቷ ተጎጂ የምትሆንበት ሆኖ በሴቶችና በወንዶች መህበራዊ ግንኙነት መካከል ተመጣጣኝ የሐይል ሚዛን ካለመኖር ይመነጫል። ችግሩ የሁሉም አገሮች ችግር ሆኖ ሰብአዊ መብትንና የፆታን እኩልነት ለማስፈን የሚደረግን ጥረት በማወክ ተጎጂነቱ የሚገኝ ነው። በሴቶች ላይ የሚደርስ ጥቃት በርካታ ገፅታዎች ያሉት ሲሆን እርስ በእርሳቸው በተሰሰሩና አንዳንድ ጊዜም በተደጋጋሚ በሚከሰቱ ተከታታይነት ባላቸው የተለያዩ ሁኔታዎች ይገለጣል። እንደ አለም ጤና ድርጅት ዘገባ ከሆነ ከ3 ሴቶች አንዳቡቅርብ ጉደኛዋ ወይም የትዳር አጋር ጉዳት ይደርስባታል። ይህ ችግር በሃገራችን ኢትዮጵያ 35% ነዉ። ነገር ግን ከለዉ የኢኮኖሚ ጥገኝነት እና ጎታች ወጎች የተነሰ ችግሩ የከፋ ነዉ። አብዛኞቹ ሴቶች ባል ሚስቴን መደብደብ ይችላል የሚል አመለካከት አለባቸዉ።

የኢትዮጵያ ተጨባጭ ሁኔታ ስንመለከት፡ ኢትዮጵያ በህዝብ ብዛት ከአፍሪካ 2ኛ ደረጃ ላይ የምትገኝ አገር ስትሆን 83.6% የሚሆነው ሕዝቧ በገጠር ይኖራል። ከአጠቃላይ የህዝብ ቁጥሯ 49.5% ሴቶች ሲሆኑ፤ 24% እድሚያቸው ከ15-49 ዓመት ዉስጥ ያሉ ናቸው። ምንም እንኳን ኢትዮጵያውያን ሴቶች በአገሪቱ አጠቃላይ እድገት ላይ ቁልፍ ሚና እየተጨወቱ ያሉ ቢሆንም ከወንዶች ጋር ሲነፃፀሩ በከፍተኛ ማህበራዊ የፍትህ እጦት እና የጥቃት ጫና ያረፈባቸው ሆነው ይገኛሉ። በተጨባጭ ሁኔታውን በጥልቀት ለመረዳት የሚያስችል ከፍተኛ የመረጃ እጥረት መኖሩን እንዳለ ሆኖ በሴቶች ላይ የሚደርሱ የሁሉም አይነት ጥቃቶችን ዓይነትና ስርጭቱን ለማወቅ የተካሄዱ ውስን ጥናቶች እንደሚያመለክቱት ችግሩ በከተማም ሆነ በገጠር የተስፋፋ መሆኑን ነው። ሆኖም በሴቶች እና በታዳጊ ልጃገረዶች ላይ የሚደርሱ ጎጂ ልማዳዊ ድርጊቶች ከፍተኛውን ቁጥር የሚሸፍኑ ሲሆን በኢትዮጵያ በሴቶችና በልጆች ላይ ለሚደርሱ ጥቃቶች መማለጫዎች ናቸው። የኢትዮጵያ መንግስት በዓለም አቀፍና በአገር ውስጥ የዜጎቹን ድህንነት ለማሻሻልና ለማስጠበቅ ባለው ቁርጠኝነት የማህበራዊና የፆታዊ ስርዓት ለውጥ ለማስመዝገብ የሚረዱ ፖሊሲዎችና የህግ ድንጋጌዎች በመዘጋጀት ተቋማዊና ልማታ እርምጃዎችን በመውሰድ ላይ ይገኛል። የመንግስት የለውጡ ትኩረት አቅጣጫዎች ከሁለት ስልታዊ ጉዳዮች ጋር የተሰሰሩ ሲሆኑ የመጀመሪያው በህብረተሰቡ ውስጥ የሚታየው ፆታዊ ጥቃት ስር የሰደደ የፆታ እኩልነት ያለመከበር ውጤት መሆኑና ሁለተኛው እነኚህ ፆታዊ ጥቃቶች በማልፅ ከሚታየው አስከፊ ድህነት ጋር የተያያዥነትና ከፍተኛ ቁርኝት ያላቸው መሆኑን ታሳቢ ያደርጋል።

የሴት ልጅ ያታን መሰረት ያደረገ ጥቃት አይነቶች

1. ስነ-ልቦና ጥቃት (Psychological violence): አላስፈላጊ ስም መጥራት፤ እደባደባለሁ ብሎ ማስፈራራት፤ ማሸማቀቅ፤ ማገዳጠጥ፤ በቃላት መተጉሸስ፤ ከቤተሰብ ወይም ከጓደኞች አስገድዶ መለየትን ይመለከታል። የማይፈለግ ትኩረት፤ አካላዊ ምልክት መስጠት ወይንም የተፃፈ ወሲባዊ ቃላትን ወይንም ዛቻ የተቀላቀለባቸውን እና የመሰሰሉትን ያጠቃልላል።
2. አካላዊ ጥቃት (Physical violence): ፆታዊ ግንኙነት የሚያካትት ሆኖ በአካል ላይ የሚፈፀም ድብደባ ማለት ነው። ለምሳሌ በጫላ መምታት ፤በጥፊ መምታት፤ መቁረጥ፤መሳፋት የአካላዊ ጥቃት የሚያስከትል ወንጀል ፤ወዘተ
3. ፆታዊ ጥቃት (sexual violence): ማንኛውም አይነት የማይፈለግ ፆታዊ ንክኪ ማለት ሆኖ የውጭ አካልን ወደ ሰው ውስጥ አካል መጫመርን የሚያካትት ማለት ነው።
4. ማህበራዊ እና ባህላዊ ጥቃ (socio-cultural violence): ይህ ጥቃት በብዙ መንገዶች ሊገለጥ ይችላል። እነርሱም
   - በማስገደድ የተፈፀመ ጋብቻ (forced marriage): ማለሰቦችን ከፍቃደኝነታቸው ውጪ ጋብቻን መፈፀም ።

- የልጅነት ጋብቻ (Early marriage): ማነኛዉም ከ18 ዓመት በታች ላሉ አዳጊዎች የሚደረግ ጋብቻ
- የሴቶ ልጅ ግርዛት (female genital mutilation): ጤናማ የመራቢያ አካልን መቁረጥ
- ሴቶችን የተምህርት ወይም የጤና እና ሌሎች ማህበራዊ ጉዳዮች ላይ እንዳይሰተፉ መከልከል ወይም አለማሰተፎ እና ወዘተ

5. ማህበራዊ እና ኢኮኖያዊ ጥቃት/ጫና (socio-economic violence):ይህ ጥቃት በብዙ መንገዶች ሊጋለጥ ይችላል። እነርሱም
   - ገንዘብ ወይንም የቤት ቁሰቁሶችን መከልከል ወይንም ለኑሮ የሚደረግን ጥረት መከታተል
   - የመሬት ባለቤተነት መብትን መንፈግ
   - የጋራ ሀብት ላይ እንዳያዝዙ ወይም እንዳይጠቀሙ መከልከል
   - ባሏ የሞተባትን ሴት የውርስ መብቷን መከልከል፣ የመሰሰሉትን ያጠቃልላል እና ወዘተ

የሴቶችን ያታን መሰረት ያደረገ ጥቃት መንስኤዎች

1. በእልኮል መጠጥ መገፋፋት (ስካር)
2. ሲወርድ ሲዋረድ የመጣ አጉል ልማዶች
3. የሴትን ልጅ እኩልነት ያለመቀበል አመለካከት
4. አጠቃላይ የማንዛቤ እጥረት
5. በማህበረተሰቡ ዉስጥ ይመለከተኛል ወይም ያጋባኛል ብሎ መከላከል ላይ አለመሰተፍ

የሴቶችን ያታን መሰረት ያደረገ ጥቃት መከላከያ ዘዴዎች

1. የህግ ማዕቀፍ፡ የኢፌዲሪ መንግስት የሴቶችን መብት ለማክበር ባለው ቁርጠኝነት በአገሪቱ ሕገ-መንግስት እና በሌሎችም የሕግ መዕቀፎች ውስጥ ትኩረት እንዲያገኙ ተደርጓል። ህገ-መንግስቱ ለሴቶች ከወንዶች እኩል መብት በእንቀፅ 35 አጎናጽፏል። ፆታን መሠረት ያደረገ ልዩነትን ይከላከላል።በሴቶች ላይ የሚደረሰውን ጥቃት ለመዋጋት በተለያዩ ፖሊሲዎችና የስትራቴጂ ሰነዶች ውስጥ እውቅና እንዲሰጣቸው ያደርጋል። ለምሳሌ በብሄራዊ የሴቶች ፖሊሲ (እ.ኤ.አ.1993)፤ የኢትዮጵያ ሴቶች የልማትና የለውጥ ፖሊሲ (እ.ኤ.አ.2006)፤ በጎጂ ልማዳዊ ድርጅቶች ላይ በተዘጋጀው ብሄራዊ ስትራቴጂ ሰነድና በእድገትና ትራንስፎርሜሽን እቅድ (እ.ኤ.አ 2010) ተንጸባርቀው ይገኛሉ። ተሻሽሎ የወጣው የአገሪቱ የወንጀል ሕግ እና የቤተሰብ ሕግ በተለየ ሁኔታ በሴቶች ላይ ለሚደርሱ ጥቃቶች ከለላ የሚሰጡ ናቸው።
2. የማንዛቤ ማስጨበጫ ትምህርት ማስፋፋት፡ ዋብዙሀን መገናኛ አዉታሮችን በመጠቀም የጥቃቶችን ስፋትና ጥልቀት ማሰየት
3. በማህበረተሰቡ ዉስጥ ይመለከተኛል ወይም የገባኛል ብሎ መከላከል ላይ አንዲሰትፍ የሚመለከታቸዉ አካልት ጋር ተባብሮ መስራት
4. ሲወርድ ሲዋረድ የመጣ አጉል ልማዶች ወይም መጠፎ ባህሌች ላይ መሰራት አለበት
5. ሴቶችን የልማቴ ተጠቃሚነት ማረጋገጥ እና በኢኮኖሚ ማጎልበት
6. በትዳር ዉስጥ ዉይይት መልመድ ወይም ባህል ማድረግ እና የመፍተሔ ርምጃ በዉይይት መፍታት
7. ከወንዶች ጋር ተባብሮ ለለዉጥ መስራተ እና ወንዶችን የለዉጥ አራያ ማድረግ
8. የባለ ድርሻ አካላትን ተሳትፎ ማጠንከር
9. በሴቶች ላይ የሚደርስን ጥቃት ለመከላከል የማህበረሰቡን አቅም በማጎልበት፤ አተገባበር እና ግምገማ ስርዓት ላይ አሳታፊ የሆነ አሰራር መዘርጋት



የሴት ልጅ ያታን መሰረት ያደረገ ጥቃት ተጎጅዎች የምላሽ ሰጪ አካላት

ተጎጂዋ የደረሰባትን የወሲባዊ ጥቃት ገጠመኝ ለመረጣችው ማንኛዉም ሰው-/አካል ሪፖርት የማድረግ መብት አላት። ተጎጂዋ ሪፖርት የምታደርግበት የመጀመሪያው ቦታ ከሚከተሉት ውስጥ ለእንደኛው ሊሆን ይችላል

- ለወላጆቿ ወይንም ለቤተሰቦቿ
- ለትምህርት ቤት መምህራን እና ለጓደኞቿ
- ለሴቶች የልማት ቡድን
- ለጤና ባለሙያዎች
- ለሴቶችና ሕፃናት ጉዳይ ሚኒስቴር/ቢሮ/ጽ/ቤት ተወካይ
- ለሕግ ድጋፍ ሰጪዎች
- በከተማ ወይንም በቢሯሯው ውስጥ ለሚገኙ የፖሊስ ወይም የደህንነት አባላት
- ተጎጂዋ ድጋፍ ያደርግልኛል ብላ ላመኮችው ሰው

ፆታዊ ጥቃት ደርሶባት ድጋፍ ለማግኘት የቀረበቻቸው ሁሉም ባለድርሻ አካላት የሚገኙ አገልግሎቶችንና አጠቃላይ መረጃዎችን ለተጎጂዋ የማሰወቅና ጉዳቷን ሪፖርት የማድረግ ግዴታና ሀላፊነት አለባቸው።



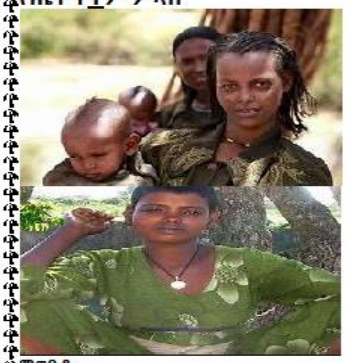
ዜሮ ትግስት ለሴት ልጅ ጥቃት!!!

አዘጋጅ፡ አጉማሴ ሰማኸኝ
ተባባሪ አካላት፡ አዊ ዞን ሴቶች እና ህፃናት ጉዳይ አዊ ዞን ጤና መመሪያ፤ የባንጃ እና ፋግታለኮማ ወረዳ ተሰጥፈዋል

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3. Health sectors response to domestic violence

የሥርዓተ-ፆታ ጥቃት መዘዘኞቹ እና የጤና ተቐም ምላሽ



መግቢያ

ፆታን መሰረት ያደረገ ጥቃት በሴቶችም በወንዶችም ላይ የሚፈፀም ጥቃት ሲሆን በአብዛኛው ሴቷ ተጎጂ የምትሆንበት ሆኖ በሴቶችና በወንዶች ማህበራዊ ግንኙነት መካከል ተመጣጠኝ የሐይል ሚዛን ካለመኖር ይመነጩልል። ችግሩ የሁሉም አገሮች ችግር ሆኖ ሰብአዊ መብትንና የፆታን እኩልነት ለማስፈን የሚደረግን ጥረት በማወክ ተንሰራፍቶ የሚገኝ ነው። በሴቶች ላይ የሚደርስ ጥቃት በርካታ ገፅታዎች ያሉት ሲሆን እርስ በእርሳቸው በተሰሰሰና አንዳንድ ጊዜም በተደጋጋሚ በሚከሰቱ ተከታታይነት ባላቸው የተለያዩ ሁኔታዎች ይታለጣል። እንደ አለም ጤና ድርጅት ዘገባ ከሆነ ከ3 ሴቶች አንዳ ባቅርብ ጉደኛዋ ወይም የትዳር አጋር ጉዳት ይደርስባታል።

ይህ ችግር በሃገራችን ኢትዮጵያ 35% ነዉ። ነገር ግን ካለዉ የኢኮኖሚ ጥገኝነት እና ጎታች ወጎች የተነሳ ችግሩ የከፋ ነዉ። አብዛኞቹ ሴቶች ባል ሚስቴን መደብደብ ይችላል የሚል አመለካከት አለባቸዉ።

የኢትዮጵያ ተጨባጭ ሁኔታ ስንመለከት፡ ከአጠቃላይ የህዝብ ግማሽ ያክሉ ሴቶች ሲሆኑ፤ ከወንዶች ጋር ሲነፃፀሩ በከፍተኛ ማህበራዊ የፍትህ እጦት እና የጥቃት ጫና ያረፈባቸው ሆነው ይገኛሉ። ሆኖም በሴቶች እና በታዳጊ ልጃገረዶች ላይ የሚደርሱ ጎጂ ልማዳዊ ድርጊቶች ከፍተኛውን ቁጥር አላቸዉ። የኢትዮጵያ መንግስት በዓለም አቀፍና በአገር ውስጥ የዜጎቹን ድህንነት ለማሻሻልና ለማስጠበቅ ባለው ቁርጠኝነት የማህበራዊና የፆታዊ ስርዓት ለውጥ ለማስመዝገብ የሚረዱ ፖሊሲዎችና የህግ ድንጋጌዎች በመዘጋጀት ተቋማዊና ልማታ እርምጃዎችን በመውሰድ ላይ ይገኛል።



የሴት ልጅ ፆታን መሰረት ያደረገ ጥቃት አይነቶች

1. ስነ-ልቦና ጥቃት (Psychological violence): አላስፈላጊ ስም መጥራት፤ እደባደባለሁ ብሎ ማስፈራራት፤ ማሸማቀቅ፤ ማገላጠጥ፤ በቃላት መተንኮስ፤ ከቤተሰብ ወይም ከጓደኞች አስገድዶ መለየትን ይመለከታል። የማይፈለግ ትኩረት፤ አካላዊ ምልክት መስጠት ወይንም የተፃፈ ወሲባዊ ቃላትን ወይንም ዛፎ የተቀላቀለባቸውን እና የመሰሰሉትን ያጠቃልላል።

2. አካላዊ ጥቃት (Physical violence): ፆታዊ ግንኙነት የሚያካትት ሆኖ በአካል ላይ የሚፈፀም ድብደባ ማለት ነው። ለምሳሌ በዱላ መምታት ፤በጥፊ መምታት፤ መቁረጥ፤ መግፋት የአካላዊ ጥቃት የሚያስከትል ወንጀል ፤ወዘተ

3. ፆታዊ ጥቃት (sexual violence): ማንኛውም አይነት የማይፈለግ ፆታዊ ንክኪ ማለት ሆኖ የውጭ አካልን ወደ ሰው ውስጥ አካል መጨመርን የሚያካትት ማለት ነው።

4. ማህበራዊ እና ባህላዊ ጥቃት/ጫና (socio-cultural violence): እነርሱም

- በማስገደድ የተፈፀመ ጋብቻ (forced marriage):
- የጠለፋ ጋብቻ (marriage by abduction):
- የልጅነት ጋብቻ (Early marriage):
- የሴቶ ልጅ ግርዛት (female genital mutilation):
- ሴቶችን የተምሀርት ወይም የጤና እና ሌሎች ማህበራዊ ጉዳዮች ላይ እንዳይሰተፋ መከልከል ወይም አለማሰተፍ እና ወዘተ

5. ማህበራዊ እና ኢኮኖያዊ ጥቃት/ጫና (socio-economic violence): እነርሱም

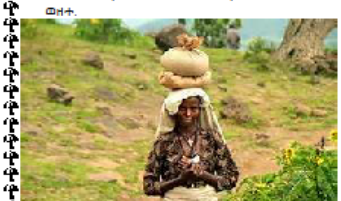
- ገንዘብ ወይንም የቤት ቁሳቁሶችን መከልከል
- የመሬት ባለቤተነት መብትን መንፈግ
- የታሪ ሀብት ላይ እንዳያዝዙ መከልከል
- ባሏ የሞተባትን ሴት የውርስ መብቷን መከልከል የመሰሰሉትን ያጠቃልላል እና ወዘተ



የሴት ልጅ ፆታን መሰረት ያደረገ ጥቃት የሚያስከትሉት ጉዳት

- ከልክ ያለፈ የስራ ጫና በቤቷም ላይ ያስከትላል
- በሴት ልጅ ላይ አካላዊ ጉዳት፡
- የስነ-ልቦና እና የስነ-አእምሮ መታወክ፡ ጭንቀት፤ ድብርት
- የቤተሰብ መፍረስ (ፍቺ)
- በልጆች ላይ የስነ-ባህሪ ብልሹነት
- ልጆችን ወላጅ አልባ ያደርጋል

- ሴቶች የስነ-ተዋልዶ ጤና ለመጠቀም ያሉዋቸዉን ነፃነት ይገፍጋል
- የቤቶችን አመራትነት ወይም ኢኮኖሚያዊ ተባትሮ በአሉታዊ መልኮ ይገደል
- በልጆች፤ በቤተሰብ በጤና ላይ አሉታዊ ተፅዕኖ ያመጣል
- ሴቶችን ለኤች.አይ.ቪ እንዲሁም ለአባለዘር በሽታዎች ተጋላጭነት ይጨምራል
- ሴቶችን ላልተፈለገ እርግዝና የጋልጣል
- የንፅህናዉን ያልጠበቀ የፅንስ ማቆረጥን ይጨምራል እና ወዘተ.



ስሜታዊ ድጋፍ መስጠት

ባወሲባዊ ጥቃት አማካይነት ከሚከሰቱትና እጅግ አስቃቂና ዶሌ ከማይቀረፉ ችግሮች አንዱ በተበደይው ላይ የሚከሰተው የስሜት መረበሽና የስነ-ልቦና ጉዳት ነው። የተጎጂዋን የስሜት ሁኔታ መረዳት መቻል ብቻ በራሱ የመጀመሪያ እርዳታ ስለሆነ የደረሰውን የስሜት ጉዳት የመፈወስ ሀይልአለው።

ወሲባዊ ጥቃት የደረሰባቸው ተጎጂዎች በአብዛኛው የሚያጋፀበርጅጥው ስሜቶች

- ከፍተኛ ጭንቀት
- መህበራዊ ግንኙነትን መሸሽ
- በከፍተኛ ሁኔታ መቆጣት (ዥጭነት)
- ድንገተኛ ስሜት መለዋወጥ
- ድብርት (የስሜት መዳንዘዝ)
- የመንነት ከስረት
- የጥፋተኝነትና የህፍረተ ስሜት
- የስታችነት እናየሀዘን ስሜት ናቸው።

ሁሉም ወሲባዊ ጥቃት ከደረሰባቸው ተጎጂዎች ጋር ግንኙነት ያላቸውአከላት ከላይ የተዘረዘሩት የስሜት መረበሽች ወሲባዊ ጥቃት ከደረሰባቸው ተጎጂዎች ላይ የሚገፀበረዉን መሰናክሎችን በመረዳት ችግራቸውን በነሱ ቦታ ርህራሄ በተሞላበት መንፈስ ድጋፍ መስጠት ያስፈልጋል።



የጤና/የህክምና ምላሽ

የፌዶራል ጤና ጥበቃ ሚኒስቴር ከጤና ጋር ተያያዥነት ያላቸውን አገልግሎቶች በሁሉም በፍራ እንዲገኙ፤ ተደራሽነታቸው እንዲጨመርና የህብረተሰቡን አቅም ያገናዘበ አገልግሎት ለመስጠት ደረጃውን ጠብቆ የተዘጋጀ አሰራር አለው። ነገ ላንጎ ከፎተኛ ጠቀሜታ ያለው የጤና አክስቴሽን ጥሮግራምና የጤና ልማት ሰራዊት መቦረታዊ የጤና ፖሊሼ አገልግሎቶችን በመያዝ እያንዳንዷን ቤተሰብ መድረስ በመቻላቸው የጤናውን ዘርፍ ግብ በከፎተኛ ደረጃ ምቼ አድርገውታል። የሄ አደረጀጀትና ስርአት ወሲባዊ ጥቃትን ለመከላከልና ምላሽ ለመስጠት በፎተኛ የሆነ አስተዋፅኦ ይኖረዋል። የወሲባዊ ጥቃት ለደረሰባቸው ተጎጂዎች የተዘጋጀው ብሄራዊ የአሰራር መመሪያ ይዛንን በነድ የሚገለብት አስተዋፅኦ ይኖረዋል። የወሲባዊ ጥቃት ተጎጂዎች በፈጣሪል፤ በአጠቃላይና የመጀመሪያ ደረጃ ሆስፒታሎች፤ ጤና ጣቢያዎች፤ የግል ሆስፒታሎችና የፀንስና ማህፀን ልዩ ማእከሎች፤ ክሊኒኮች ወይንም መከከለኛ ክሊኒኮች ሀኪሞች በሚገኙባቸው ተቋማት ሁሉ አገልግሎት ሊያገኙ ይችላሉ። ወሲባዊ ጥቃት የደረሰባቸው ተጎጂዎች የሚከተሉትን የጤና አገልግሎት በሚሰጡ ጤና ባለሙያዎች ሊገለገሉ ይችላሉ።

- በፀንስና ማሕፀን ስፔሻሊስቶችና በሐኪሞች
- ልዩ ስልጠና በተሰጣቸው መከከለኛ ደረጃ የህክምና ባለሙያዎች (ጤና መከላኛኖች፤ አዋላጅ ነርሶችና ነርሶች)
- ወንድ ተጎጂዎች በጤፀናት በቀዶ ህክምና ስፔሻሊስቶች ምርመራ ሊደረግባችና ህክምና ሊያገኙ ይገባል
- ጥቃት /አስገድዶ መድፈር የደረሰባቸው ህፃናት በፀንስና ማሕፀን ስፔሻ፤ስቶችና በህፃናት ሕክምና ስፔሻሊስቶች ምርመራ ሊደረግባችው ይገባል።

- የአእምሮ ጤና ችግር ያለባችው ተገጂዎች በአእምሮ ሐኪም እና ህክምና ነርስ ሊረዷ ይገባል
- በህግ አስከባሪ አከላት እድሜን መወሰን አስፈላጊ ሆኖ ሲገኝ ራዲዮሎጂስቶች እንዲሰተፉ ይደረጋል
- የሥነልቦና/የአእምሮ ህክምና ባለሙያዎች በምክክርና በድጋፍ አገልግሎት ተባታፊ ይሆናሉ።

የጤና ባለሙያዎች ወሲባዊ ጥቃት ለደረሰባቸው ተገጂዎች በሚሰጡበት ወቅት የሚከተሉትን ተግባሮች ያከናውናሉ።

1. ትክክለኛውን ታሪክ መቀበል እና አከላዊ ምርመራ ማድረግ
3. ለላብራቶሪ ምርመራ ናሙና መውሰድ
4. ለህፃ የሚያገለግሎ መረጀዎችን መሰበሰብ
5.ለአባለዘር በሽታዎች፤ ለኤች አይቪ፤ ለሄፓታይተስ ቢና ለሌሎችም ተገቢውን የመከላከልና የማከም አገልግሎት መስጠት
6. ለተገጂዎች የምክር አገልግሎት መስተት
7. በሂደቱ ላይ ክትትልና ግምገማ ማከሄድ
8. ጥቃቱ የደረሰባቸውን አጋጣሚዎች መዛግብ መያዝ
9. የሕክምና ምስክር ወረቀት ማዘጋጀት
10. ለሕግር አስከባሪ ሪፖርት ማድረግ
11. ወደ ሌላ አከላት (ለማህበራዊ ባንልበና አገልግሎት፤ ለሕግ ድጋፍ፤ ለጥቦቃ ቤት፤ ወዘተ) መስተላለፍ
12. በአመራሩ መመሪያ መሰረት ክትትልና ግምገማ ማከሄድ
13. ለመርሀዎቹ ታማኝ በመሆን



ምንጭ፡ የኢትዮጵያ ጤና ጥበቃ ሚኒስቴር፡ በኢትዮጵያ ወሲባዊ ጥቃት የመከላከልና ምላሽ የመስጠት ደረጃውን የጠበቀ የአተገባበር ሥርዓትን ለዳበ አገባር፤ ኢትዮጵያ፤ መጋቢት 2016

አዘጋጅ፡ አጉማሴ ሰማኸኝ

ተባባሪ አከላት፡ አዋ ዞን ሴቶች እና ህፃናት ጉዳይ፤ አዋ ዞን ጤና መምሪያ፤ እንዲሁም የባንጃ እና ፋሚታለስማ ወረዳ ተባትፈዋል

University of Ghana http://ugspace.ug.edu.gh

Appendix 9: First Ethical approval letter

Ref.No. IHRERC/ 146/2017

September 18, 2017

To: Chief Executive Director; College of Health and Medical Sciences, Haramaya University, Harar Campus

From: Institutional Health Research Ethics Review Committee (IHRERC); College of Health and Medical Sciences, Harar Campus

Chair-person

Haramaya University College of Health and Medical Sciences
Harar Ethiopia
Institutional Health Research Ethics Review Committee (IHRERC)

Subject: Ethical approval of research proposal

It is known that various research proposals are passing through the IHRERC for ethical reviews. To this effect **Agumasie Semahegn Demisie**, who is academic staff of the College and now attending his PhD study in the **University of Ghana, in Accra, Ghana** has submitted a research proposal entitled **"Community based intervention to prevent domestic violence against married or cohabited women in the reproductive age and associated factors in Awi Zone, Northwestern Ethiopia: A quasi-experimental implementation research"** through your office to the IHRERC. The committee has scrutinized the proposal for ethical issues and made the investigator for correcting and incorporating essential elements. The investigator has incorporated all elements as enquired by the committee. The committee has, therefore, approved the herewith attached and stamped 127 page proposal unanimously through full consensus of all existing seven members of the IHRERC on September 07, 2017. The IHRERC congratulates the investigator for the concerted efforts he made to fulfill the recommendations of the Committee.

Finally the IHRERC requests your Office, to inform officially the investigator to commence his data collection process. However, since the IHRERC is bestowed to make follow-up of the research process, the investigator is informed with a copy of this letter to report any changes in the research procedure and submit an activity progress report to the IHRERC **every three months.** A copy of the final report is also expected.

At the back of this letter is signed and stamped copy of the approval format of the IHRERC.

With Regards

CC

- Agumasie Semahegn ((including one copy of the approved proposal)

University of Ghana http://ugspace.ug.edu.gh

Haramaya University, College of Health and Medical Sciences
Institutional Health Research Ethics Review Committee (IHRERC)
Address: Tel.0254662011 P.O.Box 235 Fax 0256668081, Harar-Ethiopia
e-mail neggalemash@gmail.com

Institutional Health Research Ethics Review Approval Form

Name of the institution **Haramaya Universitys College of Health and Medical sciences**

Name of PI: Agumasie Semahegn Tel +251984091143 E-mail : agucell@yahoo.com, P.O.Box

Title of the proposal /project: Community based intervention to prevent domestic violence against married or cohabited women in the reproductive age and associated factors in Awi Zone, Northwestern Ethiopia: A quasi-experimental implementation research

To: Office of Chief Executive Director; College of Health and Medical Sciences, Haramaya University, Harar Campus

The IRERC has reviewed the aforementioned project proposal with special emphasis on the following points:

1. Are all ethical principles considered?
   - 1.1 Respect for persons — Yes [√] No [ ]
   - 1.2 Beneficence — Yes [√] No [ ]
   - 1.3 Justice — Yes [√] No [ ]
2. Are the objectives of the study ethically achievable? Yes [√] No [ ]
3. Is/ Are method(s) ethically sound? Yes [√] No [ ]

Based on the above mentioned ethical assessment the Institutional Research Ethics Review Committee has

a)Approved: the proposal for: i. Regional/National Review [ ]

ii. Implementation [√]

Expiry date of the review

31 08 2018

Date Month Year

b) **Conditionally approved** [ ]

c) **Not approved** [ ]

Finally we would like to take this opportunity to request your good office to facilitate his request for the proposed study.

With best regards

Chairperson: Negga Baraki ---------- 18/09/2017

Name Signature Date

Secretary: for Wondimye Ashenafi ---------- 18/09/2017

Name Signature Date

Haramaya University College of Health and Medical Sciences ★ Harar Ethiopia ★ Institutional Health Research Ethics Review Committee (IHRERC)

N.B: For any information question and clarification don't hesitate to contact the Committee with the addresses specified in the heading.

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Appendix 10: Ethical approval letter of extension



Ref. No. IHRERC/197/2018

Aug. 15/2018

To: Office of the Chief Executive Director, College of Health and Medical Sciences (COHMS), Haramaya University, Harar Campus

From: Institutional Health Research Ethics Review Committee (IHRERC), COHMS

Nega Baraki

Chair-person of the IHRERC

Berhe G/Michael

Secretary of the IHRERC

Haramaya University College of Health and Medical Sciences * Harar Ethiopia * Institutional Health Research Ethics Review Committee (IHRERC)

Subject: **Extension of Expiry Date of Ethical Approval of the PhD Dissertation Proposal by Mr. Agumasie Semahegn**

It is to be recalled that a PhD dissertation proposal entitled **"Community based intervention to prevent domestic violence against married or cohabited women in the reproductive age and associated factors in Awi Zone, Northwestern Ethiopia: A quasi- experimental implementation research"** by Mr. Agumasie Semahegn (from the University of Ghana, Accra) was approved for implementation by this IHRERC and communicated it to your esteemed office via our letter Ref.No. IHRERC/146/2017 on September 18/2017. The expiry date for the ethical approval was stated to be on **31 of August 2018**. Now Mr. Agumasie Semahegn has applied through a letter written on August 14/2018 to your office and the same referred to office of the IHRERC for consideration of extending the ethical approval expiry data until February 28/2019.

The IHRERC accepting the request and alongside receiving progress report of the study has endorsed in its regular meeting conducted on August 14/2018 to extend the ethical approval date as requested (**until February 28/2019**); and without change / modification of the original proposal document. This is, therefore, to request your esteemed office to officially inform the applicant extension of the ethical approval expiry date as indicated above.

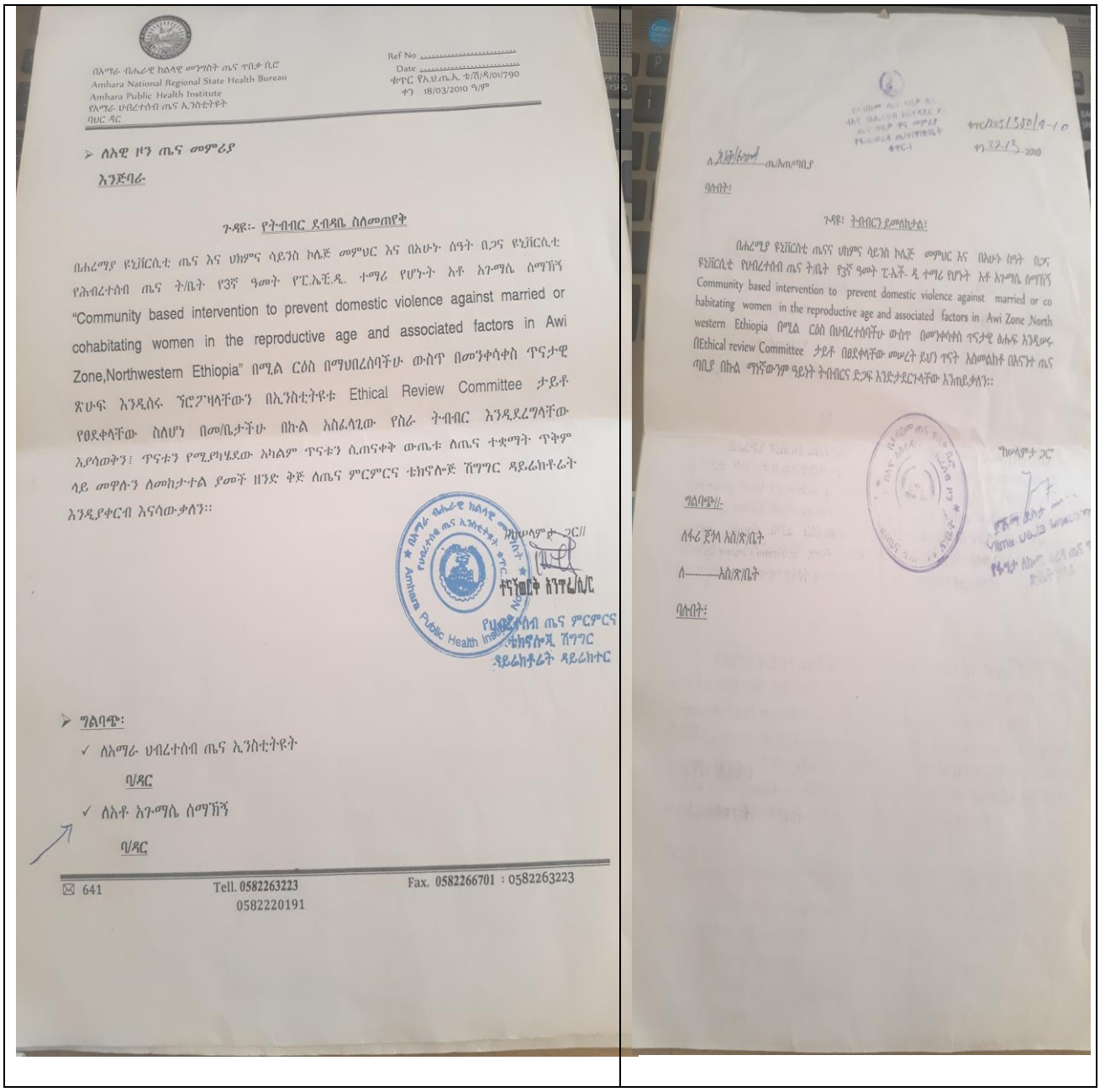
With Regards

CC

- **Agumasie Semahegn** (the Principal Investigator)

University of Ghana http://ugspace.ug.edu.gh

Appendix 11: Letters of permission from Amhara Regional State, Awi Zone and Districts



በአማራ ብሔራዊ ክልላዊ መንግስት ጤና ቢሮ
Amhara National Regional State Health Bureau
Amhara Public Health Institute
የአማራ ህብረተሰብ ጤና ኢንስቲትዩት
ባህር ዳር

Ref No .....
Date .....
ቁጥር የአ.ህ.ጤ.ኢ. ቴ/ሽ/ጽ/01/790
ቀን 18/03/2010 ዓ/ም

➢ ለአዊ ዞን ጤና መምሪያ

አንጅባራ

ጉዳዩ፡- የትብብር ደብዳቤ ስለመጠየቅ

በሐረማያ ዩኒቨርሲቲ ጤና እና ህክምና ሳይንስ ኮሌጅ መምህር እና በአሁኑ ሰዓት በጋና ዩኒቨርሲቲ የሕብረተሰብ ጤና ት/ቤት የ3ኛ ዓመት የፒ.ኤች.ዲ. ተማሪ የሆኑት አቶ አንማሴ ሰማኘኝ "Community based intervention to prevent domestic violence against married or cohabitating women in the reproductive age and associated factors in Awi Zone,Northwestern Ethiopia" በሚል ርዕስ በማህበረሰባችሁ ውስጥ በመንቀሳቀስ ጥናታዊ ጽሁፍ እንዲሰሩ ኘሮፖዛላቸውን በኢንስቲትዩቱ Ethical Review Committee ታይቶ የፀደቀላቸው ስለሆነ በመ/ቤታችሁ በኩል አስፈላጊው የስራ ትብብር እንዲደረግላቸው አያሳወቅን፤ ጥናቱን የሚያካሄደው አካልም ጥናቱን ሲጠናቀቅ ውጤቱ ለጤና ተቋማት ጥቅም ላይ መዋሉን ለመከታተል ያመች ዘንድ ቅጅ ለጤና ምርምርና ቴክኖሎጅ ሽግግር ዳይሬክቶሬት እንዲያቀርብ እናሳውቃለን።

ክብሩ ሰላምታ ጋር//

ተናኘወርቅ አንተሸሸር

የህብረተሰብ ጤና ምርምርና ቴክኖሎጂ ሽግግር ዳይሬክቶሬት ዳይሬክተር

➢ ግልባጭ:

✓ ለአማራ ህብረተሰብ ጤና ኢንስቲትዩት

ባ/ዳር

✓ ለአቶ አንማሴ ሰማኘኝ

ባ/ዳር

☒ 641 Tell. 0582263223 0582220191 Fax. 0582266701 : 0582263223

ለአ/ጅ/አንም/ል ጤ/አ/መ/ቤት

ጉዳዩ፡ ትብብርን ይመለከታል፡

በሐረማያ ዩኒቨርሲቲ ጤናና ህክምና ሳይንስ ኮሌጅ መምህር እና በአሁኑ ሰዓት በጋና ዩኒቨርሲቲ የህብረተሰብ ጤና ትቤት የ3ኛ ዓመት ፒ.ኤች. ዲ ተማሪ የሆኑት አቶ አንማሴ ሰማኘኝ Community based intervention to prevent domestic violence against married or co habitating women in the reproductive age and associated factors in Awi Zone North western Ethiopia በሚል ርዕስ በህብረተሰባችሁ ውስጥ በመንቀሳቀስ ጥናታዊ ፅሑፍ እንዲሠሩ በEthical review Committee ታይቶ በፀደቀላቸው መሠረት ይህን ጥናት አስመልክቶ በእናንተ ጤና ጣቢያ በኩል ማንኛውንም ዓይነት ትብብርና ድጋፍ እንድታደርጉላቸው እንጠይቃለን።

ክብሩ ሰላምታ ጋር

ግልባጭ//-

ለቆሪ ጀንላ አስ/ጽ/ቤት

ለ-------አስ/ጽ/ቤት

ባለቤት፡

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Appendix 12: Measures taken to control threats of validity in quasi-experimental study

A pretested questionnaire was used before data collection to evaluate the face validity and to ensure whether the participants of the study understood what the investigators were asking. Moreover, data collectors were trained and data were collected using a local language for the purposes of clarity. The study participants were allocated into three different groups prior to recruitment of study participants; efforts were made to control information contamination by selecting geographical non-proximate sites, collecting pretest and posttest survey, follow up and monitoring and finally appropriate handling of collected data.	
Factors that affect internal validity	**Measures taken by the research team**
1. History: The specific events occurring between the first and second measurement in addition to the experimental variable. It mostly affected one group design	We used a three group design. In addition, we have monitored if anything happen in the study community that used for only recording /documentation but nothing have been interfered. Unfortunately, there were no new event happened.
2. Maturation: Something happened (event) during the study period but not from the research team on unrelated, including growing older, growing hungrier, growing more tired.	Maturation can be a threat for a single group design. We used a three group design. In addition, the study period was a bit short which less likely affected by maturity, and it's a new study in the area.
3. Testing: the effects of taking a test upon the scores of a second testing.	As far as it has an effect on as single group design. It has not a threat to the two group design. To minimize it, the data collectors were told about not to remind the study participants about the tool that they used at the pretest survey. **T**he probability of the remembered the questions at the posttest survey after 12 months is so minimal.
4. Instrumentation**:** Changes in the calibration of a measuring instrument or changes interviewers/data collectors used may produce changes in the obtained measurements	We used the same questionnaire for the pretest and posttest survey. In addition, we used the same research assistants for pretest and posttest survey.
5. Statistical regression: operating where groups have been selected on the basis of their extreme scores.	The allocation of groups were made prior to data collection, and most of the response are binary (1, 0). Statistical regression cannot be a threat for the internal validity of our study.
6. Biases resulting in differential selection of participants for the control group.	Selection of districts was random, and allocation of groups was performed prior to carry out the pretest survey. In this case, selection could not be a threat for the study internal validity.
7. Experimental mortality: Loss to follow up or death of participants or respondents	The overall loss to follow up was very minimal (1217-1190= 27) for some reasons (figure 3). The good response rate was achieved due to proper selection of permanent residents and strict follow up of the recruited subjects. In normal circumstance, mortality could not be a threat for the current study.
8. Selection-maturation interaction	Subjects were selected by probability method (multistage, stratified and systematic sampling), all had equal chance of being in treatment or comparison groups, and the groups are equivalent.
Factors jeopardize external validity	
9. The reactive or interaction effect of testing**:** recognize they are being studied or watched, then start to act may be due to the pretest **[**Hawthorne effect]	We could not tell them that they are on the intervention group. Just we did the survey and finally, we implemented the piloting intervention as boldly women's life experience and gender equality.
10. The interaction effects of selection biases and the experimental variable.	The selection of participants were cried out with a pre-defined eligibility criteria through systematic sampling. The eligibility criteria's (three in number) across the 3 groups were the same. All participants were selected in the general population and representatives of the stakeholders.
11. Reactive effects of experimental arrangements: generalization about the effect of the experimental (exposed versus non-exposed)	We had monitored on the remedial action effect of other new programs that might be introduced by any means. Unfortunately, no new intervention program introduced in the study area during the study period.
12. Multiple-treatment interference: whenever multiple treatments are applied to the same respondents, because the effects of prior treatments are not usually erasable.	However it is a three group design with less threat for this factor. This study applied multiple-treatments and interference was expected. We used difference in- difference analysis to estimate the net effect of the intervention that can help us to control the multiple treatment effects.