DETERMINANTS OF INTIMATE PARTNER VIOLENCE AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE CLINICS IN BONDO SUB-COUNTY, KENYA

BY

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other institution or university.

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DEDICATION

I dedicate this work to my mother, Gladys Atsenga, and my siblings Shevin and Alvin. Thank you for always being there for me.

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ABSTRACT

Intimate partner violence (IPV) at any stage in pregnancy is an issue that threatens the health of both the mother and the unborn child. Understanding its prevalence and determinants is crucial for developing interventions. Despite being located in an area with higher rates of IPV during pregnancy than the national average, there is a paucity of data on the prevalence of this form of abuse and its determinants in pregnant women in Bondo Sub-County. This study investigated the prevalence, risk factors, and disclosure patterns of IPV among expectant mothers attending antenatal care (ANC) clinics in Bondo Sub-County. The study used a cross-sectional design and included a sample of 360 pregnant women recruited through systematic sampling method from ANC clinics in three healthcare facilities. Data on participants' and their partners' characteristics, experiences of IPV, social support and disclosure patterns were collected using pre-tested structured questionnaires. The questionnaires were administered over a three-month period by trained research assistants from September to November 2020. Descriptive statistics were used to show the prevalence of IPV and disclosure patterns. Associations between potential risk factors and IPV were examined using multivariate logistic regression. The study findings revealed a 35.3% prevalence of IPV among expectant mothers attending ANC clinics in Bondo Sub-County. Psychological abuse (23.9%) was the form of IPV that most women reported. This was followed by sexual abuse (16.4%) and physical abuse (15.6%). Expectant mothers who were unemployed (AOR=2.90, 95%CI: 1.08-7.79), had partners who consumed alcohol on a daily (AOR=4.84, 95%CI: 1.69-13.88) or occasional basis (AOR=2.19, 95%CI: 1.16-4.13), and those who did not count on their siblings or parents for support (AOR= 2.48, 95%CI: 1.14-5.43) had significantly higher odds of facing IPV. Among women who faced IPV, only 40.2% disclosed their experiences to someone with the majority (60.8%) disclosing to parents and only 7.9% disclosing to institutions. In conclusion, the prevalence rate of IPV among expectant mothers attending ANC clinics in Bondo was high. Unemployment, having a partner who drinks alcohol and lack of support from siblings or parents were the main risk factors. Disclosure levels were low with the majority of women who disclosed their experiences disclosing to parents. The findings from this study point to the need for community and health care interventions to address IPV during pregnancy in Bondo Sub-County.

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ABBREVIATIONS AND ACRONYMS

ANC	Antenatal Care
AOR	Adjusted Odds Ratio
COR	Crude Odds Ratio
GBV	Gender-Based Violence
HIV	Human Immuno-deficiency virus
IPV	Intimate Partner Violence
KNBS	Kenya National Bureau of Statistics
MOH	Ministry of Health
NGOs	Non-Governmental Organizations
OR	Odds Ratio
SPSS	Statistical Packages for Social Science
VAWI	Violence against Women Instrument
VIF	Variance Inflation Factor
WHO	World Health Organization

DEFINITION OF TERMS

Disclosure patterns: The disclosure behavior of victims of abuse. This included whether or not a victim disclosed her experiences and to whom she disclosed.

Disclosure: The act of a victim of abuse informing any individual or organization about their experiences to get help or support.

Intimate partner violence: Physical, sexual, or emotional (psychological) violence perpetrated against a woman by her boyfriend or spouse

Intimate partner: Husband (spouse) or boyfriend

Physical Violence: The deliberate use of physical force that can result in injury, impairment, or even death.

Psychological violence: Intimidation, harassment, and threats by a spouse or boyfriend against a woman, which have the potential to affect a woman's psychological well-being

Sexual Violence: Any sexual act that is directed at a woman by her husband or boyfriend that is accompanied by a threat or real physical attack or that causes the woman fear or shame.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Intimate partner violence also known as spousal abuse (James *et al.*, 2013), is the most common type of violence that men commit against women (WHO, 2021). The World Health Organization defined it as any action taken by a partner in a relationship that causes sexual, psychological, or physical harm to the other partner (WHO, 2012). Like other types of gender-related abuse, IPV is "a major public health problem" that affects women's sexual, emotional, reproductive, and physical well-being (WHO, 2021). Globally, over 30% of women who are married or have ever been in relationship have experienced IPV (Devries *et al.*, 2013). Some of the highest prevalence levels of IPV against women have been reported in sub-Saharan Africa (McCloskey *et al.*, 2016). In Kenya, approximately 47% of women and girls aged 15 to 49years have experienced IPV (KDHS, 2015). In 2019 alone, over 106 women in Kenya died of gender-related abuse, four-fifths of whom were victims of IPV (Newsplex, 2019).

Intimate partner violence is a problem that can affect women at any point in their lives (McCarthy & Stagg, 2020). Of particular concern, however, is its occurrence during pregnancy (James *et al.*, 2013). This is because IPV during pregnancy not only threatens the health of the mother but also that of the unborn child (Berhanie *et al.*, 2019; Martin-de-Las-Heras *et al.*, 2019). Antenatal hospitalizations, miscarriages and abortions, depression, fetal distress, antepartum hemorrhage, preeclampsia, premature birth, and low birth weight are some of the negative consequences of exposure to IPV during pregnancy for the mother and fetus (Han & Stewart, 2014; Alhusen *et al.*, 2015; Berhanie *et al.*, 2019). Pregnant women exposed to IPV are also generally more likely to skip antenatal care checkups or attend prenatal care sessions later than recommended (Alhusen *et al.*, 2017).

Several women and partner-related factors may increase the likelihood of women experiencing abuse from their partners during pregnancy. Studies report that IPV occurs more frequently in pregnant women who are young, single, unemployed, less educated, without social support, and with a history of abuse (Finnbogadóttir & Dykes, 2016; Shrestha *et al.*, 2016; Owaka *et al.*, 2017; Mamo *et al.*, 2022). Partner-related risk

factors for spousal abuse during pregnancy include alcohol use, unemployment, and low educational attainment (Epuitai *et al.*, 2019; Yohannes *et al.*, 2019). Identifying the factors contributing to IPV among expectant mothers in any community is a crucial step in reducing the incidence of IPV and addressing the negative health effects associated with it (Lencha *et al.*, 2019).

Disclosure of IPV is an important issue that is widely seen as beneficial for affected women. Disclosure according to Katiti *et al.* (2016), not only ensures the safety of expectant mothers and that of their pregnancies but also helps to prevent further abuse. Additionally, disclosure can help pregnant women gain access to support services and legal protection (Katiti *et al.*, 2016). Despite these benefits of disclosure, most pregnant women who experience IPV do not tell anyone (Katiti *et al.*, 2016). Among the few who disclose, the majority often disclose to close family members, while very few disclose to institutions (Katiti *et al.*, 2016; Katushabe *et al.*, 2022). In many countries, IPV is considered a private family issue that should be dealt with within the family and not by institutions. Consequently, women are reluctant to report abuse to institutions for fear of upsetting their family members (Katiti *et al.*, 2016; Ayodapo *et al.*, 2017). This ultimately hampers efforts to address IPV during pregnancy.

Increasing efforts are being made around the world to protect the health of expectant mothers as well as their unborn babies. In this endeavor, ANC has been recognized as an ideal setting to address IPV during pregnancy (WHO, 2016). Through routine screening for IPV during prenatal care visits, healthcare providers can identify expectant mothers experiencing IPV and those who are vulnerable to violence and refer them to interventions designed to protect them (Alhusen *et al.*, 2015). Research has shown both a reduced risk of violence and improved pregnancy (birth) outcomes in women who receive prenatal care interventions that target IPV (Kiely *et al.*, 2010; Campo, 2015).

The prevalence of spousal abuse during pregnancy is much higher in developing nations (27.7%) than in developed countries (13.3%) (James *et al.*, 2013). However, most initiatives to combat it have been created and implemented in high-income countries (Van Parys *et al.*, 2014; McCloskey *et al.*, 2016). In sub-Saharan African nations including Kenya, the lack of IPV interventions in health services and the community

can be attributed to a limited understanding of IPV in pregnancy (McCloskey *et al.*, 2016). Expanding the region's knowledge base on the prevalence rates, risk factors and disclosure patterns of IPV among expectant mothers can be a useful tool to encourage governments and policymakers to address this issue (Shamu *et al.*, 2011; Ayodapo *et al.*, 2017).

1.2 Problem statement

Intimate partner violence is a public health issue that affects approximately one in every three women worldwide (WHO, 2021). When it occurs during pregnancy, it endangers not only the mother's health but also that of the unborn child. Exposure to IPV in pregnancy has been linked to the increased risk of antenatal hospitalization, urinary tract infections, vaginal bleeding, fetal loss, low birth weight, and preterm delivery (Alhusen *et al.*, 2015; Martin-de-Las-Heras *et al.*, 2019). Given these adverse health effects, it is essential that interventions are developed to address this issue. However, in order to create effective interventions, policymakers need to be aware of both the prevalence and the determinants of IPV in pregnancy (James *et al.*, 2013; WHO, 2021).

According to the latest estimates from the Kenya Demographic Health Survey, the Nyanza region of western Kenya has higher rates of physical IPV during pregnancy (14%) than the national average (9%) (KDHS, 2015). However, information regarding the prevalence of other types of IPV (sexual and psychological) and the factors contributing to IPV during pregnancy are scarce in this region. To date, only a single study has reported on the prevalence and the determinants of IPV among expectant mothers in Nyanza and its findings were limited to Kisumu County (Makayoto *et al.*, 2013). An understanding of the prevalence and determinants of this form of abuse among pregnant women in other settings in Nyanza including in Bondo may contribute to a better understanding of the problem and aid in the development of targeted interventions. Therefore, this research examined the prevalence and the determinants of IPV among expectant mothers attending ANC clinics in Bondo Sub-County.

1.3 Objectives

1.3.1 Broad objective

To establish the determinants of IPV among expectant mothers attending ANC clinics in Bondo Sub-County.

1.3.2 Specific objectives

1. To establish the prevalence of IPV among expectant mothers attending ANC clinics in Bondo Sub-County.
2. To identify the factors associated with IPV among expectant mothers attending ANC clinics in Bondo Sub-County.
3. To examine the pattern of IPV disclosure among expectant mothers attending ANC clinics in Bondo Sub-County.

1.4 Research questions

1. What is the prevalence of IPV among expectant mothers attending ANC clinics in Bondo Sub-County?
2. What are the factors associated with IPV among expectant mothers attending ANC clinics in Bondo Sub-County?
3. What is the pattern of IPV disclosure among expectant mothers attending ANC clinics in Bondo Sub-County?

1.5 Justification of the study

The consequences of IPV exposure during pregnancy are serious for both women and their unborn babies. They also impede the achievement of development goals, including Kenya's sustainable development goals related to health and gender equality. It is therefore imperative that this issue is urgently addressed. Empirical evidence on the prevalence rate and the determinants of IPV in pregnancy is needed to inform policy choices and prevention as well as intervention measures. Despite being in a region where rates of IPV during pregnancy have been found to be higher than the national average, there is a paucity of data on the prevalence as well as the determinants of this form of abuse in Bondo Sub-County. This study attempted to address this gap with a view of providing information that can be used to advocate for interventions that will

not only help to prevent the occurrence of abuse during pregnancy but also contribute to safe motherhood and healthy newborns.

1.6 Significance of the study

This study's findings will be valuable to policymakers, practitioners, and other stakeholders in terms of providing information that will aid in the development of healthcare and community interventions to address IPV during pregnancy in Bondo Sub-County. The findings will also help to raise awareness of abuse during pregnancy as a significant public health problem. Healthcare providers such as nurses who provide prenatal care services will also find the results of this study useful in their everyday work. Finally, the findings from this study will encourage additional research on spousal violence during pregnancy in Bondo Sub-County and elsewhere in the country.

1.7 Scope

This study was done among expectant mothers aged 18 years and above attending ANC clinics in government-run healthcare facilities in Bondo Sub-County, Kenya.

1.8 Limitations

The study had a number of limitations. First, it relied on women self-reporting their IPV experiences, which could lead to recall bias. Women may have also underreported their IPV experiences due to cultural sensitivity to issues of violence. Another limitation is that the study used a cross-sectional design, which made it impossible to establish cause-effect relationships. Finally, the study recruited expectant mothers who attended ANC clinics only in government health facilities. Because women getting prenatal care services in government institutions may differ from those receiving ANC in private institutions, the study results may not be representative of all women visiting/attending ANC clinics in Bondo Sub-County.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, literature is reviewed with respect to research questions. In the first instance, an overview of partner/spousal violence during pregnancy is provided followed by its prevalence, risk factors, and disclosure patterns. Previous studies on violence during pregnancy in Kenya are also discussed.

2.2 Overview of IPV in pregnancy

Intimate partner violence can be broadly defined as any action by one partner in a relationship that causes psychological, physical, or sexual harm to the other partner (WHO, 2012). IPV occurs in three main forms: sexual violence, emotional/psychological violence, and physical violence (WHO, 2021). Physical violence includes actions such as choking, kicking, burning, hitting, pushing, slapping, shoving, and using weapons, all of which involve the use of physical force and can result in serious injury, disability, or death (Baird, 2012). Psychological violence includes acts such as insults, humiliation, intimidation, threats, restriction of information, and the deprivation of basic needs (WHO, 2012; Baird, 2012). Sexual violence includes actions such as forced intercourse (rape) and other forms of sexual coercion (WHO, 2012).

The occurrence of IPV at any stage in pregnancy is a major health concern as it poses a threat not only to women but also to their unborn children (Alhusen *et al.*, 2015). Meuleners *et al.* (2011), in a study examining fetal and maternal health outcomes among women hospitalized for abuse in Australia, found that exposure to abuse during pregnancy was linked with a 2-fold increase in the likelihood of experiencing maternal complications such as threatened abortions, preterm labor, antepartum hemorrhage, placental abruption, pre-labor rupture of membranes, and postpartum hemorrhage. The study also discovered that women who were victims of abuse during pregnancy were 2times more likely than those who were not exposed to abuse during their pregnancy to have poor fetal outcomes such as low birth weight, fetal distress, and fetal death.

Spousal abuse during pregnancy has also been linked to negative health behaviors. Alhusen *et al.* (2015), reported that expectant mothers who are exposed to IPV are more

likely to skip antenatal care checkups, attend antenatal care sessions later than advised, abuse alcohol or other drugs, smoke, and engage in unprotected sexual activity. Insufficient prenatal care, smoking, alcohol and substance abuse, and unprotected sexual activity have all been reported to place women at a greater risk for adverse birth and maternal outcomes (Alhusen *et al*., 2015).

2.3 Prevalence of IPV in pregnancy

Intimate partner violence during the pregnancy period is a problem that is faced by women all over the world. However, its prevalence varies from country to country and within countries due to several factors. These include varying research methodologies utilized to investigate the subject, inconsistencies in the way IPV is defined, cultural variations, and variations in the willingness of women to disclose abuse (Shamu *et al.*, 2011; Baird, 2012; James *et al.*, 2013). Higher prevalence rates of IPV among expectant mothers have been reported in health facility-based studies (21.3%) than in population-based studies (11.0%) (James *et al.,* 2013). Higher prevalence rates have also been reported in developing countries (27.7%) than in developed nations (13.3%) (James *et al.*, 2013).

African studies report some of the highest prevalence rates of abuse during pregnancy in the world. A systematic review of African research on IPV during pregnancy reported prevalence rates that ranged from 2.3% to 57% (Shamu *et al.*, 2011). In Nigeria, 44.6% of women reported experiencing abuse from their spouses during pregnancy with the most affected age group being women between the ages of 25-29 (Onoh *et al.*, 2013). In Ethiopia, approximately 6 in 10 pregnant women (59%) experienced one or more forms of abuse from their partners with sexual violence being the most prevalent (Berhanie *et al.*, 2019). Studies on abuse during pregnancy in Kenya are deficient in quantity. Those that have investigated the prevalence rates of IPV, report rates ranging from 34.1% to 66.9% (Owaka *et al.*, 2017; Luhumyo *et al.*, 2020). The prevalence rate of 66.9% that Owaka *et al.* (2017) observed in the WestPokot County is among the highest in Africa.

2.4 Risk factors for IPV during pregnancy

The identification of the risk factors for abuse is significantly important for informing risk mitigation strategies and programs and ultimately for guiding prevention policy

(WHO, 2021). Researchers have identified several factors that are key to understanding the risk of violence specifically during pregnancy. This section identifies some of the most common risk factors (determinants) for IPV among pregnant women and gives a summary of past research on the relationship between each factor and pregnancy violence.

2.4.1 History of abuse

One factor that has been consistently cited across studies as a major risk factor for being a victim of abuse during pregnancy is history of abuse (Shamu *et al.*, 2011; VanParys *et al.*, 2014; Shrestha *et al.*, 2016). In a study on the determinants of IPV among expectant mothers in Nepal Shrestha *et al.* (2016) found that women who faced violence before pregnancy were 25times more likely to face abuse from their partners during pregnancy than those who did not have any history of abuse. Additionally, VanParys *et al.* (2014) found that women who experienced IPV in the twelve months before their pregnancy had greater odds (AOR of 165) of being abused by their spouses during pregnancy with the likelihood of experiencing physical abuse, sexual violence, and psychological violence being 30.7%, 54%, and 68% respectively. Previous studies in Kenya also examined the connection between abuse during pregnancy and history of IPV with some finding the two to be significantly associated (Luhumyo *et al.*, 2020) and others (Makayoto *et al.*, 2013) not finding a significant relationship.

2.4.2 Alcohol consumption

Previous studies show that women whose partners consume alcohol are more likely to be victims of abuse during pregnancy. For example, in a systematic analysis of 19 African studies on the determinants of violence in pregnancy, 5 studies investigated the link between alcohol use and the occurrence of IPV and they all found that the consumption of alcohol by partners significantly raised the risk of women facing abuse during pregnancy (Shamu *et al.*, 2011). In Ethiopia, Yohannes *et al.* (2019) found that the likelihood of experiencing IPV was 5.72 times higher in expectant mothers whose partners drank alcohol than in expectant mothers whose partners did not. A higher likelihood of IPV in expectant mothers with alcohol-consuming partners/spouses has also been demonstrated by studies in Kenya (Makayoto *et al.*, 2013;Owaka *et al.*, 2017).

2.4.3 Marital status

Women who are not married have greater odds of facing abuse during pregnancy than married women. In a Swedish study on domestic abuse during pregnancy, Finnbogadóttir *et al.* (2016) found that unmarried women were 8.4times more likely than those who were married to experience abuse from their partners during pregnancy. Additionally, VanParys *et al.* (2014) observed that the odds for abuse during pregnancy were 4.48 times higher for divorced women than for women who were married and those cohabiting with their partners. For married couples, the type of marriage is also associated with abuse during pregnancy. For instance, in a Kenyan study that was conducted in Kisumu, Makayoto *et al.* (2013) observed that pregnant women in polygamous relationships were 3times more likely than those who were in monogamous relationships to face IPV.

2.4.4 Social support

Studies have consistently reported that the support of friends and family members can function as a protective factor against abuse for pregnant women. For example, Shrestha *et al.* (2016) investigated the link between IPV and support from friends. Their study discovered that women who could not count on their friends for support were 2times more likely than those who could rely on their friends for support to face abuse during pregnancy. Additionally, in Tanzania, Sigalla *et al.* (2017) noted that women who could rely on their own family and their partner's family for support were less likely to face abuse from their spouses during pregnancy. None of the studies available in Kenya on factors contributing to abuse during pregnancy evaluated the link between social support and IPV (Owaka *et al.*, 2017; Luhumyo *et al.*, 2020).

2.4.5 Education

Low education attainment is among the factors that have been consistently linked with both perpetration and facing abuse during pregnancy (Makayoto *et al.*, 2013; James *et al.*, 2013;Owaka *et al.*, 2017; Epuitai *et al.*, 2019; Yohannes *et al.*, 2019). In Ethiopia, Yohannes *et al.* (2019) discovered that women with lower education levels (primary school) were 4.7times more likely than those who had higher education levels (diploma and above) to face abuse from their spouses during pregnancy. Women whose spouses had low education levels were similarly more likely than those that had higher educated partners to be abused during their pregnancy (Owaka *et al.*, 2017; Epuitai *et al.*, 2019).

Kenyan studies that investigated determinants of abuse during pregnancy both observed a significant connection between IPV and the education level of women's partners (Makayoto *et al.*, 2013;Owaka *et al.*, 2017). However, neither study found a significant link between pregnant women's education level and IPV.

2.4.6 Age

Several studies have reported a significant link between young age (being young) and an amplified risk of abuse during pregnancy (Nejatizade *et al.*, 2017; Owaka *et al.*, 2017). For example, Nejatizade *et al.* (2017) discovered that women below the age of 25 were 2-times more likely than that were over 25 to be physically abused by their spouses during pregnancy. Pregnant women with young partners (<25 years) are similarly more likely than those with older partners (25-35 years) to be targets of abuse during pregnancy (Shrestha *et al.*, 2016). Studies in Kenya that have explored the relationship between women's age and abuse during pregnancy found conflicting results, with one study in West-Pokot finding a significant association (Owaka *et al.*, 2017) and another in Kisumu not finding a significant association (Makayoto et al., 2013).

2.4.7 HIV status

Few studies have looked at the link between women's HIV status and abuse during pregnancy. Those that have, report mixed findings (Olagbuji *et al.*, 2010; Shamu *et al.*, 2011; Makayoto *et al.*, 2013). For example, Olagbuji *et al.* (2010) in a study of 502 women at a post-natal clinic in Nigeria discovered that HIV-positive women had a considerably greater risk of facing abuse from their partners during pregnancy, with an AOR of 2.8. However, Makayoto *et al*. (2013) in a Kenyan study found no significant connection between HIV status and IPV exposure during pregnancy.

2.4.8 Employment status

Several studies have looked at the link between pregnant women's employment status and IPV. Some of these studies have suggested that being unemployed is significantly associated with a heightened risk of abuse during pregnancy (Mamo *et al.*, 2022). Other studies have found no significant association between women's employment status and abuse during pregnancy (Finnbogadóttir *et al.*, 2016; Shrestha *et al.*, 2016). The occupation of women's partners has also been identified as an important determinant

of abuse during pregnancy. Yohannes *et al.* (2019) found that expectant mothers whose partners were farmers were 3times more likely than those whose partners worked in government institutions to be victims of IPV. In Kenya, only one study by Makayoto *et al.* (2013) in Kisumu examined the connection between the employment status of expectant mothers and IPV and found no significant association.

2.5 IPV disclosure among pregnant women

Disclosure of abuse during pregnancy is an essential issue that is widely seen as beneficial for affected women. Disclosure according to Katiti *et al.* (2016) not only ensures the safety of expecting mothers and their pregnancies but also helps to prevent further abuse. Additionally, disclosure can help pregnant women gain access to support services and legal protection (Katiti *et al.*, 2016). Despite these benefits of disclosure, most pregnant women who experience IPV do not tell anyone (Katiti *et al.*, 2016). Among the few who disclose, the majority often disclose to close family members, while very few disclose to institutions (Katiti *et al.*, 2016; Katushabe *et al.*, 2022). In many countries, IPV is considered a private family issue that should be dealt with within the family and not by institutions. Consequently, women are reluctant to report abuse to institutions for fear of upsetting their family members (Katiti *et al.*, 2016; Ayodapo *et al.*, 2017).

In healthcare settings, ANC nurses may often be the first person that pregnant women interact with (Salmon *et al.*, 2015). Because of the nature of the ANC nurse's job and the close and trusting relationship that can develop with expectant mothers, ANC nurses may be the first professional to whom expectant mothers feel comfortable enough to disclose their experiences of IPV (Baird *et al.*, 2015). However, this can only happen if the ANC nurses directly ask expectant mothers about IPV (Baird *et al.*, 2015; Berry & Rutledge, 2016).

In a study on the disclosure of sexual abuse in healthcare settings, Berry and Rutledge (2016) found that when asked directly about their experiences by healthcare providers 83% of women would disclose. Only 25% would disclose if they were not directly asked. This finding shows the potential for increased disclosure levels in healthcare settings by directly inquiring about IPV from pregnant women. However, out of concern of offending their patients, ANC nurses may be unwilling to inquire about IPV

(Salmon *et al.*, 2015). Therefore, for ANC nurses to ask pregnant women about IPV comfortably, it is necessary to first identify whether expectant mothers find it appropriate for ANC nurses to ask them about IPV.

2.6 Studies on IPV exposure during pregnancy in Kenya

It is difficult to comprehend fully the magnitude of violence during pregnancy in Kenya because very few studies have examined it. From an online search of published papers on the prevalence rate of IPV and the factors contributing to it among expectant mothers in Kenya, only three studies were discovered (Makayoto *et al.*, 2013; Owaka *et al.*, 2017; Luhumyo *et al.*, 2020).

Makayoto *et al.* (2013) carried out the first study on "intimate partner violence" during pregnancy in the country. For three months, 300 expectant mothers attending an ANC clinic in Kisumu were surveyed. The findings revealed that 110 (37%) women had been abused by their spouses during their pregnancies. Of these, 29% were victims of psychological abuse, 13% were sexual abuse victims, and 10% were victims of physical abuse. Witnessing abuse in childhood, being in a polygamous relationship, being multiparous, having an alcoholic partner, and having a partner with low education levels were all risk factors for abuse. The findings of this study, however, can be generalized only to Kisumu.

The second study on abuse during pregnancy was conducted in 2014 at 11 healthcare facilities in the county of West Pokot (Owaka *et al.*, 2017). In this study, 238 expectant mothers attending prenatal care clinics were surveyed for IPV. The results showed that 66.9% of participants had faced abuse from their partners during pregnancy. Of these, 55.8% had faced psychological abuse, 39.2% had experienced sexual IPV, and 29.9% had faced physical violence. Alcohol use, the age of women and their partners, and having a partner with no formal education were risk factors for IPV. Their research also discovered that the standard of healthcare services given to expectant mothers who faced IPV did not meet WHO criteria and recommendations for screening, advocacy, social mobilization, and case management procedures.

The third study was conducted in Eldoret, among 369 women at a Teaching and Referral Hospital (Luhumyo *et al.*, 2020). The results showed that 34.1% of women

experienced abuse from their partners during pregnancy. Prior IPV experience and low educational attainment were significant factors that predicted of IPV

Aside from these facility-based studies, the Kenya-Demographic Health Survey (KDHS, 2015) also assessed the prevalence of abuse during pregnancy in the country. However, this survey only looked at the prevalence rate of physical IPV. The survey observed that 9% of women in Kenya experience physical abuse from their partners during pregnancy with the highest rates reported in Nairobi (18.1%) and Nyanza regions (14.1%).

2.7 Research gap

According to the latest estimates from the Kenya Demographic and Health Survey, the Nyanza region of western Kenya has higher rates of physical IPV during pregnancy (14%) than the national average (9%) (KDHS, 2015). However, information regarding the prevalence of other types of IPV (sexual, and psychological) and the factors contributing to IPV during pregnancy are scarce in this region. To date, only a single study has looked into the prevalence rate and the determinants of IPV among expectant mothers in Nyanza and its findings were limited to Kisumu County (Makayoto *et al.*, 2013). Further studies in other settings are needed in Nyanza to better understand the prevalence and the determinants of this form or abuse among pregnant women in the region.

2.8 Theoretical framework

A number of theories have been formulated to explain violence against women (Baird, 2012). This study was guided by the ecological framework model (Bronfenbrenner, 1979). The ecological framework was developed in 1979, to explain the interactions between an individual and their physical and socio-cultural environments. Since then, the framework has been extensively used to aid in the understanding of violence and the factors contributing to its occurrence (WHO, 2012). According to the model, violence occurs not because of a single factor but due to a complex interaction of multiple factors that operate at the individual, relationship, societal, and environmental levels (WHO, 2010; Baird, 2012).

The model's individual level examines how a woman's personal and biological characteristics, such as age, influence her risk of being a victim of abuse. The relationship level explores how the type of relationships that women have with their friends, partners, and family may affect their risk of experiencing violence. The community level focuses on community settings, such as neighborhoods, where social relationships are rooted. This level seeks to determine how the features of these settings influence rates of violence among women (WHO, 2010). The final level of the model examines how broader societal factors such as cultural beliefs and social and educational policies can encourage violence against women (Baird, 2012). The ecological framework supports an extensive public health strategy for tackling violence that addresses not only a person's risk of abuse but also the beliefs, norms, economic and social systems, and other factors that promote violence (WHO, 2010).

Jiwatram-Negron *et al.,* 2018 stratified and consolidated the levels of the ecological framework model into three: individual-level factors, relationship-level factors, and socio-structural level factors that include the community and societal factors. This study will explore these three risk factor levels.

2.9 Conceptual framework

The conceptual framework outlined in Figure 2.1 summarizes the relationship between variables in the study. The independent variables were split into three categories: individual, relationship, and structural factors. The individual factors included the woman's biological attributes such as her age, HIV status, and parity. Relationship factors included marital status, social support, alcohol consumption by partners, and the age of partners. Structural factors included the employment status of both women and their partners and their levels of education. The dependent variable was the "prevalence of IPV during pregnancy".

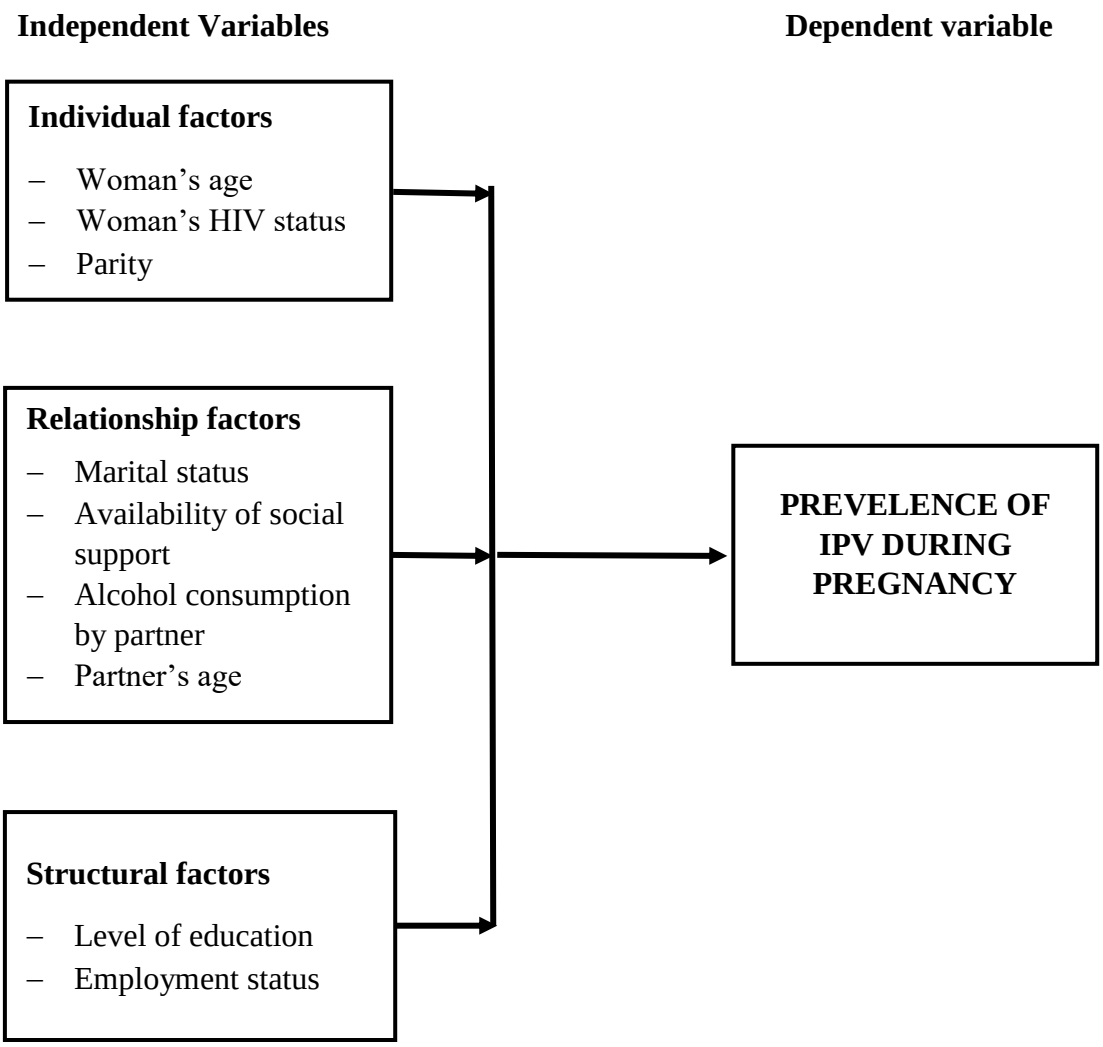

Figure 2.1. *Conceptual framework (Source: Author)*

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Study area

This research was conducted at ANC clinics in government-run healthcare facilities in Bondo Sub-County. Bondo is one of 6 sub-counties that make up Siaya County. It is situated in the Nyanza region of western Kenya. Its geographic coordinates are 0° 14' 19" North, 34° 16' 10" South (see Appendix I). The sub-county has a population of 197,883. Of these, 95,962 are male and 101,917 are female (Kenya National Bureau of Statistics, 2019). The population of women who are in the reproductive age (15 – 49 years) group is 49,436. The major economic activities practiced in the area include subsistence farming, small-scale trade, livestock keeping and fishing (Siaya County, 2017). Bondo Sub-County has 32 operational government-run health facilities that offer ANC services (Government of Kenya, 2020). According to the area's Health Records Office, approximately 6600 women visit the ANC clinics at these facilities each year. In terms of abuse against women, the Nyanza region of Kenya, where Bondo Sub-County is located has the highest rate of physical abuse against women and the second-highest rate of spousal abuse during pregnancy in the country (KDHS, 2015). However, no previous studies have looked at the prevalence or determinants of IPV among expectant mothers in Bondo Sub-County. This prompted the need for this study.

3.2 Study design

The study used a cross-sectional design, which involved the collection of quantitative data using a structured questionnaire.

3.3 Target population

The target population for this research was expectant mothers attending ANC clinics at government-run healthcare facilities in Bondo Sub-County.

3.3.1 Inclusion criteria

All expectant mothers attending ANC clinics at government-run health care facilities in Bondo Sub-County who were 18years of age or older, married or in a relationship and willing to consent to the study were included.

3.3.2 Exclusion criteria

Women were excluded from the research if they were under the age of eighteen, not married or in a relationship, or unwilling to consent to the study.

3.4 Sample size determination

The study's sample size was computed using Cochran's Formula (Israel, 2013) by assuming a 95% confidence level, a 37% prevalence rate of IPV during pregnancy (Makayoto *et al.*, 2013), and a 5% precision. The calculation of the sample size was as follows:

$$n = \frac{Z^2 pq}{e^2} = \frac{(1.96^2) \times 0.37 \times 0.63}{0.05^2} = 358$$

Where *'n'* is the sample size that was required, 'Z' is the normal distribution's abscissa (Z=1.96), 'ρ' is the estimated proportion of a population attribute (p=0.37), 'q' is 1-p (q=0.63), and 'e' is the precision level required (e=0.05).

The calculated sample size was 358. However, this was rounded up to 360.

3.5 Sampling techniques

The study used stratified and systematic sampling techniques. First, a complete list of all government-run health facilities that offer ANC services in Bondo Sub-County was obtained from the "Kenya Master Health Facility List" (Government of Kenya, 2020). There were 32 health facilities on the list. These facilities were stratified based on the Ministry of Health's service delivery levels (Kenya Ministry of Health, 2014). This resulted in 3-strata: level-2 healthcare facilities (dispensaries), level-3 healthcare facilities (health centers), and level-4 healthcare facilities (Sub-County hospitals). One health facility was then selected purposively from each of the 3 strata, yielding a final sample of 3 healthcare facilities for the study.

As shown in Table 3.1, allocation of participants in each one of the selected healthcare facilities was proportionate to the number of women attending ANC clinics at the facilities each year.

Table 3.1 *Sample distribution in the selected facilities*

Strata	Facility selected	Average number of women attending ANC every year as indicated in facility records	Sample Determination	Sample (number of women)
Level 4	Bondo County Referral Hospital	2133	$\frac{2133}{2711} \times 360$	283
Level 3	Usigu Health Center	390	$\frac{390}{2711} \times 360$	52
Level 2	Usenge Dispensary	188	$\frac{188}{2711} \times 360$	25
Total				360

The 360 women who were included in the study were selected using systematic sampling. The sampling interval was computed by simply dividing the average two-month ANC attendance at healthcare facilities in Bondo by the calculated sample size (1100/360). This yielded an interval of three. The first participant in each health facility was randomly selected from among the first five women to arrive at the ANC clinics. The lottery technique was used. First, each woman was assigned a unique number between 1 and 5. Then pieces of paper of a similar size were numbered from 1-to-5. The numbered pieces of paper were then folded and dropped into a jar where they were thoroughly mixed. One folded piece of paper was picked from the jar. The woman whose assigned number matched the number picked became the first participant. The next participants were selected at regular intervals of 3 as they arrived for ANC services.

3.6 Research instrument

This study used a structured questionnaire for data collection (see Appendix A). The tool consisted of 4 sections collecting data on the characteristics of women and their partners (husbands or boyfriends), experiences of IPV, social support, and disclosure patterns. The study questionnaire was developed by primarily adopting questions from the WHO's "Violence against Women Instrument" (VAWI) (WHO, 2005). VAWI is a

standardized tool developed by the WHO to assess IPV in different settings (Nybergh *et al.*, 2013). The tool is considered suitable for all cultures and has high validity and internal reliability (Cronbach's α coefficient 0.88) (Nybergh *et al.*, 2013). The tool has also been used in previous studies in Kenya to assess abuse during pregnancy (Owaka *et al.*, 2017; Luhumyo *et al.*, 2020). Once the study questionnaire was constructed, it was translated into Kiswahili and Dholuo (see appendix J and K)

3.6.1 Pretesting

The study instrument was pretested with 20 expectant mothers attending the ANC clinic at Gobei Health Center in Bondo Sub-County, which was not among the healthcare facilities selected for the actual study. The main goals of the pretest were to check whether the items of the questionnaire were understood and whether they provoked the kind of responses, they were expected to. The pretest was also used to train research assistants and familiarize the research team with the instruments and study procedures. The findings of the pretest allowed for adjustments to data collection and study materials, and enabled the research team to learn useful data collection skills that were applied during the actual data collection.

3.6.2 Validity and reliability

The research questionnaire was adopted from the WHO Violence against Women Instrument, a standardized tool that has been observed to have high validity and internal reliability (Cronbach's α coefficient 0.88) (Nybergh *et al.*, 2013). However, additional steps were taken to improve the questionnaire's reliability and validity. First, expert review of the questionnaire's face as well as content validity was obtained from experts working at the Center for Disease Control Gender-Based Violence Office at the Bondo County Referral Hospital. Second, the researcher used the findings of the pre-test conducted at Gobei Health Center to make revisions that ensured that the questions in the questionnaire were simple, clear, and understood by the participants.

3.7 Data collection procedures

Data from the individual respondents were collected for 3 months (from September to November 2020) by three research assistants who were recruited from the Public Health Department of Bondo County Referral Hospital. Expectant mother attending ANC clinics at the selected healthcare facilities who met the eligibility criteria were invited

by ANC nurses to take part in the study. Those willing to participate were referred to the research team. The research team described the nature as well as purpose for the study. Those interested in participating were asked to read and sign a consent form. If a participant was illiterate, the information on the consent form was read aloud to them. Upon obtaining informed consent, the research team administered the questionnaires in a private area within the health facility.

3.8 Data analysis

The completeness and quality of the questionnaires were checked and data were analyzed using the Statistical Packages for Social Science Program (SPSS Version 23). Descriptive statistics, including proportions and frequencies, were utilized to describe the participants, IPV prevalence, and IPV disclosure patterns. Bivariate binary logistic regression analyses were performed to investigate the relationship between IPV and the independent variables. To establish the factors independently connected with IPV multivariate analysis was executed using logistic regression. Only the factors that were significant ($p<0.05$) in bivariate analysis were considered in the multivariate analysis. Odds ratio (OR) and adjusted odds ratios (AOR) at 95% confidence intervals (95%CI) were used to demonstrate the strength of the relationship between IPV and independent variables. This procedure for data analysis has been applied in similar studies (Shrestha *et al.*, 2016; Lencha *et al.*, 2019). The variance inflation factor test (VIF) was employed to check for multicollinearity between the independent variables at a cutoff level of 5. All variables had a VIF< 2.1, indicating that no multicollinearity was present.

3.9 Ethical considerations

After receiving approval to carry out the study from Jaramogi Oginga Odinga University of Science and Technology Board of Post Graduate Studies, ethical clearance was obtained from Jaramogi Oginga Odinga Teaching and Referral Hospital's Ethics Review Committee. A license for the study was obtained from the National Commission for Science, Technology, and Innovation. Authority to carry out the study at the selected health facilities was obtained from the Department of Health, Siaya County, and from the individual health facilities.

Before data collection, the nature as well as purpose of this study were fully described to each participant. Signed informed consent was obtained. To protect participants'

safety during the study, the questionnaires were administered in complete privacy within the health facility. Due to the sensitivity of the study, research assistants were taught to be mindful of the effect some questions could have on participants and how to respond based on a participant's distress level. In addition, a counselor was involved in data collection to offer support to participants when the need arose. The confidentiality of the information collected from the participants was maintained throughout the study. No information was included revealing the true-identities of participants; instead, codes were used. After data collection, all participants were informed about existing social and counseling services within Bondo Sub-County and in the region where they could seek help on issues relating to IPV. A help card with the contact details of health and support services was also made available to all participants (see appendix B).

The women in the study did not receive any immediate benefits for their participation, monetary or nonmonetary. However, they were informed that their participation would help practitioners and policymakers to get a better understanding of abuse during pregnancy in Bondo Sub-County. This information could be used to develop interventions that could benefit pregnant women in future.

CHAPTER FOUR: RESULTS

4.1 Introduction

This section describes the study's findings guided by the three research questions outlined in chapter one. The chapter starts by giving a general description of the characteristics of participants and their partners. The next sections focus on the prevalence rate of IPV, factors associated with IPV, and the pattern of IPV disclosure among participants who reported IPV during pregnancy.

4.2 Characteristics of respondents and their partners

4.2.1 Socio-demographic characteristics of study participants

A total of 360 pregnant women took part in the study. Their socio-demographic characteristics are shown in Table 4.1. The mean age of the respondents was 25.35 (SD=4.89) and more than half (55.3%) of them were between 18 and 25years old. Most of the participants (40.8%) had studied up to secondary school education level and almost half (47.2 %) of them were unemployed. The majority of participants (82.2%) were married, 63.6% were multiparous, and 80.8% were HIV-negative.

Table 4.1 *Socio-demographic characteristics of participants*

Variable	Frequency (n)	Percentage (%)
Age Group		
18-25	199	55.3
26-42	161	44.7
Education		
Primary/lower	123	34.2
Secondary	147	40.8
College/higher	90	25.0
Employment status		
Unemployed	170	47.2
Self-employed (business)	148	41.1
Formally Employed	42	11.7
Parity		
Nulliparous	131	36.4
Multiparous	229	63.6
HIV Status		
Don't know	14	3.9
HIV Positive	55	15.3
HIV Negative	291	80.8
Marital Status		
Married	296	82.2
Not married but lives with a partner (boyfriend)	5	1.4
Not married, lives separately from a partner	59	16.4

4.2.2 Characteristics of Participants' Partners

Table 4.2 presents the characteristics of the respondents' partners. The partners' mean age was 30.49 (SD=6.36) and half of them (50.0%) were aged between 18 and 29 years. Most of the partners had secondary school education (43.3%) and were self-employed (68.6%). The majority (80.0%) of the partners did not consume alcohol.

Table 4.2 *Socio-demographic characteristics of women's partners*

Variable	Frequency (n)	Percentage (%)
Partner's Age		
18-29	180	50.0
30-57	180	50.0
Partner's Education		
Primary/lower	76	21.1
Secondary	156	43.3
College/higher	128	35.6
Partner's Employment		
Unemployed	25	6.9
Self-employed	247	68.6
Employed	88	24.4
Consumes alcohol		
Everyday	19	5.3
Occasionally	53	14.7
Never	288	80.0

4.2.3 Social support characteristics of participants

Table 4.2 presents the social support characteristics of the women in the study. Most of the participants reported that they lived in a community where neighbors knew each other well (80.8%) and that they could always count on their neighbors for support when in need of assistance (86.7%). About three-fifths (64.4%) of the participants indicated that they lived very close to their siblings or parents. The majority of the respondents specified that they communicated with their siblings or parents at least once every week (88.6%) and that they could always count on their siblings or parents for support (91.1%) whenever they needed help. About 87% of the participants were members of religious or community organizations.

Table 4.3 *Social support characteristics of participants*

Characteristics/variable	Frequency (n)	Percentage (%)
Lives in a village where neighbors know each other very well		
No	69	19.2
Yes	291	80.8
Can count on her neighbors for support/help		
No	48	13.3
Yes	312	86.7
Lives very close to her siblings/parents		
No	232	64.4
Yes	128	35.6
Talks with her siblings/parents		
Once per year/never	11	3.1
At least once per month	30	8.3
At least once per week	319	88.6
Can count on her siblings/parents for support		
No	32	8.9
Yes	328	91.1
Attends Organization		
No	46	12.8
Yes	314	87.2

4.3 Prevalence of IPV

To examine the first research question regarding the prevalence rate of abuse during pregnancy, participants were asked if they had faced sexual, psychological, or physical violence from their partners during their current pregnancy. Table 4.4 presents prevalence rates of the various types of IPV that were reported. Of the 360 participants, 127 (35.3%), reported that they had faced at least one form of IPV during their pregnancy. Psychological violence (23.9%) was the most widespread type of IPV reported. Physical violence was reported by 15.6% of women, while sexual violence was reported by 16.4%. Eighty-four (66.1%) out of the 127 women who encountered IPV during their pregnancy also reported a history of abuse from their husbands or boyfriends in the 12 months preceding pregnancy.

Table 4.4 *Prevalence rates of IPV during pregnancy according to type N=360*

Type of violence	*n*	%
Psychological violence		
Insulted her or caused her to feel really bad about herself	45	12.5
Humiliated her in the presence of other people	13	3.6
Scared/intimidated her	51	14.2
Threatened to hurt her or a loved one	19	5.3
Any Psychological violence	86	23.9
Physical violence		
Slapped her/threw something at her	37	10.3
Pushed/shoved her	24	6.7
Hit her with his fist	9	2.5
Kicked/dragged/beat her up	7	1.9
Chocked or burned her on purpose	3	0.8
Threatened/hurt her with a weapon	10	2.8
Any Physical violence	56	15.6
Sexual violence		
Physically forced her to engage in sexual activity	36	10.0
Engaged in sexual activity when she did not want because she was terrified of her partner's reaction	34	9.4
Forced to engage in a sexual act that felt degrading	7	1.9
Any Sexual Violence	59	16.4
Any psychological, sexual, or physical violence (IPV)	**127**	**35.3**

Note: Total percentage adds to more than 100 % because participants gave multiple responses

4.4 Factors associated with IPV

To examine the second research question regarding factors that were associated with abuse during pregnancy bivariate and multivariate analyses were conducted. First, the independent variables associated with IPV were identified using bivariate logistic regression. Multivariate logistic regression was later executed on variables that were significant in bivariate analysis ($p<0.05$) to identify the factors independently associated with IPV exposure during pregnancy. Results of the regression analyses are presented as odds ratios (OR) with 95%confidence intervals. This section begins by first presenting the results of bivariate analyses.

4.4.1 Association between IPV in pregnancy and women's characteristics

Table 4.5 presents the results of the bivariate analysis between IPV and women's sociodemographic characteristics. There were significant associations observed between IPV and women's education level, employment status, and HIV status.

Women with primary school levels of education or lower were 2times more likely than those with college education to face IPV during pregnancy (OR= 2.47; 95% CI: 1.36-4.47). Compared to pregnant women who had formal employment, unemployed women were more than 3-times more likely to face IPV (OR=3.90; 95% CI: 1.56-9.77). Additionally, women in self-employment had higher risks of being exposed to IPV than those in formal employment (OR=3.45; 95% CI: 1.36-8.71). HIV-positive women were 2times more likely than those that were HIV-negative to face IPV during their pregnancy (OR=1.99; 95% CI: 1.11-3.56). Women who were married were more likely than those that were unmarried and not living with their partners to face IPV during pregnancy but this relationship was not significant (OR=1.44; 95% CI: 0.78-2.65).

Table 4.5 *Association between IPV and women's socio-demographic characteristics (N=360)*

Variable	**Total** ***n (%)***	**Faced IPV** ***n* (%)**	**Odds Ratio (95% CI)**	***P*-value**
Age Group				
18-25	199(55.3)	69 (54.3)	0.94 (0.61-1.46)	0.790
26-42	161(44.7)	58 (45.7)	1.00	
Education				
Primary/lower	123(34.2)	55 (43.3)	2.36 (1.30-4.26)	0.005*
Secondary	147(40.8)	49 (38.6)	1.46 (0.81-2.61)	0.208
College/higher	90(25.0)	23 (18.1)	1.00	
Employment				
Unemployed	170(47.2)	67 (52.8)	3.90 (1.56-9.77)	0.004*
Self-employed	148(41.1)	54 (42.5)	3.45 (1.36-8.71)	0.009*
Employed	42(11.7)	6 (4.7)	1.00	
Parity				
Nulliparous	131(36.4)	44 (34.6)	0.89 (0.57-1.40)	0.612
Multiparous	229(63.6)	83 (65.4)	1.00	
HIV Status				
Don't know	14(3.9)	5 (3.9)	1.15 (0.37-3.51)	0.811
Positive	55(15.3)	27 (21.3)	1.99 (1.11-3.56)	0.021*
Negative	291(80.8)	95 (74.8)	1.00	
Marital Status				
Married	296(82.2)	109 (85.8)	1.44 (0.78-2.65)	0.242
Unmarried-Lives with partner	5(1.4)	1 (0.8)	0.62 (0.06-5.93)	0.676
Unmarried-Lives separately	59(16.4)	17 (13.4)	1.00	

* Statistically significant at p value<0.05

4.4.2 Association between partner characteristics and IPV

Table 4.6 presents the results of the bivariate logistic regression analyses between IPV and the characteristics of women's partners. There were significant associations observed between IPV and partners' characteristics including education level and alcohol consumption. Women with partners that had primary school education level or lower were 2times more likely than those whose partners were college-educated to face IPV during pregnancy (OR=2.24; 95% CI: 1.23-4.07). Similarly, women with partners that had secondary school education level were more likely than those whose partners were college educated to face IPV during pregnancy (OR= 1.68; 95% CI: 1.01-2.80). Alcohol use by partners was the most significant factor associated with IPV. Women who reported that their partners drank alcohol everyday were five times more likely than those whose partners did not take alcohol to face IPV during their pregnancy (OR= 5.01; 95% CI: 1.84-13.60). In addition, women whose spouses/boyfriends drank alcohol occasionally (once or twice a week) were 2 times more likely than those whose spouses/boyfriends did not take alcohol to face IPV during their pregnancy (OR=2.40; 95% CI: 1.32-4.35).

Table 4.6 *Association between IPV and characteristics of partners (N=360)*

Variable	**Total *n* (%)**	**Experienced IPV *n* (%)**	**Odds Ratio (95% CI)**	***P*-value**
Partner's Age				
18-25	180 (50)	63 (49.6)	0.98 (0.63-1.50)	0.912
26-42	180 (50)	64 (50.4)	1.00	
Partner's Education				
Primary/lower	76 (21.1)	34 (26.8)	2.24 (1.23-4.07)	0.008*
Secondary	156 (43.3)	59 (46.5)	1.68 (1.01-2.80)	0.045*
College and above	128 (35.6)	34 (26.8)	1.00	
Partner's Employment				
Unemployed	25 (6.9)	8 (6.3)	1.01 (0.39-2.61)	0.986
Self-employed	247 (68.6)	91 (71.7)	1.25 (0.75-2.10)	0.398
Employed	88 (24.4)	28 (22.0)	1.00	
Alcohol Consumption				
Everyday	19 (5.3)	13 (10.2)	5.01 (1.84-13.60)	0.002*
Occasionally	53 (14.7)	27 (21.3)	2.40 (1.32-4.35)	0.004*
Never	288 (80.0)	87(68.5)	1.00	

*Statistically significant at p value<0.05

4.4.3 Association between IPV in pregnancy and Social support

Table 4.7 presents the results of bivariate analysis between IPV and the social support characteristics of participants. There was a significant connection observed between IPV exposure during pregnancy and parental or sibling support. Women who reported not living close to their parents or siblings were 1.65 times more likely than those that lived close to their siblings or parents to face IPV during their pregnancy (OR=1.65; 95% CI: 1.03-2.63). Similarly, women who said they could not count on their siblings or parents for support when they needed it were about 3times more likely than women who could count on their siblings or parents for support to face IPV during pregnancy (OR= 2.98; 95% CI: 1.42-6.25).

Table 4.7 *Association between IPV and women's social support characteristics (N=360)*

Variable	Total *n* (%)	Experienced IPV *n* (%)	Odds Ratio (95% CI)	*P*-value
Lives in a village where neighbors know each other very well				
No	69 (19.2)	29 (22.8)	1.43 (0.84-2.44)	0.193
Yes	291 (80.8)	98(77.2)	1.00	
Can count on her neighbors for support/help				
No	48 (13.3)	20(15.7)	1.37 (0.74-2.54)	0.321
Yes	312 (86.7)	107(84.3)	1.00	
Lives very close to her siblings/parents				
No	232 (64.4)	91(71.7)	1.65 (1.03-2.63)	0.036*
Yes	128 (35.6)	36(28.3)	1.00	
Talks with her siblings/parents				
Once per year/never	11 (3.1)	6(4.7)	2.41 (0.72-8.08)	0.154
At least once per month	30 (8.3)	15(11.8)	2.01 (0.95-4.27)	0.069
At least once per week	319 (88.6)	106(83.5)	1.00	
Can count on her siblings/parents for support				
No	32 (8.9)	19(15.0)	2.98 (1.42-6.25)	0.004*
Yes	328 (91.1)	108(85.0)	1.00	
Attends Organization				
No	46(12.8)	16(12.6)	0.98 (0.51-1.87)	0.940
Yes	314 (87.2)	111(87.4)	1.00	

*Statistically significant at p value<0.05

4.4.4 Multivariate Analysis

Multivariate logistic regression was executed to identify factors that were independently associated with IPV exposure during pregnancy. Only variables, which were significant ($p<0.05$) in the bivariate analysis were included. The findings of the multivariate analysis are presented in Table 4.8. After adjusting for all other variables that were significant in bivariate analysis, only women's employment status, alcohol consumption by partners, and social support from parents or siblings remained significantly associated with IPV. Unemployed women were about 3times more likely than those that were formally employed to face IPV during pregnancy (AOR=2.90; 95% CI: 1.08-7.79). Women whose partners drank alcohol everyday had higher odds of facing IPV during their pregnancy than those whose partners did not (AOR=4.84; 95% CI: 1.69-13.88). The odds of IPV exposure were also higher for expectant mothers whose partners drank alcohol occasionally than for those whose partners did not consume any alcohol at all (AOR=2.19; 95% CI: 1.16-4.13). Women who reported not counting on their siblings or parents for support were more than twice likely than women who counted on their siblings or parents for support to face IPV during pregnancy (AOR=2.48, 95% CI: 1.14-5.43).

Table 4.8 *Multivariate analysis of the connection between IPV and selected factors (N=360)*

Variable	Total *n* (%)	Experienced IPV *n* (%)	Crude OR (95% CI)	*P*-value	Adjusted OR[a] (95% CI)	*P*-value
Woman's education						
Primary/lower	123 (34.2)	55 (43.3)	2.36 (1.30-4.26)	0.005*	1.15 (0.49-2.70)	0.756
Secondary	147 (40.8)	49 (38.6)	1.46 (0.81-2.61)	0.208	0.92 (0.44-1.92)	0.817
College and above	90(25.0)	23 (18.1)	1.00		1.00	
Woman's Employment						
Unemployed	170 (47.2)	67 (52.8)	3.90 (1.56-9.77)	0.004*	2.90 (1.08-7.79)	0.035*
Self-employed	148 (41.1)	54 (42.5)	3.45 (1.36-8.71)	0.009*	2.42 (0.89-6.61)	0.084
Employed	42 (11.7)	6 (4.7)	1.00		1.00	
Woman's HIV Status						
Don't know	14 (3.9)	5 (3.9)	1.15 (0.37-3.51)	0.811	1.01 (0.30-3.37)	0.985
Positive	55 (15.3)	27 (21.3)	1.99 (1.11-3.56)	0.021*	1.44 (0.76-2.74)	0.262
Negative	291 (80.8)	95 (74.8)	1.00		1.00	
Partner's Education						
Primary and below	76 (21.1)	34 (26.8)	2.24 (1.23-4.07)	0.008*	1.28 (0.56-2.97)	0.558
Secondary	156 (43.3)	59 (46.5)	1.68 (1.01-2.80)	0.045*	1.38 (0.71-2.68)	0.350
College and above	128 (35.6)	34 (26.8)	1.00		1.00	
Alcohol Consumption						
Everyday	19 (5.3)	13 (10.2)	5.01 (1.84-13.60)	0.002*	4.84 (1.69-13.88)	0.003*
Occasionally	53 (14.7)	27 (21.3)	2.399 (1.32-4.35)	0.004*	2.19 (1.16-4.13)	0.015*
Never	288 (80.0)	87 (68.5)	1.00		1.00	
Lives close to parents/siblings						
No	232 (64.4)	91 (71.7)	1.65 (1.03-2.63)	0.036*	1.65 (1.00-2.72)	0.051
Yes	128 (35.6)	36 (28.3)	1.00		1.00	
Can count on support from family						
No	32 (8.9)	19 (15.0)	2.977 (1.42-6.25)	0.004*	2.48 (1.14-5.43)	0.023*
Yes	328 (91.1)	108 (85.0)	1.00		1.00	

*=$p<0.05$

[a] Adjusting for other factors that were significant in bivariate analysis

4.5 Disclosure patterns

To examine the third research question regarding IPV disclosure patterns, participants who encountered IPV during pregnancy (*n*=127) were asked whether they disclosed, whom they disclosed to, whether they disclosed to nurses during ANC visits, whether ANC nurses inquired about their experiences, and, whether they found it acceptable for ANC nurses to inquire about IPV. The following details relate to disclosure patterns as revealed by the analysis.

4.5.1 Disclosure level and to whom disclosure occurred

Out of the 127 pregnant women who indicated experiencing IPV, 51 (40.2%) disclosed it to someone. As shown in Table 4.9, the majority (60.8%) of those who disclosed told their parents. Disclosure to organizations was low. Only 5.9% disclosed to religious organizations, 2.0% disclosed to the police, and none disclosed to health care institutions or women's organizations.

Table 4.9 *Disclosure of IPV by participants (N=127)*

Person to whom pregnant women disclosed	***n***	**%**
Parents	31	60.8
Siblings	21	41.2
Children	3	5.9
Relatives(uncles/aunts)	7	13.7
Friends	13	25.5
Neighbors	4	7.8
Police	1	2.0
Religious organization (pastor/priest)	3	5.9

Note: Total percentage adds to more than 100 % due to participants giving multiple responses

4.5.2 Disclosure during ANC Visits

In terms of IPV disclosure during prenatal care visits, only 12 (9.4%) of the 127 expectant mothers who faced IPV said that they had disclosed their experiences to nurses during ANC visits. The majority (90.6%) did not disclose.

4.5.3 Inquiry of IPV by ANC nurses

Only nine (7.1%) of the 127 pregnant women who faced IPV reported that ANC nurses had asked them about their experiences.

4.5.4 Acceptability of IPV inquiry during ANC visits

Of the 127 pregnant women who experienced IPV, 121(95.3%) reported that they found it acceptable for ANC nurses to inquire about IPV during ANC visits if it leads to getting interventions that improve pregnancy outcomes and reduce the risk of violence. Only six (4.7%) women objected to ANC nurses inquiring about IPV.

CHAPTER FIVE: DISCUSSION

5.1 Introduction

The specific aims of this study were to investigate the prevalence, risk factors, and disclosure patterns of IPV among expectant mothers attending ANC clinics in Bondo Sub-County. The findings revealed a 35.3% prevalence of IPV. Psychological abuse (23.9%) was the most prevalent form of IPV, followed by sexual abuse (16.4%) and physical abuse (15.6%). IPV was significantly and independently associated with lack of employment, having a husband or boyfriend who consumes alcohol, and lack of social support from siblings or parents. Among women who faced IPV, only 40.2% disclosed it to someone, with the majority (60.8%) telling their parents. Very few women disclosed abuse to institutions.

5.2 Prevalence of IPV in pregnancy

The prevalence rate of IPV among expectant mothers in this study (35.3%) is similar to prevalence rates that were reported in earlier Kenyan studies in Eldoret (34%) (Luhumyo *et al.,* 2020) and Kisumu (37%) (Makayoto *et al.,* 2013). However, the prevalence in this study differs from the prevalence of 67% that Owaka *et al.* (2017) observed in a study that was conducted in WestPokot County. The difference in prevalence between this study and the West Pokot study can be attributed to cultural differences between the two study areas.

Compared to studies that have been done in other nations, the prevalence rate of IPV among expectant mothers in this study is similar to prevalence rates reported in Tanzania (30.3%) (Sigalla *et al.*, 2017), Rwanda (35.1%) (Ntaganira *et al.*, 2008), and Vietnam (35.2%) (Nguyen *et al.*, 2018). However, the prevalence in this study differs from that reported by Yohannes *et al.* (2019) in Ethiopia (64.6%) as well as those reported in South Africa (15%) (Field *et al.*, 2018) and Sweden (2.0%) (Finnbogadóttir *et al.*, 2016). This difference can be attributed to cultural differences, methodological differences, and differences in the willingness of pregnant women to report abuse (Shamu *et al.*, 2011; James *et al.*, 2013). For instance, while the WHO instrument was used to measure IPV in this study, the NorVold Violence Questionnaire was used in the Swedish study. When comparing the two instruments, the WHO tool yielded greater prevalence levels (Nybergh *et al.*, 2013).

An assessment of the different types of IPV that were experienced by the participants revealed that psychological abuse was by far the most prevalent (23.9%) compared to sexual (16.4%) and physical (15.5%) forms of IPV. This implies that women are generally more likely to be insulted, intimidated, threatened, or humiliated by their husbands or boyfriends during pregnancy than they are to be sexually assaulted or physically abused. This is consistent with previous Kenyan studies, including Makayoto *et al.* (2013), Luhumyo *et al.* (2020), and Owaka *et al.* (2017), who reported that pregnant women are exposed to all forms of IPV but more often to psychological abuse and less to sexual and physical IPV.

Previous research suggests that IPV during pregnancy may be a continuation of previous violence (Olagbuji *et al.*, 2010; Finnbogadóttir *et al.*, 2016). This is supported by the findings of this study, in which the majority (66.14%) of women who faced abuse from their spouses or boyfriends during pregnancy also reported a history of abuse in the 12 months prior to their pregnancy. This suggests that for the majority of women, pregnancy offers no protection against abusive behavior from their partner.

5.3 Risk factors for IPV during pregnancy

The results indicated that partner alcohol consumption was significantly associated with IPV. Expectant mothers whose partners drank alcohol had higher odds of facing IPV. This finding is consistent with the findings from a systematic analysis by Shamu *et al.* (2011) in which each study examining partner alcohol consumption as a potential risk factor for abuse during pregnancy discovered a significant association. Previous studies in Kenya, Ethiopia, and Nigeria have also found a significant connection between the risk of IPV in women during pregnancy and the alcohol consumption habits of their partners (Olagbuji *et al.*, 2010; Makayoto *et al.*, 2013; Owaka *et al.*, 2017; Yohannes *et al.*, 2019). One of the proposed reasons for the link between partner alcohol use and abuse is that alcohol impairs an individual's physical and cognitive functioning, reduces self-control, and makes them less able to resolve conflicts within a relationship in a non-violent manner (WHO, 2011). Furthermore, the societal perception that alcohol consumption can lead to violence may encourage men to abuse their wives or girlfriends and to use drunkenness as an excuse for their abusive behavior (WHO, 2011).

The study found that unemployed women had significantly higher odds of facing IPV during pregnancy. This finding supports prior research conducted in Sweden, Ethiopia, and South Africa (Hoque *et al.*, 2009; Finnbogadóttir *et al.*, 2014; Mamo *et al.*, 2022). It is suggested that when women are unemployed, they become more financially reliant on their boyfriends or husbands and this makes them less likely to leave abusive relationships (Shamu *et al.*, 2011; Anderberg *et al.*, 2016). This, in turn, can prompt violent partners to display their violent tendencies, leading to an increase in violence (Anderberg *et al.*, 2016).

The study found that expectant mothers who could not rely on family members for support had higher chances of facing IPV. Thus, in line with an earlier study in Tanzania (Sigalla *et al.*, 2017) perceived support from members of the family was a protective factor for women in this study against exposure to IPV during pregnancy. A possible explanation for the protective nature of family support is that expectant mothers who can rely on family members for support may be more likely to share intimate details about their relationships such as problems they face at home with family members. In turn, family members can provide support including counseling and advice to help the woman achieve a desired goal including safety (Wright, 2015). In addition, if members of the family become aware of violence, they may intercede to put a stop to it (Wright, 2015).

5.4 Disclosure patterns of IPV

In terms of disclosure, the majority of expectant mothers who faced IPV in this study did not disclose their experiences to anyone, which is similar to what has been reported in previous studies (Katiti *et al.*, 2016; Katushabe *et al.*, 2022). Among those who disclosed, the majority chose to tell their families rather than institutions. Similar results have been reported in Tanzania, Uganda, and Nigeria (Katiti *et al.*, 2016; Ayodapo *et al.*, 2017; Katushabe *et al.*, 2022). Formal institutions including health care facilities, the police, and religious and non-governmental organizations play a vital role in preventing abuse and providing support to victims of violence (Katiti *et al.*, 2016). A possible reason for low disclosure to institutions is that in many settings, IPV is seen as a private family issue that should be dealt with within the family and not by institutions. Women who face abuse, therefore, choose not to disclose it to institutions for fear of offending family members (Ayodapo *et al.*, 2017). Moreover, according to Katiti *et al.*

(2016), the main reason for disclosing IPV for women is to bring peace to their relationships. Pregnant women may choose not to disclose abuse to institutions because they fear that formal measures taken by institutions against their partners will lead to the breakdown of their relationships rather than peace (Katiti *et al.*, 2016).

Despite the importance of IPV disclosure in ANC settings in allowing women to benefit from interventions that may improve pregnancy outcomes (Baird, 2012), most women who faced IPV in this study did not report their experiences to nurses during ANC visits. Previous research has discovered that unless expressly asked about abuse, women would generally not disclose experiences of IPV to healthcare professionals (Berry & Rutledge, 2016). In this study, the majority (95%) of women who faced IPV were not asked about their experiences by ANC nurses. This could be the reason why few women in this study disclosed their experiences to nurses during ANC visits.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

The study's findings revealed a 35.3% prevalence of IPV among expectant mothers attending ANC clinics in Bondo Sub-County. Psychological violence (23.9) was the form of IPV that occurred most frequently followed by sexual (16.4%) and physical violence (15.6%). The factors that were discovered to be significantly associated with an amplified risk of facing IPV in pregnancy included lack of support from parents or siblings, being unemployed, and having a partner who drinks alcohol. In terms of IPV disclosure, the study discovered that only 40.2% of women who faced IPV during pregnancy disclosed. The majority (60.8%) of those who disclosed told their parents and only 7.9% reported to institutions. The findings from this study show that there is a need for healthcare and community interventions that can reduce the rates of violence and address the adverse maternal and neonatal outcomes associated with IPV in Bondo.

6.2 Recommendations

Based on this study's findings, are the following recommendations:

i. There is a need to develop healthcare and community interventions to address IPV during pregnancy in Bondo Sub-County. This is based on the high IPV prevalence among pregnant women.

ii. There is a need to develop programs aimed at discouraging alcohol use and rehabilitating men who have a drinking problem.

iii. Policies and programs aimed at empowering women through job creation should be developed. This will help to ensure that women are less dependent on their male partners financially and therefore, more likely to leave abusive relationships.

iv. Women in Bondo should be encouraged to report experiences of IPV including those that occur during pregnancy to relevant institutions.

v. Mechanisms for identifying expectant mothers exposed to IPV during pregnancy should be implemented to assist healthcare providers in addressing IPV in prenatal care settings.

6.3 Recommendations for future research

i. There is a need to investigate the impact of IPV exposure during pregnancy on fetal and maternal health outcomes in Bondo Sub-County.

ii. Future studies should also identify the factors contributing to low IPV disclosure in healthcare settings in Bondo Sub-County.

iii. Similar studies should be conducted in health care facilities in other settings in the country.

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APPENDICES

Appendix A: Information sheet and study questionnaire (English)

Introduction

My name is Kevin Onuonga. I am a public health master's student at Jaramogi Oginga Odinga University. I am doing a study at the antenatal care clinic to learn about the challenges that pregnant mothers face at home. I want to invite you to take part in the research. The purpose of this document is to inform you about the study so you can make an informed choice about participating. Please read everything carefully and entirely. You are free to seek clarifications on any issue or ask any question.

Purpose of the study

The purpose of this study is to learn more about the factors that contribute to domestic violence against pregnant women.

Participation

Your participation in this study is entirely voluntary. It is entirely up to you whether or not to engage. Your choice will not effect on you in any way. If you choose to participate, you will be asked to fill out a consent form. Once you fill out this form, an interviewer will ask you questions about your experiences of intimate partner violence. Your answers will be entered into a questionnaire. The interview will last approximately 15-20 minutes.

Benefits of the study

There are no immediate monetary or non-monetary benefits for you as an individual. The long-term benefit is that the information you submit will assist health practitioners understand the factors linked with intimate partner violence during pregnancy in Bondo Sub-County. This data will be useful in the development of programs that can be used to improve the quality of care provided to pregnant women who have been exposed to or are at risk of experiencing violence.

Risks

The risk of participating in this study is that the questions asked may be on issues relating to your personal life. Some of these questions may arouse negative emotions. If you are uncomfortable with any of the questions, you may choose to skip it or end the interview without penalty. If any question makes you uncomfortable, you will be at liberty to skip it or discontinue the interview without you suffering any consequences.

Confidentiality

The information gathered throughout the survey will be kept totally confidential. This means that any information you give will be kept private and will only be used for this research. Furthermore, your name will be included in any data collections forms, thus protecting your privacy.

Dissemination of results of the study

The study's findings will be documented in my master's research thesis. Some of the findings will be published in professional publications and presented at conferences in

order to raise awareness of violence during pregnancy. None of the work resulting from this study will identify you individually or anybody else who participated.

Contact information
If you have questions or issues on any aspect of the study, please contact:

- The Researcher, Kevin Onuonga on 0708553038
- The Study Supervisors: Dr. Dan Onguru and Dr. Sydney Ogolla, P.O Box 210 Bondo, Department of Public Health, JOOUST
- The Jaramogi Oginga Odinga Teaching and Referral Hospital Ethics and Research Committee, Phone no: 057-2020801/2020803/2020321 Email: ercjootrh@gmail.com

Participant consent form

Title of Study: Determinants of IPV among pregnant women attending ANC in Bondo Sub-County, Kenya

Name of the Researcher: Kevin Onuonga

If you agree to take part in the study, please read and sign below:

I hereby give consent to take part in the study. I have been informed about the nature of the study, and the potential risks have been described to me. I realize that my participation in the study is voluntary, and that my decision to participate or not participate will have no bearing on the services I receive at this health facility. I understand that I have the option to withdraw from the study at any time, with no explanation or penalties. I have also been assured that the information I give will remain confidential.

Name of Participant: _____

Signature: _____Date: _____

Consent giver statement:
I declare that I have discussed the procedures to be followed in the study, confidentiality issues, and the benefits as well as the risks that may be involved with the respondent in a language that she understands (Dholuo/Kiswahili/English).

Name of the consent giver: _____

Signature: _____Date: _____

Participant ID_____ Facility_____ Date_____/_____/2020				
SECTION 1:DEMOGRAPHIC QUESTIONNAIRE				
I would like to begin by asking you some questions about yourself				
101	How old are you in years? RECORD AGE IN YEARS	_____		
102	Have you ever gone to school?	Yes……	1	
		No…….……...……	2	➡ 104
103	What is your highest education level?	Primary education……..……	1	
		Secondary education…..……..	2	
		Higher education ……..……....	3	
104	Are you currently employed? IF YES PROBE-What kind of work do you do? If NO PROBE Are you engaged in any business or agricultural activities?	EMPLOYED (government/NGO)…….	1	
		Agriculture.....	2	
		Business……	3	
		Unemployed	4	
105	How many children do you currently have?	NUMBER OF CHILDREN_____		
106	Do you know your HIV status? IF YES ASK What is your HIV status? *Remind respondent of the right not to disclose if not comfortable to do so*	Negative……..…	1	
		Positive….....	2	
		I don't know…....……	3	
		Not disclosed.….....	4	
107	Are you currently married? IF NOT MARRIED ASK Do you and your partner live together?	Married…….….....	1	
		NOT MARRIED (lives with partner). …..	2	
		NOT MARRIED (lives separately)……	3	
108	How old in years is your partner/husband?	AGE_____		
109	Has he ever gone to school?	Yes……	1	
		No……..……	2	➡ 111
110	What is his highest education level	Primary education……	1	
		Secondary education.....…….	2	
		Higher education……...	3	
111	What type of work does he usually do? SPECIFY KIND OF WORK If not professionally employed probe-Is he engaged in any business or agricultural activities?	PROFESSIONAL (government/NGO)…….	1	
		AGRICULTURE/fishing……	2	
		Business…….	3	
		Unemployed	4	
112	Does your partner/husband drink alcohol?	Yes…….……	1	
		No…….	2	➡ 201

113	How frequently does your partner/husband drink alcohol?	Daily……..……..…….	1	
		Once/twice a week……..…….	2	
		Once/twice a month	3	

	SECTION 2: SOCIAL SUPPORT QUESTIONNAIRE			
The next questions are about people in your life who help and support you				
201	In the village where you live, do neighbors know each other well?	Yes……..	1	
		No……	2	
		I don't know……	3	
202	If you had a problem at home like someone in your family fell ill, would your neighbors offer help?	Yes…….	1	
		No……..	2	
		I don't know……..	3	
203	Do your parents or any of your brothers or sisters live close enough by that you can easily see or visit them	Yes……	1	
		No…….	2	
204	How often do you speak with your parents and siblings, At least once a week, at least once a month, or Once a year, or never?	At least once a week……..	1	
		At least once a month…….	2	
		Once a year/never……..	3	
205	When you need help or have a problem, can you count on your parents, brothers, or sisters for help?	Yes…….	1	
		No……	2	
206	Do you attend a group or organization? **IF YES ASK** What group or organizations do you attend? **IF NO**: Probe: Do you attend any religious organization like churches and mosques or any women's group like savings groups? **MARK ALL MENTIONED**	None……	A	➡ 301
		Women's group (Chama)…	B	
		Religious organization……	C	
		Other:_____		
207	Have you ever been prevented from attending a meeting or participating in an organization? **IF YES** Who Prevented You?	Not prevented……	A	
		Partner/husband……..……	B	
		Parents……	C	
		Other_____		

SECTION 3: VIOLENCE AGAINST WOMEN QUESTIONNAIRE			
The next questions are about things that happen to many women and that your husband/partner may have done to you. You do not have to answer any question that you may not want to. May I continue>			
301	During your current pregnancy, has your husband/partner ever done the following things to you?	**A) If YES proceed to B If NO skip to the next item** **YES NO**	**B) Was this something that happened in the 12 months leading up to your pregnancy?** **YES N0**
	1. Insulted you or made you feel bad about yourself?	1 2	1 2
	2. Humiliated you in front of other people	1 2	1 2
	3. Did things to intimidate or scare you on purpose	1 2	1 2
	4. Threatened to hurt you or someone you care about.	1 2	1 2
302	During your current pregnancy, has your husband/partner ever done the following things to you?	**YES NO**	**YES N0**
	1. Slapped you or thrown something at you that could hurt you?	1 2	1 2
	2. Pushed you or shoved you?	1 2	1 2
	3. Hit you with his fist or with something that hurt you?	1 2	1 2
	4. Kicked you, dragged you, or beaten you up?	1 2	1 2
	5. Chocked or burnt you on purpose?	1 2	1 2
	6. Threatened to use or used a knife or any other weapon against you?	1 2	1 2
303	During your current pregnancy, has your partner/husband ever done any of following things to you?	**YES NO**	**YES N0**
	1. Physically forced you to have sexual intercourse when you did not want to?	1 2	1 2
	2. Did you ever have sexual intercourse you did not want because you were afraid of what he might do?	1 2	1 2
	3. Did he ever force you to do something sexual that you found degrading or humiliating?	1 2	1 2
304	VERIFY IF SHE ANSWERED YES TO ANY OF THE **QUESTIONS IN 301 A**	YES ……...…….1 NO ……..……...…… 2	
305	VERIFY IF SHE ANSWERED YES TO ANY OF TCE QUESTIONS IN **302 A**	YES …….……...……...1 NO ……..……..……… 2	
306	VERIFY IF SHE ANSWERED YES TO ANY OF THE **QUESTIONS IN 303 A**	YES ……....1 NO ……..…..……..2	

SECTION 4: DISCLOSURE QUESTIONNAIRE			
CHECK 304,305, 306	RESPONDED **YES** TO ANY OR ALL OF THE THREE QUESTIONS ↓	RESPONDED **NO** TO ALL OF THE THREE QUESTIONS) → **SKIP TO SECTION 5**	
I now would like to ask you a few questions about what usually happened when your husband/partner treated you the way he did during your current pregnancy. ***MENTION ALL SPECIFIC ACTS OF VIOLENCE RESPONDED TO "YES" IN QUESTIONS 301, 302 AND 303*** E.g. When your partner slapped you, humiliated you, or pushed you during your current pregnancy			
401	Did you tell anyone?	Yes…….	1
		No……..	2 →403
402	Whom did you tell? ***MARK EVERYTHING MENTIONED*** Probe: -Anyone else?	FRIENDS……	A
		PARENTS……	B
		SISTER/BROTHER…….	C
		AUNTS/UNCLE...……...	D
		CHILDREN……	E
		NEIGHBOUR..……	F
		THE POLICE……..	G
		HOSPITAL……..	H
		CHURCH/MOSQUE….	I
		NGO…….....	J
		OTHER_____	
403	During Antenatal care visits, did you tell your nurse?	Yes…….	1
		No……	2
404	During Antenatal care visits, did your nurse talk to you about violence during pregnancy?	Yes……..	1
		No……...	2
405	Do you think it's acceptable for antenatal care nurses to ask pregnant women about experiences of domestic abuse if it leads to better care?	Yes……	1
		No……..	2

Appendix B: Help Card

INFORMATION CARD

Thank you for taking part in this study. I appreciate you taking the time. I understand that these questions were difficult for you to answer, but we can only understand women's experiences during pregnancy by hearing from women themselves. Here is a list of institutions that offer support and counseling to women who are dealing with the issues, we've discussed. Please contact them if you or any of your friends or family members require assistance. Their services are completely free, and they will keep anything said to them confidential.

THE NATIONAL GBV HELPLINE- CALL 1195
KIMBILIO GBV HELP LINE- CALL 1193
UWIANO SMS PLATFORM –SMS 10

Appendix C: University approval

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

BOARD OF POSTGRADUATE STUDIES

Office of the Director

Tel. 057-2501804
Email: bps@jooust.ac.ke

P.O. BOX 210 - 40601
BONDO

Our Ref: H152/4024/2018

Date: 21st May 2020

TO WHOM IT MAY CONCERN

RE: KEVIN O. NYAMONGO– H152/4024/2018

The above person is a bona fide postgraduate student of Jaramogi Oginga Odinga University of Science and Technology in the School of Health Sciences pursuing Master of Public Health. He has been authorized by the University to undertake research on the topic: ***"Determinants of Intimate Partner Violence among Pregnant Women Attending Antenatal Care in Bondo Sub County, Kenya".***

Any assistance accorded to him shall be appreciated.

Thank you.

for.

Prof. Dennis Ochuodho
DIRECTOR, BOARD OF POSTGRADUATE STUDIES

Appendix D: Ethical approval

COUNTY GOVERNMENT OF KISUMU
DEPARTMENT OF HEALTH

Telephone: 057-2020801/2020803/2020321
Fax: 057-2024337
E-mail: medsuptnpgh@yahoo.com
ceo@jaramogireferral.go.ke
Website: www.jaramogireferral.go.ke

JARAMOGI OGINGA ODINGA TEACHING & REFERRAL HOSPITAL
P.O. BOX 849
KISUMU

When replying please quote
IERC/JOOTRH /228/20

Ref: .....

4th August, 2020
Date.....

To: Kevin Onuonga Nyamongo

Dear Kevin,

RE: STUDY TITLE:
DETERMINANTS OF INTIMATE PARTNER VIOLENCE AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE IN BONDO SUB-COUNTY, KENYA

This is to inform you that ***JOOTRH IERC*** has reviewed and approved your above research proposal. Your application approval number is ***IERC/JOOTR/228/20.*** The approval period is ***4th August, 2020 – 4th August, 2021.***

This approval is subject to compliance with the following requirements;

i. Only approved documents including (informed consents, study instruments, MTA) will be used
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by ***JOOTRH - IERC***.
iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to ***JOOTRH - IERC*** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to ***JOOTRH - IERC*** within 72 hours .
v. Clearance for export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days upon completion of the study to JOOTRH - ***IERC***.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://oris.nacosti.go.ke and also obtain other clearances needed.

In case the case of study site is JOOTRH, kindly report to Chief Executive Officer before commencement of data collection.

Yours sincerely,

SECRETARY, IERC

Appendix E: Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE.TECHNOLOGY & INNOVATI

Ref No:782973

Date of Issue: 12/August/2020

RESEARCH LICENSE

This is to Certify that Mr.. Kevin Onuonga Nyamongo of Jaramogi Oginga Odinga University of Science and T been licensed to conduct research in Siaya on the topic: DETERMINANTS OF INTIMATE PARTNER VIOL PREGNANT WOMEN ATTENDING ANTENATAL CARE IN BONDO SUB-COUNTY, KENYA for the perio 12/August/2021.

License No: NACOSTI/P/20/6168

782973

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE.TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this do
Scan the QR Code using QR scanner application.

Appendix F: Research Clearance, Siaya County

COUNTY GOVERNMENT OF SIAYA

DEPARTMENT OF HEALTH AND SANITATION

E-mail: siayachd@gmail.com
ADJACENT TO JCC CHURCH
PHONE:
SIAYA TOWN

COUNTY HEALTH HEADQUARTERS
SIAYA COUNTY
P O BOX 597
SIAYA

Our Ref: CGS/CHD/RESEARCH/VOL. IV (14) **19th AUGUST, 2020**

The Sub-County Medical Officer of Health
Bondo Sub-County
SIAYA

The Medical Superintendent
Bondo Sub-County Hospital
SIAYA

RE: CLEARANCE TO CONDUCT A STUDY ON DETERMINANTS OF INTIMATE PARTNER VIOLENCE AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE IN BONDO SUBCOUNTY

Mr. Kevin Onuonga Nyamongo is a student at Jaramogi Oginga Odinga University of Science and Technology pursuing a Master's degree in Public Health. He intends to conduct the above referenced study in our Sub-County Hospital (Bondo).

The specific objectives include:

i. To assess the prevalence of IPV among pregnant women attending antenatal care in Bondo Sub-County
ii. To determine the factors associated with IPV during pregnancy among pregnant women attending antenatal care in Bondo Sub-County
iii. To examine the pattern of IPV disclosure among pregnant women attending antenatal care in Bondo Sub-County.

This is to notify you that the Research has been approved by the office of the undersigned, kindly accord him necessary assistance.

COUNTY DIRECTOR OF HEALTH
SIAYA COUNTY
19 AUG 2020
P.O. Box 597-40600,
SIAYA.

Kennedy Oruenjo, MCHD,MPH,BCHD,Dip (EHS)
County Director of Public Health
SIAYA

Appendix G: County Commissioner's (Siaya) Approval

REPUBLIC OF KENYA

OFFICE OF THE PRESIDENT

MINISTRY OF INTERIOR & CO-ORDINATION OF NATIONAL GOVERNMENT

E-Mail cc.siaya@yahoo.com
When replying please quote ref. & date

COUNTY COMMISSIONER
SIAYA COUNTY
P O Box 83-40600
SIAYA

CC/SC/A.31 VOL.III/96

28th August, 2020

Deputy County Commissioner
BONDO SUB COUNTY

RE: RESEARCH AUTHORIZATION – KEVIN ONUONGA NYAMONGO

The person referred to above from Jaramogi Oginga Odinga University has been authorized by the Director General/CEO, National Commission for Science, Technology and Innovation vide letter Ref. No. *NACOSTI/P/20/6168* dated 12th August, 2020 to carry out research on ***"DETERMINANTS OF INTIMATE PARTNER VIOLENCE AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE IN BONDO SUB COUNTY, KENYA"*** for the period ending **12th August, 2021**.

The purpose of this letter therefore is to ask that you accord him the necessary support as he carries out research in your Sub County.

NOTE: Due to the prevailing COVID-19 situation, he must adhere to the containment protocols as directed by the Ministry of Health.

Dennis Obiero
For: COUNTY COMMISSIONER
SIAYA COUNTY

Copy to: KELVIN ONUONGA NYAMONGO
Jaramogi Oginga Odinga University

County Director of Education
Siaya County.

Appendix H: County Director of Education (Siaya) Approval

REPUBLIC OF KENYA

MINISTRY OF EDUCATION

State Department for Early Learning and of Basic Education

COUNTY DIRECTOR OF EDUCATION
SIAYA COUNTY
P.O. BOX 564
SIAYA

E-mail: cdesiaya2016@gmail.com

When replying please quote
CDE/SYA/URA/10/VOL.1I/7

Monday, August 31, 2020

TO WHOM IT MAY CONCERN

RESEARCH AUTHORIZATION - MR. KEVIN ONUONGA NYAMONGO

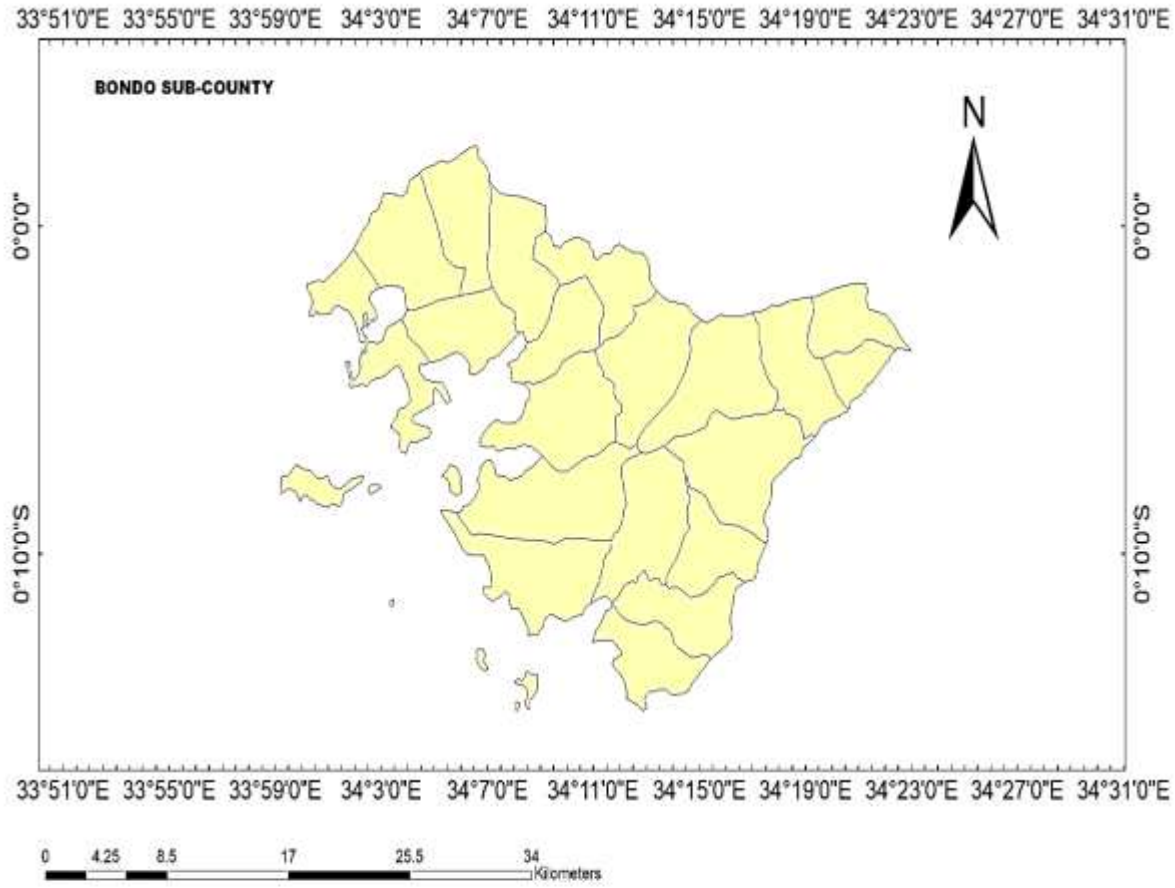
The above-named person has been mandated to carry out research in Siaya County vide research License No. **NACOSTI/P/20/6168** dated 12th August, 2020 This research study ends on 12th August, 2021

The research title is "***Determinants of intimate partner violence among pregnant women attending antenatal care in Bondo sub county, Kenya".***

Please accord him the necessary assistance in this County as he may require.

MILCAH ARUCHO
FOR: COUNTY DIRECTOR OF EDUCATION
SIAYA COUNTY

Appendix I: Map of Bondo Sub-County



Appendix J: Information sheet and study questionnaire (Kiswahili)

Kibali cha kushiriki
Kwa majina naitwa Kevin Onuonga, kutoka chuo kikuu cha Jaramogi Oginga Odinga, idara ya afya. Ningependa kukuomba ushiriki katika utafiti huu. Lengo kuu la fomu hii ni kukuwezesha kufahamu yale yote ambayo unahitajika kufahamu ili kukusaidia kufanya uamuzi kama utashiriki. Tafadhali soma fomu hii kwa makini. Unaweza kuuliza swali lolote linalohusiana na utafiti huu ikiwemo athari, manufaa na haki zako ukiamua kushiriki.

Lengo na manufaa
Utafiti huu unachunguza sababu zinazochangia wanawake wajawazito wapitie dhuluma (shida) za kinyumbani. Matokeo ya utafiti huu yatawawezesha wahudumu wa afya watafute njia ambazo zitatumika kulinda sio tu afya ya wanawake wajawazito wanaopitia shida hizi bali pia afya ya mimba yao.

Ushiriki na taratibu zitakazofatwa
Kushiriki kwako katika utafiti huu ni wahiari. Ukikubali kuhusishwa katika utafiti, utaulizwa maswali kadhaa. Maswali haya yatagusia maisha yako ya kinyumbani. Ukiulizwa swali lolote ambalo hautataka kujibu, unaeza tueleza na tutairuka.

Madhara na matatizo
Baadhi ya maswali utakayoulizwa yataguzia shida ambazo umepitia nyumbani na kwa hivyo yanaweza kukuhuzunisha. Unaruhusiwa kutojibu swali lolote ambalo hautataka kujibu au kujiondoa kwenye utafiti wakati wowote. Utaendelea kupata matibabu hata kama hautakubali kushiriki.

Siri
Majibu yako yote yatahifadhiwa kwa siri. Hakuna mtu yeyote nje ya utafitii huu atayekubaliwa kuona majibu yako. Nambari maalum itatumuka kukutambulisha wala si majina yako. Pia mahojiano yatafanywa katika mazingira ya siri.

Matokeo ya utafiti
Matokeo ya utafiti huu yataandikwa kwenye repoti ambayo nitaikabidhi idara ya afya ya chuo kikuu cha Jaramogi Oginga Odinga. Baadhi ya matokeo pia yatachapishwa vitabuni na mtandaoni. Ripoti hizi hazitataja jina yako au jina ya mshiriki mwingine yeyote. Niitaikabidhi hospitali hii ripoti zote za matokeo.

Gharama
Hautalipwa au kuhitajika kulipa chohcte ili kushiriki katika utafiti huu

Nambari za mawasiliano
Ikiwa kuna swali au swala lolote la ziada ambalo ungetaka kujua kuhusu utafiti huu unaweza kuwasiliana na:

- Mtafiti, Kevin Onuonga Nyamongo kutumia nambari ya simu 0708553038

- Supervisors: Dkt. Dan Onguru na Dkt. Sydney Ogolla P.O. Box 210, 40601 Bondo, Chuo Kikuu cha Jaramogi Oginga Odinga
- Kamiti ya uadilifu kwa utafiti ya Hospitali ya Rufaa ya Jaramogi Oginga Odinga (JOOTRH ERC) P.O.Box 849 Kisumu, Nambari ya simu: 057 2020801/2020803/2020321 Email: ercjootrh@gmail.com

PARTICIPANT CONSENT FORM KISWAHILI

Ikiwa unakubali kushiriki katika utafiti huu jaza fomu hii na utie sahihi

Mimi nimekubali kushiriki katika utafiti huu unaohusu shida ambazo akina mama wajawazito hupitia. Ninafahamu kwamba kujihusisha kwangu ni kwa hiyari. Ninaelewa kwamba ninauwezo wa kujiondoa kwenye utafiti wakati wowote nitakalo. Nimeelezwa kuhusu manufaa na madhara yanayokuja na utafiti huu. Nimehakikishiwa ya kwamba majibu yangu yote yatahifadhiwa vyema na kutumiwa tu kwa utafiti huu na kunufaisha jamii.

Jina_____

Sahihi_____ Tarehe_____

Dhibitisho
Nina dhibitisha yakwamba nimemueleza mshiriki kwa lugha anayoielewa lengo la utafiti huu na jinsi utafiti wenyewe utafanyika.

Jina_____

Sahihi_____Tarehe_____

Participant ID_____ Facility_____Date_____/_____/2020				
SEHEMU YA KWANZA				
NINGEPENDA KUANZA KWA KUKUULIZA MASWALI KADHAA KUKUHUSU				
101	Unamiaka ngapi? *ANDIKA UMRI*	_____		
102	Umewahi kuenda shule?	Ndio……	1	
		Hapana……..… …….....	2	➡ 104
103	Kiwango chako cha juu zaidi cha elimu ni gani?	Primary……..……	1	
		Secondary……..……..	2	
		Higher …….	3	
104	Unafanya kazi gani? Probe: uko na biashara au unajihusiha na ukulima wowote?	UTAALAMU(Serikali/mashirika binafsi).	1	
		Ukulima.....	2	
		Biashara……..…….	3	
		Sifanyi kazi……	4	
105	Una watoto wangapi? *RECORD NUMBER*	WATOTO_____		
106	Unajua hali yako ya HIV? *AKIJUBU NDIO MUULIZE* Hali yako ya HIV ni gani? *MKUMBUSHE: KUMBUKA SIO LAZIMA UJIBU SWALI HILI KAMA HUTAKI*	Negative……	1	
		Positive….....	2	
		Siijui…....……..…..	3	
		Hakutaka kujibu.….....	4	
107	Umeolewa? *KAMA HAJAOLEWA MMULIZE* Wewe na bwana/mpenzi wako au baba mtoto mnaishi pamoja?	Nimeoloewa…….….....	1	
		SIJAOLEWA(Naishi na baba mtoto) …..	2	
		SIJAOLEWA(Naishi peke yangu) ,….....	3	
108	Bwana/mchumba wako ana miaka ngapi?	_____		
109	Amewahi kuenda shule?	Ndio…….	1	
		Hapana……	2	➡ 111
110	Kiwango chake cha juu zaidi cha elimu ni gani?	Shule ya msingi……	1	
		Shule ya secondari.....	2	
		Elimu ya juu……	3	
111	Anafanya kazi? IF YES ASK- Anafanya kazi gani IF NO ASK- Ako na biashara yoyote au anajihusisha na ukulima au uvuvi(fishing)?	MTAALAMU(serikali/mashirika binafsi)..	1	
		Ukulima/uvuvi……	2	
		Biashara..……	3	
		Hafanyi kazi……	4	
112	Anakunywa pombe?	Ndio…….…….	1	
		Hapana……	2	➡ 201
113	Anakunya pombe mara ngapi?	Kila siku……..……..	1	
		Maramoja au mbili kwa wiki….	2	
		Mara moja au mbili kwa mwezi	3	

	SEHEMU YA PILI			
	Maswali ambayo nitakuuliza sasa ni kuhusu watu ambao hukusaidia. Ninaeza endelea?			
201	Katitka kijiji unachototoka unajuana na majirani wako vizuri?	Ndio……	1	
		Hapana……	2	
		Sijui……	3	
202	Ukipata shida yoyote nyumbani kwa mfano ugonjwa, unadhani majirani wako wanaweza kukusaidia?	Ndio……	1	
		Hapana……	2	
		Sijui…….	3	
203	Wazazi au ndugu na dada zako wanaishi karibu na penye wewe unaishi?	Ndio…….	1	
		Hapana…….	2	
204	Wewe huongea na wazazi wako au ndugu na dada zako mara ngapi? Kila wiki, mara moja kwa mwezi au maramoja kwa mwaka ama hauongei nao kabisa?	Kila wiki……..……	1	
		Maramoja kwa mwezi….	2	
		Mara moja kwa mwaka…	3	
205	Ukipata shida yoyote nyumbani, unadhani wazazi au ndugu na dada zako wanaeza kukusaidia?	Ndio……..	1	
		Hapana……	2	
206	Je wewe ni mwananachama wa kikundi chochote? IF YES: Wewe ni mwanachama wa kikundi gani IF NO, PROMPT Wewe huuenda kanisani/msikitini au chama chochote cha wamama? MARK ALL MENTIONED	Hapana……	A ➡	
		Kikundi cha wamama….	B	301
		Kanisa/ msikiti……	C	
		Other:_____ _____		
207	Kuna mtu yeyote ambaye amewahi kukuzuia kuhudhuria mkututano wa chama au kanisa? AKIJIBU NDIO ULIZA Nani alikuzuia?	Sijawahi kuzuiwa…….	A	
		Bwana/mpenzi…….……	B	
		Wazazi…….……..……	C	
		Other_____		

SECTION 3			
Watu wawili wanapokua kweye uhusiano huwa wanapitia mazuri na mabaya. Maswali ambayo nitakuuliza sasa ni kuhusu shida ambazo wanawake wengi hupitia na labda pia wewe umepitia.Tafadhali jibu haya maswali kwa usahihi kwa sababu majibu yako yanaweza kuwasaidia wamama wengi.Tunaweza ruka swali lolote lambalo hautataka kujibu. Sawa?			
301	Tangu upate mimba, bwana yako au mchumba wako amewahi	A) KAMA NDIO ENDA SEHEMU YA B NDIO HAPANA	B) JE JAMBO HILI LILIFANYIKA MIEZI 12 KWABLA YA UJAUZITO NDIO HAPANA
	1. Kukutusi?	1 2	1 2
	2. Kukuaibisha mbele ya watu?	1 2	1 2
	3. Kukupigia makelele kwa hasira?	1 2	1 2
	4. Kukutisha kwamba atakupiga au atapiga watoto wako au marafikI zako	1 2	1 2
302	Tangu upate mimba bwana yako au mchumba wako amewahi	NDIO HAPANA	NDIO HAPANA
	1. Kukupiga kofi?	1 2	1 2
	2. Kukusukuma ukaanguka?	1 2	1 2
	3. Kukugonga ngumi au kukurushia kitu ambacho kilikuumiza?	1 2	1 2
	4. Kukupiga teke?	1 2	1 2
	5. Kukunyonga au kukuchoma ?	1 2	1 2
	6. Kukutisha na kisu au kiboko au silaha yoyote?	1 2	1 2
303	Tangu upate mimba, bwana yako au mchumba wako amewahi	NDIO HAPANA	NDIO HAPANA
	1. Amewahi kukulazimisha kufanya mapenzi kama hutaki ?	1 2	1 2
	2. Umewahi fanya mapenzi na yeye kwa sababu uliogopa angekupiga kama ungekataa ?	1 2	1 2
	3. Amewahi kikulazimisha ufanye tendo lolote la kimapenzi lenye lilikuaibisha?	1 2	1 2
304	Angalia kama amejibu ndio sehemu lolote la swali 301A Amejibu ndio sehemu lolote la swali hilo?		NDIO…..……1 HAPANA…...2
305	Angalia kama amejibu ndio sehemu lolote la swali 302 A Amejibu ndio sehemu lolote la swali hilo?		NDIO…..……1 HAPAN...…..2
306	Angalia kama amejibu ndio sehemu lolote la swali 303 A Amejibu ndio sehemu lolote la swali hilo?		NDIO..……1 HAPANA..…..2

SEHEMU YA NNE			
ANGALIA MASWALI 304,305, 306	Mshiriki alijibu NDIO swali moja, mbili au yote matatu ↓	Mshiriki alijibu HAPANA maswali yote matatu → GO TO SECTION 5	
Umenieleza kwamba kuna vitu ambazo mchumba wako/ bwana yako alikufanyia katika muda huu wa ujauzito wako.Ningependa sasa kukuuliza maswali kuhusu nini ulifanya baada yakupitia mambo haya			
401	Uliambia mtu yeyote kuhusu shida hizi ulizokua ukipitia?	Ndio……	1
		Hapana……..	2 → 403
402	Uliambia nani? *MARK ALL MENTIONED* Probe: -Kuna mtu mwingine uliambia?	Rafiki……..…	A
		Wazazi……..	B
		Ndugu/dada……..…….....	C
		Mjomba/ shangazi……..	D
		Watoto……	E
		Jirani……	F
		Polisi……	G
		Daktari…..…….	H
		Kanisa……..…..	I
		Chama…….....	J
		Other_____	
403	Ulipokuja clinic uliambia daktari wako kuhusu shida hizi?	Ndio……	1
		Hapana…….……..	2
404	Ulipokuja clinic daktari alikuuliza kama unapitia shida hizi ?	Ndio…….	1
		Hapana……..	2
405	Kwa maoni yako ni vizuri madaktari kuuliza kina mama wajawazito kama wanapitia shida hizi ikiwa itasaidia kulinda afya ya akina mama na afya ya mimba yao?	Ndio……..	1
		Hapana……	2

Appendix K:Information sheet and study questionnaire (Luo Version)

Weche mokwongo
Nyinga en Kevin Onuonga. An japuoinjre e mbalariany mar Jaramogi Oginga Odinga. Atimo nonro ewi chandruok mar mier ma mine mapek kale .Daher mar ruaki e nonro matimoni.Fom ni bo konyi e yie dwoko penjo ka nyakla. Akwayi ni isome kuom okang ma malo. Inyalo penjo penjo moro a mora kitieko.

Gimo miyo atimo nonro
Nonro ni itimo ni mondo ange chandruok manyalo kelo shida ma mine kale e dala.

Chiuruok
Chiuruok mari eyor nonroni en nono.En yiero mari mar bedo achiel kodwa e nonroni. Yiero mari ok nyal kelo ni chandruok moro amoro.Ibiro kwayi mondo ikony e filo form ni.Ka iyie bet e nonroni to nyamiyo moro biro penji penjo manie otasni kaluwore kod weche ma isekadhe kalure kod lwenje ma mako joma mine e kinde magi pek.Dwoko mari ibiro ndiki e kalatas.Penjo ni biro kawo kinde mar nus saa kata dakika piero angwen kod abich 30-45.

Ber mar nonroni
Onge ber ma sani mibiro yudo achiel ka chiel machalo kaka pesa kata gima chielo.Ber mare en ni wach mibiro miyowa biro bedo kony ne jolony mag yore thieth ewi lwenje ma e kind joma odak to moloyo seche ma miyo pek.Nonro biro konyowa ngeyo kaka wanyalo kedo kod lwenje ma himo mine mapek to moloyo mondo wageng lwenje ma hinyo mine ekinde ma gipek.

Rachne
Rach mar bedo e nonro ni en ni moko kuom penjo mibiro penji nyalo mulo weche mag dak mopondo kendo moko nyalo miyo ng'ato mirima. Ka penjo moro iwinjo ka ok inyal duoko thuolo nitie ni inyalo kale kendo dhi nyime kod penjo ma moko.

Ratiro mar nonroni
Weche ma ichiwo e nonroni ibiro kan ma onge ngat machielo ma ongeyo, en ekindi kod ja tim nonro,machielo en ni nyingi ok biro ndiki ka mora amora.

Chiwo dwoko mar nionroni
Duoko mar nonro a biro ndiko e kalatasa mar penj matimo e mbalariany, moko kuomgi ibiro chiu ne jo tim nonro ma olony mondo ondikgi e oboke wa mapachoka kata mana e buge ma jolony ndiko e wi lwenje mag mier ekind mine ma pek. Onge ndiko moro amora ma biro fwenyo ni in e jachiu nonro.

Kuom penjo mamoko
Ka in kod penjo moro amora inyalo tudri kodwa kokalo kuom

- Jatim nonro mari, Kevin Onuonga e namba mar sim 0708553038
- Ja lu nonroni en Daktarin Dan Ounguru kod Daktarin Sydney Ogolla p.o box 210-40601 bondo,bad kar thieth momakore kod ler mar aluora, mbalariany mar jaramogi oginga Odinga .Namba mar sim en 0721818368
- Kar timo nonro mar Jaramogi Oginga Odinga P.O Box 849 Kisumu namba mar sim en 057-2020801/2020803/20203221, email: ercjootrhgmail.com

Consent form

Ka iyie bedo e nonroni to wakwai mondo iketnwa koki piny ka

A yie bet e nonroni,osenyisa weche moluwore kod nionroni mitimokod rach mar bedo nonroni. Angeyo ni bedo e nonroni en e yor chiuruok,kendo angeyo ni bedo mara ka ok nyal chocho ratiro mara moro amora,bende an kod ngeyo ni thuolo nitie ma anyalo weyo ekore kendo penjo ma ok an go thuolo bende anyalo weyo ma ok adwoko. Bende angeyo ni weche ma achiwo gin weche ma opondo.

NYing ja nonro_____

Seyi_____ Tarik_____

Nonro mar jachiu nonro

Asechiwo nonro ma owinjere ne jal mane atimo go nonro e dhok duto ma owinjo dholuo.wech mar siri mar nonro ni bende ongeyo.

Nying jachiw nonro_____

Seyi_____Tarik_____

Participant ID_____ Facility_____Date_____/_____/2020				
SECTION 1				
	Da her chako kod penjo ma ka kori mondi			
101	In ja higni adi?	Hiki (years)_____		
102	Be ni dhi e skul?	En kamano...	1	
		Ok en kamano...	2	➡ 104
103	Isomo nyaka okang' mane? (*NDIK OREYO MOCHOPE)* Isomo nyaka okang' mane? (*NDIK OREYO MOCHOPE)*	Praimari…	1	
		Sekondar…	2	
		Kole…	3	
104	Nitie kuma ondikie tich sani? IF YES PROBE -En tich mane mitimoga?	Gi Sirkal kata Odanda ma ok mar sirkal…	1	
		Pur…	2	
		Ohala…	3	
		Ok en kamano…	4	
105	In kod nyithindo adi?	Nyithindo_____		
106	Be ingeyo chal mari mar kute mag ayaki? *KA OYIE PENJE* Chal mari en mane? *Par ne ja chiu dwoko ni en kod thuolo mar weyo ka ok en thuolo duoko penjono*	Ionge gi kute…	1	
		In gi kute…	2	
		Akia….	3	
		Pok oyangi…	4	
107	Bende osekendi? *KA JADUOKO POK OTEDO, PENJE GE NIYA?* Bende idak gi jaodi? Bende osekendi? *KA JADUOKO POK OTEDO, PENJE GE NIYA?* Bende idak gi jaodi?	Pod nitiere e kend…	1	
		Pok okendo/otedo (odak gi wadgi)…	2	
		Pok okendo/otedo (opogo dak)…	3	
108	Jaodi/Chuori en ja higni adi?	Higa (higni)_____		
109	Bende ne odhi e skul?	En kamano…	1	
		Ok en kamano…	2	➡ 111
110	Skul nochopo e okang' mane?	Praimari…	1	
		Sekondar…	2	
		Mamalo…	3	
111	Bende en ng'at mondik e tich? PROBE :Tich mane ma ojaga timo pile? EN TICH MACHALO NADE	Gi Sirkal kata Odanda ma ok mar sirkal…	1	
		Pur/lupo…	2	
		Ohala…	3	
		Oken kamano…	4	
112	Bende jaodi/chuori madho kong'o	En kamano…	1	
		Ok en kamano…	2	➡ 201
113	Chuori madho kong'o e ohinga machalo nade?	Pile…	1	
		Nyadichiel koso nyadiriyo e juma…	2	

		1-2 e dwe...	3	

SECTION 2				
Maswali ambayo nitakuuliza sasa ni kuhusu watu ambao hukusaidia. Ninaeza endelea?				
201	E gweng kuma udakie be ji ni thuolo kod jowadgi maber?	En kamano …….....	1	
		Ok en kamano…….……	2	
		Ok ang'eyo……..……..	3	
202	Ka ngato e odu kata anywola maru tuo be jabathe nyalo tere osiptal?.	En kamano ……...….	1	
		Ok en kamano……	2	
		Ok ang'eyo……..	3	
203	Be oweteni kata,nyimineni kata jonyuol odak machiegni ma unyalo limoru?	En kamano…….	1	
		Ok en kamano……	2	
204	Wewe huongea na wazazi wako au ndugu na dada zako mara ngapi? Kila wiki, mara moja kwa mwezi au maramoja kwa mwaka ama hauongei nao kabisa?	Kila wiki…..……	1	
		Maramoja kwa mwezi..	2	
		Mara moja kwa mwaka…	3	
205	Ka in kod chadruok moro be jonywolni kata nyithindu nyalo konyi?.	En kamano…….….	**1**	
		Ok en kamano……	**2**	
206	Be idhiga e buche mag girube kata kanisa? (Chama) KA OYIE PENJE Riurwok ila mage ma idhiyega? none: be idhiga kanisa? Be idhiga e buche mag mine? MARK ALL MENTIONED	Onge…….	A ➡	301
		Riuruok mar mine..…..……	B	
		Kanisa……	C	
		Mamoko:_____		
207	Bende osega tami donje e bura kata timo tije mag riuroge KA EN KAMANO, PENJ Ng'ano mane otami?	Ok notam……...….	A	
		Jaodi/chuori……..	B	
		Jonyuol…….……	C	
		Mamoko_____		

SECTION 3			
Kaji ariyo ni e kanyakla,, giriwo kinde marachgi mabeyo .Penjo maluwo wuoyo ewi gigo matimore ne mon mangeny kod ma jaodi ma ingo sani bende osetimoni.Bende asingoni ni dwoko duto ma ichiwo ibiro pandi ma ok yang e lela kendo okm bviro chuni ni idwok penjo ma ok idwar duoko.Be anyalo dhi mbele>			
301	E kinde mane ipek,bende jaherani kata chuori osetimoni gigi?	A) Ka en kamano, dhi mbele gi B to ka oken kamano to kal nyaka e penjo ma mbele KAMANO OKKAMANO	B) Ma e bende osetimore e dweche 12 mokalo kapok imako ich? KAMANO OKKAMANO
	1. Chuanyi kata miyo iwinyo marach iwuon?	1 2	1 2
	2. Kuodo wiyi e dier oganda?	1 2	1 2
	3. Bende ne osetimoni gimoro amora manobuogi eyo moro amora (kuom ranyisi,eyo,mane obedo ka orangie,goni koko kata tuomoni gik moko	1 2	1 2
	4. Buogi kata hinyi kata buogo ngat ma ingiyogo?	1 2	1 2
302	E kinde mag ich ma in go sani, bende jaodi	KAMANO OKKAMANO	KAMANO OKKAMANO
	1. Osepadi kata bayi gi gimoro manyalo hinyi?	1 2	1 2
	2. Osedhiri matek manyalo hinyi?	1 2	1 2
	3. Goyi kod angum kata gimoro manyao hinyi?	1 2	1 2
	4. Gweyi, ywayi e loo kata goyi?	1 2	1 2
	5. Deyi kata wang'i kong'eyo?	1 2	1 2
	6. Bwogi ni obotiyo go kata otiyo gi pala kata silaha moro amora kuomi?	1 2	1 2
303	E kinde mag ich ma in go sani, bende jaodi	KAMANO OKKAMANO	KAMANO OKKAMANO
	1. Osechuni to mondo inind kode kata ka ok ni dwar?	1 2	1 2
	2. Bende ne isa nindo gi ng'ato kane ok idwar nikech niluoro gima onyalo timoni?	1 2	1 2
	3. Bende ne osechuni mondo itim timbe mag nindruok mane richo ni kata mano omiyi wich kuot?	1 2	1 2

304	VERIFY IF SHE ANSWERED YES TO ANY OF THE **QUESTIONS IN 301 A**	YES ……...…….1 NO ……..……..……..2
305	VERIFY IF SHE ANSWERED YES TO ANY OF TCE QUESTIONS IN **302 A**	YES ……...……...1 NO ……..…….…..……...… 2
306	VERIFY IF SHE ANSWERED YES TO ANY OF THE **QUESTIONS IN 303 A**	YES …….……...1 NO ……..…..…….2

SECTION 4			
NG'I PENJO MAR 304,305 306	ODWKO KAMA KA OK KAMANO PENJO ACHIEL KATA ADEK GO DUTO ↓	ODWOKO NI DAWE E WI PENJO DUTO ADEK → Skip to section 5	
Koro adwa penjo gima ni timo bang'e ka ni kalo e chandruok manikale ka ni pek *PENJE E SHIDA DUTO MA NOWACHO NI NOKALE E PENJO MAR 301A, 302A AND 303A* e.g. *Ka Jahera ni nopadi ka thiri e mdier oganda ka ni pek?*			
401	Be ninyiso ng'ato moro a mora?	Ndio……....	1
		Hapana……..……	2 → 403
402	Ne I nyiso ng'a? *Probe: -Be ni nyiso ng'ato a ngata*	Osiepe……..	A
		Jonywuol ni……..	B
		Owadu kata nya meru……..	C
		Wya kata neru……	D
		Nyithindo……..	E
		Jirande ni……..	F
		Polise……..	G
		Laktar kata jachieth mora amora..	H
		Jadolo……	I
		Buche mek mine kata riuruok moro amora ma ok mar sirkal……..	J
		Moro_____	
403	Kaka ni biro e kar thieth be niyiso jathieth kata laktar?	Kamano……..	1
		Ok en kamano……..	2
404	Laktachi kata jathieth ni ne oloso kodo nikech chandruok mag dala?	Kamano……..	1
		Ok en kamano……..	2
405	Kar weche gi be inyalo yie ne ja thieth mondo openj ji kar od thieth e chandruok ma gi kale e dala mond gi kony?	Kamano……..	1
		Ok en kamano ……..	2