PREVALENCE AND ASSOCIATED FACTORS OF INTIMATE PARTNER VIOLENCE AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE CLINICS AT MOSHI MUNICIPAL COUNCIL, KILIMANJARO, TANZANIA

Mariam Lawrence Barabara

MSc (Midwifery & Women Health) Dissertation
Muhimbili University of Health and Allied Sciences
October, 2017

Muhimbili University of Health and Allied Sciences

Department of Community Health Nursing

PREVALENCE AND ASSOCIATED FACTORS OF INTIMATE PARTNER VIOLENCE AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE CLINICS AT MOSHI MUNICIPAL COUNCIL, KILIMANJARO, TANZANIA

By

Mariam Lawrence Barabara

A Dissertation Submitted in (Partial) Fulfillment of the Requirements for the Degree of Master Science (Midwifery and Women's Health) of

Muhimbili University of Health and Allied Sciences
October, 2017

CERTIFICATION

The undersigned certify that they she has read and hereby recommend for acceptance by Muhimbili University of Health and Allied Sciences a dissertation entitled ***''Prevalence and associated factors of intimate partner violence among pregnant women attending antenatal care clinics at Moshi Municipal council, Kilimanjaro, Tanzania ''*** in (partial) fulfillment of the requirements for the degree of Master of Science (Midwifery & Women Health) of the Muhimbili University of Health and Allied Sciences.

_____

Dr. Edith A.M Tarimo (RN, PhD)

(Supervisor)

_____

Date

DECLARATION AND COPYRIGHT

I, **Mariam Lawrence Barabara**, declare that this **dissertation** is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

Signature…… **Date**…….

ACKNOWLEDGEMENTS

First and foremost, I thank God for giving me wisdom and strength to conduct this study, otherwise all this would not have been possible.

I would like to express my deepest sincere gratitude and thanks to my supervisor Dr. Edith Tarimo for her valuable guidance, encouragement, sincere coordination, precious suggestion, heartfelt support and sincere effort through proposal preparation to the production of this dissertation.

I am deeply grateful to Dr. Kohi, my research teacher for her commitment in teaching the subject, together with other lecturers for they laid a good foundation for my research knowledge. Also my great and respectful gratitude goes to Mr. Gibson Kapanda for his valued statistical support in data analysis.

I would like to express my great appreciation to the management and all staffs of Majengo Health Centre, CCP Health Centre, Pasua Health Centre, Bondeni Dispensary, Kiboriloni Dispensary, Msaranga Dispensary and Njoro Dispensary and all pregnant women who participated in this research, for without their sincere cooperation, this research would not be completed.

My heartfelt appreciation goes to my Dear husband Nicholaus Paul Ong'om and all my family members, particularly, my beloved daughter Noella who provided me wholehearted support to fulfill my studies and mostly in successful completion of this thesis. I cannot stop expressing my deepest special thanks to my entire family members, my colleagues and friends for their constant advices, love, support and encouragement during my study.

Lastly but not least, I am very grateful to the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) for granting me the training scholarship and funding to conduct this research.

DEDICATION

This work is dedicated to my late father Lawrence Barabara Kungube (who passed away during data collection) and my mother Secilia L. Barabara for laying a foundation to my studies and teaching me to maintain my dignity as a woman.

MAY THE ALMIGHT GOD BLESS YOU RICHLY!

ABSTRACT

Background: Intimate partner violence (IPV) during pregnancy represents a field of inquiry of vital importance, since pregnancy is a delicate period when women are expected to be protected from violence. The aim of this study was to explore the prevalence and factors associated with IPV among pregnant women attending antenatal care clinic (ANC) at Moshi municipal council, Kilimanjaro Region, Tanzania.

Materials and Methods: A descriptive cross-sectional design using quantitative approach was conducted in seven health facilities. A total of 340 participants were enrolled using systematic random sampling. Data were collected for four consecutive weeks, using a structured questionnaire which was administered in Kiswahili language. Data were analyzed using SPSS version 21.0 software, and Chi-square test was used to determine the associations.

Results: The mean age of 340 participants was 26.3 years (±6 SD). The overall prevalence of IPV during pregnancy was found to be 49.4% (n=168). Sexual violence was the most common (33%), followed by emotional (29%) and then physical (11%). Furthermore, IPV during pregnancy was significantly associated with: polygamous relationship (OR=0.5), unilateral choice of partner (when the male partner or his relatives choose the female partner without her consent) (OR=4.3), unintended pregnancy (OR=1.7), rare/no control over household expenditures (OR=3.5) and had partner who frequently consumed alcohol (OR=0.4).

Conclusions: Nearly half of women experienced intimate partner violence during pregnancy. Sexual violence appears to be the most common type of IPV followed by emotional and physical IPV. Therefore, antenatal care clinic may represent a unique opportunity to identify and screen for IPV victims, and refer the victims to obtain relevant services.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ANC	Ante Natal Care
CHMT	Council Health Management Team
DRCHCO	District Reproductive and Child Health Coordinator
DV	Domestic Violence
FBO	Faith Based Organisation
HIV	Human Immunodeficiency Virus
IPV	Intimate Partner Violence
IRB	Institutional Review Board
MMO	Municipal Medical Officer
MNH	Muhimbili National Hospital
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MUHAS	Muhimbili University of Health and Allied Sciences
NBS	National Bureau of Statistics
PI	Principle Investigator
RA	Research Assistant
SPSS	Statistical Package for Social Sciences
STI	Sexually Transmitted Infections
URT	The united republic of Tanzania
VAW	Violence Against Women
WHO	World Health Organization

DEFINITION OF TERMS

Conceptual definitions

Intimate Partner Violence (IPV) during pregnancy is also called Domestic Violence (DV). It is an application of physical, sexual, or psychological and/emotional violence or threats of violence on a pregnant woman by current or former partner or spouse or boyfriend, or any other family member (WHO, 2011).

Physical violence refers to intentional use of physical force with the potential to cause death, disability, injury, or harm. This includes being scratched, slapped or thrown at something that could hurt, biting, shaking, pushed or shoved, hit with a fist or something else that could hurt, kicked, dragged, choked, burnt or beaten up (Makayoto et al. 2013).

Sexual violence refers to the use of physical force to have sexual intercourse against her will (attempted or completed sex acts). This includes harassment, forceful anal penetration, raped, attempted rape, marital raped, abuse/ exploitation (Semahegn & Mengistie, 2015) .

Psychological or emotional violence: Refers to being insulted or made to feel bad about one self, humiliated or belittled in front of others, intimidated or scared on purpose or threatened with harm. This includes humiliation, control, withholding of information, deliberately making someone feel diminished or embarrassed, isolation from contacts (Kabeer, 2014).

Economic violence: Acts of economic violence includes denial of right to own property, denial of access to money or other basic resources (Laisser, Nyström, Lindmark, Lugina, & Emmelin, 2011).

Operational definitions

Family members in this study includes current/former partners/husband, father, mother, mother-in-law, father-in-law, brother, sister, brother-in-law and sister-in-law.

Intimate partner in this study is a spouse, companion or boyfriend with whom the pregnant woman is having or had a relationship with.

Perpetrator of violence in this study is a person responsible for infliction of any type of violence to the pregnant woman.

Pregnant women in this study are expectant women seeking antenatal care irrespective of the gestation age and number of visits to the antenatal clinic.

Polygamy in this study is regarded as a state in which a male partner lives either formally or informally with more than one woman in one house or different houses. This male partner, in this relationship, is responsible for providing basic needs to these women.

CHAPTER ONE

1:0 INTRODUCTION

1:1 Background

Women are vulnerable to violence from many different sources, although most violence against women is perpetrated by an intimate partner. Intimate Partner Violence (IPV) among women is a worldwide problem which can lead directly or indirectly to serious public health effects. IPV can directly cause serious injury, physical disability or death meanwhile indirectly it could lead to mental disorders, substance use, delay in seeking antenatal care, lack of fertility control and personal autonomy. This violence can be in form of physical aggression, sexual coercion, and psychological/emotional abuse or controlling behaviors by current or former partner or spouse (WHO, 2013). According to the World Health Organization's multi-country study, between 15% and 71% of women are estimated to suffer from IPV in their lifetime, where the prevalence is highest in Africa, Eastern Mediterranean and South-East Asian regions (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). In Tanzania Mainland (Dar es Salaam, Kagera, Mbeya, Mwanza, Tabora and Ruvuma), it has been reported that 65% (n=308) among ever married or ever partnered women experienced any form of IPV in their lifetime (Kazaura, Ezekiel, & Chitama, 2016).

Previous studies have identified some associated factors that may increase IPV during pregnancy such as young age, being married, low social-economic status, witnessing maternal abuse in childhood, multiparous, polygamous union and having an alcoholic partner or low level education (Shamu et al., 2011; Makayoto et al., 2013). The overall IPV prevalence during pregnancy is reported to be 2.3% to 57.1% globally; Africa being one of the highly affected regions (Shamu et al., 2011). Out of 72 studies from 23 countries (including Tanzania) conducted between 1994 and 2013, the prevalence of IPV among pregnant women was between 1.2% and 63.1%, whereas the highest prevalence was from African studies (Mercedes & Lafaurie, 2015). A study conducted at Kisumu Hospital in Kenya recognized that 37% (n=110) of pregnant women experienced IPV during pregnancy, while psychological

violence was the most common (29%), followed by sexual violence (12%) and physical violence (10%) (Makayoto et al., 2013).

In most settings, the prevalence was seen to be constant in younger age groups (15–35 years), and appeared to decline very slightly after the age of 35 years. IPV during pregnancy is more common than other maternal health conditions (pre-eclampsia, gestational diabetes, hypertension) that are routinely screened for in antenatal care. Global initiatives to reduce maternal mortality and improve maternal health must devote screening for IPV as an integral part of routine antenatal care (Devries et al., 2010; Stöckl, March, Pallitto, & Garcia-Moreno, 2014). A longitudinal study conducted in Moshi Municipal Council among pregnant women was only focusing on the factors influencing the disclosure of IPV to someone, the proportion of women disclosing to someone was found to be 23.3%, which is less than a quarter of all women who were exposed to physical, sexual and/or emotional abuse (Katiti, Sigalla, Rogathi, Manongi, & Mushi, 2016).

IPV during pregnancy has been contributed by gender, ethnic-cultural, social and economic aspects (Mercedes & Lafaurie, 2015). In a study conducted in urban South Africa, psychological violence showed a great degree in IPV during pregnancy (Groves, Kagee, Maman, Moodley, & Rouse, 2012), while in a rural districts of South Africa, physical abuse prevailed (Matseke, Peltzer, & Mlambo, 2012). Furthermore in Kenya and Nigeria, psychological violence seems to be most prominent during pregnancy (Makayoto et al., 2013; Ezeanochie, Olagbuji, Ande, Kubeyinje, & Okonofua, 2011). In Rwanda, the prevailing type of violence was physical abuse (Rurangirwa, Mogren, Ntaganira, & Krantz, 2017).

If the health status of pregnant women and their unborn babies are to be improved, effective interventions against IPV must be provided, and this will only be effective if local data on the types and factors associated with IPV are identified. Therefore, this study is very vital since identification of factors associated with IPV among pregnant women attending antenatal care clinic (ANC) have provided new insights for future interventions.

1:2 Statement of the Problem

Intimate partner violence against pregnant women affects their physical, psychological, sexual, spiritual and social well-being. Traditionally, women during pregnancy are protected against any form of violence (Stöckl, March, Pallitto, & Garcia-moreno, 2014). Despite this general believe, several studies show that many women are violated by husband/partner during pregnancy. Study done by Mercedes & Lafaurie, (2015) among 23 countries including Tanzania revealed that the prevalence of IPV among pregnant women was between 1.2% and 63.1%, whereas the highest prevalence was from African countries. Another study conducted in Dar es Salaam, found that 27% of pregnant women experienced IPV, with 18% and 20% ever experienced physical and sexual violence respectively (Mahenge, Likindikoki, Stöckl, & Mbwambo, 2013). Also, the data from Mwanza Region, reported that 33.8% of pregnant women had an antenatal depression due to poor relationship with their partner and low socio-economic status (Rwakarema, Premji, Nyanza, Riziki, & Palacios-Derflingher, 2015).

Available literature from World Health Organization (2013) and Rwakarema et al., (2015) revealed that IPV is a serious public health problem in Tanzania because of its prevalence and documented negative effect on pregnancy outcome. The common documented negative effects are low birth weight, preterm labour, miscarriage, mental disorder, maternal mortality, neonatal death and Sexually Transmitted Infections (STIs) including HIV compared to non-abused women. From the above facts, it is evident that women from Tanzania are victim to violence during pregnancy.

Experiencing IPV during pregnancy is associated with a multitude of pregnancy-specific behaviors. Research has shown that women abused during pregnancy are twice as likely to miss three or more antenatal care (ANC) visits or initiate ANC later than recommended, compared to non-abused counterparts (Cha & Masho, 2014; Alhusen, Ray, Sharps, & Bullock, 2015).

Despite the fact that the government of Tanzania through the Ministry of Health (now called MoHCDGEC) in collaboration with other stakeholders, has developed policy and management

guidelines, including a plan of action to eliminate and prevent gender based violence (GBV) (URT, MoHSW, 2013), there still violations documented. A longitudinal study conducted in Moshi Municipality reported only 23.3% (N=79) disclosed IPV to someone, which was less than a quarter of all pregnant women who were exposed to abuse (Katiti et al., 2016). Although prevalence of IPV has been reported in Tanzania, few studies have been documented to investigate prevalence and factors associated with IPV against pregnant women. This research intended to investigate and reveal the prevalence and factors associated with IPV in Moshi Municipality.

1:3 Rationale of the Study

IPV against pregnant women is a significant social and public health concern in Tanzania. This violence can be in the form of physical, sexual, and psychological abuse by current or former sexual partner. If the health status of pregnant women and their unborn babies concern IPV are to be improved, then the local data on the factors associated with IPV should be identified.

The findings from this study provide the information to health care providers including midwives about prevalence and factors influencing IPV among antenatal mothers, in Moshi Municipality. Thus, increase the number of studies in Tanzania, and provide a door for identifying IPV victims during pregnancy.

Furthermore, the findings of the study may be used to design health system interventions that can address the problem. Additionally this study provides the researchers with recommendations and opportunities to undertake further studies on the issue of IPV against pregnant women in similar contexts.

1:4 Research questions

1. What is the prevalence of intimate partner violence during pregnancy?
2. What are the types of intimate partner violence experienced during pregnancy?
3. What are the factors associated with intimate partner violence among pregnant women?

1.5 Objectives

1.5.1 Broad objective

The broad objective of this study was to explore the prevalence and factors associated with intimate partner violence among pregnant women attending antenatal clinic (ANC) at Moshi Municipal Council, Kilimanjaro Region, Tanzania.

1.5.2 Specific objectives

1. To determine the prevalence of intimate partner violence during pregnancy among antenatal mothers in Moshi Municipal Council.
2. To identify types of intimate partner violence experienced during pregnancy among pregnant women attending antenatal care (ANC) in Moshi Municipal Council.
3. To assess factors associated with intimate partner violence against pregnant women attending antenatal care (ANC) in Moshi Municipal Council.

1:6. Conceptual Framework for prevalence and factors associated with intimate partner violence among pregnant women

A conceptual framework used in this study has been adopted and modified from the original framework based on domestic violence against women and associated factors in Ethiopia (Semahegn & Mengistie, 2015). The application of this model provides a framework for prevalence and associated factors of intimate partner violence among pregnant women attending antenatal care at Moshi Municipal Council-Kilimanjaro, Tanzania.

In the modified model, the domestic violence against women changed to Intimate partner violence during pregnancy, and the four associated factors have been expanded to meet the objectives and context of this study.

According to this model, intimate partner violence against pregnant women depends on demographic factors, husband/partner factors, family factors, and community factors.

Demographic factors (age, tribe, religion, education status, occupation status, area of residence and types of pregnancy) can influence IPV. These are female based factors which independently contribute to the occurrence of the act of violence. For example, a girl who is below 18 years old is not matured enough to reason the later consequences of engagement into early sexual relationship and she is usually easily being trapped with just small gifts (Abdurashid, 2013). Likewise, she is unable to fight for her right and therefore easier to be abused by old men. Tribe and religion, general power given to one partner and left another inferior can also contribute to IPV. For example, most African tribes see women as luxurious material/service and reproductive machinery in the society and this may influence IPV due to the power which men have (Makayoto et al., 2013; Shamu, Abrahams, Zarowsky, Shefer, & Temmerman, 2013). Occupation status and level of education may influence decision making process towards IPV. E.g. A woman who is economically dependent on her husband (perpetrators) to win her bread may be exposed to violence as this makes her remaining in the relationship (Rurangirwa et al., 2017) . Also a woman with low level of education may not be able to defend herself for lack of awareness as to how to protect her right from male violence. Concerning the area of residence, a previous study conducted in South Africa, suggested that women in rural area have higher IPV prevalence compared with urban women, which could be due to hiding violence and a disparity in access to services (victims often have barriers to transportation because their partners do not support them to access available health facilities), which help to intervene or prevent the violence (Peek-Asa et al., 2011). A woman with unintended type of pregnancy is more likely to experience psychological abuse from herself or her partners or her family, who blame her for getting pregnant (Moore, Frohwirth, & Miller, 2010).

On the other hand, family related factors such as types of marriage, number of live children, head of household, choice of partner and power of decision making also may influence IPV (Makayoto et al., 2013). Thus, types of marriage such as polygamy might influence IPV due to the issue of jealousy and unequal love among women partners, hence, resulting in increasing IPV. Number of live children, head of household and power of decision making may limit woman's access to healthcare, including family planning which aggravates health problems associated with IPV. Also, when both parties choose each other, IPV doesn't exist as compared to when the male partner or his relatives choose the partner without her consent by directing going to her parents/guardian. Husband/partner related factors such as age, education level and occupation are the individual weakness of offenders. Moreover, community related factors such as traditional gender norms and attitude towards wife beating are the cultural issue that in some ways ignores violent behavior, and hence influence partner violence. E.g. If there are no preventive punishments against perpetrators such as not recognizing marital rape as a crime can increase IPV. For instance marital rape is not recognized as a crime under Tanzania Law (T. P Code, 2012). Therefore, rape committed by a husband against his wife is considered as norm and health phenomenon.

Finally, it seemed that one element of certain factor may command the other factor then influence IPV. Thus, demographic factors and family related factors may dictate each other to influence IPV. For example religion such as Islam may influence types of polygamous marriage by giving a male partner power/right to do so. Tribes such as Kurya from Musoma-Tanzania may influence the unilateral (one sided) choice of partner, which contribute to the occurrence of IPV. Moreover, husband/partner factors can influence both family factors and community factors to influence IPV. For example, the economic position of male partner may also have impact on the types of marriage and woman may experience violence as a normal part of life due to economic dependence on her husband. To sum up, what has been stated under conceptual frame work, the presented factors may influence IPV in different ways (Figure 1).

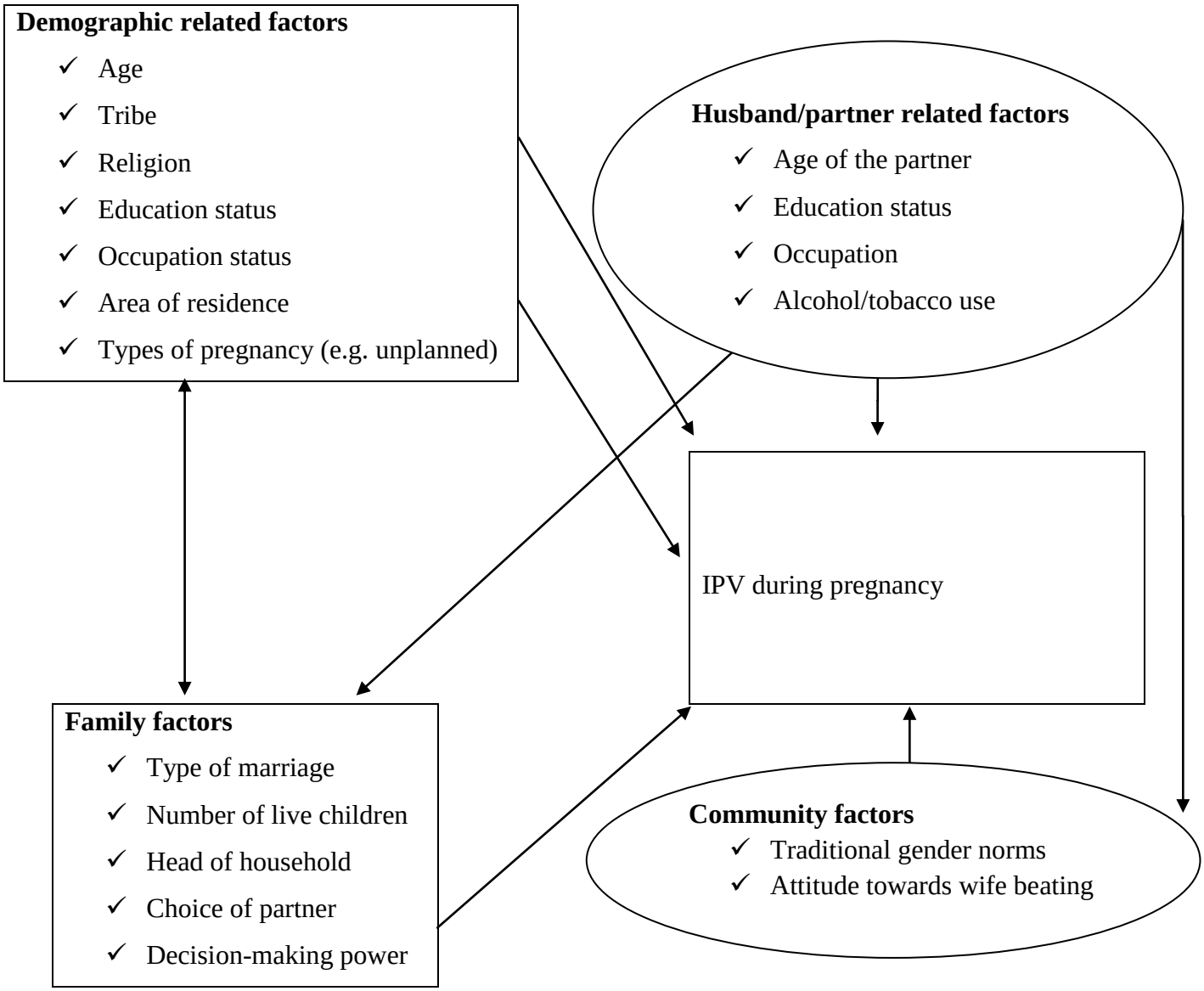

Figure 1: A modified conceptual framework based on prevalence and associated factors of IPV among pregnant women (Semahegn & Mengistie, 2015).

CHAPTER TWO

2:0 LITERATURE REVIEW

2:1 Introduction

Intimate partner violence during pregnancy is more common than several recognized maternal health conditions e.g. pre-eclampsia and gestational diabetes which are routinely screened for in antenatal care. It is important to reduce maternal mortality and improve maternal and newborn health (Devries et al., 2010; Stöckl et al., 2014). Several studies have been conducted to highlight the magnitude and nature of the problem and to test potential interventions in reproductive health services to prevent and minimize the impact of such violence. An attempt was made to review some of the literature which obtained from books, journals and internet sources related to the current topic in order to appreciate the information already available on the issue and to learn some lessons from other's investigations.

2:2 Prevalence and types of intimate partner violence (IPV) against pregnant women

A systematic review among thirteen African studies on IPV against pregnant women revealed that prevalence ranged from 2.3% to 57.1%, and Africa is one of the highest reported globally (Shamu et al., 2011). Data from 72 studies in 23 countries (including Tanzania) conducted between 1994 and 2013 pointed out that intimate partner violence among pregnant women stands between 1.2% and 63.1% also the highest percentage was observed in African studies (Mercedes & Lafaurie, 2015).

Intimate partner violence during pregnancy can present in different forms. In a study conducted in Japan; hitting, slapping, kicking, punching, hair pulling or use of weapon are frequently cited examples of physical abuse (Kita et al., 2014). Psychological violence such as verbal threats, humiliation, deprivation of essentials (food, money and health care) were cited in the studies done in Durban-South Africa, Western Ethiopia and Spain (Groves et al., 2012; Abate, Wossen, & Degfie, 2016; Velasco, Luna, Martin, Caño, & Martin-De-las-heras, 2014). Sexual violence such as forced sexual contact, rape or sexual assault with an object was the

most common type of violence reported in Zimbabwe and Gambia (Shamu, Abrahams, Zarowsky, Shefer, & Temmerman, 2013; Idoko, Ogbe, Jallow, & Ocheke, 2015). These results indicate that IPV during pregnancy is a serious public health problem in Africa due to its prevalence and needs attention to prevent and minimize adverse effects from such violence. According to Western Ethiopia study, the prevalence of IPV during pregnancy was 44.5%, whereas more than half (55.5%) of these experienced all three forms of IPV i.e. psychological, physical and sexual violence (Abate, Wossen & Degfie, 2016). Another study conducted in Kenya, found that 37% of pregnant women experienced at least one form of IPV during pregnancy. Psychological violence was the most common (29%), followed by sexual (12%), and then physical (10%) (Makayoto et al., 2013). A patriarchal society in these areas was observed as one way of disciplining one's wife with many women socialized to anticipate this discipline.

In Tanzania, there are limited published data available on factors associated with IPV against pregnant women. The in-depth study of population-based surveys in Tanzania 2001-2002 as part of the WHO Multi-Country study in Dar es Salaam and Mbeya, 7% and 12% respectively ever experienced IPV during any pregnancy, regardless of when the woman was pregnant (Stockl, Watts & Mbwambo, 2010). Another study done in Dar es Salaam at antenatal clinic (ANC), Muhimbili National Hospital (MNH), revealed that prevalence of IPV associated with mental health symptoms in the index pregnancy was 27% (n=315), with 18% and 20% experiencing physical and sexual violence respectively. However, emotional/psychological abuse and economic violence were not assessed in that study (Mahenge et al., 2013). However Rwakarema et al. (2015) in Mwanza, Tanzania in a study of relationship between antenatal depression and risk factors (pregnancy related anxiety, social economic status, and partner relations) found that 33.8% (n=134) had antenatal depression. The pregnant women with poor relationship with partner and low socio-economic status had the highest effect for antenatal depression. Although antenatal depression was found to be high, IPV was not examined in this study because social norms would not permit discussion of domestic matters in public as the study was health-facility based (hospital, health center and dispensary). A recent longitudinal

study conducted in Moshi Municipal among 1123 pregnant women on factors influencing IPV disclosure, found that 23.3% (n=79) had disclosed to someone. The study relied on secondary data which made it difficult to clarify missing information with participants due to the sensitivity of the topics. The study indicated that, most of abused pregnant women kept suffering in silence (Katiti et al., 2016).

2:3 Factors associated with IPV among pregnant women

There are several factors that may increase IPV during pregnancy such as young age, being married, low socio-economic status, witnessing maternal abuse in childhood, multiparous, polygamous union and having an alcoholic partner or low level education (Mahenge et al., 2013; Makayoto et al., 2013; Shamu et al., 2011).

2:3:1 Demographic related factors

One of the most prominent associated factors identified with intimate partner violence during pregnancy in Nigeria population is the low educational level of women (Ezeanochie et al., 2011). The findings from a study on IPV during pregnancy across 19 countries revealed that in most settings, prevalence was witnessed to be persistent in young age groups (15–35 years), and appearing to decline very slightly after the age of 35 years (Devries et al., 2010). In Rwanda, women with no formal education were more likely to report intimate partner violence (Ntaganira, Muula, Siziya, Stoskopf, & Rudatsikira, 2009). Maternal and fetal outcomes of IPV during pregnancy were significantly associated with unintended pregnancies than those with planned pregnancy (Han & Stewart, 2014). Marital status was a relevant demographic factor in South Africa (Matseke et al., 2012), where not to be married or cohabitating was associated with increased partner violence during pregnancy. In Nigeria, of 315 pregnant women who tested HIV positive, 99% reported to experienced IPV (Ezeanochie et al., 2011).

2:3:2 Family factors

Makayoto et al. (2013), in Kisumu District Hospital, Kenya, suggested that being in a polygamous union, multiparous, witnessed maternal abuse in childhood and when the choice

of a partner comes from one side were more likely to have increased chances of being abused during pregnancy. A study conducted among pregnant women in Rwanda, found significant association between women having no/less controlling behavior over household expenditures and IPV (Rurangirwa et al., 2017).

2:3:3 Factors related to husband/partner

A systematic review of African studies on IPV against pregnant women demonstrated strong evidence that violence is significantly associated with alcohol and/or psychoactive substance use by a partner (Shamu et al., 2011). Similar results were found in a study conducted in Kenya which revealed an association between a partner who drinks alcohol while a partner who attained tertiary education was protective against IPV (Makayoto et al., 2013). Another study conducted in Spain reported that uncommitted relationship or without kin support during pregnancy are at greater risk of IPV (Velasco, Luna, Martin, Cano & Martin-de-las-heras, 2014). Male partner with low income is a relevant partner related factor associated with IPV during pregnancy in Nigeria (Ezeanochie et al., 2011). In Germany, women perceived pregnancy as a turning point; it reduces women's acceptance of their partner's unemployment, alcohol abuse and lack of relationship commitment or by increasing women's vulnerability because they felt too young to raise a child alone (Stöckl & Gardner, 2013).

2:3:4 Community factors

The study conducted in Western Ethiopia indicated the presence of traditional norms that support beating pregnant women. Although this has dangerous effects to both maternal and unborn child in almost all cases (86.2%), the perpetrator was the biological father of the baby they were carrying (Abate et al., 2016).

However a cross-sectional study in Mumbai slums revealed 35% of pregnant women agreed violence as a way of disciplining a partner (Das et al., 2013). In Kenya, a patriarchal family is one of the main associated factors with intimate partner violence during pregnancy (Makayoto et al., 2013). Other qualitative study by Stockl et al. (2013) from Germany, states that male

partners were not able to adjust to new expectations that they might have to help housework, since women became physically unable to complete chores as usual.

In summary, the literature show that intimate partner violence against pregnant women depends on socio-demographic factors such as age, education, parity, marital status, economic status, types of pregnancy, as well as family, community and partner related factors in different contexts and cultures.

CHAPTER THREE

3:0 METHODOLOGY

This chapter details the methodology that was employed in the study. The study design, area, population and sampling procedure are outlined. Furthermore, the data collection tools, procedures and tools are also described. Data analysis procedures together with significance tests to be conducted are narrated. Ethical issues are also presented in this chapter.

3:1 Study design

A descriptive cross sectional study design was conducted, using a quantitative approach to quantify the prevalence of IPV and associated factors among pregnant women attending ANC clinic.

3.2 Study settings

The study was conducted in Moshi Municipal Council, one of districts of Kilimanjaro Region. Kilimanjaro Region is located in the north eastern part of Tanzania and is divided into seven administrative districts which are Siha, Rombo, Hai, Moshi Rural, Moshi Urban (municipal), Mwanga and Same. Moshi municipality is bordered to the north by the Moshi Rural District, to the east by Mwanga district and to the south and west by Manyara Region. According to Tanzania National census 2012, Moshi Municipality has a total population of 184,292 and covers a surface area of 59 square kilometers. Administratively it has two divisions which are East and West containing 21 wards (Tanzania, N.B.S, 2012). Moshi Municipality has a total of 63 health facilities, of which only 28 are providing ANC services. Twenty one (21) are public health facilities, 5 are Faith based and 2 are private. According to a 2016 report from District Reproductive and Child Health Coordinator (DRCHCO), an estimated 34,774 pregnant women attend ANC in Moshi Municipality per year. About three quarters of them (23,171) receive ANC services through public health facilities (Appendix 1). Therefore, in this study the researcher considered only 21 public health facilities (including hospital, health

centre and dispensaries) purposefully because they offer the service to many pregnant women compared to Faith based and private health facilities.

3:3 Study Populations

The study population comprised of all pregnant women seeking antenatal services in public health facilities at Moshi municipal council.

3:4 Inclusion Criteria

All pregnant women who attended antenatal care clinic during data collection were involved.

3:5 Exclusion Criteria

Pregnant women who were too sick were excluded from participating.

3:6 Sample Size Determination and Sampling Procedure

3:6:1 Sample Size Determination

The sample size was obtained using 1975 Cochran's formula (Singh & Masuku, 2014).

$n = \frac{z^2 p (100 - p)}{\varepsilon^2}$ where;

n = minimum required sample size

z = % point of normal distribution corresponding to the level of confidence at 1.96 for 95% level

p = expected proportion of IPV among pregnant women

ε = margin of error.

In this study, the proportion was derived from cross sectional study, done in Muhimbili National Hospital, Tanzania on IPV against pregnant women and associated mental health symptoms. This study revealed that 27% of women experienced IPV in their pregnancy (Mahenge et al., 2013).

z = 1.96

p = 27%

ε = 5

$$n = \frac{z2p\,(100 - p)}{\varepsilon^2}$$

$$n = \frac{1.96^2 27\,(100 - 27)}{5^2}$$

n = 302.87

The sample size was adjusted for those who would not complete answering the questions or non-response using the following formula;

n = n*(100%/100%-f %)

n = 302.87*(100/100-10) = 336.52

The adjusted required sample was 337 pregnant women.

3:6:2 Sampling Procedure

Health Facilities

All public health facilities (n=21) in this area were listed and stratified according to the level of services such as hospital, health centers and dispensaries, since it was anticipated that the level of services had no significant difference on ANC service provided. From the strata, only facilities that provided ANC services for pregnant women to more than 1,000 per year were selected as shown in Appendix 1 (DRCHCO Report, 2016). These facilities have been selected purposefully because of a high number of ANC clients they reach per year compared to other health facilities. This enabled the researcher to reach a big audience of women within a short period of time, and hence obtained the required sample size. Then 30% (n=7) of 21 public health facilities were sampled for the study, which are three health centers and four dispensaries.

Participants:

A systematic random sampling technique was used to select pregnant women in the seven selected health facilities. Participants were sampled by the Principal Investigator (PI) or Research Assistant (RA) after getting the services they came for. It was estimated that 25-35

non-repeat attendance of pregnant women at health centers and 10-15 at dispensaries per day (Source: DRCHCO, 2016). Using a sample interval of every one pregnant woman, only women who agreed to participate had consented to take part in the study, then in a day, the maximum of 10-15 respondents at a health center and 4-8 respondents at dispensary were interviewed. This means that, every day, an average total of 25-30 pregnant women were interviewed from 3 among 7 selected health facilities (one health center and two dispensaries). For that reason, in four weeks' time a total of 340 respondents had been interviewed, 210 from health centers and 130 from dispensaries (Figure 2).The first pregnant woman to be interviewed on each day was the first woman to attend clinic. All health facilities provide ANC services for the five working days per week. Those who refused to participate were replaced by another pregnant woman in the list. Participants ANC cards' were temporary labeled by using black mark on the corner at the front page to avoid repetition.

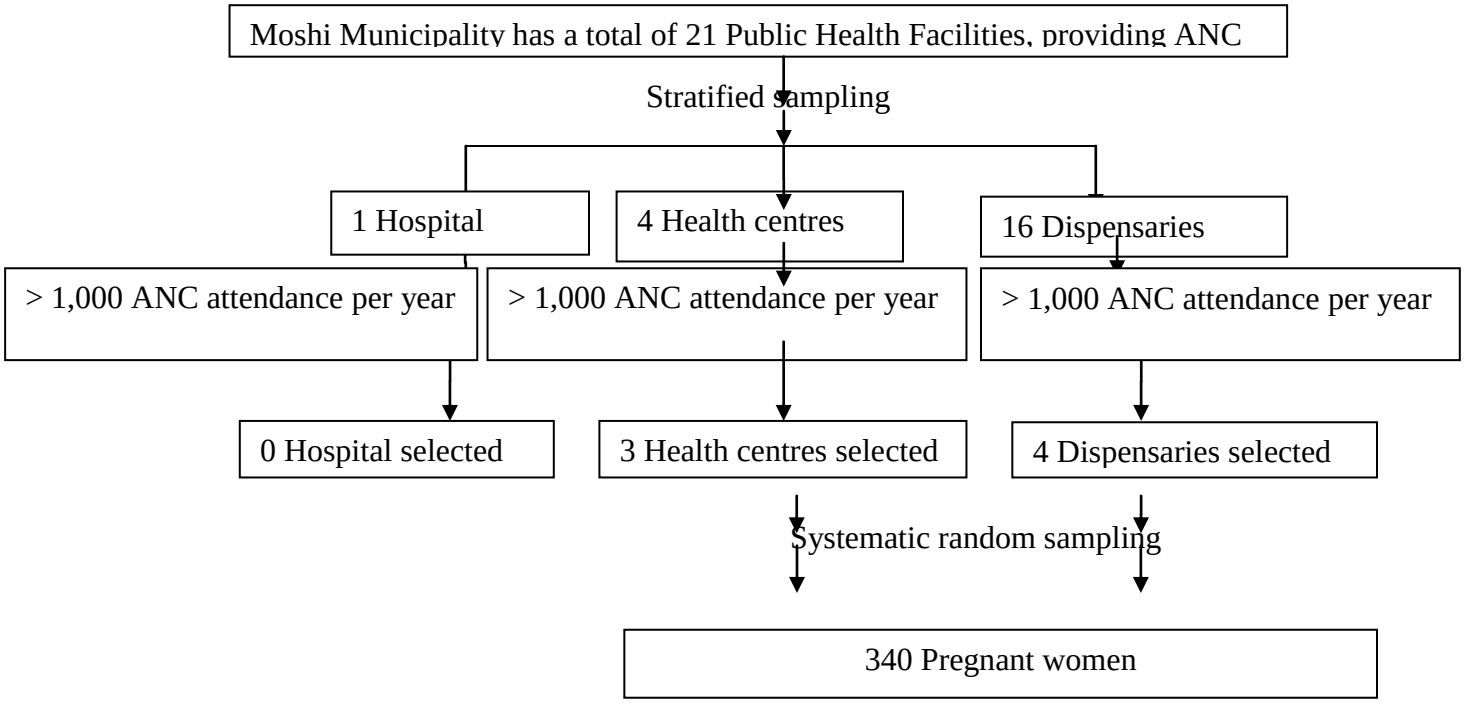

Figure 2: Sampling procedure

3:7 Data Collection

3:7:1 Data collection instrument

Data were collected by using a structured questionnaire. The questionnaire was developed in English version (Appendix 2) and translated into Swahili version (Appendix 3) because it is a language articulated by most study participants. Some of the questions were developed and structured by the researcher, while questions about IPV exposure were adapted from the WHO multi-country study IPV screening tool (Garcia-Moreno et al., 2005).

The questionnaire consisted of five parts (n=37), namely demographic characteristics (n=14), family-associated information (n=9), partner/husband associated information (n=6), community associated data (n=2) and lastly, IPV exposure assessment (n=6) which included the occurrence of any form of violence during the index pregnancy and who was the perpetrator, this helped to identify women who have had experienced IPV during pregnancy from any family member. Women who experienced IPV during the index pregnancy were asked whether they reported or discussed any of the events with anyone. The questionnaire mainly consisted of closed and few open ended questions. The less sensitive questions were asked first and the more sensitive questions were asked at the end to build confidence of the participant.

3:7:2 Data Collection Methods

The questionnaire was administered by two RAs or PI at exit, to allow the pregnant women first to get the services they came for, as well as to allow answering the questions with settled mind. The Special room at each site was set aside for the interviews so as to have maximum confidentiality and reduce distractions from other individuals. Interviews went ahead only when a woman had consented to take part through written consent. Any doubts expressed were cleared in Swahili language. This helped to reduce non-response rate and missing data.

3:7:3 Pretesting

The data collection tool was pre-tested with 34 pregnant women attending ANC in Magereza and Rau health facilities which were not among seven selected health facilities. These

pregnant women were not included in the final data analysis. The main reason for pre-testing was to modify the questionnaires to suit the target population. Also pretesting aimed to test whether the assistants were well drilled for the main exercise.

3:7:4 Training of research assistants

Two research assistants (qualified midwife) were recruited and had two days training on sampling procedure, purpose of the study, data collection method and ethics. They were trained on how to ask questions in order to get clients' own answers. They participated in pretesting and thereafter conducting the interviews under the supervision of the Principal Investigator (PI).

3:7:5 Reliability

Reliability referred to the consistency of measurements. According to Kothari (2004), reliability ensures repeatability of the measurements. Reliability was ensured first by training two research assistants on data collection process and clear understanding of the questions. Pre-test to check reliability of the tool was done in two health centers, in Moshi Municipality, with similar criteria as the study sample, and an appropriate justification was done. The internal consistency coefficient (Chronbach's alpha) of the data collection tool for 37 item questionnaire was 0.84, after the pre-test.

3:7:6 Validity of the tool

The principal investigator checked the questionnaire to ensure that the questions are in line with the objectives of the study. Three experienced people in this area of study (2 midwives and 1 statistician) reviewed the questionnaire to countercheck the content and test the average time needed to fill the questionnaire, and made suggestions for changes where necessary. In addition, validity was ensured through the use of an adapted standard validated IPV screening tool from WHO multi-country study questionnaire (Garcia-Moreno et al., 2005), which had been used elsewhere in different settings, and it is available in different languages i.e. English, Spanish, Swahili etc. Moreover a study conducted in two different cities of Brazil reported that a Chronbach's alpha coefficient of this WHO tool was 0.88 and 0.89 respectively. The tool

proves to have high internal consistency and capacity to discriminate different forms of violence perpetrated in different social contexts (Schraiber, Latorre, França, Segri, & D'Oliveira, 2010).

3:8 Data Analysis

Every questionnaire was checked by the field supervisor (PI) for completeness on the day of data collection. After data collection and sorting, data were coded and entered into Statistical Package for Social Sciences (SPSS) software version 21. Data were analyzed based on the stated study objectives and were presented in frequency distributions, cross tabulations and diagrams. The few open ended responses were categorized and coded accordingly. The overall prevalence of IPV during pregnancy was determined through calculating the proportion of pregnant women who reported to experience any type of violence from a family member. Then results of IPV prevalence were categorized according to the types of the IPV. The proportion was calculated at 95% confidence intervals and p-value of <0.05 was considered as statistically significant.

3:8:1 Operationalization of the study variables

The types of IPV experienced during pregnancy were categorized into emotional, physical or sexual violence which was inflicted by a family member. The score of yes ≥ 1 to any of response was valued as having experienced IPV and < 1 score were considered as no violence. Factors associated with IPV during pregnancy were assessed through scores obtained by answering questions connected to demographic factors, family factors, husband/partner factors and community factors. A chi square test (X^2) was used to determine the association. The results with a p-value of <0.05 with 95% confidence interval (CI) for OR (odds ratio) were considered as statistically significant in calculating risks.

3:9 Study variables

3:9:1 Dependent variables: Intimate partner violence against pregnant women

3:9:2 Independent variables:

- Socio-demographic characteristics include age, residence, tribe, religion, occupational, educational, gravidity, abortions, parity, live children, gestation weeks and HIV status
- Family associated factors i.e. type of marriage and number of people living with.
- Husband/partner factors (age, education, occupation, religion, alcohol/tobacco use).
- Community factors (traditional gender norms)

3:10 Ethical Consideration

Approval for ethics was obtained from Muhimbili University of Health and Allied Sciences (MUHAS) Institutional Review Board (IRB), Directorate of Senate Research and Publication committee (Appendix 6). Permission to conduct the study was obtained from the Municipal Medical Officer (MMO) of Moshi Municipal Council (Reference No. MMC/HO/7008/VOL.VI/134). All research participants who met the inclusion criteria and agreed to participate signed the consent forms and illiterate participants gave a thumb print (Appendix 5). Participants were interviewed on their own in privacy room to ensure anonymity and confidentiality, and were assured that all information obtained would be confidential. In same line, codes were used to represent their names. Participants who found to have experienced IPV hence felt emotional and were shading some tears during data collection were advised and referred to the health facility counsellor for further evaluation and treatment. Nobody was forced to participate in the study, participation in the study was entirely voluntary and they had the right to opt out at any stage of the interviewing process without causing any negative impact on their future access to services at the health facility. The principles of beneficence, justice and protection of human rights were followed during the conduct of this study.

3:11 Dissemination plan

The final report of this study will presented to; Muhimbili University of Health and Allied Sciences (MUHAS) and deposited in MUHAS Library; at scientific conferences regionally, nationally and internationally. Also it will be disseminated to Moshi Municipal Council Medical Officer of Health and to all seven study areas (Majengo Health Centre, CCP Health Centre, Pasua Health Centre and Bondeni, Dispensary, Kiboriloni Dispensary, Msaranga and Njoro Dispensary) for further reference. The manuscript will be prepared for publication in a nursing journal to reach the wider population.

CHAPTER FOUR

4.0 RESULTS

This chapter summarizes results according to the objectives.

4:1 Socio-demographic characteristics of the Respondents

4:1:1 Number of respondents by health facilities

Seven public primary health facilities (three health centres and four dispensaries) were selected for data collection. A total of 210 pregnant women were sampled from three health centers and 130 from four dispensaries (Figure 3).

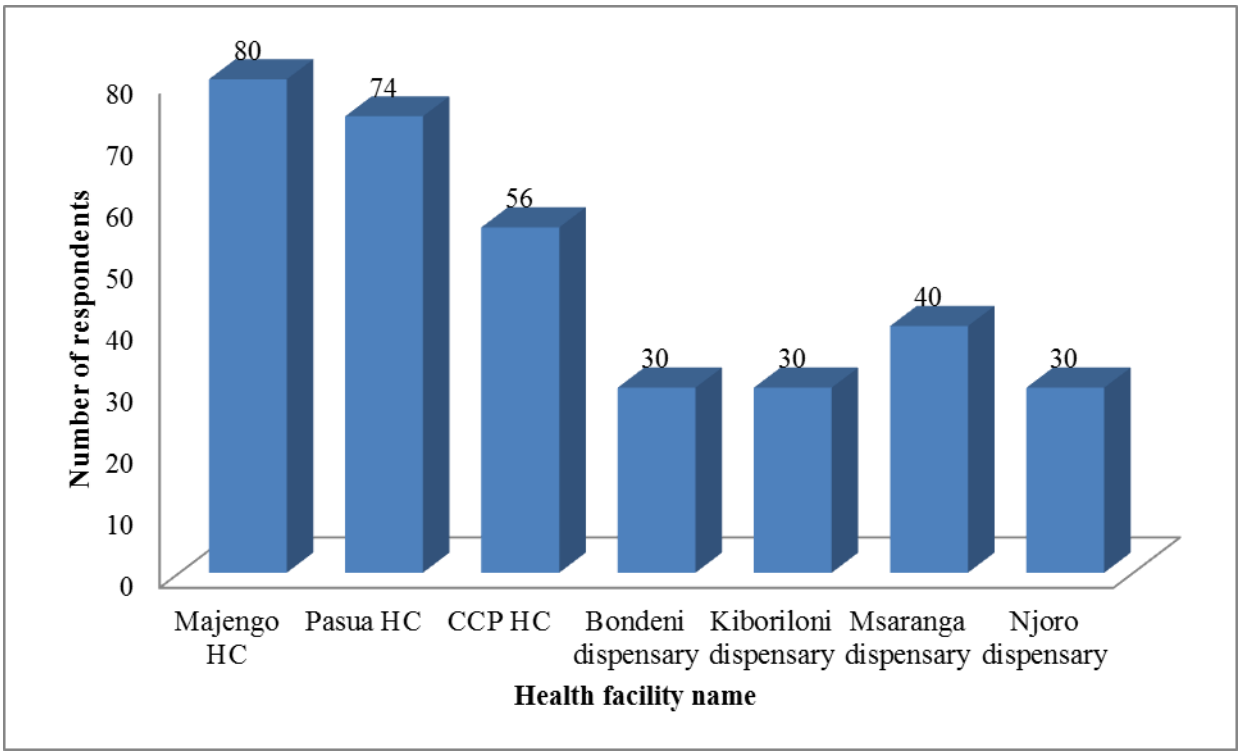

Figure 3: Number of respondents by health facility (n=340)

4:1:2 Socio-demographic characteristics of the respondents

Three hundred and forty (340) pregnant women participated in the study with a mean (±SD) age of 26.3 (±6) years ranging from 15 to 44 years. Majority (62.8%) were aged between 20 and 29 years, married and living with their partners/spouse (61.8%), Christians (68.5%), had completed primary education (54.1%), living in urban settings (86.5%), and did not consume alcohol during pregnancy (75.6%). About half of the respondents were self-employed, and were Chagga by tribe. Among those who had been tested for HIV and were willing to disclose their status (n=318), 9.1% were HIV positive. Nearly for all respondents (97.1%), the choices of partner/spouse were bilateral and three quarters of the respondents had monogamous marriage (Table 1).

Table 1: Social demographic characteristics of the respondents (n=340)

Variable	No. (%)
Age (years):	
Mean (SD, Range)	26.3 (6, 15-44)
Under 20	33 (9.7)
20 – 29	213 (62.8)
30 or older	94 (27.6)
Relationship with male partners:	
Married, living together	210 (61.8)
Married, living apart	15 (4.4)
Co-habiting	38 (11.2)
Regular partner, living apart	73 (21.5)
No response	4 (1.2)
Education level:	
No formal education	11 (3.2)
Primary	184 (54.1)
Secondary	106 (31.2)
Above secondary	39 (11.5)
Current employment status:	
Unemployed	80 (23.5)
Peasant	40 (11.9)
Formal employment (civil/private)	71 (20.9)
Self-employment	144 (42.6)
Other (student)	4 (1.2)

Tribe:	
Chagga	146 (42.9)
Pare	52 (15.3)
Sambaa	36 (10.6)
Iraq (Mbulu)	14 (4.1)
Meru	7 (2.1)
Other	85 (25.0)
Residence:	
Urban	294 (86.5)
Rural	46 (13.5)
Religion:	
Christian	233 (68.5)
Muslim	107 (31.5)
HIV status:	
Infected	31 (9.1)
Uninfected	287 (64.4)
Unknown	22 (6.5)
Frequency of alcohol intake:	
Daily	1 (0.3)
1-2 times per week	36 (10.6)
2-3 times per month	11 (3.2)
Once per month	35 (10.3)
Never	257 (75.6)
Choice of partner/spouse:	
Bilateral	330 (97.1)
Unilateral	10 (2.9)
Type of marriage:	
Monogamous	305 (89.7)
Polygamous	35 (10.3)

4:1:3 Household characteristics

Majority (66.8%) of the households had 2-4 members; headed by husband/male partner (68.5%) and living with husband/male partner (68.2%). Nearly all respondents (95.0%) were able to control over household expenditures, and about ninety percent had financial support from someone else. More than half of participants gave self-earned money to someone else (Table 2).

Table 2: Household characteristics of respondents

Variable	No. (%)
Number of household members:	
One	36 (10.6)
2 – 4	227 (66.8)
More than 4	77 (22.8)
Household head:	
Respondent	43 (12.6)
Husband/male partner	233 (68.5)
Parents	34 (10.0)
In-law	12 (3.5)
Other	16 (4.7)
Missing	2 (0.6)
Living with:	
Husband/male partner	232 (68.2)
Parents	37 (10.9)
Alone	32 (9.4)
In-laws	11 (3.2)
Other	28 (8.2)
Control over household expenditures:	
Yes, all times	323 (95.0)
Yes, rarely	9 (2.6)
No	8 (2.4)
Financial help from someone else:	
Yes	305 (89.7)
No	35 (10.3)
Obligation to give self-earned money to someone else:	
Yes, all	3 (0.9)
Yes, part	194 (57.1)
No	143 (42.1)

4:1:4 Obstetric' characteristics of respondents

Slightly more than half have had 2-4 pregnancies. About half had never given a live birth. Majority (72.7%) had never had an abortion. Of 340 respondents, 190 (55.9%) had at least one child. About half were in their 16^{th} – 32^{nd} week of gestation. More than half had planned to conceive (68.5%) (Table 3)

Table 3: Obstetric characteristics (pregnancies and births)

Variable	No. (%)
Number of pregnancies:	
One	146 (42.9)
2 – 4	177 (52.1)
More than 4	17 (5.0)
Number of live births:	
None	155 (45.6)
One	96 (27.9)
2 – 4	87 (25.6)
More than 4	3 (0.9)
Number of abortions (n=205):	
None	149 (72.7)
One	45 (22.0)
2 – 4	11 (5.3)
Number of living children:	
None	150 (44.1)
One	107 (31.5)
2 – 4	83 (24.4)
Gestation age at study time (weeks):	
Less than 16	41 (12.1)
16 – 24	99 (29.1)
25 – 32	82 (24.1)
33 – 35	69 (20.3)
36 – 42	49 (14.4)
Pregnancy intention:	
Intended	233 (68.5)
Unintended	107 (31.5)

4:1:5 Male partner/spouse characteristics

More than three quarters (82.4%) of respondents had partner/spouse aged at least 25 years. About two-thirds of male partners/spouses had education level above primary. Majority were employed in the civil service/self-employed. Majority (64.4%) were Christians, never taken alcohol (57.9%) and did not smoke/chew (81.2%) (Table 4).

Table 4: Male partner/spouse characteristics

Variable	No. (%)
Age (years):	
Under 25	60 (17.6)
25 or older	280 (82.4)
Education level:	
No formal education	7 (2.1)
Primary	110 (32.4)
Secondary	147 (43.2)
Above secondary	76 (22.4)
Current employment status:	
Unemployed	10 (2.9)
Peasant	35 (10.3)
Formal employment (civil/private)	154 (45.3)
Self-employment	133 (39.1)
Other (student or retired)	8 (2.4)
Religion:	
Christian	219 (64.4)
Muslim	121 (35.6)
Frequency of alcohol intake:	
Daily	32 (9.4)
1-2 times per week	86 (25.3)
1-3 times per month	8 (2.4)
Less than once per month	17 (5.0)
Never	197 (57.9)
Tobacco smoking/chewing habits:	
Smokes/chews	64 (18.8)
Does not smoke/chew	276 (81.2)

Respondents were asked if traditional norms support beating pregnant women. Out of 340 respondents, only 17 (5.0%) agreed. Also respondents were asked if violence is used as one way of disciplining one's wife. Only 4 (1.2%) respondents agreed to this assertion.

4:2 Prevalence of intimate partner violence (IPV) during pregnancy

Of 340 pregnant women, 168 (49.4%) said they had experienced some form of Intimate Partner Violence (IPV) during the current pregnancy. The distribution of the types of IPV experienced is shown in Figure 4. Of the three types of IPV, sexual violence was the most prevalent (33%) followed by emotional (29%) and then physical (11%).

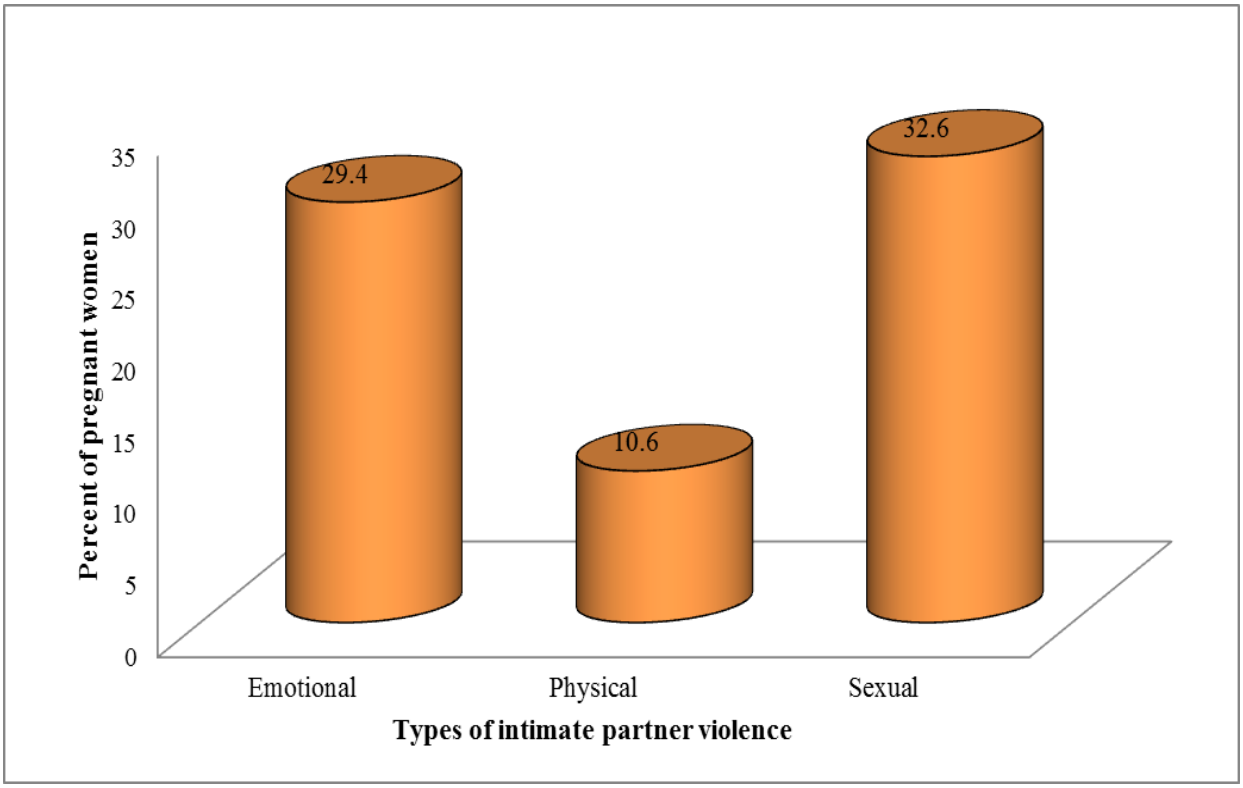

Figure 4: Prevalence by type of intimate partner violence (n=340)

4:3 Factors Associated with IPV during Pregnancy

4:3:1 Relationship between IPV and social demographic characteristics of pregnant women

Polygamy was the only factor significantly influencing the occurrence of IPV among pregnant women compared to monogamy ($p<0.05$). Although unilateral choice of partner/spouse compared to bilateral were 4 times likely to influence IPV, the difference was significantly in borderline (OR=4.3, 95% CI=0.9-20.3; p=0.050). HIV infected women were 2 times more likely to experience IPV compared to uninfected ones, the difference was not statistically significant (OR=2.0, 95% CI=0.9-4.4; p=0.070) (Table 5).

Table 5: Relationship between IPV experienced and socio-demographic characteristics (n=340)

Variable	Total	Experienced of IPV		OR (95% CI)	p
		Experienced	Not experienced		
		No. (%)	No. (%)		
Age (years):					
Under 20	33	20 (60.6)	13 (39.4)		
20 or above	307	148 (48.2)	159 (51.8)	0.6 (0.3-1.3)	0.178
Relationship with male partners (n=336):					
Married/cohabiting, living together	248	120 (48.4)	128 (51.6)		
Married/regular partner, living apart	88	45 (51.1)	43 (48.9)	1.1 (0.7-1.8)	0.659
Education level:					
Up to primary	195	99 (50.8)	96 (49.2)		
Secondary or higher	145	69 (47.6)	76 (52.4)	0.9 (0.6-1.3)	0.562
Current employment status:					
Formal employment (civil/private)	71	34 (47.9)	37 (52.1)		
Informal/unemployed	269	134 (49.8)	135 (50.2)	1.1 (0.6-1.8)	0.773
Tribe:					
Chagga	146	80 (54.8)	66 (45.2)		

Non-Chagga	194	88 (45.4)	106 (54.6)	0.7 (0.4-1.1)	0.085
Residence:					
Urban	294	147 (50.0)	147 (50.0)		
Rural	46	21 (45.7)	25 (54.3)	1.2 (0.6-2.2)	0.584
Religion:					
Christian	233	115 (49.4)	118 (50.6)		
Muslim	107	53 (49.5)	54 (50.5)	1.0 (0.6-1.6)	0.976
HIV status:					
Infected	31	20 (64.5)	11 (35.5)	2.0(0.9-4.4)	0.070
Uninfected	287	136 (47.4)	151 (52.6)	1.0	
Unknown	22	12 (54.5)	10 (45.5)	1.3 (0.6-3.2)	0.469
Frequency of alcohol intake:					
Frequently (daily-1-2 times/ week)	37	20 (54.1)	17 (45.9)	1.0	
Less frequently (1-3 times/month)	46	26 (56.5)	20 (43.5)	1.1 (0.5-2.6)	0.823
Never	257	122 (47.5)	135 (52.5)	0.8 (0.4-1.5)	0.454
Choice of partner/spouse:					
Unilateral	10	8 (80.0)	2 (20.0)		
Bilateral	330	160 (48.5)	170 (51.5)	4.3(0.9-20.3)	0.050*
Type of marriage:					
Monogamous	305	145 (47.5)	160 (52.5)		
Polygamous	35	23 (65.7)	12 (34.3)	0.5 (0.2-1.0)	0.042

* Fisher's Exact test p-value

4:3:2 Relationships between IPV and obstetric characteristics

Unintended pregnancy was the only significant factor influencing presence of IPV during pregnancy. Women with unintended pregnancy were almost twice more likely to experience IPV (OR=1.7, 95% CI=1.1-2.8; P<0.05). Though women with more than two abortions compared to none were 3 times more likely to experience IPV, the difference was not statistically significant (OR=3.1, 95% CI=0.8-12.1; p=0.121) (Table 6)

Table 6: Relationship between IPV experienced and obstetric characteristics (pregnancies and births)

Variable	Total	Experience of IPV		OR (95% CI)	p
		Experienced	Not experienced		
		No. (%)	No. (%)		
Number of pregnancies:					
One	146	73 (50.0)	73 (50.0)	1.0	
2 – 4	177	88 (49.7)	89 (50.3)	1.0 (0.6-1.5)	0.960
More than 4	17	7 (41.2)	10 (58.8)	0.7 (0.3-1.9)	0.492
Number of live births:					
None	155	78 (50.3)	77 (49.7)	1.0	
One	96	43 (45.3)	52 (54.7)	0.8 (0.5-1.4)	0.438
2 or more	90	47 (52.2)	43 (47.8)	1.1 (0.6-1.8)	0.775
Number of abortions (n=205):					
None	140	69 (46.3)	80 (53.7)	1.0	
One	45	22 (48.9)	23 (51.1)	1.1 (0.6-2.2)	0.761
2 – 4	11	8 (72.7)	3 (27.3)	3.1 (0.8-12.1)	0.121
Number of living children:					
None	150	77 (51.3)	73 (48.7)	1.0	
One	107	50 (46.7)	57 (53.3)	0.8 (0.5-1.4)	0.468
2 – 4	83	41 (49.4)	42 (50.6)	0.9 (0.5-1.6)	0.778
Gestation age at study time (weeks):					
Less than 16	41	17 (41.5)	24 (58.5)	1.0	
16 – 24	99	49 (49.5)	50 (50.5)	1.4 (0.7-2.9)	0.388
25 – 32	82	41 (50.0)	41 (50.0)	1.4 (0.7-3.0)	0.373
33 – 35	69	37 (53.6)	32 (46.4)	1.6 (0.7-3.6)	0.219
36 – 42	49	24 (49.0)	25 (51.0)	1.4 (0.6-3.1)	0.478
Pregnancy intention:					
Unintended	107	63 (58.9)	44 (41.1)	1.0	
Intended	233	105 (45.1)	128 (54.9)	1.7 (1.1-2.8)	0.018*

4:3:3 Relationship between occurrence of IPV and household and community characteristics

Pregnant women who had rare/no control over household expenditures were 3 times more likely to influence the occurrence of any form of IPV compared to women who had all- time control over household expenditures (OR=3.5, 95% CI=1.1-11.0; p<0.05). Also, when the head of household were other relatives compared to respondent, IPV were two times more likely to influence the presence of IPV though the difference was not statistically significant (OR=2.0, 95% CI=0.9-4.4; p=0.077). Though respondents' denial of violence as a way of disciplining women compared to those who agreed that violence is a way of disciplining wife/partner were 3 times more likely to experience any type of IPV during pregnant, the difference was also not significant (OR=3.0, 95% CI=0.3-28.8; p=0.623) (Table 7).

Table 7: Relationship between household and community characteristics and IPV during pregnancy

Variable	Total	Experienced of IPV		OR (95% CI)	p
		Experienced	Not experienced		
		No. (%)	No. (%)		
Number of household members:					
One	36	15 (41.7)	21 (58.3)	1.0	
2 – 4	227	115 (50.7)	112 (49.3)	1.4 (0.7-2.9)	0.317
More than 4	77	38 (49.4)	39 (50.6)	1.4 (0.6-3.0)	0.448
Household head (n=338):					
Respondent	43	18 (41.9)	25 (58.1)	1.0	
Husband/male partner	233	112 (48.1)	121 (51.9)	1.3 (0.7-2.5)	0.454
Other	62	38 (59.4)	26 (40.6)	2.0 (0.9-4.4)	0.077
Living with:					
Husband/male partner	232	109 (47.0)	123 (53.0)	1.0	
Alone	32	18 (56.2)	14 (43.8)	1.5 (0.7-3.1)	0.326
Other	76	41 (53.6)	35 (46.1)	1.3 (0.8-2.2)	0.293
Control over household expenditures:					
Yes, all times	323	155 (48.0)	168 (52.0)		

Rarely/no	17	13 (76.5)	4 (23.5)	3.5 (1.1-11.0)	0.025*
Financial help from someone else:					
Yes	305	150 (49.2)	155 (50.8)		
No	35	18 (51.4)	17 (48.6)	1.1 (0.5-2.2)	0.801
Obligation to give self-earned money to someone else:					
Yes, all/part	197	95 (48.2)	102 (51.8)		
No	143	73 (51.0)	70 (49.0)	0.9 (0.6-1.4)	0.607
Traditional norms allows beating pregnant women:					
Yes	17	7 (41.2)	10 (58.8)		
No	323	161 (49.8)	162 (50.2)	1.4 (0.5-3.8)	0.486
Violence a way of disciplining wife/partner:					
Yes	4	1 (25.0)	3 (75.0)		
No	336	167 (49.7)	169 (50.3)	3.0 (0.3-28.8)	0.623*

∗ Fisher's exact test p-value

4:3:4 Associations between IPV and partner characteristics

Compared to male partners who frequently consumed alcohol, those who sometimes consumed alcohol were significantly less likely to cause IPV to their wives/partners (OR=0.4, 95% CI=0.2-1.0; P<0.05). Other partner/spouse characteristics had no influence on IPV during pregnancy (p>0.05) (Table 8).

Table 8: Relationship between partner characteristics and IPV during pregnancy

Variable	Total	Experience of IPV		OR (95% CI)	p
		Experienced	Not experienced		
		No. (%)	No. (%)		
Age (years):					
Under 25	60	30 (50.0)	30 (50.0)		
25 or older	280	138 (49.3)	142 (50.7)	1.0 (0.6-1.8)	0.920
Education level:					
Up to primary	117	52 (44.4)	65 (55.6)		
Secondary or higher	223	116 (52.0)	107 (48.0)	1.4 (0.9-2.1)	0.185
Current employment status:					
Formal employment	154	78 (50.6)	76 (49.4)		
Informal/unemployed	186	90 (48.4)	96 (51.6)	0.9 (0.6-1.4)	0.678
Religion:					
Christian	219	104 (47.5)	115 (52.5)		
Muslim	121	64 (52.9)	57 (47.1)	1.2 (0.8-1.9)	0.340
Frequency of alcohol intake:					
Frequently	118	65 (55.1)	53 (44.9)	1.0	
Sometimes	25	8 (32.0)	17 (68.0)	0.4 (0.2-1.0)	0.037
Never	197	95 (48.2)	102 (51.0)	0.8 (0.5-1.2)	0.239
Tobacco smoking/chewing habits:					
Smokes/chews	64	36 (56.2)	28 (43.8)		
Does not smoke/chew	276	132 (47.8)	144 (52.2)	0.7 (0.4-1.2)	0.225

Out of 168 pregnant women who experienced IPV during pregnancy, 88 (52.4%) shared the incidence with someone. Out of 100 emotional IPV incidences, 57.0% shared with someone else, while out of 36 incidences of physical IPV, 22 (61.1%) shared, of 111 sexual abuse cases, 54 (48.6%) shared. By comparison between types of IPV and sharing with others, no significant differences were demonstrated

CHAPTER FIVE

5:0 DISCUSSION

This chapter discusses the findings according to the objectives, and followed by the study limitations.

5.1 Prevalence of intimate partner violence among pregnant women

Almost half of the pregnant women (49.4%) in this study experienced intimate partner violence which is similar to that reported by Abate, Wossen, & Degfie, (2016) in Western Ethiopia (44.5%). This proportion is low compared to other studies. Studies done in Zimbabwe (Shamu et al., 2013) and Gambia (Idoko et al., 2015) reported the proportion of pregnant women experienced IPV to be 63.1%, 61.8% respectively. The differences in these proportions could be attributed to variations in study populations, definition of intimate partner violence and women perceptions of experience IPV as a normal part of life. The variation could also be due to study settings, this study was conducted in primary healthcare clinics where antenatal care patients are less likely risk pregnant women unlike most of the other studies conducted in a tertiary care clinic.

However, the above percentage (49.4%) is higher than the previous studies done in Dar es Salaam-Tanzania with 18.8% (Abubakari, Mbwambo, Mahenge, & Sto, 2016), 15.9% in Japan (Kita et al., 2014), 7.4% in Jefferson county, Alabama (Li, Kirby, Sigler, Hwang, & Lagory, 2010), 13.5% in Uganda (Devries et al., 2010) and 9% in Nkangala rural district, South Africa (Matseke et al., 2012). The possible reason is likely to be connected to different instruments used in screening for IPV. This study used IPV screening tool adapted from WHO multi-country study (Garcia-Moreno et al., 2005) unlike the other studies; in Japan the study used Japanese Violence Against Women Screen (VAWS) tool; in Jefferson county-Alabama, Nkangala district-South Africa and in Dar es Salaam-Tanzania Conflicts Tactics Scale (CTS) for IPV screening were used. Furthermore, in Uganda data used were from the Demographic

and Health Surveys (19 countries), this might be due to the fact that study covered a large section of the population, whereas this study covered only one district.

5.2 Types of IPV

Sexual violence was the most common (33%) type of IPV observed in this study followed by emotional/psychological (29%) and then physical (11%). It is interesting to find that being pregnant in this area is not necessarily protective against IPV. However physical violence slightly seemed to have decreased compared to other forms of IPV. This also was observed in Nigeria and Rwanda where physical violence was observed to decrease slightly during pregnancy, to be 5% and 10.2% respectively (Ezeanochie et al., 2011; Rurangirwa et al., 2017). The possible reason observed in this study could be cultural unacceptability of beating pregnant women since only 17 (5%) of respondents disagreed to this assertion. Also another reason could be only 4 (1%) respondents agreed violence to be used as one way of disciplining one's wife. This reflects that pregnancy gives some protection from physical violence.

In this study, sexual violence was revealed to be the most common type of IPV during pregnancy compared to other forms. Similarly to this were observed in Zimbabwe in a study by Shamu et al., (2013) and in Kenya by Makayoto et al., (2013). The possible reason might be pregnant women in this study were forced to engage in sexual act without their consent which led to (31.5%) unintended pregnancy. On the other hand increased sexual violence during pregnancy was due to the male partner/husband failing to understand women physical and emotional changes during pregnancy. Such changes include unwanted frequent sexual intercourse. Such excuses were often not accepted or understood by their partners resulting into conflict and forced sex. Therefore, this confirms the continued male dominance, control and entitlement to sex to still be common in many African cultures.

However, the prevalence of sexual and physical types of IPV during pregnancy in this study are higher than previously reported in Dar es Salaam, Tanzania (Mahenge et al., 2013). The possible explanation for this disparity might be the study settings. While this study was

conducted in primary health facility clinics, the Dar es Salaam study was conducted in a tertiary care clinic.

5:3 Factors associated with IPV

Results in this study indicate that, women in polygamous relationship were likely to experience IPV during pregnancy compared to their monogamous counterparts. Increased IPV among polygamous relationship could be due to jealousy and unequal love among women. Moreover, it is possible that men in polygamous relationships express differential levels of attachment towards their spouses (expenditures, accommodation, etc.) and they are more likely to abuse those who are less favored. Similar findings were reported in Kenya (Makayoto et al., 2013). Interestingly, when both partner/spouse choose each other is protective against IPV during pregnancy compared to unilateral choice. It is possible that this could be the issue of intimate love expression from both parties, since their unity/relationship comes from within and not otherwise. This is supported by a study carried out by Makayoto et al., (2013). This might be due to sharing similar social-cultural life style among the two study areas.

Data revealed that IPV occurred almost twice as much among women who had unintended pregnancy than in those with planned pregnancy. This might be contributed by the fact that women who have mistimed pregnancy or unwanted pregnancy endure significant higher levels of psychological abuse from themselves or partners or their family, who blame them for getting pregnant. It is not surprising in this study the second most common type of violence during pregnancy was psychological violence. Similarly to this were observed in the previous studies conducted in Moshi-Tanzania by Katiti et al., (2016) and in the United States by Moore, Frohwirth, & Miller (2010), which reported the lack of women empowerment in deciding for their own reproductive health was the major cause of unplanned pregnancy. The study suggests that women in a patriarchal society experience violence and undesired pregnancy which is also linked to forced intercourse.

On the other hand, this study found a significant association between women who had rare/no control over household expenditures and IPV. This might make the woman staying in the relationship due to economic dependence on her perpetrator. It was also one of the reasons that were reported to have influenced Tanzanian government efforts to change society perception about women roles by institutionalizing a large number of females in parliament so as to achieve socioeconomic development through gender equality (URT, 2005). Similarly, a Rwandan study reported lower rate prevalence in spouse controlling behavior as a result of Rwanda's government efforts in applying gender equality policies, that led to a significant female parliament representation (Rurangirwa et al., 2017).

This study also showed that male partners who occasionally consumed alcohol were less likely to cause IPV compared to those who regularly consumed alcohol. Frequent alcohol use may be associated with having multiple sexual partners which aggravates conflicts. Furthermore, some people may intentionally take alcohol regularly to gain courage to engage in selfish deeds such as IPV against their partners. Nevertheless, Shamu and colleagues found that alcohol use by a woman and/or male partner, whether heavily or occasionally was significantly associated with pregnancy-related abuse (Shamu et al., 2011). Therefore, comparisons between Shamu et al. study and the findings of this study concerning alcohol use on violence among partners must be cautiously interpreted. On the contrary, a study done in Gambia reported that alcohol use by the spouse was not significantly associated with partner violence. This might be explained by the fact that drinking alcohol is a culturally unacceptable practice in Ghambia which might be the possible reason to very few women admitted that their partners drink alcohol (Idoko et al., 2015).

This study also showed some risk factors, which were more likely to influence the presence of IPV during pregnancy, though the difference was not statistically significant. Thus, HIV infected respondents were two times more likely to experience IPV. This might be due to the fact that people living with HIV/AIDS face stigma and discrimination, thus experience emotional agony because of being blamed by their partner, community, at work place and

health care settings (Lifson et al., 2012). Similarly, in rural Ethiopia HIV positive pregnant women had higher rates of all forms of IPV than HIV negative. However, other studies conducted in rural Rwanda and Zimbabwe (Ntaganira et al., 2009; Shamu et al., 2013) did not find any association between HIV status and IPV among pregnant women. This suggests that some countries in Africa have social support mechanisms and protection of HIV infected pregnant women compared to other countries. On the side of acceptance of violence as a way of disciplining wife/partner, very few (1%) respondents agreed that violence is a way of disciplining wife compared to those who disagreed. This proportion is low than the 35% reported in Mumbai slums (Das et al., 2013), but Mumbai's study investigate the IPV against women during and after pregnancy, which might have led to higher rates, as pregnancy may be protective against some forms of violence exposure. This finding suggests that these populations may be sharing similar life style of patriarchal society where violence is recognized as one way of disciplining one's wife, and women socialized to anticipate this discipline.

There are insufficient data on association between IPV and when the head of household are other relatives during pregnancy or multiple abortions. This study found that when the head of household are other relatives such as in-laws, parents, etc. they were two times more likely to influence the occurrence of IPV though the difference was statistically not significant. The reasons here could, be some women gain some control over one aspect of their lives. If other relatives are the head of the house, their presence often characterizes violent episodes which can limit a woman's access to healthcare, including family planning and aggravate health problems associated with IPV. Likewise, this study found that, women experiencing multiple abortions had three times higher odds of IPV exposure. This might be the last option for women with limited sexual negotiating power and low contraceptive options.

Finally, this study revealed that about half (52%) pregnant women who experienced any form of IPV disclosed to someone else. The reason behind might be due to the feeling of being more secured if they disclose to other people. However, this rate is higher compared to 23% reported in Kilimanjaro-Tanzania (Katiti et al., 2016). The reason of contradictory findings

could relate to the study approach whereby this study used primary data while Katiti and colleagues relied on secondary data. Other variables did not achieve the statistical significance, and hence did not seem to contribute to the occurrence of IPV during pregnancy.

5:4 Study limitations

- Participants were pregnant women who sought ANC at health facilities during data collection period, and thus other pregnant women who were not attending antenatal clinic due to other reason did not take part. Hence, the findings are not representative of all pregnant women in the study area.
- This study obtained information on factors associated with IPV through quantitative approach, which may not be adequate to elucidate some factors (which are mainly personal feelings).
- The study was conducted in Moshi urban district, hence excluded pregnant women from rural areas who might have different views about IPV risk factors. The results would have been more meaningful if the study would have all representatives between rural and urban settings.

CHAPTER SIX

6:0 CONCLUSIONS AND RECOMMENDATIONS

6:1 Conclusions

Nearly half of pregnant women in this study experienced some form of intimate partner violence. Sexual violence was the most common type of intimate partner violence observed in this study followed by emotional and then physical. Therefore, antenatal care clinic may present a unique opportunity to identify and screen for IPV victims, and lead the victims to relevant referrals and interventions. This study also found that IPV during pregnancy was commonly associated with polygamous relationship, undesired pregnancy, rare/no control over household expenditures, having a partner who frequently consumed alcohol and unilateral choice of partner (when the male partner or his relatives choose the partner without the other part consent in this case only the guardians/parents decide for her). Besides being HIV infected, having experienced multiple abortions, acceptance of violence as a way of disciplining wife and having other relatives as head of household were observed to influence IPV during pregnancy although statistically were not significant.

6:2 Recommendations

1. **Education aspects**

- The primary health facilities under Municipal Medical Officer (MMO) should increase community awareness on IPV during pregnancy and its associated factors through community/religious campaign and mass media i.e. radio and television. This will increase the awareness on the factors associated with IPV during pregnancy and therefore will encourage community to discuss openly with the victims as the primary prevention.

2. Research aspects

- Further research should be done using respondents from both rural and urban settings; it can also apply qualitative approach, to complement factors associated with each type of IPV during pregnancy.
- Further research should be done on male perpetrators of IPV and implicit attitudes toward violence.

3. Policy aspects

- The Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) should make sure that there is coordination and integration among health, social welfare, criminal justice and other stakeholders to coordinate efforts among all relevant ministries and seek sufficient resources to implement plan against IPV among antenatal mothers.
- The Ministry of Constitutional and Legal Affairs should revise the 1998 sexual offences special provisions Act to recognize marital rape or sexual violence in marriage as a criminal offense, stating specifically that marriage or other relationships shall not constitute a defense to a charge of sexual assault.

4. Practice aspects

- Midwives together with obstetrician/gynecologists by understanding prevalence and IPV associated factors they can play a critical role in early prevention of IPV, through screening, intervention and lead the victims to relevant referral.
- Professional organizations such as the Tanzania Midwives Association (TAMA), and Tanzania National Nurses Association (TANNA) should advocate routine screening for IPV among women attending antenatal care clinics with history of polygamous relationship, has rare/no control over household expenditures, a partner who drinks alcohol and history of unwanted pregnant.

REFERENCES

Abate, B. A., Wossen, B. A., & Degfie, T. T. (2016). Determinants of intimate partner violence during pregnancy among married women in Abay Chomen district, Western Ethiopia: a community based cross sectional study. *BMC Women's Health*, *16*(1), 16.

Abdurashid, R. (2013). The Prevalence of Domestic Violence in Pregnant Women Attending Antenatal Care at the Selected Health Facilities in Addis Ababa. *Addis Ababa University, School of Social Work.*

Alhusen, J. L., Ray, E., Sharps, P., & Bullock, L. (2015). Intimate partner violence during pregnancy: maternal and neonatal outcomes. *Journal of Women's Health*, *24*(1), 100-106.

Cha, S., & Masho, S. W. (2014). Intimate partner violence and utilization of prenatal care in the United States. *Journal of Interpersonal Violence*, *29*(5), 911-927.

Das, S., Bapat, U., More, N. S., Alcock, G., Joshi, W., Pantvaidya, S., & Osrin, D. (2013). Intimate partner violence against women during and after pregnancy: a cross-sectional study in Mumbai slums. *BMC Public Health*, *13*(1), 817.

Deuba, K., Mainali, A., Alvesson, H. M., & Karki, D. K. (2016). Experience of intimate partner violence among young pregnant women in urban slums of Kathmandu Valley , Nepal : a qualitative study. *BMC Women's Health,* 1–10

Devries, K. M., Kishor, S., Johnson, H., Stöckl, H., Bacchus, L. J., Garcia-Moreno, C., & Watts, C. (2010). Intimate partner violence during pregnancy: analysis of prevalence data from 19 countries. *Reproductive Health Matters*, *18*(36), 158-170.

Ezeanochie, M. C., Olagbuji, B. N., Ande, A. B., Kubeyinje, W. E., & Okonofua, F. E. (2011). Prevalence and correlates of intimate partner violence against HIV-seropositive pregnant women in a Nigerian population. *Acta obstetricia et gynecologica Scandinavica*, *90*(5), 535-539.

Garcia-Moreno, C., Jansen, H. A., Ellsberg, M., Heise, L., & Watts, C. H. (2005). WHO multi-country study on women's health and domestic violence initial results on prevalence. *Genetics*, *151*(1), 277-83.

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

Groves, A. K., Kagee, A., Maman, S., Moodley, D., & Rouse, P. (2012). Associations between intimate partner violence and emotional distress among pregnant women in Durban, South Africa. *Journal of interpersonal violence*, *27*(7), 1341-1356.

Han, A., & Stewart, D. E. (2014). International Journal of Gynecology and Obstetrics Maternal and fetal outcomes of intimate partner violence associated with pregnancy in the Latin American and Caribbean region. *International Journal of Gynecology and Obstetrics*, *124*(1), 6–11.

Idoko, P., Ogbe, E., Jallow, O., & Ocheke, A. (2015). Burden of intimate partner violence in The Gambia-a cross sectional study of pregnant women. *Reproductive health*, *12*(1), 34.

Kabeer, N. (2014). *Violence against women as 'relational' vulnerability: engendering the sustainable human development agenda*. United Nations Development Programme.

Katiti, V., Sigalla, G. N., Rogathi, J., Manongi, R., & Mushi, D. (2016). Factors influencing disclosure among women experiencing intimate partner violence during pregnancy in Moshi Municipality, Tanzania. *BMC Public Health*, *16*(1), 715.

Kazaura, M. R., Ezekiel, M. J., & Chitama, D. (2016). Magnitude and factors associated with intimate partner violence in mainland Tanzania. *BMC Public Health*, *16*(1), 494.

Kita, S., Yaeko, K., & Porter, S. E. (2014). Prevalence and risk factors of intimate partner violence among pregnant women in Japan. *Health Care for Women International*, *35*(4), 442-457.

Kothari, C.R. (2004). Research Methodology, methods and techniques, 2nd. Ed. New Delhi: *New Age International (P) Limited Publishers*.

Laisser, R. M., Nyström, L., Lindmark, G., Lugina, H. I., & Emmelin, M. (2011). Screening of women for intimate partner violence: a pilot intervention at an outpatient department in Tanzania. *Global Health Action*, *4*(1), 7288.

Li, Q., Kirby, R. S., Sigler, R. T., Hwang, S. S., LaGory, M. E., & Goldenberg, R. L. (2010). A multilevel analysis of individual, household, and neighborhood correlates of intimate partner violence among low-income pregnant women in Jefferson County, Alabama. *American journal of public health*, *100*(3), 531-539.

Lifson, A. R., Demissie, W., Tadesse, A., Ketema, K., May, R., Yakob, B., ... & Shenie, T. (2012). HIV/AIDS stigma-associated attitudes in a rural Ethiopian community: characteristics, correlation with HIV knowledge and other factors, and implications for community intervention. *BMC international health and human rights*, *12*(1), 6.

Mahenge, B., Likindikoki, S., Stöckl, H., & Mbwambo, J. (2013). Intimate partner violence during pregnancy and associated mental health symptoms among pregnant women in Tanzania: a cross-sectional study. *BJOG: An International Journal of Obstetrics & Gynaecology*, *120*(8), 940-947.

Mahenge, B., Stöckl, H., Abubakari, A., Mbwambo, J., & Jahn, A. (2016). Physical, sexual, emotional and economic intimate partner violence and controlling behaviors during pregnancy and postpartum among women in Dar es Salaam, Tanzania. *PloS one*, *11*(10), e0164376.

Makayoto, L. A., Omolo, J., Kamweya, A. M., Harder, V. S., & Mutai, J. (2013). Prevalence and associated factors of intimate partner violence among pregnant women attending Kisumu District Hospital, Kenya. *Maternal and Child Health Journal*, *17*(3), 441-447.

Matseke, G., Peltzer, K., & Mlambo, G. (2012). Partner violence and associated factors among pregnant women in Nkangala district, Mpumalanga. *South African Journal of Obstetrics and Gynaecology*, *18*(3).

Mercedes, M., & Lafaurie, V. (2015). Intimate partner violence against women during pregnancy: a critical reading from a gender perspective. *Revista Colombiana de Enfermería*, *10*(10), 64-77.

Moore, A. M., Frohwirth, L., & Miller, E. (2010). Male reproductive control of women who have experienced intimate partner violence in the United States. *Social Science & Medicine*, *70*(11), 1737-1744.

Ntaganira, J., Muula, A. S., Siziya, S., Stoskopf, C., & Rudatsikira, E. (2009). Factors associated with intimate partner violence among pregnant rural women in Rwanda. *Rural Remote Health*, *9*(3), 1153.

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

Rwakarema, M., Premji, S. S., Nyanza, E. C., Riziki, P., & Palacios-Derflingher, L. (2015). Antenatal depression is associated with pregnancy-related anxiety, partner relations, and wealth in women in Northern Tanzania: a cross-sectional study. *BMC Women's Health*, *15*(1), 68.

Rurangirwa, A. A., Mogren, I., Ntaganira, J., & Krantz, G. (2017). Intimate partner violence among pregnant women in Rwanda, its associated risk factors and relationship to ANC services attendance: a population-based study. *BMJ Open*, *7*(2), e013155.

Schraiber, L. B., Latorre, M. D. R. D. O., França Jr, I., Segri, N. J., & d'Oliveira, A. F. P. L. (2010). Validity of the WHO VAW study instrument for estimating gender-based violence against women. *Revista de Saude Publica*, *44*(4), 658-666.

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

Shamu, S., Abrahams, N., Temmerman, M., Musekiwa, A., & Zarowsky, C. (2011). A systematic review of African studies on intimate partner violence against pregnant women: prevalence and risk factors. *PloS one*, *6*(3), e17591.

Shamu, S., Abrahams, N., Zarowsky, C., Shefer, T., & Temmerman, M. (2013). Intimate partner violence during pregnancy in Zimbabwe: a cross-sectional study of prevalence, predictors and associations with HIV. *Tropical Medicine & International Health*, *18*(6), 696-711.

Singh, A. S., & Masuku, M. B. (2014). Sampling techniques & determination of sample size in applied statistics research: An overview. *International Journal of Economics, Commerce and Management*, *2*(11), 1-22.

Stöckl, H., & Gardner, F. (2013). Women's perceptions of how pregnancy influences the context of intimate partner violence in Germany, Culture , Health & Sexuality: *An International Journal for Research , Intervention and Care*, *15*(10), 1206-1220.

Stöckl, H., Filippi, V., Watts, C., & Mbwambo, J. K. (2012). Induced abortion, pregnancy loss and intimate partner violence in Tanzania: a population based study. *BMC Pregnancy and Childbirth*, *12*(1), 12.

Stöckl, H., March, L., Pallitto, C., & Garcia-Moreno, C. (2014). Intimate partner violence among adolescents and young women: prevalence and associated factors in nine countries: a cross-sectional study. *BMC Public Health*, *14*(1), 751.

Stöckl, H., Watts, C., & Mbwambo, J. K. K. (2010). Physical violence by a partner during pregnancy in Tanzania: prevalence and risk factors. *Reproductive Health Matters*, *18*(36), 171-180.

Tanzania National Bureau of Statistics. (2012). Population and housing census: population distribution by administrative areas. *Ministry of Finance, Dar es Salaam*. Retrieved September 18, 2016, from http://www.nbs.go.tz/nbstz/index.php/statistics-by-population

Tanzania Penal Code. (2012). Chapter 16 of the Laws (Revised), Issued Under Cap. 1. 1981. *Dares salaam*. Retrieved September 28, 2017, from http://www.un.org/depts/los/Legislationandtreaties/.../TZA_penal_code.pdf

United Republic of Tanzania, Ministry of Health and Social Welfare. (2013). Gender based violence and violence against children and violence against children for healthcare providers and social welfare officers: Participant's manual. *School of Nursing & Public Health, University of Dodoma*

United Republic of Tanzania. (2005). Country report on the implementation of the Beijing platform for action and the outcome document of the twenty-third special session of the general assembly-Beijing + 10. *Ministry of Community Development, Gender and Children*

Velasco, C., Luna, J. D., Martin, A., Caño, A., & Martin-de-las-Heras, S. (2014). Intimate partner violence against Spanish pregnant women: application of two screening instruments to assess prevalence and associated factors. *Acta Obstetricia et Gynecologica Scandinavica*, *93*(10), 1050-1058.

World Health Organization. (2011). Intimate partner violence during pregnancy: *Information sheet*. Retrieved September 18, 2016, from http://apps.who.int/iris/bitstream/10665/70764/1/WHO_RHR.

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

Yount, K. M., DiGirolamo, A. M., & Ramakrishnan, U. (2011). Impacts of domestic violence on child growth and nutrition: A conceptual review of the pathways of influence. *Social Science & Medicine*, *72*(9), 1534-1554.

APPENDICES

Appendix 1: ANC attendance and ownership - Moshi Municipal Council 2016

Sno.	Health facilities	ANC Attendance	Public	Faith based	Private
1	Bondeni Dispensary	1180	1		
2	CCP H. Center	1643	1		
3	First Kilimanjaro Hosp.	197		1	
4	Kaloleni Dispensary	166	1		
5	KCMC Hosp.	6661		1	
6	Kibo Paediatric Dispens.	105	1		
7	Kiborloni Dispensary	1187	1		
8	Korongoni Dispensary	406	1		
9	Longuo Dispensary	166	1		
10	Magereza Dispensary	860	1		
11	Majengo H. Center	5480	1		
12	MAOHS H. Center	198		1	
13	Mary Land H. Center	136			1
14	Mawenzi Hospital	70	1		
15	Mji Mpya Dispensary	909	1		
16	Moshi Upendo H. Center	40		1	
17	Msandaka Dispensary	32	1		
18	Msaranga Dispensary	1470	1		
19	MUCO H. Center	26	1		
20	Njoro Dispensary	1431	1		
21	Pasua H. Center	6072	1		
22	Police line Dispensary	111	1		
23	Rau Dispensary	973	1		
24	Sabasaba Dispensary	63	1		
25	Shirimatunda Dispensary	594	1		
26	St.Joseph Hosp.	4034		1	
27	Tindigani Dispensary	187	1		
28	UMATI Dispensary	377			1
Total		**34,774**	**21**	**5**	**2**

Source: DRCHCO, 2016

Appendix 2: Questionnaire - English version

TITLE: PREVALENCE AND ASSOCIATED FACTORS OF INTIMATE PARTNER VIOLENCE AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE AT MOSHI MUNICIPAL COUNCIL-KILIMANJARO REGION, TANZANIA

Questionnaire number……

Date of Interview: day…… month……/2017. Name of Clinic: ……

Serial no……. Name of interviewer: ……

Demographic characteristics

Circle the correct response or fill blanks

1. What is your age ……..
2. Residence …….
    a) Urban
    b) Rural
3. What tribe do you belong to? ……..
4. What is your religion?
    a) Christian
    b) Muslim
    c) Other specify…….
5. Highest level of education
    a. No formal education
    b. Primary education
    c. Secondary education
    d. College/university

6. Current employment:
    a. Not working
    b. Peasant
    c. Government employee/Private sector employee
    d. Self-employment
    e. Other (specify) ……
7. During this pregnancy, how often did you drink alcohol?
    a. Every day
    b. Once or twice a week
    c. 2-3 times in a month
    d. Once per month
    e. Never
8. What is your current HIV status?
    a. Positive
    b. Negative
    c. Don't know

Pregnancies and births

9. Including your current pregnancy, how many times have you been pregnant? Including pregnancies that did not end up in a live birth. (Gravidity)
    a. 1 (skip to question 11)
    b. 2-4
    c. More than 4
10. How many times did you abort?
    a. 0
    b. 1
    c. 2-4
    d. More than 4

11. How many children have you given births to that were alive when they were born? (including births where the baby didn't live for long) – (Parity)
    a. 0
    b. 1
    c. 2-4
    d. More than 4
12. How many living children do you have
    a. 0
    b. 1
    c. 2-4
    d. More than 4
13. How many weeks pregnant are you?
    a. Before 16 weeks of gestation
    b. 16 to 24 weeks of gestation
    c. 25 to 32 weeks of gestation
    d. 33 to 35 weeks of gestation
    e. 36 to 42 weeks of gestation
14. Did you plan/intend to get this pregnancy?
    a. Yes
    b. No

Family questions:

15. What is the nature of your relationship/marriage?
    a. Married, living together
    b. Married but living apart
    c. Living with a man, not married
    d. Currently having a regular partner (sexual relationship), living apart
    e. Refused/no answer

16. Including yourself, in total, how many wives or partners does your partner/husband live with now as if married?
    a. Total number of wives and live in partners……
    b. Don't know
17. Who do you live with now?
    a. Partner/husband
    b. Alone
    c. In laws
    d. Parents
    e. Others specify……
18. What is the total number of persons living in your household (including you)?
    a. 1
    b. 2-4
    c. More than 4
19. Who is the head of your household?
    a. I am
    b. My husband/partner
    c. In laws
    d. Parents
    e. Other relative ……
20. Are you able to spend the money you earn as you wish yourself?
    a. Yes all the time
    b. Yes rarely
    c. No
21. Do you have to give all or part of the money to your husband/partner?
    a. No
    b. Yes, give part to husband/partner
    c. Yes, give all to husband/partner

22. Do you have someone who can help you financially if you need it?
    a. Yes, specify ……..
    b. No
23. Choice of the partner/husband
    a. Both choose each other
    b. Third party's choice
    c. Ones party's choice

Husband/partner factors

24. What is age of your partner/husband?
    a. Less than 25 years
    b. 25 and above years

25. What is the highest level of education has your husband/partner achieved?
    a. No formal education
    b. Primary education
    c. Secondary education
    d. College/university
26. What is your husband/partner occupation?
    a. Not working
    b. Farmer
    c. Government employee/Private sector employee
    d. Self-employment/business
    e. Other (specify) ……..
27. What is your partner/husband religion?
    a. Christian
    b. Muslim
    c. Others (Specify)……

28. How often does your husband/partner drink alcohol?

    a. Every day
    b. Once/twice a week
    c. 1-3 times in a month
    d. Less than once a months
    e. Never

29. Does your partner smoke or chew tobacco?

    a. Yes
    b. No

Community factors/ Social factors questions

30. Do you/your partner traditional norms support beating pregnant women?

    a. Yes
    b. No

31. Do you think violence is a one way of disciplining ones' wife?

    a. Yes
    b. No

32. **VIOLENCE SCREEN**

When two people marry or live together, they usually share both good and bad moments. I would like to ask you some question about your husband/partner and how he treats (treated) you. I would again like to assure you that your answer will be kept secret, and that you do not have to answer any question that you do not want to.			
During this pregnancy, have you ever suffered from any of these? (mark all answer)	**Circle the correct response**	**If yes to any, who did it to you (choose from the right side, and write all the appropriate**	**If No to all (skip to question 35)**

		letter(s)	
(A) Emotional violence			
a. Belittled or humiliated in front of other people	Yes/No		a. Current Partner b. Former partner c. Mother In-law d. Father in law e. Brother in law f. Sister in law g. Your brother h. Your sister i. Friend j. I don't know the per k. Neighbor l. Father m. Mother n. Others……
b. Threatened to be withdrawn support (e.g. financial help)	Yes/No		
c. Intimidate on purpose (e.g. by looked at you)	Yes/No		
d. Threatened to be beaten	Yes/No		
e. Abused verbally	Yes/No		
(B) Physical violence			
a. slapped/thrown something at you	Yes/No		
b. Being beaten or dragged or pushed	Yes/No		
c. Choked or burnt	Yes/No		
d. Threatened with a weapon or knife	Yes/No		
f. Punched/kicked in the abdomen	Yes/No		
(C) Sexual violence			
a. Having sex because you are afraid of what your partner might do	Yes/No		
b. Forced to do something sexual which degrading or humiliating	Yes/No		
c. Forced to involve in sexual act without your consent	Yes/No		
d. Any other abuse, mention …….	Yes/No		

33. Did you tell anyone about the abuse that happened to you during this pregnancy?

    a. Yes, specify whom you told (please mention all) ……

    b. No, (skip to question 34)

34. If no, why …….....

35. We have now finished the interview. Do you have any comments, or is there anything else you would like to add? …….

I would like to thank you very much for helping us. I appreciate the time you have taken. I realize that these questions may have been difficult for you to answer, but it is only by hearing from women themselves that we can really understand about their health and experiences of violence

THIS PART IS FOR PRINCIPAL INESTIGATOR AND RESEARCH ASSISTANT USE ONLY.

36. Has the participant been exposed to any form of IPV? (refer Q 32)
    a. Yes
    b. No
37. If yes, which type IPV? (refer Q 32)
    a. Emotional l violence
    b. Physical violence
    c. Sexual violence

THANK YOU FOR YOUR PARTICIPATION

Appendix 3: Dodoso la mahojiano – Toleo la kiswahili

DODOSO KUHUSU UWEPO WA UNYANYASAJI NA SABABU ZINAZOCHANGIA UNYANYASAJI WA AKINA MAMA WAKATI WA UJAUZITO KATIKA KLINIKI YA WAJAWAZITO MANISPAA YA MOSHI MJINI, MKOA WA KILIMANJARO, TANZANIA.

Namba ya dodoso……

Tarehe ya usahili: siku…… mwezi……./2017. Jina la kituo: ……

Namba ya utambulisho……. Jina la Msahili: ……

TAARIFA BINAFSI

Jaza nafasi au Chagua jibu sahihi

1. Una miaka mingapi? …….
2. Mahali unapoishi
    a) Mjini
    b) Kijijini
3. Kabila ……..
4. Dini yako
    a) Mkristo
    b) Muisilam
    c) Nyingine taja…….
5. Kiwango cha elimu yako
    a. Sijawahi kusoma
    b. Elimu ya msingi
    c. Elimu ya secondari
    d. Chuo/ chuo kikuu

6. Shughuli yako ya kiuchumi:
    a. Sina kazi
    b. Mkulima
    c. Mwajiriwa wa serikali/Mwajiriwa binafsi
    d. Nimejiajiri
    e. Nyinginezo (taja)……..
7. Unatumia pombe kwa sasa/wakati wa ujauzito?
    a. Kila siku
    b. Mara 1 au 2 kwa wiki
    c. 2-3 kwa mwezi
    d. Mara 1 kwa mwezi
    e. Situmii
8. Je una maambukizi ya VVU kwa sasa?
    a. Ndiyo
    b. Hapana
    c. Sijui

Ujauzito na uzazi

9. Hii ni mimba ya ngapi, zikiwemo na mimba ambazo hukufanikiwa kufikia mwisho kujifungua mtoto hai?
    a. 1 (Nenda swali la 11)
    b. 2-4
    c. Zaidi ya mara 4
10. Mimba ngapi zimetoka/zimeharibika?
    a. 0
    b. 1
    c. 2-4
    d. Zaidi ya 4

11. Umezaa mara ngapi (wakiwemo uliozaa hai muda mfupi wakafariki)
    a. 0
    b. 1
    c. 2-4
    d. Zaidi ya mara 4
12. Una watoto wangapi wanaoishi?
    a. 0
    b. 1
    c. 2-4
    d. Zaidi ya 4
13. Mimba ina wiki ngapi (umri wa mimba kwa wiki)?
    a. Chini ya wiki 16
    b. Wiki 16 mpaka 24
    c. Wiki 25 mpaka 32
    d. Wiki 33 mpaka 35
    e. 36 mpaka 40
14. Je ulipanga kupata ujauzito huu?
    a. Ndiyo
    b. Hapana

Maswali yanayohusu familia:

15. Hali ya ndoa?
    a. Nimeolewa, tunaishi pamoja
    b. Nimeolewa lakini hatuishi pamoja
    c. Sijaolewa lakini naishi na mwanaume
    d. Kwasasa nini mpenzi wa kudumu (nipo kwenye mahusiano), hatuishi pamoja
    e. Hakuna jibu

16. Je mpenzi/mume wako ana wanawake/wapenzi wangapi ukiwepo na wewe anao ishi nao kama mke?
    a. Jumla ya wanawake anaoishi nao kama mke/mpenzi……
    b. sijui
17. Kwasasa unaishi na nani nyumbani?
    a. Mume/mpenzi
    b. Mwenyewe
    c. Wakwe
    d. Wazazi
    e. Wengine taja…….
18. Je ni watu wangapi unaishi nao kwenye nyumba unayoishi, ukiwemo na wewe)?
    a. 1
    b. 2-4
    c. Zaidi ya 4
19. Nani mkuu katika nyuma yako?
    a. Mimi mwenyewe
    b. Mume/mwenza
    c. Wakwe
    d. Wazazi
    e. Mwingine (Taja)……
20. Je unao uhuru wa kutumia/kupanga matumizi ya pesa yako kama upendavyo?
    a. Ndiyo kila wakati
    b. Ndiyo mara chache sana
    c. Hapana
21. Je huwa unampatia mume/mpenzi wako pesa yako yote au kiasi?
    a. Hapana
    b. Ndiyo nampatia kidogo mume/mpenzi
    c. Ndiyo nampatia mume/mpenzi yote

22. Je kuna mtu anakuwezesha kipato/pesa ukiwa na uhitaji?
    a. Ndiyo, taja nani …….. ……..
    b. Hapana
23. Uchaguzi wa kupata mume/mwenza
    a. Sote tulipendana/kuchaguana
    b. Uchaguzi wa watu wengine
    c. Mmoja wetu alichagua

Maswali yanayo husu Mume/mwenza

24. Umri wa mume/mpenzi?
    a. Chini ya miaka 25
    b. Zaidi ya miaka 25

25. Kiwango cha elimu cha mwenza/mume?
    a. Hana elimu
    b. Ana elimu ya msingi
    c. Ana elimu ya sekondari
    d. Ana elimu ya chuo
26. Kazi ya mume/mpenzi?
    a. Hana kazi
    b. Mkulima
    c. Muajiriwa wa serikali/Muajiriwa sekita binafsi
    d. Kajiajiri
    e. Nyingine (taja) ……
27. Dini ya mume/mwenza**?**
    a. Mkristo
    b. Muisilam
    c. Nyingine taja……

28. Je mwenza/mume wako anakunywa pombe?
    a. Kila siku
    b. Mara 1 au 2 kwa wiki
    c. 1-3 kwa mwezi
    d. Chini ya mara 1 kwa mwezi
    e. Situmii
29. Je mwenza/mume wako anavuta sigara au ugoro?
    a. Ndiyo
    b. Hapana

Maswali yanayohusu jamii/jumuia

30. Je mila za kwako/mwenza wako zinaunga mkono ukatili kwa mama mjamzito?
    a. Ndiyo
    b. Hapana
31. Je unadhani ukatili kwa mwanamke ni njia sahihi ya kumuelimisha/nidhamu kwa mke?
    a. Ndiyo
    b. Hapana

32. **UCHUNGUZI WA UKATILI**

Watu wanapo ishi pamoja kama mke na mme, huwa na kipindi cha kushiriki mema na changamoto zao. Ningependa nikuulize maswali kuhusu mume/mwenza wako jinsi anavyo kufanyia Ninakudhibitishia tena taarifa zote utakazozitoa zitakuwa ni siri, na unaruhusiwa kutojibu swali lolote endapo hutajisikia kufanya hivyo.			
Wakati wa ujauzito huu je umewahi kufanyiwa lolote kati ya haya? (jaza yote yaliyotokea)	**Zungusha jibu sahihi**	**Kama ndiyo je nani alikufanyia hivyo (tumia orodha upande**	**Kama jibu ni hapana kwa yote (nenda swali la 35)**

		wa kulia)	
(A) **Ukatili wa kisaikologia/hisia**			
a. Kuaibiswa mbele ya watu	Ndiyo/hapana		a. Mwenza/mume wa sasa b. Mwenza uliyeachana naye c. Mama mkwe d. Baba mkwe e. Shemaji f. Wifi g. Kaka h. Dada i. Rafiki j. Simfahamu k. Jirani l. Baba m. Mama n. Wengineo ……
b. Kutishiwa kuondolewa msaada (mf. msaada wa kifedha)	Ndiyo/hapana		
c. Kutishiwa kwa makusudi (mf. Vile anavyo kutazama)	Ndiyo/hapana		
d. Kutishiwa kupigwa	Ndiyo/hapana		
e. Kutukanwa au kudhalilishwa kwa maneno	Ndiyo/hapana		
(B) Ukatili wa mwili			
a. Kurushiwa kitu kwa madhumuni ya kukuumiza	Ndiyo/hapana		
b.Kupigwa/kuburuzwa au kusukumwa	Ndiyo/hapana		
c. Kukabwa na mtu yoyote	Ndiyo/hapana		
d. Kutishiwa kwa silaha	Ndiyo/hapana		
e. Kupigwa mateke tumboni	Ndiyo/hapana		
(C) Ukatili wa ngono			
a. Kufanya tendo la ndoa kwa sababu unamuogopa mume/ mwenza wako	Ndiyo/hapana		
b. Kulazimishwa kufanya tendo la ndoa bila kuridhia	Ndiyo/hapana		
c. Kudhalilishwa kijinsia	Ndiyo/hapana		
d. Unyanyasaji mwingine taja …….	Ndiyo/hapana		

33. Je ulimwambia yoyote yaliyokutokea kwenye swali la 32 wakati wa ujauzito huu?
    a. Ndiyo, taja ulimwambia nani (taja wote) ……..
    b. Hapana (nenda swali la 34)
34. Kama hapana, je kwa nini? ……
35. Sasa tumemaliza mahojiano. Je una maoni yeyote, au una taarifa yeyote ambayo ungependa kuiongeza? ……

Ninapenda nikushukuru sana kwa ushiriki wako, kwa kutumia muda wako, ninatambua kuwa baadhi ya maswali yalikuwa ni vigumu kutoa majibu moja kwa moja, lakini ni kwa kusikia kutoka kwa wanawake wenyewe, ndiyo itasaidia kujua afya ya mama mjamzito na ukubwa wa tatizo hili

SEHEMU HII, NI KWA MATUMIZI YA MTAFITI/MTAFITI MSAIDIZI TU.

36. Je mshiriki amefanyiwa ukatili wa aina yeyote? (angalia swali la 32)

    a. Ndiyo
    b. Hapana

37. Kama ndiyo, je aina gani ya ukatili aliyonayo mshiriki? (angalia swali la 32)
    a. Ukatili wa kisaikologia/hisia
    b. Ukatili wa mwili
    c. Ukatili wa ngono

ASANTE KWA KUSHIRIKI

Appendix 4: Consent Form- English Version

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES DIRECTORATE OF POSTGRADUATE STUDIES

ID NO:

Greetings! My name is **Mariam Barabara,** I am a post graduate student, pursuing a MSc of midwifery and women's health at Muhimbili University of Health and Allied Science. Currently I am conducting a study on **Prevalence and associated factors of Intimate Partner Violence among pregnant women attending antenatal care at Moshi Municipal Council-Kilimanjaro Region, Tanzania.**

Purpose of study

To explore the prevalence and factors associated with intimate partner violence, among pregnant women attending Antenatal care clinic (ANC).

Sponsor:

Ministry of Health, Community Development, Gender, Elderly & Children (MoHCDGEC) – Tanzania

Involved Participants

This study will involve all pregnant women attending antenatal care clinic. The participation in the study will be voluntary, you are free to decide either to participate in the study or not. If

you participate, I will request you to answer questions in relation to Intimate Partner Violence during pregnancy. It will take 20-30 minutes for you to complete the interview.

Confidentiality

All information which will be collected from you will remain confidential and it will be used for study purpose only. This will be anonymous where by codes will be used instead of participants' names and will be stored in locked cupboard. Only the principal investigator will have access to it. If the results of the study will be published or presented in a scientific meeting, no information that might identify you as a participant will be used.

Benefits

If you will be found to have been exposed to IPV during the study, you will be advised or referred to see the nurse counselor and those with physical injury will also be referred to the counselor/doctor for further evaluation and treatment.

The study findings of whether you have been exposed to IPV or not will help the policy makers and other NGOs administrators to put strategies which will help the health care provider to screen all pregnant women for IPV as the integral part of routine antenatal care and lead them to relevant referrals and interventions. By doing so, will help to reduce/remove the burden experienced by pregnant women and their unborn babies related to IPV.

Compensation

There will be no compensation of any kind for participation.

Risk

The study questions may cause some of you to be uncomfortable, because it can touch the challenges which you have been experiencing in your index pregnancy even at some other periods. It is not the intension of the study to harm you psychologically or emotionally, but this study wants to find out how abused pregnant women and their fetus can be helped.

Rights to withdraw and alternatives

Your participation is absolutely voluntary and there is no penalty or loss of any benefits to which you're otherwise entitled for refusing to participate. You are free to ask any question and you may stop to participate in this study any time.

Contact Person

If you ever have questions about this study or your rights as a participant in this study, you should contact the principle investigator **Mariam Barabara,** through mobile number 0754 962 696 or P.O Box 3012, KCMC School of Nursing, Moshi-Kilimanjaro. OR you may contact or call Director of Postgraduate studies Dr. Joyce Masalu at MUHAS, P.O. Box 65001, Dar es Salaam. Tel: 2150302-6.

Signature:

Do you agree to participate?

Participant agrees …… Participant does NOT agree ……..

I, _____ have read the contents in this form. My questions have been answered. I agree to participate in this study.

Signature of participant _____ Date _____

Signature of the researcher _____ Date _____

Appendix 5: Fomu ya ridhaa ya kushiriki katika utafiti- Toleo la Kiswahili

CHUO KIKUU CHA AFYA NA SAYANSI SHIRIKISHI MUHIMBILI, KURUGENZI YA BARAZA LA MASOMO YA UZAMILI

Namba ya utambulisho

Mimi naitwa **Mariam Barabara** ni muuguzi mkunga, kwa sasa ninasoma shahada ya uzamili ya ukunga na afya ya wanawake katika Chuo Kikuu cha Afya na Sayansi Shirikishi Muhimbili. Ninafanya utafiti kuangalia **uwepo wa unyanyasaji na sababu zinazochangia unyanyasaji wa akina mama wakati wa ujauzito katika kliniki ya wajawazito manispaa ya Moshi mjini, mkoa wa Kilimanjaro, Tanzania.**

Madhumuni Ya Utafiti

Lengo la utafiti huu ni kubaini uwepo wa unyanyasaji na vitu vinavyochangia unyanyasaji wa akina mama wakati wa ujauzito katika kliniki ya akina mama wajawazito.

Mdhamini

Mdhamini wa utafiti huu ni Wizara ya Afya, Maendeleo ya Jamii, Jinsia, Wazee, na Watoto, Tanzania.

Jinsi Ya Kushiriki

Utafiti huu utawashirikisha wanawake wote wenye ujauzito wanaohudhuria kliniki ya ujauzito. Kushiriki kwako katika utafiti huu ni kwa hiari, una uhuru wa kuamua kushiriki katika utafiti au kutokushiriki. Endapo utaamua kushiriki nitaomba ujibu maswali yanayohusu

ukatili kwa mama mjamzito. Itachukua muda wa dakika 20-30 wewe kumaliza kuhojiwa maswali.

Usiri wa taarifa za mshiriki

Unahakikishiwa tena kuwa taarifa zote zitakazopatikana kutoka kwako wakati wa utafiti huu zitabakia kuwa siri na zitatumika kwa madhumuni ya utafiti husika tu, na si kwa malengo mengine yeyote. Kukuhakikishia hilo dodoso litakalo husika tutatumia namba ya utambulisho badala ya jina lako, kisha dodoso hili litafungiwa kabatini na Mtafiti mkuu pekee ndiye mwenye fursa ya kulitumia kwa madhumuni ya utafiti tu.

Faida za utafiti huu kwa mshiriki

Endapo ukigundulika kuwa unafanyiwa ukatili katika utafiti huu, utapelekwa kwa Muuguzi mshauri ambaye atakushauri zaidi na endapo utakuwa na majeraha katika mwili yanayohitaji matibabu utapelekwa kwa mshauri/mganga kwa uchunguzi zaidi na matibabu.

Pia majibu ya utafiti huu yatapelekea watunga sera za afya na uongozi wa mashirika yasiyo ya kiserikali kuweka mikakati ambayo itasaidia wahudumu wa afya kufanya uchunguzi wa awali kwa wanawake wote wenye ujauzito waliohudhuria kliniki juu ya unyanyasaji na hatua stahiki kuchukuliwa. Hii itasaidia kwa siku za usoni kupunguza/kuondoa unyanyasaji wa wanawake wakati wa ujauzito ili kuboresha afya ya mama na mtoto wake.

Fidia

Hakutakuwa na fidia yoyote kwa wewe kushiriki katika utafiti huu.

Athari za utafiti huu kwa mshiriki

Kuna baadhi ya maswali yanayoweza kugusa changamoto ambazo umekuwa unazipitia katika ujauzito huu, na kukufanya ujisikie vibaya. Sio kusudi la utafiti huu kukuumiza kisaikolojia bali kuangalia ni kwa kiasi gani wewe pamoja na mtoto aliyeko tumboni aweza kusaidika. Tutajaribu kadri ya uwezo wetu kuepuka kuuliza maswali yatakayokuumiza kisaikolojia.

Haki ya kushiriki au kutoshiriki katika utafiti huu

Ushiriki wako katika utafiti huu ni wa hiari kabisa. Unayohaki ya kishiriki au kutoshiriki bila kulazimishwa. Pia unayo haki ya kukataa kuendelea kushiriki/kuacha kujibu maswali wakati wowote utakapojisikia kufanya hivyo na hakutakuwa na hatua yeyote itakayochukuliwa dhidi yako au kulaumiwa kwa kufanya hivyo. Utaendelea kupata huduma za afya kama ulivyokuwa unapata kabla yawewe kukataa au kujitoa katika utafiti huu.

Nani wa kuwasiliana nae?

Wasiliana na mtafiti mkuu, Mariam Barabara kwa sim namba 0754 962 695 au S.L.P 3012 KCMC Chuo cha Uuguzi, Moshi-Kilimanjaro wakati wowote utakapokuwa na maswali au jambo lolote lenye kuhitaji ufafanuzi kuhusu utafiti huu au haki yako kama mshiriki. Au wasiliana na Mkurugenzi wa Baraza la masomo ya Uzamili wa Chuo Kikuu cha Afya na Sayansi Shirikishi Muhimbili, Dr Joyce Masalu, S.L.P 65001, Dar es Salaam au simu namba 2150302-6.

Je,una maswali?

Je, unakubali kushiriki kwenye utafiti huu? (weka alama ya vema), Ndiyo…… Hapana ……

Mimi……Nimesoma/nimesomewa na kuelewa yaliyomo kwenye fomu hii na maswali yangu yote yamejibiwa vizuri.
Nimekubali kushiriki kwenye utafiti huu.

Sahihi ya mshiriki……. Tarehe ……..

Sahihi ya mtafiti…… Tarehe ……...

Appendix 6: Ethical Clearance

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES
OFFICE OF THE DIRECTOR OF POSTGRADUATE STUDIES

P.O. Box 65001
DAR ES SALAAM
TANZANIA
Web: www.muhas.ac.tz

Tel G/Line: +255-22-2150302/6 Ext. 1015
Direct Line: +255-22-2151378
Telefax: +255-22-2150465
E-mail: dpgs@muhas.ac.tz

Ref. No. MU/PGS/SAEC/Vol. IX

18th April, 2017

Ms. Mariam L. Barabara
MSc. Midwifery and Women's Health
MUHAS.

RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED "PREVALENCE AND ASSOCIATED FACTORS OF INTIMATE PARTNERS VIOLENCE AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE AT MOSHI MUNICIPAL COUNCIL-KILIMANJARO, REGION, TANZANIA."

Reference is made to the above heading.

I am pleased to inform you that, the Chairman has, on behalf of the Senate, approved ethical clearance for the above-mentioned study. Hence you may proceed with the planned study.

The ethical clearance is valid for one year only, from 19th April, 2017 to 18th April, 2018. In case you do not complete data analysis and dissertation report writing by 18th April 2018, you will have to apply for renewal of ethical clearance prior to the expiry date.

Dr. E. Balandya
DEPUTY DIRECTOR OF POSTGRADUATE STUDIES

cc: Director of Research and Publication
cc: Dean, School of Public Health and Social Sciences

Appendix 7: Permission to Conduct a Research Study

MOSHI MUNICIPAL COUNCIL

(All correspondence be addressed to the Municipal Director)

MUNICIPAL DIRECTOR: +255-027-2752344
ALL OFFICE: +255-027-2754371/4
FAX : +255-027- 2752906
E-MAIL: mkurugenzi@moshimc.go.tz
WEB SITE: www.moshimc.go.tz
blog-manispaayamoshi.com
TELEGRAPHIC ADDRESS: MANISPAA

MUNICIPAL HALL,
P.O. BOX 318,
MOSHI.

Ref. No. MMC/HO/7008/VOL.VI/134

24th April, 2017

Mariam Lawrence Barabara,
MUHAS,
P.O. Box 65001,
DAR ES SALAAM.

REF: PERMISSION TO CONDUCT A RESEARCH STUDY IN MOSHI MUNICIPAL COUNCIL – KILIMANJARO REGION

Refer to your letter dated on 24th April, 2017 requesting permission to conduct a research study entitled **"Prevalence and associated factors of Intimate Partner Violence among pregnant Women attending Antenatal care at Moshi Municipal Council-Kilimanjaro Region, Tanzania.**

Permission to conduct a research study in our health facilities (Majengo H/C, CCP H/C, Pasua H/C, Bondeni, Kiboriloni, Msaranga and Njoro Dispensary has been granted.

You are required to adhere with research ethics and to share the final research with Moshi Municipal Council Medical Officer of Health.

Dr. Somoka Mwakapalala
MUNICIPAL MEDICAL OFFICER
MOSHI MUNICIPAL COUNCIL

Copy to Health facilities:-

1. Majengo H/C,
2. CCP H/C,
3. Pasua H/C,
4. Bondeni Dispensary,
5. Kiboriloni, Msaranga and
6. Njoro Dispensary

} Please assist her.