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**WOMEN AS VICTIMS AND
PERPETRATORS OF INTIMATE
PARTNER VIOLENCE (IPV) IN
MAPUTO CITY, MOZAMBIQUE:
OCCURRENCE, NATURE AND
EFFECTS**

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ABSTRACT

Background: Intimate partner violence (IPV) against women is a widespread bad behavior, and its effects on women's lives encompass injuries, mental ill-health, decreased intimacy, and a financial burden. Growing evidence indicates that women also abuse their intimate male partners. The role of controlling behaviors in IPV remains controversial, but data, mainly from Western countries, indicate that both women and men use them. The situation (e.g., health condition) of women who have been victims or perpetrators of IPV indicates that they may fare poorly in various areas (e.g., have poorer mental health). The overall aim of this thesis is to investigate women's experiences of IPV as both victims and perpetrators, the associated risk and protective factors, and the effects (including poor mental health).

Methods: Data were collected between April 1, 2007 and March 31, 2008. They consist in consecutive cases of 1,442 women aged 15-49 years-old visiting Forensic Services at the Maputo Central Hospital (Maputo City, Mozambique) after IPV abuse. Interviews were conducted by trained female interviewers, and the data collected included demographic and life style factors, and previously validated in sub-Saharan Africa (SSA) Revised Conflict Tactics Scale (CTC2) scores, Controlling Behavior Scale Revised (CBS-R) scores, and Symptoms Check List (SCL-90-R) scores. Further, Schedule for Social Interaction scores which had not been validated in SSA. Statistical analyses included chi-square tests, and applications of bivariate and multivariate techniques.

Results: Study I: Overall experienced IPV during the past 12 months was 70.2% and chronicity was 85.8 times; 55.3% were severe acts of violence. Co-occurring victimization across all types was 26.8%. Having a middle/high educational level, divorce/separation, children at home, controlling behaviors, being a perpetrator oneself with co-occurring victimization, and childhood abuse were important factors in explaining sustained IPV. Study II: Overall inflicted IPV during the past 12 months was 69.4% and chronicity was 44.8 times; 48.9% were severe acts of violence. Co-occurring perpetration of IPV across all types was 14.5%. Having a middle/high educational level and a liberal profession/own business, divorce/separation, children at home, and high BMI, smoking, controlling behaviors (in particular, over one's partner), co-occurring perpetration, being a victim oneself, and abuse as a child were important factors in explaining the inflicting of IPV. Study III: During the 12 past months, the numbers of women and men who had directed any kind of physical assault at their partner were similar, but there was divergence concerning the use of an act of sexual coercion. The most common type of relationship was non-violent, followed by situational couple violence (SCV). Childhood abuse was associated with mutual violent control (MVC). Study IV: Victims and perpetrators of IPV by type (psychological aggression, physical assault, sexual coercion, and physical assault with injury) scored higher on symptoms of depression, anxiety and somatization than their unaffected counterparts during the previous 12 months. Controlling behaviors, mental health comorbidity, childhood abuse, social support, smoking, sleep difficulties, age and lack of education were important factors in explaining mental health problems in women who were both victims and perpetrators of IPV across all types. Victimization and perpetration were not associated with poor mental health across all types of IPV.

Conclusions: The thesis demonstrates that women seeking help for IPV abuse are widely victimized, but they also use violence against their male partners. In both cases, the rate of severe IPV and the chronicity level are high. The most violent relationship involves situational couple violence, but mutual coercive violence and intimate terrorism are fairly common. Victims and perpetrators report greater symptoms of mental health. The factors related to the different dimensions of symptoms of mental health are in general similar. Overall, the situation of help-seeking women is a source of great concern for many groups, e.g., care providers, since their suffering is extensive and deep, ranging from complex IPV experiences as victims and perpetrators to greater symptoms of mental health. This thesis may have important implications for the development of interventions to decrease sustained and inflicted IPV in Mozambique and to prevent its associated outcomes, e.g., mental ill-health.

LIST OF PUBLICATIONS

- I. **Zacarias AE**, Macassa G, Svanström L, Soares JJ, Antai D. Intimate partner violence against women in Maputo city, Mozambique (submitted).
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LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANOVA	Analysis of Variance
BMI	Body Mass Index
CBS-R	Controlling Behaviors Scale-Revised
CBOS	Community Based Organizations
CC	Coercive Control
CCV	Coercive Controlling Violence
CNBS	Comissão Nacional de Bioética em Saúde
CTS	Conflict Tactic Scales
CTS2	Conflict Tactic Scales-Version 2
DB	Dysphoric Borderline
DHS	Demographic Health Survey
ETA2	Squared Estimate of Effect Size
FRELIMO	Frente de Libertação de Moçambique
FO	Family Only
GDP	Gross Domestic Product
GVA	Generally Violent Antisocial Men
HIV	Human Immunodeficiency Virus
IPV	Intimate Partner Violence
IT	Intimate Terrorist
ISSI	Interview Schedule of Social Interaction
MANOVA	Multivariate Analysis of Variance
MVC	Mutual Violent Control
NGO	Non-Governmental Organization
OMM	Organização da Mulher Moçambicana
OR	Odds Ratio
POP	Psychiatric Out-Patients
RENAMO	Resistência Nacional de Moçambique
SCL-90-R	The Symptom Check List-Revised
SCV	Situational Couple Violence
SD	Standard Deviation
STD	Sexually Transmitted Disease
SSA	Sub-Saharan Africa
VIT	Victim of Intimate Terrorism
VR	Violent Resistance

1 INTRODUCTION

Intimate Partner Violence (IPV) against women is a serious public health problem around the world. It is at an endemic level, and threatens the health and well-being of women and their children [1,2,3]. Further, IPV against women is considered a human rights violation, since such abuse blocks female socio-economic improvement and the capacity for self-determination [3]. The effects of IPV encompass everything from financial adversity and decreased confidence to high rates of morbidity and mortality [1,2,4-13]. In sub-Saharan Africa (SSA), women are forced, by means of violence, to maintain sexual relations with their partners, and are unable to negotiate use of condoms, which increases their vulnerability to HIV [14,15]. Also, IPV can be an additional burden, exacerbating the poor financial, social, health and living circumstances of women [12,16]. In official and traditional marriage, or in sexual unions where patriarchal views and gender roles prevail, women are often seen as the property of men, and marginalized in terms, for example, of financial power. The violence frequently takes the form of physical chastisement, e.g., when the woman does not take care of her usual chores, such as cleaning or cooking [8,17].

Growing evidence, mostly from developed countries, indicates that the abuse of men by their female intimate partners may also be a major public health issue [13,18-23]. A few studies suggest that men in SSA are abused as well, and at a relatively high rate [2,11,24-31]¹, and males have complained of being abused by their female partners [27,28,32-34]. The effects of abuse on men's financial, social, health and living circumstances have not been sufficiently investigated, but observations, mainly from Western countries, indicate that they can fare poorly in these respects [34-37].

Little attention has been paid to the financial, social, health and living circumstances of women using IPV against their male partners, even if findings, again mainly from developed countries, indicate that they can suffer from, for example, serious mental health ailments and attachment anxiety [38-43]. Nevertheless, there is a lack of studies, particularly in SSA, about women's experiences of IPV as victims and perpetrators, and how these experiences are related to factors such as abuse during childhood, controlling behaviors and mental health, even among those women who are known victims of male IPV. The paucity of data is evident in Mozambique, where little attention has been paid by the research community to women's experiences of various types of IPV as victims and perpetrators. To the best of our knowledge, only three studies in Mozambique have addressed the prevalence of IPV among women and men, where both genders have complained of being abused by their intimate partners [27,28,32]. There are no studies of women's experiences of sustained and inflicted IPV in relation to factors such as abuse as a child, controlling behaviors, and mental ill-health. In view of the scarcity of data in Mozambique regarding women's experiences of sustained and inflicted IPV, and related risk and protective factors and effects, these issues have been addressed in a sample of 1,500 women seeking help for IPV abuse by their partner. Information about the women's experiences of IPV as victims and perpetrators, and about which factors are associated with such experiences may be useful in various ways. For example, the data may provide important information on

¹Female respondents.

women's circumstances that could assist policy makers, and also health analysts, planners and providers, in developing interventions to target sustained and inflicted IPV, and its associated risk and protective factors and effects.

2 BACKGROUND

2.1 OCCURRENCE AND NATURE OF IPV

Intimate partner violence (IPV) against women has received increasing attention among health care scholars and physicians because of its impact on their physical and mental health, both in the short and long term [1,2,16]. IPV is rooted in specific socio-economic, cultural and controlling/dominance settings, and public attitudes to what is or is not tolerable in intimate relationships reflect societal views and cultural norms [1,44]. IPV is defined as “abuse between two people in a close relationship ... [including] current and former spouses and dating partners” [45]. Although IPV affects both sexes, in societies where there is a huge gender disparity women experience more abuse than men [46]. The prevalence of IPV varies according to many factors, including societal conditions, socio-economic status, race/ethnicity, and gender. Thus, public awareness of IPV is an important influence on the social environment in which victims and perpetrators are embedded, which in turn may contribute to reducing or increasing the rate of IPV [47]. There are a fairly large number of studies concerning the prevalence and nature of IPV against women in SSA and elsewhere, based both on community and general population samples and on highly selected samples (e.g., women in shelters) [e.g., 1,2,6,21]. Mounting evidence indicates that women’s use of abuse against male intimates is also common; few studies, however, have addressed women’s abuse of male intimate partners in SSA, and the findings tend to be based on research from the developed world, particularly Anglo-Saxon countries [see e.g., 13,20-23,27-29]. These data come from student, community and general population samples, but there seems to be an over-representation of students. Most available findings on women’s sustained and inflicted IPV are based on cross-sectional studies.

2.1.1 Women as victims

Notwithstanding noteworthy methodological differences, studies carried out around the world have been shown that IPV is a serious concern, regardless of age, race, ethnicity, or country [1,2,16]. Estimates of prevalence rates among women physically assaulted by their male partner at some point in their lives range between 10% and 69% worldwide, and between 18% and 58% in Europe [48]. In the USA, 1.3 to 5.3 million women experience IPV every year [49]. Alhabib et al. [50], in their literature review of studies of the lifetime prevalence of domestic violence against women around the world (published between 1995 and 2006), found that the highest means of physical violence and emotional abuse were among Japanese immigrants to North America, at about 47% and 78% respectively, and in samples from South America, Europe, and Asia, at about 37% and 50% respectively.

In SSA, previous studies have shown that prevalence rates of IPV against women vary widely, which may relate to cross-country, inter-regional and circumstantial differences, but may also reflect operational differences, such as the definition of IPV and method of data collection. The estimated prevalence rate of overall IPV (physical, sexual and emotional) against women in the past 12 months in four studies in three countries (South Africa, Rwanda and Nigeria) ranged between 14% and 41% [51]. In another study, carried out in 7 SSA countries, the estimated rate of co-occurring emotional/physical/sexual violence ranged from 3.6% to 8.3%, and of physical/sexual

abuse from 6.8% to 30.1% [6].² One study, carried out in Kenya among women seeking antenatal care, found that the yearly prevalence rates of types of IPV were physical 52.25%, psychological 40%, and sexual 15% [52]. In the southern Africa region, according to the Demographic Health Survey (DHS), prevalence rates during the 12-month period varied. In Tanzania, the rates were physical 33.4%, sexual 13.7%, and emotional 31.9%. The rates of co-occurring emotional/physical and sexual violence were 6.3%, and of physical and sexual violence 9%. [53]. In Malawi, the rates were physical 14.7%, sexual 13.4%, and emotional 21.2%. The rate of co-occurring emotional/physical and sexual violence was 3.6%, and of physical and sexual violence 5.3%. [54]. Further, in Zambia, the prevalence rates were physical 19.6%, sexual 16%, and emotional 23.9%. The rate of co-occurring emotional/physical and sexual violence was 5.7%, and of co-occurring physical and sexual violence 10.3% [55]. Moreover, in Zimbabwe, the prevalence rates of violence were physical 20.7%, sexual 13.3%, and emotional (22.7%). The rate of co-occurring emotional/physical and sexual violence was 3.8%, and of co-occurring physical and sexual violence 5.8%. [56]. Likewise, one study carried out in South Africa among women seeking antenatal care found prevalence rates of violence within 12 months prior to the study of physical 25.5%, emotional 51%, and sexual 9.7%, while the rate of co-occurring physical and sexual violence was 30.1% [57]. In Mozambique, there are only two studies, which reported that 11% [32] and 26% [27] of women had been physical abused by their intimate partners during the past year.

2.1.2 Women as perpetrators

In recent decades, scholars around the world have argued about the nature of IPV, and particularly about the gender of perpetrators. Growing evidence, mostly from developed countries, indicates that the abuse of men by their female intimate partners may also be a major public health issue [13,18-23,58]. Data from the National Crime Victimization Survey in the USA from 1993 to 2001 show that between 103,000 and 163,000 men per year reported being abused by their female partner [59]. Moreover, Archer [18] in a meta-analysis of 82 studies about physical aggression between heterosexual partners found that women were more likely than men to use physical aggression (e.g., to kick their partner) and to use it more frequently. Similar findings were obtained in the longitudinal Dunedin study [22] of partner violence among a cohort of young adults; that is, women physically abused their male partners more often than men did their female partners. Further, in a Canadian survey [21] of domestic violence (a synonym for IPV), it was observed that rates of intimate terrorism (e.g., the will or compulsion of an aggressor to exert general control over his or her partner by means such as physical violence) were generally similar for women and men; that is, 8% of women and 7% of men reported severe abuse. Likewise, Straus [13], in a study of female and male university students in 32 countries, observed a total assault rate of 31.2%, with women being more abusive than men (21.4% vs. 9.9%), even in male-dominated societies. It was also observed that rates of dominance and self-defense as precursors of violence in these student populations were generally low and the same among both women and men. Moreover, various studies [21,22] show that “multiple” forms of abuse and repeated abuse among adults do not seem to differ between the sexes, which suggests that women are not more vulnerable than men. Although men are

² Cameroon, Kenya, Malawi, Rwanda, Uganda, Zambia, Zimbabwe.

generally more likely to use sexual acts against women than vice-versa, recent findings suggest that this issue may be more complex than previously thought. Hines [20], in a study of university students from 38 sites, found that 2.4% of men were verbally forced by their female partners into oral or anal sex, and 2.1% into vaginal sex, whereas 1.6% of women reported that their partners verbally forced them into oral or anal sex, and 1.6% into vaginal sex.

In SSA, women's abuse of their male intimate partners has not received much attention. However, some studies indicate that women initiate abuse (mainly physical) of their male partners at rates ranging from 0.5% to 27% [1,2,11,24-26,29-31].³ Males have complained of being physically abused by their female partners in Nigeria [29], South-Africa [34], and Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe [32] at rates of 3% to 27%.⁴ According to the DHS³, in the southern African region, the prevalence rate during the previous 12 months of women initiating physical violence was variable: in Tanzania, the rate was 1.5% [53], in Malawi 1.8% [54], in Zambia 11.4% [55], and in Zimbabwe 2.2% [56]. Further, in a study carried out among university students [13], it was found that the prevalence of physical assault in the previous 12 months was 1.7% in Tanzania and 10.2% in South Africa. In Mozambique, previous studies have reported that IPV perpetrated by women during the past year ranged between 8% and 37% [27,28,32].

Overall, the range of prevalence rates of IPV against men is wide, which may pertain to cross-country, inter-regional and contextual variations, but also may be due to methodological differences regarding operational definitions of IPV and modes of data collection.

2.2 DEFINITIONS OF IPV

Domestic violence is referred to as **intimate partner violence (IPV)**, since the term distinguishes this type of family violence from other types, such as violence against children or elderly people [45].

The Centers for Disease Control and Prevention (www.cdc.gov/) and Saltzman et al. [45] state that: "Intimate partner violence describes physical, sexual, or psychological harm by a current or former partner or spouse. This type of violence can occur among heterosexual or same-sex couples and does not require sexual intimacy. IPV can vary in frequency and severity. It occurs on a continuum, ranging from one hit that may or may not impact the victim to chronic, severe battering". There are four main forms of IPV:

- (a) **Physical violence** refers to: "Intentional use of physical force with the potential for causing death, disability, injury, or harm. Physical violence includes, but is not limited to, scratching; pushing; shoving; throwing; grabbing; biting; choking; shaking; slapping; punching; burning; use of a weapon; and use of restraints or one's body, size, or strength against another person".
- (b) **Sexual violence** divides into three categories: "(i) Use of physical force to compel a person to engage in a sexual act against his or her will, whether or not the act is completed; (ii) attempted or completed sex act involving a person who

³Women as respondents.

⁴Men as respondents.

is unable to understand the nature or condition of the act, to decline participation, or to communicate unwillingness to engage in the sexual act, e.g., because of illness, disability, or the influence of alcohol or other drugs, or because of intimidation or pressure; and (iii) abusive sexual contact”.

- (c) **Threats of physical or sexual violence** refers to: “Use [of] words, gestures, or weapons to communicate the intent to cause death, disability, injury, or physical harm”.
- (d) **Psychological/emotional violence:** “Involves trauma to the victim caused by acts, threats of acts, or coercive tactics. Psychological/emotional abuse can include, but is not limited to, humiliating the victim, controlling what the victim can and cannot do, withholding information from the victim, deliberately doing something to make the victim feel diminished or embarrassed, isolating the victim from friends and family, and denying the victim access to money or other basic resources. It is considered psychological/emotional violence when there has been prior physical or sexual violence or prior threat of physical or sexual violence. In addition, stalking is often included among the types of IPV”.

Stalking generally refers to "harassing or threatening behavior that an individual engages in repeatedly, such as following a person, appearing at a person's home or place of business, making harassing phone calls, leaving written messages or objects, or vandalizing a person's property" [60].

2.3 THEORIES AND TYPOLOGIES OF IPV AND TYPES OF OFFENDERS

There are various theories of IPV. Additionally, several IPV typologies and offender types have been proposed. There follows a sample of the different theories, typologies and offender types that we believe are best suited for this thesis.

2.3.1 Theories of IPV

The study of aggression/violence has a long tradition in scientific research, and both humans and animals are investigated. Several disciplines are involved in researching and theorizing about aggression and violence, including forensic science (physicians and pathologists), psychiatry, physiology, sociology, anthropology, animal behavior, and criminology. The concept of IPV may have supplied the field with new “oxygen”. Understanding which of these theories can explain IPV is essential to realizing the purpose of this thesis, which is to enable the development of interventions to decrease inflicted and sustained IPV in Mozambique.

2.3.1.1 Systems theory

This theory argues that IPV plays a role in relationships between individuals, and postulates that violence is used to adjust intimacy and reserve in couples [61-63]. Systems theorists posit that violence has a specific function in a relationship due to the participation of both members of the couple, which preserves the relationship. The pattern of violence develops, and increasing hostility, coercion, and the give-and-take dynamic of violence/abuse provide a way of preserving equilibrium in the relationship, or of maintaining a dominant/controlling behavior on the part of one partner (who has authority in the relationship, or who has the duty to maintain authority and to make

decisions) over the other. Thus, the one who exerts control over the other may use violence to maintain his or her position. Otherwise, the one who is controlled by his or her partner may use violence to attain a more rightful relationship [61-63]. Building on this theory allows us to understand the risk factors that may lead individuals to become victims or perpetrators of IPV.

2.3.1.2 Feminist theory

Contrary to systems theorists, feminist theorists argue that the risk factors for IPV operate at macro or socio-political level. Feminist theory looks at how men and women are acculturated into protagonists of power and dominating or controlling behaviors [20,61,64-66]. The feminist framework posits that power imbalances within patriarchal societies create a gendered social order that gives men rights and authority over women within the family or relationship. This results in men exercising power and control over women in many ways, including the use of violence or abuse as a tool to maintain power or the practice of a controlling behavior [20,61,64-66].

According to this theory, women living in a male-controlled society are more likely to be victims of IPV. The theory is cross-cultural, and can be consistently applied when describing high rates of female victimization in countries associated with or characterized by more sexist attitudes, such as Mozambique [67]. In addition, the theory is consistently applicable when considering high rates of male IPV perpetration in patriarchal set-ups, just as is the case in part of the segment of Mozambican society with the greatest gender inequality [see, e.g., 64-67].

2.3.1.3 Social learning theory

The social-learning framework views IPV as a learned behavior that can be passed on from one generation to the next [66,68-70]. The theory posits that women who have been punished or abused during their childhood will see this kind of behavior as an acceptable outlet in a given situation. A child grows up and acquires the learned behavior during adulthood, where it is regarded as suitable. Moreover, positive or negative behaviors can be assimilated through positive or negative role models that, on applied social learning principals, are pertinent to the acquisition and maintenance of aggressive conduct [66,68-70]. Likewise, social learning imbues women with the principle that violence in relationships is a normal course of action under stressful circumstances. Building on this theory allows us to understand risk factors that may lead individuals who have been abused during childhood to become victims or perpetrators of IPV.

2.3.1.4 The ecological model

Systems, social learning and feminist theories are valuable for understanding IPV at individual and macro levels, but their application has some limitations. The ecological model includes interaction between different risk factors in multiple spheres that may influence societal hierarchical levels [1,71,72].

This theory hypothesizes that the risk factors for IPV might be conceptualized across four levels. Each level – individual, family/interpersonal, community, and macro system/societal – substantially impacts on the risk factors for IPV. At the first level, the individual's vulnerability to IPV as a victim or perpetrator refers to the most immediate risk factors, such as biological sex and having suffered childhood abuse. The

family/interpersonal level, the second level, consists of aspects of the circumstances or environments in which IPV occurs, such as conflicts in relationships between individuals. At the third, community, level the victims or perpetrators are involved in networks in social organizations (e.g., formal or informal institutions, groups of friends) that link individuals and their families to their community and wider cultural norms. Finally, the macro system/societal level encompasses broad cultural beliefs, dogmas and regulations, such as public and general norms concerning gender and power/dominance. Building on this theory may offer a comprehensive public health approach to complementing our framework for understanding why some people engage in IPV while others do not [1,71,72].

2.3.2 Typologies of IPV

Growing empirical evidence indicates that IPV is not a monolithic phenomenon, and that types of IPV can be differentiated with regard to partner dynamics, causes, context and effects. Four major patterns of IPV have been described, i.e., coercive controlling violence, violent resistance, mutual violent control, and situational couple violence [73-75]. In addition, there is coercive control, which does not automatically lead to violence [76,77]. Most available findings on IPV typologies and offender types are based on cross-sectional studies in developed countries.

2.3.2.1 *Coercive controlling violence and coercive control*

Coercive controlling violence (CCV) was initially described as “intimate terrorism” by Johnson [78], and the term “coercive controlling violence” was later coined by Kelly and Johnson [75] for this form of abuse. CCV involves pervasive control. A person controls and monitors his or her partner’s actions, relationships and activities, and the victim is often punished if the rules set up by the controlling person are not followed and respected [75].

CCV has been considered to be a pattern of control used mainly by male IPV perpetrators [74,78,79]. There are increasing indicators, however, that female IPV perpetrators also use control/dominance [13,20,21,80], and that there is no significant difference in control/dominance by women and men [13,21]. Moreover, data show that dominance by women and men results in an increased probability of abuse by women [13,81]. Thus, as suggested by Straus[13] “whenever there is dominance of one partner, there is an increased risk of violence by the dominant partner to maintain the dominant position, or by the subordinate partner to achieve something blocked by the dominant partner, or to change the power structure”. Further research into CCV is warranted, e.g., concerning women’s use of it.

Recently, Stark [76] described the concept of coercive control (CC) and stated that it involves violence, intimidation, isolation and control, with the objective of limiting the other person’s liberties. The perpetrator may also control the **victim by using physical and sexual violence, by threatening to use severe violence, or by intimidation or coercion**. However, as indicated by Stark [77], CC does not lead automatically to violence. Essentially, it is the motivation within a relationship that may result in abuse. The motivation behind CC remains rather unclear, but it has been suggested that the motives for using CC might include a wish to control the partner’s sexuality, particularly women’s sexuality [82]. Further research into CC is warranted, concerning,

for example, the use of it by both genders, and their motives. In this thesis, CCV (or CC) is used as a synonym for intimate terrorism (IT).

2.3.2.2 Violent resistance

Violent resistance (VR) is a type of IPV used by the victim to resist and retaliate when his or her partner engages in CCV, but not to control the partner [74,78,79]. VR has been considered to be essentially a female reaction to a male partner engaging in CCV [64,65,74,78,79], but apparently men exposed to CCV by female partners also react with VR [80,83]. Interestingly, data show that self-defense or retaliation ranks low among the reasons provided by women for using IPV [84], and in fact the motives (e.g., jealousy) for IPV seem to be rather similar among women and men [85]. Further research into VR is warranted, concerning, for example, men's use of it.

2.3.2.3 Mutual violent control

Mutual violence control (MVC) is a type of IPV where the parties engage in mutual combat. They use violence to control each other in a specific setting [79]. MVC may be relatively uncommon [79,86], but further research into MVC is still warranted, concerning, for example, its frequency.

2.3.2.4 Situational couple violence

Situational couple violence (SCV) is a type of IPV that is not based on a pervasive pattern of control. The causes of SCV vary from couple to couple and across different incidents of abuse experienced by the same couple. SCV occurs when a couple argues about a specific issue, or when a situation escalates into violence. It can occur often, and be severe or even fatal [75]. A range of studies indicate that SCV is common in the general population, or at least in community and student samples [21,74,83,87]. Further research into SCV is warranted, concerning, for example, its frequency in highly selected groups (e.g., women in shelters).

2.3.3 Types of offenders

Based on data from a series of studies, Holtzworth-Munroe and Stuart [88] proposed a typology of male offenders. They described three types of offenders along three dimensions: severity and frequency of marital violence, generality of the violence (family-only or extra-familial violence) and the male abuser's psychopathology or personality disorders. The types are family only, dysphoric–borderline, and generally–violent–antisocial men.

2.3.3.1 Family only

The family only (FO) offenders restrict their violence to the context of their family. They seldom engage in the severest forms of violence, or in psychological and sexual violence. They also show low levels of substance abuse and psychopathology.

2.3.3.2 Dysphoric–borderline

The dysphoric-borderline (DB) offenders engage in moderate to severe marital violence, including psychological and sexual violence. They tend to limit violence to the context of their family, but violence outside the family can occur. They may abuse substances (e.g., alcohol) and are likely to have the severest levels of psychopathology (e.g., a schizoid personality).

2.3.3.3 *Generally-violent-antisocial men*

The generally-violent-antisocial men (GVA) are violent within and outside the family. They engage in moderate to severe marital violence, including psychological and sexual violence. They also tend to abuse substances (e.g., alcohol) and are likely to have moderate levels of psychopathology (e.g., an antisocial personality disorder).

The typology proposed by Holtzworth-Munroe and Stuart [88] has apparently been validated for male offenders [89-91]. Recent findings indicate that the typology may also be valid for female offenders [92]. Further research into this typology is warranted concerning, for example, female offenders.

Additionally, several researchers have proposed typologies of female sex offenders. For example, based on a sample of female sex offenders in Texas, USA, Vandiver and Kercher [93] developed a six-category typology: heterosexual nurturers, non-criminal homosexual offenders, female sexual predators, young adult child exploiters, homosexual criminals, and aggressive homosexual offenders. These findings need, however, to be further validated empirically.

2.4 RISK FACTORS AND THE CONSEQUENCES OF IPV

There are a large number of empirical studies concerning the risk factors related to women's sustained and inflicted IPV. Prior studies have demonstrated conflicting results regarding risk factors associated with IPV. Controlling behavior by partner (e.g., my partner always wants to know where I am) is a well-known risk factor, which is associated with high rates of IPV in SSA [2,6,14,24,26]. Similar results have also been obtained in Western countries [13,20,21,94-96]. However, data from Ghana has shown that controlling behaviors by/over partner among men and women are a predictor of victimization/perpetration of IPV [97]. Also, consistent with studies from elsewhere (e.g., from Canada), controlling behaviors by/over partner have been shown to be predictors of victimization/perpetration of IPV among both sexes [13,20,21,80,87,94-96,98]. Further, jealousy over the actions of partner and unfaithfulness among men and women are usually associated with female IPV victimization [1,2,11,99]. Women's experiences of abuse during childhood in SSA appear to be related to IPV victimization [8,100], which is consistent with data from western countries [101-108]. Yet, childhood abuse appears only to be associated with IPV perpetration in Western countries [20,109-114]. Data on the relations between IPV and demographic and socio-economic factors are inconsistent, with some studies reporting that women living in poor socio-economic conditions (e.g., are unemployed) are more exposed to IPV [2,8,32,115], both in SSA and elsewhere. However, data from SSA have found that empowered women (e.g., employed women) are at greater risk of IPV victimization [24,25]. On the other hand, data from Western countries have shown that women with lower education are more likely to perpetrate IPV [116]. Yet, studies conducted elsewhere have found that empowerment of women (e.g., high educational level) is a predictor of inflicting IPV [20,112,117]. Heavy alcohol use by men and women has been associated with women's victimization in SSA [8,11,31], which is consistent with data from Western countries [120-123]. Finally, a large number of researchers have found a robust relationship between being a victim of IPV and also perpetrating violence [see, e.g., 124,127].

Intimate partner violence can have physical, mental and reproductive health consequences. Data from SSA and elsewhere have shown that IPV victimization is associated with poor physical and mental health [2,97,125-139]. In addition, research also indicates a correlation between IPV perpetration and poor mental health, in SSA and elsewhere [97,128,140-143]. Moreover, women exposed to IPV have been associated with negative reproductive health outcomes, such as unwanted pregnancy, preterm birth, low birth weight, abortion, pelvic pain, and sexually transmitted disease and HIV/AIDS, in SSA and elsewhere [1,2,14,29,131,135]. The mental health outcomes of IPV are attracting increasing attention, and studies suggest that women's experience of IPV, as victim or perpetrator, increases the likelihood of developing ailments such as depression, anxiety and post-traumatic stress disorder, in SSA and elsewhere [125-143]. Further, mental ill-health among women exposed to all forms of abuse (psychological, physical, sexual, and injury) is a relatively common phenomenon, and can lead to poor physical health [137-139].

2.5 CONCEPTUAL FRAMEWORK

Since the early 1980s, scholars have found numerous risk factors that predict future victimization or perpetration with regard to IPV. Many theories attempt to explain the contexts in which IPV occurs. However, there is a problem with many of the studies that have been based on unidirectional IPV, which examine only one aspect, i.e., male-to-female violence. In this thesis, the presumption of gender neutrality in IPV is essential for filling the current void in terms of understanding why women become victims or perpetrators. Thus, a more inclusive theoretical framework can evolve from individual-level through to macro-level determinants. In addition, there is a need to incorporate controlling behaviors/dominance as a variable. The addition of more contemporary measures of controlling behaviors in the CBS-R, [80,86,95,98], such as power in the relationship, and which person has a duty to maintain authority and make decisions, may give us scope for greater explanatory understanding of the causes of IPV. In a traditional setting, controlling behaviors/dominance are associated with men, as postulated in feminist theory, particularly in a patriarchal society [20,61,64-66]. Yet, the power matrix/controlling behaviors are continuously changing in workplaces, communities, and society at large. It can be speculated that, in a Mozambican socio-cultural context, power is becoming increasingly balanced. Thus, controlling behaviors by partners are more likely to achieve something that was formerly blocked by the dominant partner through the use of IPV in a traditional setting. Nevertheless, controlling behaviors over partner are more likely to shift the relationship of power between individuals through the use of IPV. However, controlling behaviors by both partners are more likely to preserve equilibrium in the relationship between individuals through IPV. The positing of controlling behaviors by/over a partner is consistent with systems, feminist theories and the ecological model [1,20,61,64-66,71,72].

Individual-level explanations seek to identify the developmental backgrounds of individuals who are most likely to respond to the societal conditions that facilitate IPV. Systems theory has focused on the understanding of IPV at interpersonal level [61-63]. According to this theory, both partners have a predisposition consistently to escalate or deescalate the IPV they aim at each other. Therefore, factors such as engagement, aggressiveness, and controlling behaviors/dominance are related to both partners in

IPV, while they act as either victim or perpetrator [61-63,127,128,144]. Further, the most commonly mentioned individual-level factor for IPV in social learning theory and the ecological model is childhood abuse [1,66,68-72]. By contrast, the feminist theory operates at socio-political level. Feminist theorists argue that IPV is triggered by patriarchal dogma systems in society, established on the basis of male dominance and familial structure. Thus, societal and cultural beliefs have established male perceptions of dominance and power, while supporting a view of women's roles as subservient [20,61,64-66]. In any case, these theories may address some limitations to understanding the risk factors for IPV. The ecological model allows us to understand the complex interaction between societal risk factors for becoming either victims or perpetrators of IPV. There is an individual's risk (e.g., child abuse), which turns into a family's risk (e.g., marital conflict), which eventually becomes located in community factors (e.g., women socio-economic status) and societal factors (e.g., traditional gender roles) [1,71,72]. This permits the construction of an integrated model. See Figure 1.

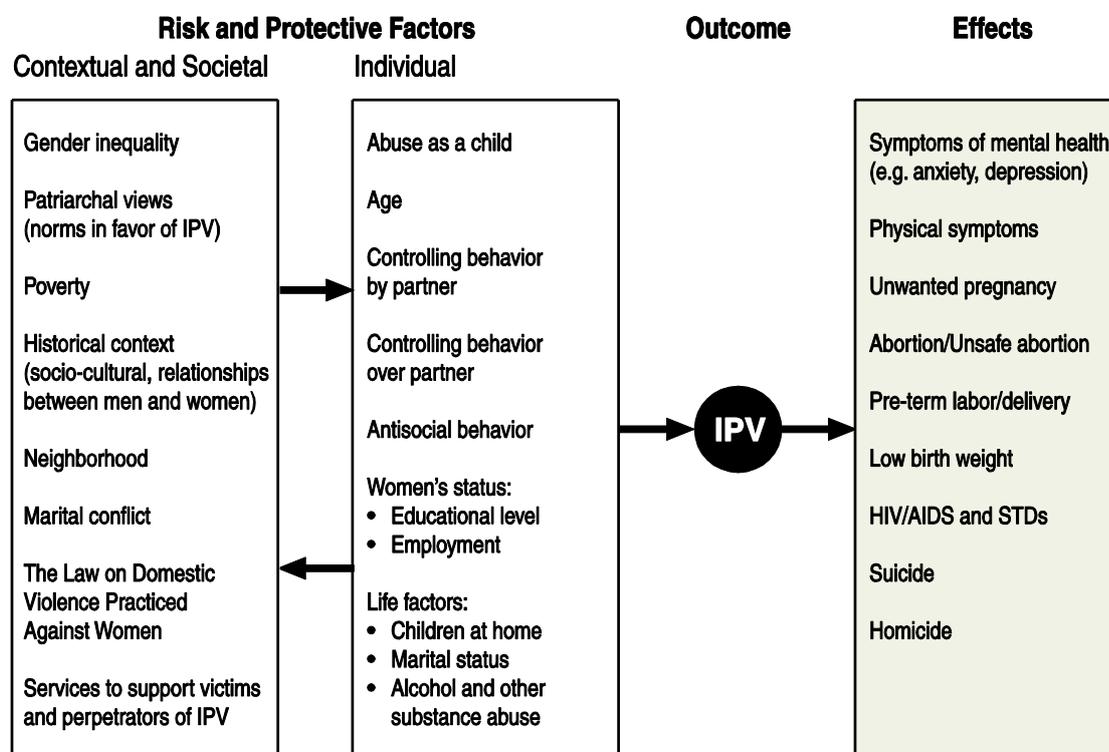


Figure 1: Risk factors and IPV dynamics.

2.6 STUDY CONTEXT AND THE GENDER ISSUE IN MOZAMBIQUE

Mozambique is located on the eastern coast of southern Africa. It became independent in 1975 after five centuries of Portuguese colonial rule. The independence of Mozambique came as a result of an armed struggle, led by FRELIMO (the Mozambique Liberation Front) that began in 1964 and ended in 1974, with the signing of the Lusaka Agreements. After independence, FRELIMO established a socialist regime in a one-party system. This situation led to a civil war that ended in 1992 after peace agreements signed in Rome between FRELIMO and RENAMO (the Mozambique National Resistance). In 1994, the first multiparty elections were held. It

is estimated that during the civil war more than 1 million people lost their lives, and approximately 2 million sought refuge in neighboring countries [145].

Mozambique has an estimated population of 22.416.881 million inhabitants; 47% are female (10,524,035), and 63% live in rural areas. The official language is Portuguese. Mozambique has a GDP per capita of 454 \$USD, a literacy rate of 51.9%, a life expectancy at birth of 48 years, and an infant mortality rate of 124/1,000. Maputo City is the capital of the country, and has 1,178,116 million inhabitants (608,569 females). Moreover, 61.2% of the female population is composed of women of child-bearing age [146]. See Figure 2.



Figure 2: Map of Mozambique.

As in some other specialized fields, there are few epidemiological studies related to IPV in Mozambique. This might be due to the fact that the legal/judicial system and other institutions downplay the problem. The same applies to the Ministry of Health, which results in a general failure to report this kind of crime. Although data on women IPV victims, collected from hospitals and police stations, and reported elsewhere in the Mozambican media, are not compiled systematically and confirmed, subjective evidence indicates that IPV is a serious social problem in Mozambique.

Since independence, particularly under the socialist system, the government has undertaken the tasks of promoting gender equity, empowering women and encouraging

them to contribute actively to the social and economic development of the country. As in other African societies, typical Mozambican families are extended families, including, parents, children, in-laws, nephews, uncles and grandparents [146]. In 2005, a new family law [147] entered into force. As from then, women have been granted legal rights in terms of using the family name, property ownership, land tenure, child custody, and other rights that were not provided for in previous legal instruments. However, in marriage, men are still considered the head of family and in most cases control household finances, since they are usually the breadwinners. Further, when women are treated as subordinates, property is kept under men's authority, as too are bank and commercial transactions. Thus, with the persistence of patriarchal norms and values, women are less assertive, more vulnerable, and more dependent on their male partners for satisfying material needs, thereby increasing their likelihood of experiencing IPV [8,67].

The traditional wedding system (Lobolo), which involves a sort of "gratification" in kind (clothing and fabrics, cattle, wine, and other items requested by the bride's family), and also in cash, provides an enabling stage for gender inequality, since the groom and his relatives tend to react as if they have all rights over the bride, which derive from the "deal they have done" with her family. The same applies to early marriages, as in most cases they are arranged between the bride-to-be and the husband-to-be, with no involvement of the bride, which strips her of her basic rights in the relationship. In both situations, there is great likelihood of the occurrence of IPV against women [67].

It has been observed that attitudes towards IPV, supported by cultural customs, have led many women to take their partner's violence for granted [67]. However, in recent decades, the government and civil society have struggled to change prevailing attitudes towards IPV. On September 29, 2009, the Mozambican Parliament approved the Law on Domestic Violence Practiced Against Women [148]. The scope of the law, as stated in Article 3 [148], is: "...to protect the physical, moral, psychological and sexual integrity of women against any kind of violence exerted by her spouse, former spouse, partner, former partner, boyfriend, former boyfriend and family members". The law [148] includes aspects related to women's sexual and reproductive health, and criminalizes denial of the use of contraceptives and/or other methods of family planning. Pursuant to Article 17, non-consensual sexual intercourse can result in a prison term of six months to two years and a corresponding fine [148]. Sexual intercourse with or without the partner's consent, transmitting an STD, is punishable by a two to eight year prison term [148]. Pursuant to Article 18, 1 & 2, if such intercourse results in the transmission of HIV, the penalty varies between eight to twelve years imprisonment [148]. As for gender equality, Article 36 [148] clearly states that: "The provisions of this Law apply to men in equal circumstances, with the necessary adjustments".

Victims and perpetrators have benefited from the services provided by various non-governmental organizations (NGOs), community-based organizations (CBOs), and charities, with the aim of helping them both to recover from, and/or remove the scars caused by, the trauma inflicted or sustained. The government has established a new window of assistance to victims via the Office for the Women and Children Victims of Violence to address the issue.

Despite the efforts mentioned above, the response of the legal/judicial system is still very weak; most of the cases reported to the police are not adequately dealt with and, if taken to court, tend to be dismissed for “a lack of sufficient incriminating evidence”.

The main challenges faced by the legal and health systems are to disseminate and enforce the Law on Domestic Violence Practiced Against Women [148] and to adopt specific policy measures to deal with IPV, so as to provide response services in an appropriate and timely manner.

3 AIMS AND OBJECTIVES

3.1 OVERALL AIM

The overall aim of this thesis is to yield knowledge about women's experiences of IPV, both as victims and perpetrators. This includes investigating predictors of IPV and the factors associated with symptoms of depression, anxiety and somatization among all women victims /perpetrators of IPV.

3.2 SPECIFIC OBJECTIVES

Study I: examines the magnitude, severity and chronicity of women's sustained IPV by and across types, and co-occurring IPV (psychological aggression, physical assault, sexual coercion, physical assault with injury), and scrutinized factors (e.g., abuse as a child) associated with sustained IPV by type (e.g., psychological aggression).

Study II: examines the magnitude, severity and chronicity of women's inflicted IPV by and across types, and co-occurring IPV (psychological aggression, physical assault, sexual coercion, physical assault with injury), and scrutinized factors (e.g., abuse as a child) associated with inflicted IPV by type (e.g., psychological aggression).

Study III: examines women's own and their partner's use of controlling behaviors, partner violence, and sexual abuse, as well as their own experiences of childhood abuse. Using Johnson's typology, the relationships are categorized as non-violent, intimate terrorism, violent resistance, mutual violent control or situational couple violence.

Study IV: examines mental health (e.g., depression) in women victims and perpetrators of IPV by type (psychological aggression, physical assault, sexual coercion, physical assault with injury), compared mental health levels (e.g., depression) in women victims and perpetrators of IPV by type (e.g., psychological aggression), and scrutinized factors (e.g., abuse as a child) associated with mental health (e.g., depression) in women who are both victims and perpetrators of IPV across all types (e.g., psychological aggression).

3.3 RESEARCH QUESTIONS

- Do empowerment indicators, such as educational level and employment, have an effect on intimate partner violence? (Studies I and II)
- Does childhood abuse increase the likelihood of becoming a victim or perpetrator of intimate partner violence? (Studies I and II)
- Do controlling behaviors by/over partner have an effect on intimate partner violence? (Study I, II and III)
- Is IPV usually mutual, where both partners are involved in physical assault? (Study III)
- Which is the most frequent relationship type? (Study III)
- Which relationship type is most associated with childhood abuse? (Study III)

- Is IPV victimization or perpetration a risk factor for symptoms of depression, anxiety and somatization among women victims/perpetrators of IPV? (Study IV)
- Is childhood abuse a risk factor for mental ill-health among women victims/perpetrators of IPV? (Study IV)
- Do empowerment indicators, such as educational level and employment, have an effect on the mental health of women victims/perpetrators of IPV? (Study IV)
- Are controlling behaviors by/over partner a risk factor for mental ill-health among women victims /perpetrators of IPV? (Study IV)

4 METHODS

The present thesis is based on a large research project. A research protocol was developed, which covered several areas, including methodology. A great deal of attention was paid to a number of practical and methodological issues.

4.1 THE SETTING

The research was conducted in Maputo City, Mozambique, at the Forensic Services located in Maputo Central Hospital. The Forensic Services were prepared to ensure that the research was conducted without disturbances to the normal operations of the Services. Like in any Forensic Department, the Services are basically and primarily a workplace where typical forensic activities are performed, e.g., autopsies when there is a suspicion of death resulting from criminal intent. Additionally, the Services provide assistance (e.g., psychological, legal) to victims of various types of intentional violence (e.g., rape, community violence) and non-intentional violence (e.g., road traffic injury, work-related accident), and prepare reports for the insurance services, if so required. It is a busy place, and conditions had to be adapted to pursue the research, in terms of finances, staff, training and equipment. Being involved in the research was a matter of personal choice, and the Services are the central point where most critical cases of violence are reported.

Conducting a long-term research project, like the present one, which involved a large number of people (1,500 respondents, the main researcher, 1 research assistant, and 6 interviewers) and on-site activities (e.g., interviews), would have put a great strain on the Services if preparatory actions had not been taken before its initiation. To avoid disruptions to regular activities, prevent discontent among the ordinary staff, maintain separate financial costs, and indeed ensure the fulfillment of the project, the following actions were taken:

(i) The project was initiated following approval granted by the management of Maputo Central Hospital, under which Forensic Services operate as part of the University (Eduardo Mondlane) Teaching Hospital.

(ii) Regular staff were informed in detail about the project.

(iii) Regular staff were not be involved in the activities of the project, except for two nurses who participated in the interviews and some staff members who checked the questionnaire before its use. These persons were paid for their additional work.

(iv) Regular staff would provide support, but this was part of their regular activities.

(v) Regular activities should take precedence.

(iv) Working stations for the project were made available, e.g., an interview room.

(vi) There was a strict separation of the costs of regular activities and the costs related to the research project.

(vii) Regular staff could file complaints about the research project if they deemed it necessary.

(viii) Staff working with the project, mainly the interviewers, were instructed not to disturb the regular staff and activities, except in urgent cases, with no prejudice to the primary mission of the Services.

4.2 STUDY DESIGN

The choice of study design is a crucial question in any investigation, since various factors, such as availability of human and financial resources and underlying aims, have to be taken into account. In this case, the design chosen was cross-sectional. It involved meeting 1,500 women with known exposure to IPV (consecutive cases) over a period of 12 months, but each woman was seen only once. The women were a mixture of self-referrals and referrals by female organizations or by the police; a majority were self-referrals or referrals by female organizations. The instruments used for the interviews were the same as and/or adapted from other instruments formerly used to collect data on the IPV exposures of women in different settings [see, e.g., 1,2,21,86,97].

The design approach used in this research has several limitations, e.g., limits regarding statements on causality, a lack of comparison groups, and susceptibility to bias (e.g., selection bias). However, in this research the strengths of the approach outweighed its limitations, e.g., wide availability of respondents, rather inexpensive, and results that can be “easily” transferred to and applied in relevant settings. Finally, considering the conditions under which this research could be conducted, and given that there was virtually no reliable information on IPV and related factors, the approach adopted was the most realistic one.

4.3 STUDY PARTICIPANTS AND SAMPLING

Of the population of 3,000 plus cases reported annually to the Forensic Services, the study focused on a sample of 1,500 women, who sought the services, either voluntarily or by referral from third parties. Regardless of being involved or not in recurrent IPV, each woman was seen only once. No sampling in the proper sense of the word was performed. The criteria for inclusion were: (i) aged 15-49; (ii) being a victim of IPV, (iii) willingness to participate, and (iv) being resident in Maputo City. The women were a mixture of self-referrals, referred by women rights organizations, the police, etc., with a majority being self-referrals or referrals by female organizations. However, no specific notes were taken with regard to recording exact numbers according to specific patterns of referral. Thus, classifying them as IPV victims is consistent with other research conducted in the health sector [149,150]. Of the 1,500 pre-selected women, 1,442 (96.1%) filled in the questionnaire, while 58 (3.9%) refused to respond (see Figure 3).

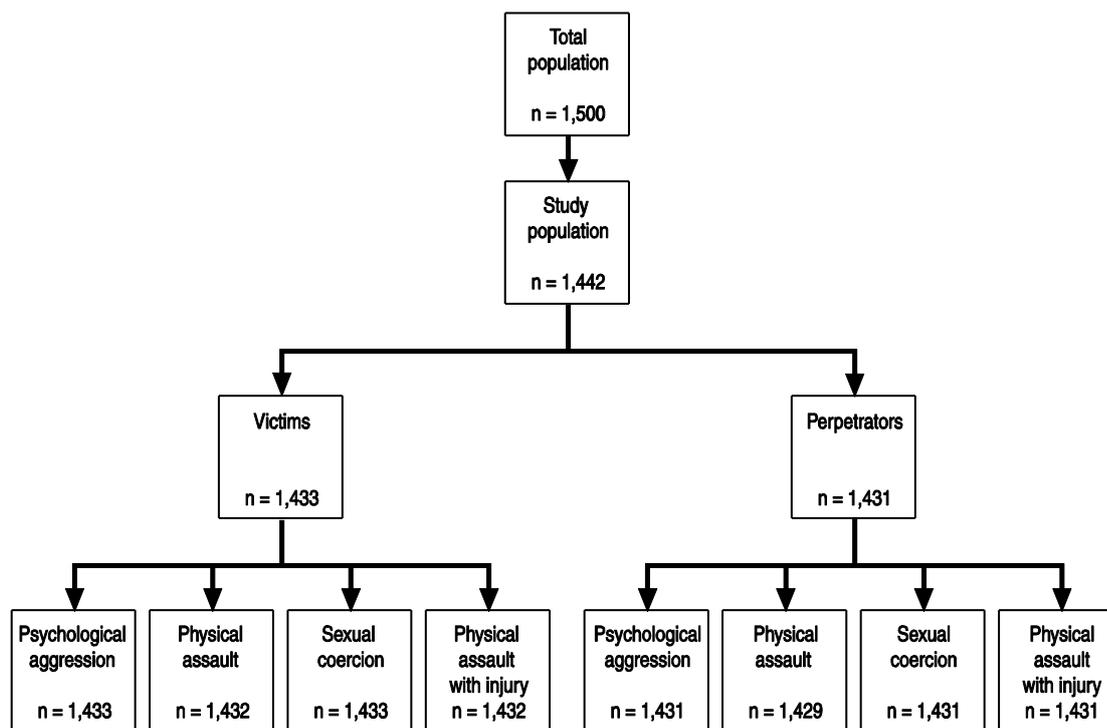


Figure 3: Selecting the study sample.

4.4 MEASURES

Constructing an adequate questionnaire to collect data relevant to the underlying aims of the study in a reliable and valid way was crucial to the current research. This activity started with a review of available and adequate instruments, which could “capture” the variables of interest, followed by work on various issues (e.g., translations), and the lay-out of the questionnaire. Further, the research took into account what the literature on IPV highlights as essential in addressing IPV. The following actions were taken.

A preliminary questionnaire was developed, consisting of the following section: (i) Relationship characteristics, IPV and controlling behaviors; (ii) Abuse as a child; (iii) Abuse by others; (iv) Work-related factors; (v) Quality of life; (vi) Social support; (vii) Stress; (viii) Mental health, suicide ideation and hopelessness; (ix) Physical health, medication and use of health care; (x) Use of alcohol and tobacco, and BMI; and, (xi) demographic and socio-economic variables. For this thesis, I only used the following sections: (i) Relationship characteristics, IPV and controlling behaviors; (ii) Abuse as a child; (iii) Social support; (iv) Mental health and sleep difficulties (v); Use of alcohol and tobacco; and BMI (vi); demographic and socio-economic variables.

Among the instruments used for this thesis, the CTS2 and SCL-90-R already existed in Portuguese. The other instruments, e.g., the CBS-R,⁵ were not in Portuguese.

A number of actions were taken before the final questionnaire was developed and used.

(i) For the instruments in Portuguese, i.e., the CTS2 and SCL-90-R, checks were made by some of the Services staff and the interviewers to ensure that the Portuguese

⁵Excluding demographic/socio-economic factors, sleep, and alcohol and tobacco use.

for the scales conformed to that spoken in Mozambique, and would be understood (e.g., had idiomatic equivalence). Additionally, an experienced translator (with experience of translating medical and social sciences texts) translated some randomly chosen items back and forward. Translations and content were checked by the main researcher, and independent researchers (all with education in the medical and social sciences). Comments were considered and errors corrected.

(ii) For the other instruments, where versions in Portuguese did not exist (e.g., CBS-R), translations and back-translations were conducted by an experienced translator (with experience of translating texts in the medical and social sciences). Further checks were conducted by some of the Services staff and the interviewers to ensure that the Portuguese for the scales conformed to that spoken in Mozambique, and would be understood (e.g., had idiomatic equivalence). Translations and content were checked by the main researcher and the independent researchers (all with education in the medical and social sciences). Comments were considered and errors corrected.

(iii) Before the questionnaire was used, it was filled in by the interviewers themselves. Final comments were considered and errors corrected. Further, a final content check was conducted by the main researcher, and independent researchers (all with education in the medical and social sciences).

(iv) For ethical reasons, field tests of the questionnaire using abused women were not conducted. Following these procedures, the main researcher finalized the lay-out of the questionnaire and started to use it. Some minor orthographic errors were detected after conducting the first interviews, but these were corrected.

4.4.1 Assessment of IPV

The Conflict Tactic Scales (CTS and CTS2) have been used in studies involving more than 70,000 participants from various cultural backgrounds, and more than 400 peer-reviewed scientific or scholarly papers, including longitudinal birth-cohort studies and multi-country studies [see, e.g., 13,20,21], have been published. Additionally, at least ten books reporting findings based on the CTS/CTS2 have been published, and more than 20 countries have used the scales [151]. Also, the CTS2 has been validated in an SSA context [13,127].

The scales have been criticized [e.g., 152] because, for example, they do not provide information about the contexts in which violence occurs (e.g., intention), and certain types of abuse (e.g., economic) are not measured. Despite criticisms, psychometric data indicate that the scales, not least the CTS2, have good construct and discriminant validity, and also cross-cultural validity and reliability [13,127,151]. Moreover, the scales are the most commonly used self-report measures of IPV, and are currently regarded as a research gold standard for the assessment of IPV.

The theoretical basis of the CTS2 lies in conflict theory [153]. According to this theory, conflict is an inevitable part of all human association. However, the use of abuse as a tactic to deal with and resolve a conflict is harmful. The CTS2 concentrates on “conflict tactics”, i.e., on actions taken to pursue one’s own interests.

Thus, the use of CTS2 scales in this thesis was justified on the basis that they permit the “capturing” of various types of IPV, and their degree of severity and level of

chronicity, in a straightforward, concrete, well-defined and reliable way among women and men involved in intimate relationships. The scales have good construct and discriminant validity, and cross-cultural validity and reliability. Finally, the scales have been used in a very large number of studies of women and men, and across different ages, populations, settings, cultures, social, religious and economic backgrounds, and countries, including ones in SSA [13,127,151]. Accordingly, our data can be compared with other findings.

The CTS2 scale [151] is composed of 5 sub-scales: negotiation, psychological aggression, physical assault, sexual coercion, and physical assault with injury. The total number of items comes to 78, which capture the tactical behaviors of respondents and their partners (39 each). The acts within each sub-scale can be severe or minor; occurrence ranges from once to never, and who started the violence is also reported.⁶ Cronbach's α for women as victims and perpetrators were 0.88 and 0.79, respectively. For the purpose of this thesis, the items on negotiation were not processed. Who started the physical violence was addressed only in Study III.

Negotiation: consists of six specific items, of which three are cognitively oriented (e.g., I suggested a compromise to resolve a disagreement), and three emotionally oriented (e.g., I showed my partner I cared even though we had disagreed). These items cover the use of reasoning/negotiation, or not, by the respondent towards his or her intimate partner (e.g., husband/wife) to deal with conflicts. Negotiation may have taken place once, twice, 3-5, 6-10, 11-20 or >20 times during the past 12 months, or did not occur in the past 12 months, but had occurred or never occurred before.

Psychological aggression: consists of eight specific items, of which four pertain to minor aggression (e.g., insulted or swore at my partner) and four to severe aggression (e.g., called my partner fat or ugly). These items cover the use of psychological attacks, or not, by the respondent towards his/her intimate partner (e.g., husband/wife) to deal with conflicts. Psychological aggression may have occurred once, twice, 3-5, 6-10, 11-20 or >20 times during the past 12 months, or did not occur in the past 12 months, but had occurred or never occurred before.

Physical assault: consists of twelve specific items, of which five pertain to minor assault (e.g., pushed or shoved my partner) and seven to severe assault (e.g., beat up my partner). These items cover the use of physical assaults, or not, by the respondent towards his/her intimate partner (e.g., husband/wife) to deal with conflicts. Physical assault may have occurred once, twice, 3-5, 6-10, 11-20 or >20 times during the past 12 months, or did not occur in the past 12 months, but had occurred or never occurred before.

Sexual coercion: consists of seven specific items, of which three pertain to minor coercion (e.g., made my partner have sex without a condom) and four to severe coercion (e.g., used threats to make my partner have oral or anal sex). These items cover the use of behavior by the respondent towards his or her intimate partner (e.g., husband/wife), or not, to compel the partner to engage in unwanted sexual activity. Sexual coercion may have occurred once, twice, 3-5, 6-10, 11-20 or >20 times during

⁶Concerns only physical assault.

the past 12 months, or did not occur in the past 12 months, but had occurred or never occurred before.

Physical assault with injury: consists of six specific items, of which two pertain to minor injury (e.g., had a sprain, bruise, or small cut because of a fight with my partner), and four to severe injury (e.g., had a broken bone from a fight with my partner). These items cover the injury resulting (consequence), or not, from a physical attack by the respondent on his/her intimate partner (e.g., husband/wife). Injury may have occurred once, twice, 3-5, 6-10, 11-20 or >20 times during the past 12 months, or did not occur in the past 12 months, but had occurred or never occurred before.

4.4.2 Assessment of childhood abuse

Abuse during childhood (before the age of 15 years) is defined in terms of four open items: one each for psychological abuse (e.g., shouted or yelled at); physical abuse (e.g., beaten up); sexual abuse (e.g., forced to have sex); and injury (e.g., bruised). These questions were derived from the CTS2 [151]. Also, on the basis of the CTS2 [151], chronicity (how often the acts occurred) was assessed. The acts may have occurred once, twice, 3-5, 6-10, 11-20 or >20 times, or never occurred. Finally, the perpetrators (e.g., parents), the sites of occurrence (e.g., home) and the consequences (e.g., injury) of the abuse were assessed. Cronbach's α for both victims and perpetrators were 0.72. The items concerning the perpetrators, sites and consequences of the abuse are not used in this thesis.

4.4.3 Assessment of controlling behaviors

Controlling behaviors can be defined and measured in different ways depending on, for example, the number of behaviors included, and the gender inclusiveness of the questions for victims and perpetrators, female and male.

In this thesis, the 24-item CBS-R developed by Graham-Kevan and Archer [80,86,90] was used. This scale was developed to ascertain the use of control tactics by victims and perpetrators of IPV. All items refer to specific acts, but do not include any items concerned with physical aggression. Additionally, all the items are suitable for female and male victims, and do not rely on respondents cohabiting or having children. The CBS-R can be scored to derive a mean for overall controlling behavior, or to obtain five sub-scores, each of which is a particular form of controlling tactic: using economic abuse to "control the other's money" (4 items), using coercion and threats to "threaten to leave the relationship" (4 items), using intimidation through the "use [of] nasty looks and gestures to make the other feel bad or silly" (5 items), using emotional abuse to "show the other one up in public" (5 items), and using isolation to "try to restrict time one spent with family or friends" (6 items). The respondents use a 5-point response scale to indicate how often during the past year they used each behavior with their partners (from 0 never to 4 always). All the studies in this thesis used the total score of controlling behaviors, with a high score corresponding to high control. The CBS-R has been shown to have good reliability and validity, even in an SSA context [80,86,90,97,127]. Cronbach's α for women using control and being controlled were 0.91 and 0.93, respectively.

4.4.4 Assessment of mental health

In this thesis, mental health is measured in terms of depressive, anxiety and somatization symptoms. The symptoms were extracted from the SCL-90-R [154], which comprises 90 items organized on nine primary symptom dimensions, with three global indices of distress: depression, anxiety and somatization. Depression is defined in terms of 13 symptoms (e.g., loss of sexual interest or pleasure). The symptoms reflect a representative range of the manifestations of clinical depression, such as dysphoric mood (e.g., loss of vital energy) and feelings of hopelessness. Anxiety is defined in terms of 10 symptoms (e.g., nervousness). The symptoms reflect a representative range of the manifestations of clinical anxiety, such as feelings of terror and dread. Somatization is defined in terms of 12 symptoms (e.g., hot or cold spells). The symptoms reflect a representative range of the manifestations of clinical somatization, such as pain and discomfort in the gross musculature. “Severity” levels for all questions range from 0 to 4 (from not at all to extremely). High scores correspond to high degrees of psychopathology. The SCL-90-R screens psychopathology. It is well-suited as a mental health outcome measure and helpful in diagnostics [155]. The SCL-90-R has been used in many countries and populations (e.g., among psychiatric patients), and has in general shown good reliability, validity and cross-cultural validity, even in an SSA context [154,155,156,157]. Cronbach’s α across these dimensions for victims and perpetrators were 0.95 and 0.92, respectively.

4.4.5 Assessment of social support

In this thesis, social support was measured using the Schedule for Social Interaction [158], which refers to social support in terms of the availability of deep emotional relationships and of peripheral social networks. Operationally, the social support measurement was based on a short version of the Interview Schedule of Social Interaction (ISSI) [159], as developed by Undén and Orth-Gomér [158], which consists of 12 items. Six items concern social attachment in terms of availability of deep emotional relationships. The other six encompass social integration in terms of availability of peripheral social networks. The scores range from 1 to 6 (not available – available). The schedule had been shown to have good reliability and validity in various studies [158], but it had not been previously validated in an SSA context. Cronbach’s α for the social attachment of victims and perpetrators were 0.75 and 0.80, respectively. Cronbach’s α for the social integration of victims and perpetrators were 0.87 and 0.88, respectively.

4.4.6 Assessment of life-style and sleep variables

Data were gathered on the use of alcohol and cigarettes in a yes/no format, and a Body Mass Index (BMI) score, based on self-reported height and weight, was computed for each woman using the formula kg/m^2 . Additionally, data were collected on sleep difficulties in a yes/no format.

4.4.7 Assessment of demographic and socio-economic variables

Data on a series of demographic and socio-economic variables were collected: age (in years), marital status (categorized as single, married/cohabitant, divorced/separated, and widowed), presence of children at home (assessed as a yes or no variable), housing (categorized as conventional or nonconventional), educational level (assessed as no education, low, intermediate, or high), occupational status (assessed as blue-collar

worker, low white-collar worker, middle-high white-collar worker, or student/other), socio-economic status (assessed as working for others, liberal profession/own business, student, or domestic/other), salary/financial resources (categorized as yes or no), and financial strain reflecting how respondents make ends meet, and assessed as never, sometimes, often, or always. A woman was regarded as being under financial strain if her response was anything but “never”. The demographic/socio-economic items were largely derived from a classification system used in Mozambique by the Ministry Council – Ministry of Finances.

4.5 DATA COLLECTION AND PROCEDURE

The data were gathered during 12 months between April 1, 2007 and March 31, 2008, and a great deal of the data consisted of retrospective account of experiences (e.g., IPV exposure). In order to achieve and optimize disclosure under secure conditions, considering the sensitivity of the issues and potential risks involved (e.g., perpetrator involvement), a decision was taken to use interviews at the Forensic Services as a strategy for collecting the data. If a woman agreed to participate (either verbally or in writing, or both), an interview (on average 1 hour) was performed in a private isolated room by means of a questionnaire (see Section 4.4 for the measures). All the participants provided their verbal consent. The interviewers were all female, either nurses at the Forensic Services or medical students at the Faculty of Medicine, Eduardo Mondlane University in Maputo. All of them speak the local language (Changana). A number of actions were taken to ensure that the interviews were conducted as effectively and properly as possible.

The training of the interviewers involved the following:

Information (i) The selected interviewers were informed in detail about the research and various facets of IPV. The interviewers were also thoroughly informed about each and every scale included in the questionnaire, and trained in how to use it.

During the interview: (i) the interviewers were instructed to stop if a respondent got tired or upset. If needed, support was to be provided (e.g., by a psychologist).

Ending the interview: The interviewers were instructed to: (i) ask the respondents if they wanted to add something they were not asked about during the interview; (ii) ask the respondents if they had any further questions about the research or any other related matter.

For ethical reasons, the interviews were neither video-taped nor sound-recorded, which would have been useful for ensuring that the interviews were conducted according to instructions, etc. Instead, there were weekly meetings with the interviewers. In those meetings, a number of issues were addressed, including checking whether the interviews were being conducted according to instructions, and how the interviewers felt during/about the interviews. Additionally, random checks on the questionnaires were performed by the main researcher.

Proper management of the collected data is important for many reasons (e.g., for securing anonymity). The following actions were taken to ensure good data management:

(i) The completed questionnaires were checked for wholeness, reliability and accuracy by the main researcher before the data were entered into a computer.

(i) The data analysis was performed using SPSS for Window, version 17.0.

Feedback information on the study was made available to the participants on request, but only as aggregate data.

4.5.1 Response rates

Three-point-nine percent (3.9%) of the 1,500 women declined to participate (n=58). There was no socio-demographic data that could serve as a basis to characterize the sample of those who refused in relation to the characteristics of the respondents.

The high response rate (96.1%) is comparable with other studies using clinical samples [see, e.g., 101]. It might also be due to the fact that most of the responding women were already sensitized to being victims of IPV. Further, many of the women had been self-referred, referred by the police and/or female organizations (e.g., OMM). Finally, the high response rate may be a result of the use of ascertainment tools (CTS2, CBS-R, SCL-90-R) previously validated in an SAA context [13,97,127,156,157].

4.6 ETHICAL CONSIDERATIONS

The research was approved by the National Ethical Committee at the Ministry of Health of Mozambique (122/CNBS/06).

In the research process, great attention was paid to the integrity of the interviewees, and to providing a calm, supportive and assuring atmosphere so as to facilitate disclosure. Based on these premises, a number of issues were addressed, these was explained verbally, in writing, or both.

Ethical issues included respect for privacy and emphasis on voluntariness, anonymity and confidentiality. Further, strongly emphasis was put on that non-participation would not have any negative consequences.

4.7 STATISTICAL ANALYSES

The data analyses were conducted using the SPSS statistical package, version 17.0.

Several types of tests were used, depending on the study in question.

4.7.1 Studies I and II

The women's IPV types as victims/perpetrators (psychological aggression, physical assault, sexual coercion, physical assault with injury) during the past 12 months were described in the forms of raw figures, percentages, means and standard deviations (SDs). The relations between IPV types, and the demographic/socio-economic and life-style variables were examined using analyses of variance (ANOVAs) and Pearson's chi-square tests (χ^2). The significance level for the bivariate analyses was set at $p < 0.0125$, and for the multivariate analyses at $p < 0.05$. Four multiple block-wise logistic regressions were conducted to identify and quantify factors associated with IPV types (e.g., physical assault) during the past 12 months, while controlling for other possible factors. In block-wise logistic regression, variables are entered into a regression

equation block by block, and the contribution of each block to explaining the dependent variable is expressed as a Nagelkerke R^2 value. Each block explains part of the total variance (total model). Nagelkerke R^2 is an approximation of descriptive goodness-of-fit statistics, which assesses the fit of the proposed logistic model (quantifies the strength of the association between the variables) [160]. Results were expressed in the form of odds ratios (ORs) and 95% confidence intervals (95% CIs). In the regressions, the independent factors included were variables significantly related to each IPV type in the bivariate analyses. Demographic/socio-economic factors were entered into the models first, followed by life-style factors, controlling behaviors, perpetration, victimization, and abuse as a child, which is a common procedure in studies in the field. Concretely, the independent factors included were marital status, having children at home, housing, education, occupational status, socio-economic status, having salary/financial resources, financial strain, BMI, and smoking and alcohol use (yes/no). Further, we added controlling behaviors over/by partner, women's IPV perpetration and victimization by type (e.g., psychological aggression) and childhood abuse (e.g., psychological). The regression models differed for each IPV type due to the results of the bivariate analyses, but some of the variables (e.g., control) were used in all the models. All variables with more than two categories were transformed into dummy variables.

4.7.2 Study III

The frequencies of women and men performing any act of physical assault, psychological aggression, or sexual coercion during the past 12 months were described in the forms of raw figures, percentages and standard deviations (SDs). Classifications of women and men using non-controlling violence and using controlling violence, and classifications of relationship types and "who hits first" were analyzed in terms of percentages, means, Pearson correlations, ANOVAs, MANOVAs, and Eta^2 and Scheffe post-hoc tests. The significance level was set at $p < 0.05$.

4.7.3 Study IV

Cross-tabulations/means and standard deviations (SDs) and Pearson's chi-square (χ^2) analyses were used to assess the demographic, socio-economic, and lifestyle factors associated with the IPV types. The significance level was set at $p < 0.05$. Using analysis of variance (ANOVA), descriptive statistics concerning mental health scores (symptoms of depression, anxiety, and somatization) were computed for women who were the victims of types of IPV compared with those who were not victims of IPV during the past 12 months, and also for women who were perpetrators of types of IPV (psychological aggression, physical assault without/with injury, sexual coercion) compared with those who were not perpetrators of IPV.

Multiple linear regression analyses were conducted to examine the explanatory factors in the associations between women's IPV victimization and perpetration during the past 12 months, independent of type and the outcome variables (symptoms of depression, anxiety, and somatization). The selected factors (exposures) were variables significantly associated with the types of IPV in the bivariate analyses conducted in the previous studies [161]. These included being married/cohabitant, secondary education, blue-collar worker/middle or high white-collar (occupational status), working for others (socio-economic status), salary/financial resources, financial strain, children at home, living in non-conventional housing, BMI, use of cigarettes and alcohol, abuse as a

child, and controlling behaviors (controlling behaviors over/by partner). Further, sleep difficulties, being a victim and a perpetrator of IPV across all types of abuse, and also the social support variables were added. Finally, depending on the outcome being analyzed, depression, anxiety and somatization were also used as exposure variables to assess the influence of comorbidity on other mental health consequences. For example, in the analysis of depression and associated factors, anxiety and somatization were added as exposure variables. All variables were entered into the multiple linear regression models in a single block to control for possible confounding between these variables. Results were expressed as standardized betas (β s) and p -values. The significance level for the bivariate and multiple regression analyses was set at $p < 0.05$.

5 RESULTS

5.1 STUDY I: INTIMATE PARTNER VIOLENCE AGAINST WOMEN IN MAPUTO CITY, MOZAMBIQUE

Research questions:

1. Do empowerment indicators, such as educational level and employment, have an effect on intimate partner violence?
2. Does childhood abuse increase the likelihood of becoming a victim of intimate partner violence?
3. Do controlling behaviors by/over partner have an effect on intimate partner violence?

This study found that, out of the women attending our facility, 70.2% had experienced one or more type of IPV in the previous 12 months; chronicity was 85.8 times, and 55.3% were subjected to severe acts. Psychological aggression accounted for 65.3% of cases, with a chronicity of 35.3 times, while severe acts were involved in 45.9% of cases. This was followed by physical assault at 54.3%, with chronicity 27.7 times; of these cases, 44% were severe. 50.9% were cases of sexual coercion, with chronicity 16.3 times, and 29.2% involved severe acts. Physical assault with injury accounted for 34.4% of cases, with chronicity 6.4 times, of which 26.3% were severe.

Further, co-occurring victimization across all types of IPV was 26.8%, with chronicity 55.3 times. The combination of psychological aggression, physical assault and sexual coercion was the most frequent (42.6%), compared with the other combinations.

The evidence derived from the logistic regressions indicated that some of the demographic and socio-economic variables had an effect on IPV. For example, having a middle or high educational level was positively associated with psychological aggression. It was also noted that divorce/separation was negatively associated with sustained psychological aggression and sexual coercion. Having children at home was positively related to exposure to physical assault with injury.

Controlling behaviors over partner were positively associated with experienced psychological aggression and sexual coercion. Further, controlling behaviors by partner were positively associated with sustained physical assault and physical assault with injury, and negatively associated with exposure to psychological aggression.

All types of IPV perpetration by the interviewees (psychological aggression, physical assault, sexual coercion and physical assault with injury) were positively related to their own victimization, while having experienced physical abuse during childhood was positively associated with experienced psychological aggression.

5.2 STUDY II: WOMEN AS PERPETRATORS OF IPV: THE EXPERIENCE OF MOZAMBIQUE

Research questions:

1. Do empowerment indicators, such as educational level and employment, have an effect on intimate partner violence?
2. Does childhood abuse increase the likelihood of becoming a perpetrator of intimate partner violence?
3. Do controlling behaviors by/over partner have an effect on intimate partner violence?

This study revealed that the overall occurrence of the women inflicting one or more types of IPV on their partners during the previous last 12 months was 69.4%, with chronicity 44.8 times, of which 48.9% were severe acts. Psychological aggression proved to be the most common form of inflicted IPV at 64%, with chronicity 23.1 times, of which 40.5% with severe acts. This was followed by sexual coercion, at 39.1%, with chronicity 7.2 times, of which 18.7% of cases were severe. Physical assault was at 38.2%, with chronicity 10.3 times, of which 25.5% were severe acts. Finally, physical assault with injury was at 22.6%, with chronicity 4.2 times, of which 16.6% were severe acts. Further, co-occurring perpetrating IPV across all types was at 14.5%, with chronicity 86.3 times. The combination of psychological aggression, physical assault and sexual coercion was the most frequent (24.9%), compared with the other combinations.

The results of the logistic regressions indicated that some of the demographic, socio-economic and life-styles variables had an effect on the perpetration of IPV. Having a middle/high educational level and a liberal profession/own business were positively associated with the perpetration of psychological aggression and sexual coercion. However, divorce/separation was negatively related to inflicted psychological aggression. Having children at home was positively associated with inflicted physical assault with injury, and negatively associated with psychological aggression. Financial strain was negatively associated with inflicted psychological aggression and sexual coercion. Having high BMI was positively related to the perpetration of physical assault and physical assault with injury. Alcohol consumption was negatively related to the inflicting of physical assault with injury, but smoking was positively associated with acts of this kind.

Controlling behaviors over partners were positively associated with the perpetration of all forms of IPV. Further, controlling behaviors by partners were positively related to the infliction of physical assault with injury.

Being a victim oneself was associated with the perpetration of IPV. Abuse during childhood was positively associated with the perpetration of IPV. Physical child abuse was associated with inflicted psychological aggression. Being exposed as a child to sexual abuse was positively associated with physical assault, and physical assault with injury. Sustaining a physical assault with injury in the process was related to sexual coercion.

5.3 STUDY III: INVESTIGATING VIOLENCE AND CONTROL DYADICALLY IN A HELP-SEEKING SAMPLE FROM MOZAMBIQUE

Research questions:

1. Is IPV usually mutual, where both partners are involved in physical assault? Which is the most frequent relationship type?
2. Do controlling behaviors by/over partner increase the likelihood of becoming a victim or perpetrator of intimate partner violence?
3. Which relationship type is most associated with childhood abuse?

In the year prior to the compilation of the data, the proportion of people who had used any act of physical aggression towards their partner was 38% for women and 44% for men. With regard to psychological aggression, 64% of the perpetrators were women, and 65% were men. As for sexual aggression, the figures were 39% for women, and 51% for men.

In so far as the level of control is concerned, the use or non-use of physical aggression was categorized as follows: for women, 64% non-violent, 26% non-controlling physical aggression, and 9% controlling physical aggression; for men, 46% non-violent, 32% non-controlling physical aggression, and 22% controlling physical aggression.

Classifying the relationships dyadically using Johnson's typology, it was noted that 44.7% of cases were non-violent, which was followed in frequency by situational couple violent (SCV) 30.7%, victim of intimate terrorism (VIT) 15.4%, mutual violent control (MVC) 6.3%, and intimate terrorism (IT) 2.8%. The patterns found across the relationships of all the interviewees was that of mutual violence (excluding MVC), followed by male partner violence only.

As for the relationship between type of violence and who hit first, the predominant pattern was that of men initiating the IPV. Further, across relationship types overall, the dominant pattern was of mutual initiation, which ranged from 25% for MVC to 43% for IT.

The results of applying the multivariate analysis of variance (MANOVA), and Eta² and Scheffe post-hoc tests found that, for men, acts of physical aggression and injuries were associated with the IT and MCV relationships rather than SVC. However, for women, acts of physical aggression and injuries were more related to IT and MVC relationships than SCV or VIT. Further, acts of sexual aggression against a partner were more associated with relationship-controlling violent men (IT and MVC) than with non-controlling violent men (SCV and VIT). However, acts of sexual aggression against a partner were related to MVC women rather than SCV, VIT or IT women. Concerning childhood abuse, the MANOVA found that psychological aggression was associated with MVC women rather than IT, VIT or SCV women.

5.4 STUDY IV: SYMPTOMS OF DEPRESSION, ANXIETY, AND SOMATIZATION IN FEMALE VICTIMS AND PERPETRATORS OF INTIMATE PARTNER VIOLENCE IN MAPUTO CITY, MOZAMBIQUE

Research questions:

1. Do empowerment indicators, such as educational level and employment, have an effect on the mental health of women victims/perpetrators of IPV?
2. Is IPV victimization or perpetration a risk factor for symptoms of depression, anxiety and somatization among women victims/perpetrators of IPV?
3. Is childhood abuse a risk factor for mental ill-health among women victims/perpetrators of IPV?
4. Are controlling behaviors by/over partner a risk factor for mental ill-health among women victims/perpetrators of IPV?

We found that IPV exposure was associated with several demographic, socio-economic and life-style factors, including age, marital status, housing, educational level, occupational and socio-economic status, financial resources and financial strain, and alcohol and tobacco consumption.

The results of the bivariate analyses showed that, in general, women's victimization and perpetration during the past 12 months were associated with symptoms of depression, anxiety and somatization. However, the effects of symptoms of mental health were more substantial in relation to women's IPV victimization than to their IPV perpetration. Further, 25.9% and 25.5% of women as victims and perpetrators, respectively, reported psychopathological levels across these mental dimensions within or above the range of those reported by psychiatric out-patients. However, women who sustained and inflicted psychological aggression recorded fewer symptoms of depression, anxiety and somatization than those who sustained and inflicted the other types of violence.

The multiple regressions showed that IPV victimization and perpetration were not associated with symptoms of depression, anxiety and somatization. Yet, childhood abuse was positively related to symptoms of somatization. Further, some of the demographic, socio-economic and life-style variables had an effect on mental health. Smoking was positively associated with symptoms of anxiety. In addition, not having an education was positively related to symptoms of depression. However, being married/cohabitant was negatively associated with symptoms of depression. Younger adult women and social support (social attachment and social integration) were positively associated with symptoms of somatization. Nevertheless, social attachment was negatively related to symptoms of depression and anxiety. Sleep difficulties and controlling behaviors by partner were positively associated with symptoms of depression and somatization. Yet, controlling behaviors by partner were negatively related to symptoms of anxiety. Remarkably, controlling behaviors over partner were related to anxiety. Finally, comorbidity was a strong predictor of symptoms of depression, anxiety and somatization.

6 DISCUSSION

6.1 MAIN AIMS AND FINDINGS

The overall aim of this thesis is to yield knowledge about women's experiences of IPV, as either victims or perpetrators. This also includes identification of the risk and protective factors associated with IPV, and of symptoms of depression, anxiety and somatization.

The results revealed that, overall, 70.2% (n=1,006) of women seeking help after IPV abuse by a partner were victimized. This rate is higher than those reported for SSA and elsewhere [1,2,5,6,57,132,162,163]. Nonetheless, 69.4% (n=993) also used violence against their partners, a rate higher than those indicated for SSA and elsewhere [26-28,30, 118], but lower than in some other places [21]. In both cases, the levels of severe IPV and chronicity were fairly high. Co-occurring victimization and perpetration was rather common. The rates of co-occurring victimization in case combinations are analogous to those reported for SSA and elsewhere, are higher than in some places [6,163] but, lower than in some others [164,165]. In particular, our rate of co-occurring perpetration is higher than that reported in a study from Ghana [26]. Overall, the rates of sustained and inflicted IPV in this thesis tend to exceed those observed in other studies in SSA and elsewhere using different populations (e.g., women attending antenatal clinics). In several cases, differences in rates may be explained by discrepancies in the operational definition of IPV, the number of questionnaire items used to measure the violence, and population characteristics (in our case, women who seek help due to their IPV experiences). However, the issue of culture is not addressed here. Other explanations (as shown in the regressions) may be that the women were involved in relationships where there was mutual abuse (i.e., the women were both abused and abusing). Mutual abuse and controlling behaviors were found to be critical components of the violence [13,124,127]. Our results on chronicity and severity of violence are difficult to compare with other studies, either due to a lack of such information or because they are reported differently. Likewise, our figures are higher than those observed in studies using the same operational definitions of IPV, chronicity and severity [118,166]. Our findings point, for example, to the necessity of using the some operational definitions of IPV, chronicity and severity when doing research about violence, and also to the need for further research across cultures and types of respondents.

On the basis of theoretical perspectives, namely those of feminist theory, systems theory, the ecological model, and social learning theory, a more comprehensive understanding of the possible explanations for becoming a victim or perpetrator of IPV is obtained. Overall, the factors associated with victimization and perpetration, and symptoms of depression, anxiety and somatization are generally similar, in particular with regard to abuse as a child and controlling behaviors.

First, we found, in Mozambique, that the empowerment conferred by better education and being in a liberal profession or running one's own business (socio-economic status) increases the likelihood of becoming a victim or perpetrator of IPV. This is inconsistent with previous studies in SSA and elsewhere (e.g., the USA), which report no effects of education on IPV, in particular with regard to sustained psychological aggression; that is, that there is neither a reduced IPV risk among the

highly educated [25,167] nor an elevated IPV risk among the lowly educated (25,168,169). Our finding is in line with systems theory, and might be based on the idea that the better educated and more empowered women are, the firmer they will feel about their rights and the less inclined they will be to accept traditional gender roles; then, their partners may use violence to compensate for their lack of a counterargument [61-63,170]. These findings are also in line with feminist theory and the ecological model, which postulate that patriarchal beliefs in male dominance, while reinforcing perceptions of women having submissive roles, increase vulnerability to IPV [1,21,61,64-66,71,72]. On the other hand, decision-making autonomy, due to a better education and being in a liberal profession or running one's own business, were found to be related to the inflicting of psychological aggression and sexual coercion, which is consistent with the findings of other studies [20,112,117-119]. These findings are supported by systems theory, and might be rooted in the idea that decision-making shifts in the household lead women to neutralize the traditional gender roles in order to impose their will, which could be a trigger of violence [61-63,170]. Overall, our results suggest that the relationship between empowerment and IPV is complex. They may reflect a situation where women's contributions to decision-making and breadwinning, which are habitually realized by males, are shifting in Maputo City and, more generally, in a Mozambican context. This suggests the need for further investigation of possible confounding variables to provide deeper understanding of the relationship between empowerment and IPV.

Second, this thesis extends studies that have examined the protective association of divorce/separation with IPV [25,115,167]. Victimization was found to be associated with psychological aggression and sexual coercion, and perpetration with psychological aggression. In both cases, violence has led to the termination of a relationship. Thus, the likelihood of becoming either a victim or a perpetrator of IPV is reduced, which is consistent with the findings of others studies in relation to victimization [25] and to perpetration [115,167]. However, these findings are not in line with all the theories suggested, which suggests that further research is warranted to address the issue.

Third, having children at home increases the likelihood of becoming a victim or perpetrator of IPV, which is in line with the studies that have shown that individuals are hesitant to leave a violent relationship when they have investments in it, such as children, emotional attachment, etc. [171]. The finding is consistent with previous studies that have found an association between sustained physical assault with injury and having children at home [167,168,172,173]. This finding is supported by systems theory, and might be founded in the everyday pressure/conflict faced by a woman that is related to protecting the children from her partner; that is, the woman becomes a proxy for the abuse of children [61-63,170]. The finding is also supported by feminist theory and the ecological model, and may center on men trying to maintain traditional gender roles, and using violence when they are dissatisfied with women's caring for the children, or when they experience economic stress related to an increasing number of children [1,17,20,61,64-66,71,72]. On the other hand, having children at home is also related to inflicting physical assault with injury, which is consistent with the findings of other studies of women as victims [115,167]. This finding on infliction is, again, supported by systems theory, and might be founded in everyday clashes related to the defense of children from their partners. Thus, in the face of abuse of children, women may react with great anger and injure their male partner [61-63,170]. Psychological

aggression is negatively associated with having children at home. However, such an association fails is not supported by all the theories suggested. Further research is warranted to address this finding.

Fourth, our research extends studies that have examined the association of experiencing financial strain and IPV. Our finding of a protective effect is inconsistent with previous studies that have found an association between low household income or unemployment and an increased likelihood of inflicting IPV [115,167]. This finding provides support for feminist theory and the ecological model, and may derive from being in poverty and facing a society's patriarchal beliefs make women dependent on their partners for their daily living, and thus decrease the likelihood that they will inflict IPV [1,20,61,64-66,71,72].

Fifth, smoking is associated with an increased likelihood of perpetrating IPV. This is consistent with previous studies that have found an association between inflicted physical assault with injury and smoking [43]. This finding is supported by systems theory and may be based on daily conflict and provocation by partners, due to their smoking, triggering acts of violence [61-63,170]. However, alcohol consumption reduces the likelihood of perpetrating IPV. This protective association between alcohol consumption and inflicted physical assault with injury is inconsistent with previous studies, which have found a positive association, mainly with women as victims [120-123]. This finding is not supported by all the theories suggested, and further research is warranted to address the issue.

Sixth, high BMI was found to be associated with an increased likelihood of perpetrating physical assault with injury. Again, this is inconsistent with previous studies, which have found that high BMI is a risk factor for being a victim, not a perpetrator, of IPV [174]. This finding is supported by systems theory, and may be founded in quotidian contestation and vexation by partners due to their obesity causing stressful feelings in women, who react with violence [61-63,170].

Seventh, controlling behaviors by partner are associated with an increased likelihood of becoming both a victim and a perpetrator of IPV. These findings are consistent with previous studies that have found associations between controlling behaviors by partners and sustained physical assault and physical assault with injury [2,6,14,24,26]. Our research findings are supported by feminist theory and the ecological model, and might be explained in terms of the patriarchal beliefs that impact on the male awareness of power that is associated with societal acceptance of IPV. This might reflect the gender power situation in Mozambique, which is associated with an increased likelihood of IPV [1,20,61,64-67,71,72]. However, sustained psychological aggression is negatively associated with controlling behaviors by partners. We found no rational explanation for controlling behaviors having a protective effect of this kind, and further research is warranted to address this finding. On the other hand, controlling behaviors by partner were found to related to the infliction of physical assault with injury, which is consistent with previous research [13,20,21,80, 86,87,95,97,98]. This finding is supported by systems theory, and may be founded in the everyday engagement and control used by a woman's partner that leads her to react with violence to counter something that is obstructed in the relationship [61-63,170]. In this case, inflicted psychological aggression and sexual coercion were found to be negatively related to controlling behaviors by partner. The possibility of a protective effect may derive from

women being afraid of the consequences and accepting the control, and thereby becoming less likely to use violence. These findings are not supported by all the theories suggested, and further research is warranted to address them.

Eighth, controlling behaviors over partner increase the likelihood of becoming a victim or perpetrator of IPV. These findings are consistent with previous studies that have found associations between controlling behaviors over partner and sustained psychological aggression and sexual coercion [21,86,94,97]. They are supported by feminist theory and the ecological model, and might be explained by male-dominated patriarchal beliefs that give rights and authority to men within the family/relationship; the men then use violence as a tool to reinstate supremacy, to compensate for their own lack of power, or to neutralize women's use of control [1,61,64-66,71,72]. These results are also supported by systems theory, and are substantiated by the fact that control over a partner causes relationship conflicts, which the male partner then tries to counter by inflicting psychological and sexual violence to emphasize his power [61-63,170]. But, controlling behaviors towards partners are related to all types of inflicted IPV, which is consistent with the findings of previous studies [13,20,21,86,87,94-98]. These findings are supported by systems theory, and might be explained by the fact that power shifts in the household are confrontational in relation to patriarchal beliefs; women's attempts to employ coercive control are blocked by their male partners, and violence results from power struggles in the relationships [20, 61-63,170]. This thesis adds to the literature by establishing that controlling behaviors by/over partner may be of great significance to the occurrence of victimization and perpetration of IPV [13,97,127].

Ninth, this research is the first in SSA of which we are aware that scrutinizes the influence of women's perpetration of violence on their own victimization. In addition, it extends research that has examined the association between being a victim of IPV and perpetrating violence. There is evidence that the pattern of violence is mutual; that is, both partners are violent. Women's abuse of their partner (physical assault, psychological aggression, sexual coercion, physical assault with injury) is related to their own victimization (physical assault, psychological aggression, sexual coercion, physical assault with injury), a finding that is consistent with previous studies [24-29,53-56,94-98,124,127,128,144]. These findings are supported by systems theory, and may be explained by the patriarchal beliefs of the past being replaced by a more egalitarian social structure. Thus, the change of power in relationships due to women's empowerment (i.e., female economic success) tends to break down traditional gender roles and increase the likelihood of IPV [20, 61-63,170]. Likewise, these findings are supported by feminist theory, and might be based on the view that female violence occurs as a reaction/defense aimed at avoiding a seemingly inevitable male assault [64,65,111,175]. Further research should explore the relationships between empowerment indicators, controlling behaviors and IPV victimization/perpetration to afford deeper understanding.

Tenth, childhood abuse increases the likelihood of becoming a victim or perpetrator of IPV. Being physically abused during childhood was found to be associated with sustained psychological aggression, which is consistent with previous research [8,100,101,103,107,108]. Also, physical childhood abuse was related to inflicted psychological aggression; sexual child abuse was associated with inflicted physical assault with injury; and finally, personal experience of physical assault with injury was

related to inflicted sexual coercion. All these findings are consistent with those of previous studies [20,109-114]. They are supported by social learning theory and the ecological model, and may be related to women who are abused during childhood developing tolerance or acceptance of violence. Thus, these cognitive and behavioral factors predict subsequent victimization and perpetration of IPV [1,66,68-72].

This is one of the first works in SSA to use Johnson's typology to explore the use of control behaviors and aggression by both partners in a relationship dyadically. The results show that there is reciprocal use of physical assault, but there is divergence with regard to the use of sexual coercion, which is consistent with previous studies [176]. To the extent this scenario is applicable, we found a predominance of male-initiated IPV, which suggests that female aggression occurs in self-defense. This finding is consistent with previous studies, and is supported by feminist theory [64,65,111,175], but further research is needed to explore the impact of reciprocal aggression. After classifying the relationships dyadically, the predominant pattern was one of non-violent. Remarkably, when violence was used, the predominant pattern was SCV (56%), followed by a relationship with a male intimate terrorist (VIT 28%), with male and female intimate terrorists (MVC 11%), and with a female intimate terrorist (IT 5%). Further, a majority of the relationships were mutually violent, followed by man-only violent, with fewer than 10% of cases of female-only violent. Consistent with Johnson's predictions [78], physical assault without injury, physical assault with injury and sexual coercion across relationship types IT (both men and women) are all associated with the most aggressive individuals. Hence, MCV was found to be the most physically damaging type of relationship, since it gives rise to the greatest risk of violence intensifying. We also found that factors related to the dyad partner, such as controlling behaviors and physical assault, are critical to whether violence increases or decreases, which is consistent with previous studies [13,97,127]. Thus, the fact that controlling behaviors by/over partner are risk factors for violence and for a reciprocal pattern of violence suggests that both partners would benefit from engaging in interventions aimed at changing their dysfunctional behaviors. Overall, our findings are supported by systems theory, and might be corroborated by evidence that violence occurs in the context of an enduring relationship [61-63,170].

Finally, childhood abuse is associated with women who are labeled as being involved in MVC, which is consistent with the findings of previous studies [88,90,92]. Our findings support social learning theory, and may be founded in the fact that women who have learned "distorted views" on what relationships are about have a tendency to select partners who are consistent with such views within the context in which they live. Thus, they use controlling behaviors and violence, a finding that is consistent with previous studies [66,68-70,177].

To conclude, a further objective of this thesis was to assess the extent to which the factors we have considered are associated with mental ill-health among women victims and perpetrators of IPV during the past 12 months. We observed significant associations between women's IPV victimization and perpetration in all its forms (psychological aggression, physical assault, sexual coercion, and physical assault with injury) and symptoms of depression, anxiety and somatization. Stronger associations were found in relation to being victimized by abuse than by perpetrating abuse, which is consistent with the findings of previous studies of IPV victimization [97,126,127,

135,178-181] and of IPV perpetration [40-42,140-143]. Noteworthy findings were that women who sustained or inflicted psychological aggression reported fewer symptoms of depression, anxiety and somatization than those who were the victims or the perpetrator of the other types of violence, which is contrary to previous findings on victimization [128,135,182] and on perpetration [128]. It was noticeable that 25.9% and 25.5% of women, as victims and perpetrators, respectively, reported psychopathological levels across these mental dimensions within or above the range of those reported by psychiatric out-patients [154]. Given our study design, it was impossible to establish whether mental health problems existed prior to the violence (the past 12 months), or whether or not they had a major influence. The multiple regression analyses could not confirm that victimization and perpetration were independently associated with symptoms of depression, anxiety and somatization. Methodological factors could explain this because our analysis was based on women's self-reports of these symptoms rather than on clinical evidence. Further, results elsewhere [161,183] have shown that these women were involved in relationships within which the occurrence of mutual abuse (i.e., being both abused and abusing) were the norm rather than the exception. Therefore, the effect of violence on mental health may not have been "visible" because these women have adjusted to abuse as an "ordinary" part of their lives. Another important factor was controlling behaviors, which may have been more critical to the mental health of these women than violence itself.

Accordingly, our findings stress the need for more research using longitudinal study designs to assess the relationships between IPV victimization and perpetration and mental health, in SSA and elsewhere.

Consistent with previous studies, controlling behaviors were found to be associated with poor mental health [97,127,128,184,185], and the effects of controlling behaviors upon mental health were more marked than those of victimization [185]. Controlling behaviors by partners were found to be related to symptoms of depression and somatization. These results are in line with feminist theory and the ecological model, and might be explained as a consequence of men's dominance over women, who experience IPV in a patriarchal environment that leads to feelings of desperation, reduced self-esteem, and social isolation, which has a serious impact on their emotional and physical health in the form of symptoms of depression and somatization [20,61,64-66,71,72,186]. Nevertheless, controlling behaviors by partners were found to be negatively associated with anxiety. Such a protective effect of controlling behaviors on mental problems is corroborated in feminist theory and the ecological model. The women who have adjusted to and believed in the social norms emanating from the "patriarchal school" to which they belong, characterized by tolerance of gender roles, economic dependency, and IPV, may be less likely to exhibit symptoms of anxiety [20,61,64-66,71,72,186]. Notably, however, controlling behaviors over partner are related to anxiety. This finding is in line with feminist theory, and might be corroborated by the fact that these women, acculturated as they are into patriarchal beliefs, feel guilty about their coercive behaviors, deny their IPV experiences, and also have a fear of their partner's reactions. All this may increase the likelihood of mental health problems, such as anxiety [20,61,64-66,186]. Overall, our results suggest that the relationship between controlling behaviors and mental health is multifaceted. There may be mirror settings, where women's acculturation into patriarchal beliefs is being

replaced by more egalitarian social perspectives in Maputo City and in a broader Mozambican context, which suggest that further investigation of possible confounding variables is needed to provide deeper understanding of the relationship between controlling behaviors and mental health.

Childhood abuse was found to be associated with symptoms of somatization, which is consistent with the findings of previous studies [97,134,187-189]. This finding is further corroborated in social learning theory, where symptoms of somatization can be attributed to women, during their childhood, having been punished for violating social norms, and having learned to suppress their emotional expression. Yet, their IPV victimization during adulthood may result in guilt and positive attention from significant others (e.g., the perpetrators). Thus, these women have acquired an increased awareness of and sensitivity to bodily reactions, and are more likely to exhibit symptoms of somatization [66,68-70,186].

Sleep difficulties were found to be associated with symptoms of depression and somatization, which is consistent with the findings of previous studies [190,191]. These findings are in line with feminist and social learning theory, and the ecological model, and can be substantiated by women with a history of child abuse and later IPV victimization in adulthood having sleep difficulties, which may increase the likelihood of symptoms of depression and somatization [20,61,64-66,68-72,186]. Yet, due to the cross-sectional nature of our data, a causal inference could not be made.

The association of smoking with symptoms of anxiety is consistent with previous findings [192-194], although some are contradictory. It has been found that smoking is related to IPV perpetration [161], that IPV victimization and childhood abuse are predictors of smoking, and that smoking increases the likelihood of anxiety [195]. However, these findings are not in line with all the theories suggested. Further research is warranted to address the issues involved.

Social attachment was found to be negatively associated with symptoms of depression and anxiety, which is consistent with the findings of previous studies [196-198]. Women with persons with whom they can share their feelings and preoccupations, e.g., family members, may have greater control over IPV-related stressors, which may enable them to change the role dynamics in their relationship. Thus, they tend to be less likely to experience symptoms of depression and anxiety. However, social attachment and social integration were found to be associated with symptoms of somatization, which is supported by some previous studies [199], but is inconsistent with some others [198,200]. However, the findings are corroborated in feminist theory and the ecological model, where low social support is attributed to a number of factors, such as a childhood abuse, history of IPV, lack of financial resources, and blaming oneself for or denying abuse, which may increase the likelihood of experiencing symptoms of mental ill-health [20,61,64-66,71,72,186]. Our results indicate that the relationship between social support and mental health is complex, which indicates the need for further investigation of possible confounding variables to provide deeper understanding of the relationship between social support and mental health in an SSA context.

Consistent with the findings of other studies, not having an education was found to be related to depression [201,202]. This finding is in line with feminist theory and the ecological model, which highlight the connections between gender inequality,

economic dependence on a partner, lower educational attainment, IPV victimization , and social isolation, all of which might increase the likelihood of symptoms of depression [20,61,64-66,71,72,186].

Age was found to be associated with symptoms of somatization, which is consistent with previous studies that have found a strong association between being a younger adult woman and mental health problems [203]. This finding is further supported in feminist theory and the ecological model, where the main effects of childhood abuse, early marriage, IPV and economic dependence on a partner, and biological factors related to puberty may intensify symptoms of somatization [20,61,64-66,71,72,186].

Finally, the strongest predictor of symptoms of depression, anxiety and somatization was found to be comorbidity, which is consistent with the findings of previous studies [204-208]. This finding is in line with feminist theory and the ecological model, where risk factors at different levels, from individual to society, such as childhood abuse, experiences of IPV, gender inequality, socio-economic dependence on a partner, and male dominance are regarded as leading women into powerlessness and hopelessness, thereby contributing to poor mental health [20,61,64-66,71,72,186].

6.2 STRENGTHS AND LIMITATIONS

This thesis has several limitations. First, the use of data involving consecutive cases, i.e., those of all women who visited Forensic Services at the Maputo Central Hospital for abuse by their partner during the period of data collection may be a source of selection bias. In addition, the use of the ascertainment tools (the CTS2, the CBS-R, the SCL-90-R, and the ISSI) may have resulted in ascertainment bias. Second, causality is difficult to establish with the design used in this thesis, which involved observations of each participating woman once at a defined time. To more firmly establish causal links would require another type of design (e.g., repeated measures). Third, the women were recruited in Maputo and had previous IPV experiences, and a control group (e.g., the general population) was not included. The sample may not have been representative of women in the rest of the country, and their IPV experiences may or may not have differed from those of women in general. However, some results seem congruent with other investigations in the area using different samples (e.g., the general population, battered women). Fourth, basing the study on women's self-reported accounts of their IPV experiences when they have made contact with the Forensic Services without the use of hospital records may have resulted in reporting bias.

Despite these limitations, this study may have provided new insights into the relationship between women's sustained and inflicted IPV, risk and protective factors and effects (e.g., on mental health), not least in the context of SSA and Mozambique.

The strengths of this thesis include its confirmation of findings from previous studies and its provision of new insights into the literature in an SSA context.

Most importantly, this research can be valuable for developing strategies aimed at the early detection and prevention of IPV, and also for interventions to support and care for victims and perpetrators in Mozambique.

7 CONCLUSIONS

The debate about the nature of IPV can be approached from different perspectives. IPV is a complex and dynamic aspect of human interaction that occurs in multiple forms and patterns. Instead of identifying the ones that are most correct or more common, it can be stated that gendered interactions in a social context can affect the behaviors of women and men differently. First, this thesis contributes to knowledge of how empowerment indicators are related to IPV, and also to symptoms of depression, anxiety and somatization. Further, it stresses the importance of policy contexts and the social structure of the gender inequality in which the aggression occurs. Second, women's own victimization and childhood abuse contribute to the co-occurring victimization and perpetration of IPV. This study extends the literature that looks at how women are victims, and how using violence is one of their reactions to their own victimization. Likewise, it stresses the importance of the policy context and the fact that gender socialization plays an important role in women's aggressiveness. It is important to be aware of women's statuses (as victim and perpetrator) and their partners' conflict-related behaviors when designing an intervention. Finally, there is evidence that controlling behaviors are important in explaining IPV victimization and perpetration, and also symptoms of depression, anxiety and somatization.

Without being prescriptive, it would be worth the effort to typify the cases observed, and establish the patterns of their occurrence, avoidance and settlement. In this regard, the stakeholders involved may consider taking pre-emptive measures to deal with the phenomenon. A possible way is to ensure that reported cases are adequately addressed, and do not become recurrent.

8 POLICY IMPLICATIONS AND RECOMMENDATIONS

In light of the nature of this research, we make some recommendations. They touch upon the following:

First, there is a need to increase public awareness of IPV and its risk factors, and of how to detect and prevent it, in awakening campaigns among the general population, primary health care providers, social workers, police staff, and prosecutor/court staff .

Second, it is important to provide information and education about IPV, which places greater emphasis on changing gender norms in society (from patriarchal to more egalitarian) through public debates/workshops, the media, information leaflets, brochures, etc.

Third, information on the Law on Domestic Violence Practiced Against Woman and the Family Law need to be spread, and relevant policy measures taken, such as improving cooperation and capacity building between the health sector, the police, the courts, and social services.

Fourth, settings where abuse can be reported must be improved. Victims (women and men) may have difficulties in reporting an offense, because they are afraid of being institutionalized or abandoned.

Finally, there is a need for the development of preventive and conduct interventions, such as treatment, that consider both partners' conflict-related behaviors.

9 FUTURE DIRECTIONS

This is the first thesis ever in Mozambique to address the occurrence of and different facets of IPV (e.g., types, severity), and also its risk and protective factors, and effects among women as victims and perpetrators.

I hope and expect that this thesis will contribute to the quest for better approaches to IPV, at all the levels where its occurrence and scars have adverse impacts on the societal order, ranging from the individuals, be they victims or perpetrators, the people who have immediate contact with these individuals, the communities and/or authorities to which cases are reported, and the practitioners in health facilities, forensic services, police stations, etc.

Given its relevance and the interest shown in the subject matter of this thesis, I also expect that it will kindle debate among the stakeholders whose work is intrinsically related to IPV, resulting in a more consistent, preventive and responsive approach to IPV.

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