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Pienaar, Sunette

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Investigating the associations between economic intimate partner violence and mental health outcomes among women: a cross-sectional study from Gauteng Province, South Africa

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Sunette Pienaar

Student no: 1925103

Supervisors:

Dr Wiedaad Slemming

Dr Mercilene Machisa

A research report submitted to the School of Public Health, University of the Witwatersrand in partial fulfilment of the requirements for the degree of Master of Public Health.

14 November 2021

Declaration

I, Sunette Pienaar, declare that this research report is my original work. It is submitted in partial fulfillment of the requirements for the degree of Master of Public Health, in the field of Maternal and Neonatal Health, in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to this or any other university.



16 November 2021

Abstract

Introduction

Intimate partner violence (IPV) is endemic to South Africa. More than 50% of women have experienced lifetime IPV compared to the global estimate of 30%. The health impacts of IPV cover injuries, post-traumatic stress, binge drinking, depression, suicide, and death. Sexual (SIPV), emotional (EmIPV) and physical IPV (PhIPV) have been well researched. Yet, little is known about economic intimate partner violence (EIPV) and the impact thereof on mental health outcomes in low and middle income countries (LMIC). The study adds to the existing understanding of women's experiences of EIPV and what the effects are on their mental health specifically in South Africa.

Materials and methods

This study analysed data from a population-based cross-sectional study of Gender Links and the South African Medical Research Council in the Gauteng Province that was conducted between April and July 2010. The prevalence of EIPV, depression and suicidal ideation amongst a sample of 491 women is described. Pearson's chi-squared test was used to test the associations between EIPV and depression and suicidal ideation. The multivariate analysis controlled for socio-economic variables and other factors associated with EIPV, i.e. child abuse, partnership control and other life trauma. Statistical significance was set at 5% and results were presented with 95% Confidence Intervals (CI). Adjusted odds ratios (aORs) were used to report the outcomes of the multiple logistic regression models.

Results

Among this sample, 24% of women experienced lifetime EIPV, 9% experienced past 12-month IPV, 24% had depressive symptoms (CESD>=21) and 7.5% reported thoughts of suicide. Women who experienced recent EIPV were twice as likely to be depressed compared to women who did not experience EIPV (aOR=2.3 [CI: 1.2-5.0]);and women with EIPV experiences were 4 times as likely to have suicidal thoughts (aOR=3.9 [CI:1.2-12.4]) compared to women who did not EIPV experiences. Older women (35-49 years) were 80% less likely to have suicidal thoughts compared to younger women (aOR=0.2 [CI:0.1-0.6].

Conclusion

This study found high prevalence of South African women's experiences of EIPV with significant associations between depression and suicidality, as has been shown with sexual, physical and EmIPV. These findings confirm the critical need for future studies to advance measures of EIPV which have previously been neglected. Interventions that adress the drivers of EIPV and its associated mental health effects must be prioritised.

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List of Abbrevations

AIDS: Acquired Immunodeficiency Syndrome

aORs: Adjusted Odds Ratios

AUDIT: Alcohol Use Disorders Identification Test

CCB: Checklist of Controlling Behaviours (CCB)

CES-D Scale: Centre for Epidemiological Studies Depression Scale

CI: Confidence Interval

COVID-19: Coronavirus disease 2019

CTQ: Childhood Trauma Questionnaire

DV: Domestic Violence

DV-FI: Domestic Violence-Related Financial Issues Scale

EIPV: Economic Intimate Partner Violence

EmIPV: Emotional Intimate Partner Violence

GBV: Gender Based Violence

HIC: High-Income Country

HIV: Human Immunodeficiency Virus

HREC: Human Research Ethics Committee

IPV: IPV

LMIC: Low- and middle- income countries

PDA: Personal Digital Assistant

PhIPV: Physical IPV

PTSD: Post-Traumatic Stress Disorder

SEA: Scale of EIPV

SEA2: Revised Scale of EIPV

SEA-12: 12-item Scale of EIPV

SIPV: Sexual Intiate Partner Violence

SRPS: Sexual Relationship Power Scale

PSU: Primary Sampling Unit

OR: Odds Ratio

SAMRC: South African Medical Research Council

SES: Socio-Economic Status

STI: Sexually Transmitted Infections

VAM: Violence against Men

VAW: Violence against Women

WHO: World Health Organisation

WHO MCS: World Health Organisation Multi-Country Study on Women's Health and Domestic Violence

Chapter 1: Background

1.1 Introduction

Intimate partner violence (IPV) affects all women across socio-economic divides and is a public health and a societal problem. IPV is highly prevalent globally with 30% of all women having reported some experience of IPV in their lifetime (1). Women who have experienced IPV are at risk of poor mental and mental health outcomes including HIV, depression, suicidal ideation, and even death.

The extent and patterns of IPV are described in this chapter. IPV is defined, the prevalence of different forms of IPV, including physical IPV (PhIPV), sexual IPV (SIPV), emotional IPV (EmIPV) and economic IPV (EIPV) is described with reference to the drivers of IPV. The relationship between IPV and poor mental health outcomes, specifically depressive symptoms and suicidal ideation are reviewed.

EIPV and associated factors are described in the light of the fact that this form of IPV has received little attention from scholars. The reasons for this literature gap are outlined. The contribution of this study to the growing body of knowledge on the mental health outcomes associated with EIPV is described in the problem statement and the focus of this study is justified. The overall aims and specific objectives of the study are listed in the conclusion of this chapter.

1.1.1 Defining IPV and its different forms

IPV is defined as a behaviour by a intimate partner, current or former, that causes, sexual, physical or psychological harm. Such behaviours include physically aggressive acts, controlling behaviours, economic control, psychological violence, social isolation and sexual coercion, and can occur as a

single or recurrent act (2,3). Multiple forms of violence often happen in a single episode of abuse (3). Women and men who are involved in heterosexual sexual relationships can either be perpetrators or victims of IPV or both (4). Evidence, however, suggests that men are mostly perpetrators of IPV in heterosexual relationships and women are at higher risk of being victims (1,5). The emphasis of this study is specifically on male violence perpetrated against women (VAW) in heterosexual intimate relationships.

IPV is distinct from other terms and concepts used to describe violence against women (VAW). Domestic violence (DV) is a broad terms that encompass people living together in a family setting and can affect partners, non-partners, siblings and children (6). “IPV” as a term was introduced the first time in Copenhagen at the Second World Conference on Women in 1980 as an alternative to DV (7) introducing partner violence into the public sphere as a human rights issue (8). IPV is included in the broad umbrella term, “violence against women and girls (VAW)” which includes sexual violence committed agains others than partners, trafficking of girls and yougn women and female genital mutilation (9).

1.1.2 Global prevalence of Physical IPV (PIhPV), Sexual IPV (SIPV) and Emotional IPV (EmIPV)

The WHO Multi-country Study on Women’s Health and Domestic Violence against women (WHO MCS), conducted amongst 24 000 women in 15 sites in 10 countries in diverse cultural settings: Bangladesh, Brazil, Ethiopia, Japan, Peru, Namibia, Samoa, Serbia and Montenegro, Thailand, and the United Republic of Tanzania, estimated the global prevalence of lifetime PhIPV, SIPV and EmIPV, at 30% (1). The WHO MCS used an adopted version of the Conflict Tactics Scale (CTS) which has been widely used in the USA and elsewhere to describe IPV prevalence.

A systematic review by WHO of the prevalence of PhIPV and SIPV or both in 155 studies in 81 countries, found that the WHO Africa, South-East Asia and

Eastern Mediterranean regions which cover the majority of low- and middle-income countries (LMICs) have the highest IPV rates. These three regions host large populations of women with lower socio-economic status (SES). An estimated 37% of every-partnered women in these three LMIC regions reported experiences of PhIPV or SIPV in their lifetimes (1). In comparison, high-income regions, and regions in the Western Pacific and Europe reported lower rates of IPV estimated at 25% (1,6). The WHO systematic review defined current prevalence as the proportion of ever-partnered women reporting at least one act of PhIPV or SIPV or both that took place during the 12-months prior to the interview. Another systematic review of African studies on the prevalence and risk factors of IPV against pregnant women found three studies with EmIPV prevalence rates of 24.8%, 41% and 49% respectively (10).

The WHO MCS found that IPV prevalence varies for various types of violence (11). EmIPV and controlling behaviours are the most common types of abuse. Between 20% and 75% of women had experiences of one or more acts of past 12-month EmIPV. The prevalence of controlling behaviour varies between 21% and 90%. Compared to EmIPV, the prevalence of PhIPV or SIPV ranges between 13% and 61% in women, between 15 to 49 years (11). Women report experiences of various forms of IPV concomitantly. Findings from the WHO MCS showed that most women experience either PhIPV only or both PhIPV and SIPV and between 30% and 56% of women experience both PhIPV and SIPV (11).

Although IPV affects women across the socio-economic divide, the prevalence rates vary between different settings and socio-demographic characteristics (11). Levels of PhIPV and SIPV is consistently higher in rural populations than in urban populations (6). Higher rates of IPV have been reported in younger women (12), women who are divorced or separated (6), women of lower socio-economic status (13), women with low educational status (11), women with more children and women of colour (14,15).

There is little evidence on the prevalence of EIPV. This may be attributed to the lack of standard measures for EIPV and scholars' use of different items as proxy measures for EIPV (16). It is challenging to compare prevalence rates across studies that use different measures for EIPV (16).

Studies from nationally representative samples in the Philippines, found EIPV to be in the range of 1.5% to 6.7% (17). This study measured EIPV by four items with dichotomous "yes" or "no" variables: "disallowed respondent to engage in legitimate work", "controlled money or force her to work", "destroyed personal property/pet or threaten to harm pet", and "ever lost job/source of income because of husband". Pet abuse has been associated with extremely high-risk environments for women who experience IPV which most likely include the co-occurrence forms of IPV including EIPV (18).

A study from Palestine found that 44% of married women reported experiencing EIPV in their lifetime (19). This study used different measures from the study in the Philippines and included only two questions on EIPV: 1.) whether a partner prevented a woman from appropriating the family's money as she pleases, and 2.) whether a partner exercised control of a woman or forced her to comply. The variable for EIPV in this study was assessed on two levels: not abused (the wife was never abused) and abused (the wife was abused by at least one act).

1.1.3 Global drivers of PhIPV, IPV and EmIPV

IPV is influenced by a complex web of interconnected factors or drivers along the ecological model. Evidence suggests that unequal gender-power relationships and the way they shape gender attitudes, norms and behaviours are interconnected with IPV (20). Community- and societal variables such as women's status, gender inequality, social acceptability of violence against women and the socio-economic development status of women are associated with IPV (21). IPV is associated with relationship-level risk factors such as

relationship conflict, economic stress, the dominance of males, and women and men having different educational status in a relationship. Individual drivers of IPV include child maltreatment or witnessing violence in the family, low levels of educational attainment, drug or alcohol abuse and harmful behaviours and attitudes that condone IPV (22).

1.1.4 The South African Context: prevalence, drivers and effects of PhIPV, SIPV and EmIPV

1.1.4.1 Prevalence of IPV

South Africa is known to have a very high rate of violence against women (VAW) compared to other countries in the world (23). Every day , there are three women killed by their intimate partners (24). The prevalence of PhIPV, SIPV, EmIPV and EIPV in South Africa is significant. EmIPV is the most prevalent form of abuse. About 44% of women in previous studies reported lifetime EmIPV (13,25); between 19% and 51% (25–27) reported lifetime PhIPV; 20% and 25% experienced lifetime SIPV (25), and 22% experienced EIPV (25). The estimated cost of VAW in South Africa could be between R28 and R42 billion annually (28). Despite a strong legislative environment and national policies that protect and promote the rights of women, IPV is a persisting problem (23).

1.1.4.2 Drivers/risk factors of IPV

VAW in South Africa, which includes IPV, is a socio-economically complex problem (11). Structural issues, such as the violent legacy of the apartheid system, and its interaction with present-day issues such as unemployment and

high rates of poverty are cited as possible contributing reasons for the persisting high prevalence of VAW in South Africa (23).

South Africa's young people experience high levels of violence in society which is a risk factor to IPV in later life. Child abuse is related to poor mental health outcomes such as depression and alcohol abuse in females in adult live (29). Recent evidence from South African scholars suggests that mental health comorbidity is a mediator in the relationship between child abuse and recent IPV. Multiple pathways starting from child abuse and covering women's experiences of IPV have been mapped in the literature (30). The COVID-19 pandemic and associated stressors of childcare, financial problems and enforced lockdowns have dramatically increased the risk of IPV and child abuse, and as many as 87 000 cases of IPV were notified in South Africa during the first week of lockdown, (31).

Accepted norms of gender-based violence significantly contribute to IPV perpetration in South Africa (32,33). Violent acts by men are justified as an acceptable response to women's behaviour, such as having an affair (33). Gender inequitable attitudes, a patriarchal culture and male privilege upheld by traditional culture and the church have been recognised as major causes of IPV amongst women and girls in South Africa (34).

1.1.4.3 The impact of IPV on mental health

IPV has short-term and long-term effects on the health outcomes of women including injuries, death, chronic disease, and mental ill-health such as PTSD, depressive symptoms, and suicidal ideation. The health impacts of IPV are further described in the literature review in this chapter.

Evidence links experiences of IPV to increased depression and suicidal ideation in South Africa (35,36). The third biggest contributor to the disease burden in

South Africa, next to HIV and other infections, is mental ill-health (37). Prevalence rates of mental ill health vary between 18% and 27% for depressive symptomology in rural-based studies and 25% in urban settings (38,39). Major depression prevalence is much higher in females. Women are nearly twice as likely to be depressed in their lifetime than their male counterparts (40). Evidence shows that alcohol abuse is co-morbid with depressive symptoms and post-traumatic stress disorder (PTSD) where women experienced IPV (30).

1.2 Literature Review

1.2.1 Challenges in studying EIPV

There are multiple reasons for the dearth of research on EIPV. Firstly, in the past, scholars have paid little attention to conceptualising EIPV as a separate manifestation of IPV until fairly recently (41). Scholars have more commonly treated EIPV and EmIPV as one construct and only recently have the constructs begun to be studied separately (41,42). Secondly, there has been contestation and scholars have had limited consensus about the definitional clarity of EIPV (43,44). While at a global scale there has been progress in the standardised measurement of PhIPV and SIPV in different settings, there have been limitations in the standardised measurement of EmIPV and EIPV (45,46). The lack of consensus on measures is partially due to the challenges associated with standardising culturally specific constructions of the nature and characterisation of EmIPV and EIPV in different contexts and settings (43,44). More commonly in LMIC settings, EIPV has been studied within contexts of economic insecurity where IPV has been regarded as a contributor to poverty and financial insecurity for women. Economic insecurity is sometimes framed as a likely outcome of IPV rather than a separate form of abuse (47). Finally, there is no agreement on how to code and analyse survey responses (13). It is recognised that more research is needed to develop reliable and validated scales on EIPV in local contexts .

1.2.2 Current definitions of EIPV

Scholars are yet to reach conceptual clarity on the definition of EIPV although a multi-country review on EIPV, by Postmus et al., recognised a “growing clarity and consistency of terminologies” in literature (48). EIPV refers to deliberate and controlling behaviour in which a perpetrator limits the ability of a partner to obtain, use, and sustain economic and financial resources (49,50). The terms, “EIPV” and “financial abuse” are used vice versa by scholars (51). The term, “economic coercion” has also been used to describe economic abusive behaviours also to obtain, use, and sustain resources (52).

Studies on EIPV refer to various tactics that perpetrators use to gain complete control over the victims financial resources (53), which renders it extremely difficult for a woman to leave an abusive relationship (54). These tactics include preventing access to and knowledge of economic resources (50,55,56); limiting access to resources (57); and denying access of resources, such as food clothing and/or medications (56). Adams and colleagues, categorised the different tactics used by perpetrators in the literature into 3 groups: 1.) behaviours preventing a woman from obtaining resources; 2.) behaviours that prevent women from using their own resources, and 3.) behaviours that exploit the resources of women (49). Postmus, Plummer, and Stylianou developed a three-factor construct of EIPV in intimate relationships which includes economic control, sabotaging employment, and exploiting economic resources (58).

The first factor, economic control, includes behaviours by perpetrators to prevent a woman from exercising any power to make financial decisions and/or accessing or knowing about finances (50,55,59). Perpetrators may keep track of how the victim spends money or limit or close access to a bank account (55). Victims may also be denied access to clothing, food or medicines (59).

Economic sabotage refers to behaviours by perpetrators to obstruct employment opportunities of a partner (16), such as discouraging or preventing a partner from obtaining or maintaning employment (50), actively interfering with a partner's employment by harrasing the partner at work or repeatedly calling the partner at work (60,61), and stealing their car keys and money or threatenining physical harm (62,63). Other tactics included in a literature review by Tolman and Raphael included disabling behaviours such as visible facial injuries, and causing the partner to be late by turning of the alarm clock (64). Studies on employment sabotage are limited in that they have been mostly implemented in the United States during welfare reform and with small samples of welfare recipients, women living in poverty and in shelters, and homeless women (65–68).

Economic exploitation refers to intentional behaviour to exploit a partner's resources and to destroy their credit or financial resources. These behaviours include running up credit of the victim and excessive gambling (49,69), exploiting insitutional barriers such as women's fewer economic opportunities (67), refusing to pay bills for essential amenities such as electricity and mortage (59), stealing money from partners and not giving the victim money for the home and children while spending this money on other things (70).

1.2.3 Measuring EIPV

The lack of research on EIPV stems greatly from the lack of standardised measurement for EIPV. Different scales have been used and developed for EIPV in different contexts. This section refers to literature on the development of EIPV as a separate construct and the development of different scales over time as a background to the measures of EIPV used in South African studies.

Researchers have only started hypothesising on measurements of EIPV as a separate construct in the late 2000s and there exists no agreement on the scale

or measurement of this type of IPV (49,71). Most of the research on EIPV stems from one or two questions included in measurements focusing on physical and/or psychological abuse limiting the results on EIPV (71). However, Postmus concludes that without paying due attention to EIPV, the scope, complexity and magnitude of abuse are being missed (48).

In the efforts to develop measures that are more comprehensive for EIPV, scholars have started developing EIPV sub-scales and scales. Weaver et al. (72) and Lehman and colleagues (73) were first and second to develop subscales for measuring EIPV in the Domestic Violence-Related Financial Issues Scale (DV-FI) and also in the Checklist of Controlling Behaviours (CCB). Both scales were limited measuring the different types of EIPV covered and were tested on small sample sizes of impoverished women in shelters in the United States of America.

The Scale of EIPV (SEA), created by Adams et al., was the first full scale instrument to measure EIPV (49). It includes 120 items from research. Advocates and IPV victims were interviewed on economic abusive tactics. A 28-item SEA was subsequently developed with subscales of 11 items referring to Economic exploitation and 17 items referring to Economic control. The 12-item Scale of EIPV (SEA-12) was developed by Postmus, Plummer and colleagues and covered economic controlling issues, the exploitation of economic resources, and acts of employment sabotage (50). Both scales were tested on small sample sizes of mainly Caucasian women in the United States of America who received services from domestic violence agencies in shelters. The majority of these women earned less than US$25,000 annually. Further testing found that both the SEA as well as the SEA-12 had good reliability and validity as well as good internal consistency and that EIPV was distinctly different from PhIPV, SIPV and EmIPV (58). The 120-item SEA was reduced to a scale of 12 items which was found to be reliable and valid as a short instrument to measure EIPV distinct from other forms of abuse. This shorter measurement also made it more

feasible to include EIPV together with PhIPV, SIPV and EmIPV in data collection tools for IPV.

The literature review on EIPV, by Postmus, explored measurements of EIPV in 4 South African studies (48). The study by Gafoor et al., conducted in 2016, among 1456 sexually active and HIV negative women conveniently sampled from public spaces such as health clinics, malls, churches, taxi stands and community venues. The authors measured EIPV by asking if money were taken away or not given to a woman (74). The study of Jewkes, Penn-Kekana, Levin, Ratsahak and Schrieber (2000) conducted with a stratified, multistage, randomly selected sample measured EIPV using 3 items including: 1.) being prevented by a partner from working, 2.) the partner using money for the home or the children for other things, and 3.) being evicted by a partner from the matrimonal home (70). In a 2003 study conducted by Jewkes et al., two items to measure EIPV prevalence amongst women were used: 1) using the money for other things than running the home and 2.) a partner taking earnings from her (75). In Joyner and Mash's 2011 study conducted in a rural setting, the researchers used three items to measure EIPV: 1.) the partner witholding money, 2.) the partner controlling financial decision-making or 3.) the partner taking money (76).

More recently Gibbs, Dunkle and Jewkes conducted a randomised control trial of clusters in poor socio-economic areas around Ethekwini using the four questions to measure IPV in the Gauteng GBV Indicators study, being: 1.) a partner stopped a woman from finding a job, working, earning or trading money; 2.) a partner took money earned by a woman from her against her will; 3) a partner threw a woman out of the house; and 4.) a partner usesd money for himself, such as tobacco and alcohol, rather than spending money on essential household necessities (13). This study used the four items from WHO MCS which were adapted by Machisa et al. for the GBV indicators project (25). The scales used in the South African studies included measures of economic control and economic exploitation, but not on economic sabotage. Most common were

the questions on whether your earnings were taken from you (economic exploitation) and whether you were not provided with money to run the house or look after the children (economic control).

Most recently, Adams et al (2020), developed and published a Revised Scale of EIPV (SEA2) which includes 14 items. This scale measures the use of control to restrict women's economic autonomy. The findings that different forms of EIPV were measured by the two subscales and the SEA2 was found to be pyschometrically sound to measure constructs related to EIPV (77).

Despite these different measurements for EIPV used in different studies and contexts, there is a tendency for scholars to combine constructs of EIPV into measures of EmIPV hence failing to report separately on the prevalence and factors associated with EIPV (48). While advances are made in high income countries (HICs) in measuring EIPV, such as the development of of the SEA and the SEA-12, there is a need to test these scales in other LMICs whilst recognising the complexity that cultural contexts contribute to gender inequality, forms of IPV and their measurement (48).

1.2.4 Health effects of PhIPV, SIPV and EmIPV

Women with experiences of violence are more at risk of adverse health outcomes (78,79). IPV has immediate as well as lifelong impacts on the health of women (6). The immediate effects of IPV on women's health include non-fatal injuries such as bruising, sprains, broken bones, lacerations, and welts (5,18). These and other effects, including post-traumatic stress disorder (PTSD) (80) and depression (80–83), as well as suicidal ideation and attempts (83,84) can have long-term consequences if left undiagnosed and untreated. IPV is also fatal and 38 percent of all murders of women globally are committed by intimate partners (1). Lifelong health impacts of IPV include chronic diseases (85,86),

gynaecological problems (57), mental and neurological disorders (87,88), and low self-esteem (89).

IPV experience is exacerbated during pregnancy and prevalence rates of between 36%-40% for PhIPV and 15-19% for SIPV among pregnant women have been recorded in South Africa (90,91). Women who experienced IPV are nearly 20% higher odds to deliver preterm and twice the odds to terminate their pregnancy (1). Women with experiences of IPV are at higher odds to participate in risky behaviours including drug and alcohol use (92,93), unsafe sex and multiple sexual partners (94,95) in comparison to women without IPV experiences. These behaviours increase the risk of women of acquiring HIV and other sexually transmitted infections (STIs) (96–98).

Health outcomes of PhIPV and SIPV have been extensively researched, while evidence on the health outcomes associated with EmIPV and EIPV are lacking. Studies on the health outcomes related to PhIPV and SIPV show that these two forms of IPV are consistently and strongly associated with depressive symptoms and suicide of women in different settings, both low- and high income (6). Devries et al. conducted a systematic review that shows a bi-directional relationship between experiences of IPV and depressive symptoms and suicidality. IPV experience increases the risk of depressive symptoms and suicidality and depressive symptoms or suicidal thoughts increase the risk of IPV experiences (43).

IPV is rated fifth in the Global Burden of Disease study in terms of women with IPV experiences living a lower quality of life over a higher number of years (disability years of life lost) (99). The lifetime economic cost associated with IPV-related injuries, loss of productivity, criminal justice and other costs, are estimated at 3.6 trillion US dollars (3); and two thirds of IPV costs are related to health care (100). It is anticipated that the novel coronavirus pandemic (COVID-19) may likely increase the risk, incidence and outcomes of women experiencing IPV (101).

1.2.5 Health effects of EIPV

Many of the studies on the mental health outcomes of IPV were conducted using samples of patients in clinical settings, therefore they are limited in generalisability to the general population of women. Some cross-sectional studies have investigated the mental health impact of EIPV separate from other forms of IPV, but these studies are limited in establishing the temporality of relationships (79,102,103). Notwithstanding, the evidence suggests that EmIPV and EIPV are separately significantly associated with increased suicidal ideation and suicide attempts as well as depression (89,104–106).

A cross-sectional study from Palestine showed a positive relationship between women who experienced EIPV and depression and anxiety compared to women who did not experience EIPV (19). Another study conducted in Germany on a nationally representative sample found that both older women (50-65 years) and younger women (16-49 years) who experienced EIPV reported severe psychological problems (105). A longitudinal study by Postmus, Huang and colleagues on a national representative sample of births on the impact of EmIPV, PhIPV and EIPV found women who gave birth who experienced EIPV were nearly twice as likely to be depressed than those women who gave birth and who did not experience a combined exposure to both EmIPV or EIPV (107). Another study by Nancarrow et al., that was conducted in Australia, showed that women who experienced EIPV was at high risk for depression (108). Antai and colleagues conducted a study in the Philippines using a representative sample from the National Demographic and Health Survey with women 15-29 years, and found that EIPV experiences were predictive of psychological distress and suicide attempts (17).

Among studies conducted in South Africa all the different forms of IPV have been associated with suicidal ideation (13,106). A cross-sectional study from South Africa conducted by Gibbs et al. in informal settlements amongst young women who experienced EmIPV found a prevalence of 45.3% depressive

symptoms and 30% suicidal ideation (13). This study also found an independent association between EmIPV and EIPV with symptoms of depression (45.3%) and past four-week suicidal association (30%). While this study showed an association between both EIPV and EmIPV and depressive symptoms, Gibbs and colleagues found a stronger association between EIPV and suicidal ideation compared to EmIPV and suicidal ideation (13). The relationship between EIPV and suicidal ideation were also more consistent and stronger than between EmIPV and suicidal ideation (13). More severe depressive symptoms and increased risk of suicidal ideation are associated with experiences of multiple forms of IPV (13,78). Women with EmIPV were also at higher odds of substance abuse (78).

Evidence on the health impacts of EIPV globally is limited. Very few studies locally have investigated the associations between EIPV experience and mental health outcomes among women from the general population.

1.3 Problem Statement

IPV is endemic to South Africa and accounts for 50% of all women murdered in the country (23). Much is also known about the impacts of SIPV, EmIPV and PhIPV on women's health. Yet, there is little evidence on the prevelance of EIPV and the impact thereof on women's health.

In South Africa, Jewkes and others estimated the disaggregated prevalence of the experiences of women of three different aspects of EIPV in three South African provinces being Eastern Cape, Mpumalanga and the Northern Province (75). However, they did not investigate the health effects associated with women's EIPV experiences. Gibbs explored the health effects of EIPV but used a non-representative sample within an intervention study that was conducted around informal settlements in the Ethekwini regions of Kwazulu-Natal, hence his studies have limited generalisability to the general population (13).

The GBV indicators study, which generated data from a population-based survey and used a randomised and representative sample from South Africa's most populous province, Gauteng, measured economic violence using different items including employment sabotage, economic exploitation, and economic control. The study simultaneously measured mental health outcomes among women including depression, suicidality and alcohol and drug abuse (25). The GBV Indicators study data is therefore ideal to explore the associations between EIPV and the mental health outcomes of women.

1.4 Justification for the Study

There is little research on EIPV as a unique construct from EmIPV, despite its possible associations with mental health outcomes through pathways that may be different from those of EmIPV (13). There is a need for more research on the prevalence of EIPV with representative samples and specifically in LMICs (16,42). This study contributes to deepening understanding about the experiences of women of EIPV in the South African context and its effects on mental health through adding to the existing scant body of evidence on this subject.

1.5 Study Aims and Objectives

The study aimed firstly to describe the prevalence of EIPV among women residing in Gauteng province between April and July 2010, and to investigate what the associations are between women's experience of EIPV and depressive symptoms and suicidal ideation, respectively.

The the study had the following specific objectives:

1. To describe the prevalence of EIPV (main exposure variable) among a representative sample of women from Gauteng, Province
2. To describe what the prevalence is of depressive symptoms (main outcome) and suicidal ideation (secondary outcome) in a representative sample of women from Gauteng, Province disaggregated by key exposure variables
3. To determine the associations between EIPV, symptoms of depression and suicidal ideation among a representative sample of women from Gauteng, Province

Chapter 2: Methods

The methods used in the study are presented in this chapter. This chapter also includes a brief overview of the methods used in the primary study as background to this study. The variables used in this study are articulated and the methods to manage and analyse the data are described.

2.1 Study Design

This study analysed data from a population-based cross-sectional study, the GBV Prevalence and Attitudes Study, which was steered by Gender Links and the South African Medical Research Council as the flagship tool of the GBV Indicators Project (25).

2.2. Primary Study

2.2.1 Background

The aim of the primary study was to describe the patterns and prevalence of GBV perpetration by men and experiences of GBV by women. The study also described HIV risk, gender attitudes, GBV prevention campaigns and responses to GBV (25). The GBV study was conducted between April and July 2010 in the Gauteng province.

2.2.2 Study Site

The study site is the Gauteng Province which is geographically the smallest of

the South African provinces, but it consists of 20% of the South African population. The province is the most densely populated in South Africa with 680 people per square kilometre (109). Gauteng has an equal proportion of males and females and hosts a young population with an average age of 25-29 years. Gauteng is mostly urban and includes both the biggest city and economic hub in South Africa, Johannesburg, as well as the administrative capital, Pretoria. More than three quarters of the population is black African (77%), and whites make up 16% of the population (109).

2.2.3 Study Population and Sample

Both males and females residing in Gauteng province aged 18 years and older were included in the study population of the primary study. A representative sample of men and women was identified using a two-stage proportionate stratified design (25). Stratification was done based on socio-economic criteria and the South African 2001 census data was used as the sampling frame (109).

Phase 1 of the sampling strategy comprised a random selection of seventy-five Primary Sampling Units (PSUs) used in the census of 2001. Twenty households were randomly selected from each of the PSUs in the second phase of the sampling strategy. The study enumerated all women (or men) in each household and one female or male were randomly selected for an interview from those who stayed in the household for a minimum of 4 nights a week (25).

Ninety-six percent (96%) of the selected households, comprising a total of n=1568 households (794 women and 744 men), were reached by fieldworkers. The study did not control for widows or orphans. A proportion of 89% of households had an eligible participant resulting in a total of n=513 women and n=487 men interviewed, which comprises an overall response rate of 75% with 77.2% respondents being men and 73% being women (25).

Inclusion Criteria

- Women and men aged ≥18 years
- Women and men living in Gauteng
- Women and men who stayed in a household for a minimum of 4 nighs a week
- Women and men who were mentally competent to complete the questionnaire

2.2.4 Data Collection

The study used a questionnaire that was standardised and the questions were close-ended. The questionnaire was developed in English and then translated into other local languages, i.e. isiZulu, Sesotho and Afrikaans (25). Field workers received one week training prior to the pilot study. The questionnaires were either interview-administered or self-administred. The questionnaires were conducted in complete privacy by field workers of the same sex (25). The study participants received a stipend of R25 as a token of gratitude for the time they spent to complete the questionnaire (25).

Twenty women from a Primary Sampling Unit (PSU) which was not part of the study, participated in the pretesting. The questionnaires were administered by same-sex fieldworkers in face-to-face interviews and were self-completed by women or filled out by fieldworkers. Interviews were conducted in private spaces and data was collected using a Personal Digital Assistant (PDA) or a small electronic handheld device that allows participants and/or fieldworkers to capture data electronically.

2.2.5 Measurement

Socio-demographic characteristics and partner characteristics, expriences of

GBV, adverse health and social outcomes and impact, GBV attitudes, sexual behaviours, campaign awareness and legislation relevant to GBV, and responses to GBV were collected through 348 closes-ended survey questions (25). The questionnaire is included as Appendix 2.

The content of the survey was created using surveys that were validated or previously used in South Africa. The survey used questions from the WHO MCS that were adapted by previous studies for use in the context of South Africa (111). The WHO MCS included measurements on PhIPV, SIPV, EmIPV and controlling behaviours, and covered both past 12-month as well as lifetime experiences of IPV. All of the questions in the WHO MCS on IPV related to behaviours by partners, whether current partners or ex-partners.

2.3 Secondary Analysis

The South African Medical Research Council (SAMRC) provided the investigator with a de-identified and cleaned dataset of the GBV Prevalence and Attitudes Household Survey in Stata for the purpose of the secondary analysis.

2.3.1 Study Sample

The secondary data analysis focuses only on the sample of women (N=513) included in the primary study.

Inclusion Criteria

- Participants with information on both the primary exposure (EIPV) and the outcomes (depressive symptoms and suicidal ideation) variables (n=491)

Exclusion Criteria

- Women who had not experienced intimate relationships in their lifetime
- Women who have missing data on key variable questions on EIPV and depressive symptoms and suicidal ideation (mental health outcomes)

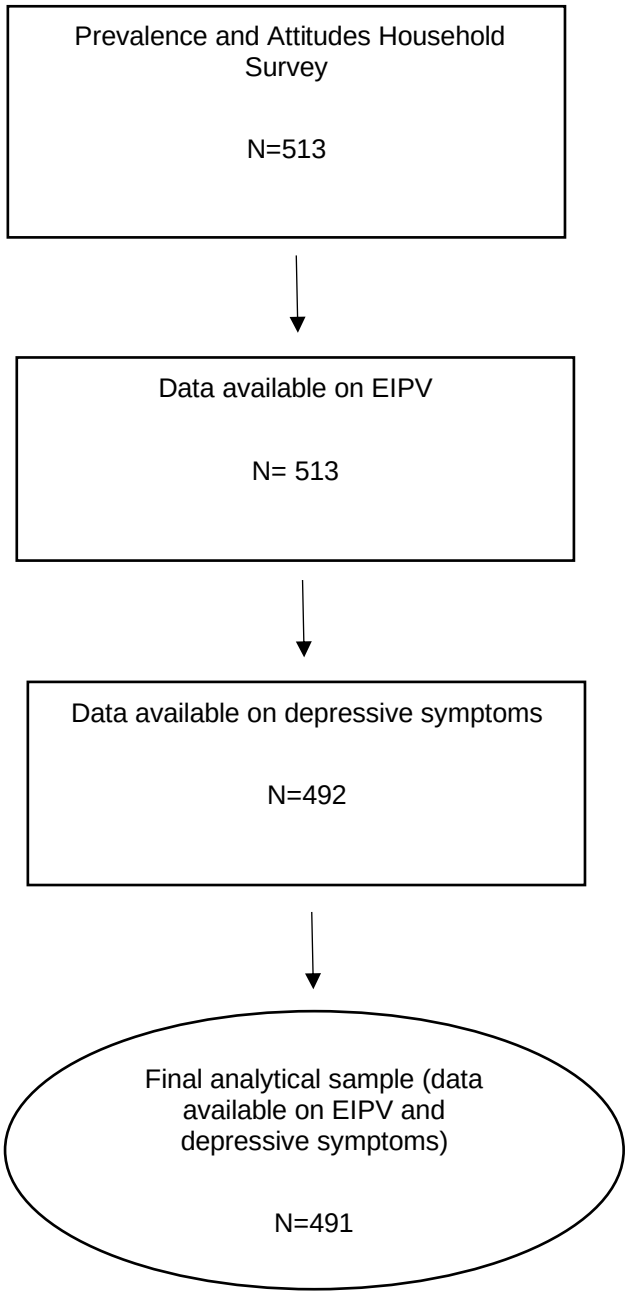


Figure 2.1 Selection of analytical study sample

2.3.2 Measurement of Variables

The secondary analysis included questions relating to the outcome variables (depressive symptoms and suidical ideation) and the exposure variables (economic, emotional, physical and SIPV). Questions from the primary study that related to confounding factors such as socio-demographic characteristics, childhood trauma, relationship control, other experiences of trauma were also included.

Outcome variables

Outcome variables include symptoms of depression which was the primary outcome. The secondary outcome was suicidal ideation.

Depressive symptoms

Depressive symptoms were measured using the 20-item Depression Scale of the Centre for Epidemiological Studies Depression (CES-D) scale (112). This scale was validated in isiZulu, isiXhosa and Afrikaans populations in South Africa (113). The CES-D scale is a self-report measure for measuring the frequency of depressive symptoms in the general population over the past week and uses Cronbach's alpha = 0.86 (112). A depression score was created by summing up the responsponses of the 20 items of the CES-D scale.

Depressive symptoms was scored using a Likert scale with four points, indicating weekly frequency of symptoms, where 0=rarely or none of the time, 1=some or a little of the time (1-2 days), 2=moderate amount of time (3-4 days), and 3=most or all of the time (5-7 days). The socre range is 0-60. Previous South African studies have used a cut-off score ≥21, assuming an indication of a high probability of clinical depression (13,114–117). A randomised control study by Gibbs et al., conducted in urban informal settlements around Ethekwini, examined the association between EIPV and health outcomes and is the only

study that have measured this association up to date. The Gibbs study also used a cut-off score ≥21 (13). A binary variable was created to describe prevalence in the study population whereby <21 is no depressive symptoms and ≥21 is indicative of depressive symptoms.

Suicidal ideation

The secondary outcome, suicidal ideation was measured through a single question asking if a woman had considered ending her life in the four weeks prior because of violence she experienced in her life. A previous study in South Africa by Jina et al. used this measure to investigate the adverse mental health outcomes of EmIPV in rural young women and used this measurement to assess suicidal ideation (118). Responses were categorised as “yes” or “no”.

Exposure variables

The WHO MCS survey, adapted for use in South Africa by previous studies (111) was used to measure past 12-month and lifetime EIPV, which was the main exposure variable of interest (89). The measure for past 12-month IPV is a more reliable measure of women’s recent/current experiences than using the lifetime experience measure as women who experienced IPV earlier in their lives may no longer be experiencing it currently. Moreover, mental health measures have timelines of recency. The CES-D scale, for example, was used in the survey to measure symptoms occuring within the past 4 weeks (25,119). Therefore, using recent IPV measures provides a better estimation of the effects of the experiences of women on mental health.

EmIPV, PhIPV and SIPV experience were measured and analysed for determining the prevalence of abuse in a lifetime or in the past 12-months by either a current/former husband or boyfriend. A binary variable with options “yes” and “no” was retained for all the IPV measures. A woman who had experienced

at least one incidence of abuse was regarded as abused.

Table 2.1 Exposure variables of different forms of IPV

Form of IPV	Items
EIPV	Included four items covering the following acts: • being prevented from finding a job, going to work, trading earning money or participating in income generation projects by a partner • a partner taking earnings from you • a partner forcing you or your children from your home where you were living • a partner who uses money for other things while not supporting household expenses or looking after the children, but has money for other things
EmIPV	Included the following items: • insults or made someone to feel bad about yourself • a partner belittling or humiliating someone in front of other people • a partner doing things to scare or intimidate by the way looked, by yelling and smashing things, for example • a partner threatening hurting you or someone you love • a partner stopping you from seeing any of your family or friends • a partner who boasted about bringing girlfriends home
SIPV	The following items were included: • physically forced non-consensual sex • having sex because of fearing that the partner might retaliate in some way if a woman refuses • being forced to do something sexual that they found degrading or humiliating
PhIPV	Included the following items: • slapping, throwing dangerous objects • pushing, or shoving you • hit you with a fist or with something else to hurt you • kicked, dragged, beat, choke or burnt you • threatened to use or used a gun, knife, or other weapon against you

The answers for experiences of IPV were categorised as either, “no experience” or “once or more”. Women who have experienced EIPV, EmIPV, SIPV and PhIPV once, a few times or many times were grouped under the “once or more” response. The responses of women who reported “never” having experienced IPV were classified as “no experience”.

As individual forms of IPV are likely to co-exist (11,120), the exposure to economic violence will be described in the context of other forms of IPV. Categories to be used are: 1.) no IPV at all; 2.) co-occurrence of economic and emotional violence only; 3.) co-occurrence of economic violence with any other form of violence and 4.) occurrence of other forms of violence excluding economic and emotional violence.

Potential confounding variables

The study analysis adjusted for factors which were found to be associated in the literature with both EIPV exposure and outcomes such as depressive symptoms and suicidal ideation, and therefore can be considered as potential confounding factors. Factors related to depressive symptoms and suicidal ideation respectively, were considered in the analysis:

- *Socio-demographic characteristics* – including education, age, nationality, race, income, employment status and partnership status which referred to having a boyfriend or staying with a man or widowed, divorced, separated or married in a polygamous relationship or having a boyfriend or husband any time before the survey.
- *Childhood abuse/trauma* - 14 items from the validated modified and shortened Childhood Trauma questionnaire (CTQ) was used with a Cronbach's alpha=0.89 (114,121). The CTQ has been used by Jewkes et al. in a study amongst rural South African youth (114). The childhood measure describes experiences of the respondent before the age of 18 such as not having enough to eat; living in different households at different times; hearing or seeing the child's mother being beaten by a husband or boyfriend; being told they were lazy or stupid or weak by someone in the family; being touched on the buttocks or genitals or made to touch someone else; insulted or humiliated by someone in the family in front of other people; beaten at home with a belt or stick or ship or

something else which is hard; had sex with a man who was more than 5 years older than the child; parents were too drunk to take care of the child; the respondent was beaten so hard at home it left a mark or bruise; spending time outside the home and none of the adults at home knew where the child was; had sex with someone because the child was threatened or frightened or forced; was beaten or physically punished at school by a teacher and was forced to have sex against her will by a boyfriend. The responses for the 14 items were categorised as 1.) "no child abuse" (score<14); 2.) mild child abuse (score≥14 and ≤28) and 3.) severe child abuse (score>28).

- *Relationship control* – the Sexual Relationship Power Scale (SRPS) was used to measure gender imbalance (114,122). The scale was adapted in South Africa and 11 items were validated in the South African context (Chronbach's alpha=0.92). Possible responses on the Likert scale included "Strongly Agree" = 1, "Agree" = 2, "Disagree" = 3, "Strongly Disagree" = 4 to compile a SRPS score. This score measured women's subjective experiences of being controlled in an intimate relationship. Scores on the SRPS were characterised as low, medium, and high according to tertiles of the distributions (123). Having a score <22 was regarded as low, a score ≥ 22 and ≤33 was regarded as medium control, and a score >34 was regarded as high. If the SRPS score was lower, it indicated a greater that the participant has less relationship power.
- *Other life trauma* – the Life Event Checklist from the PTSD Checklist, a validated screening instrument for PTSD, was used to measure other life trauma and consisted of 10 items, namely imprisonment, civil unrest/war, serious injury, being close to death, murder of family or a friend, unnatural death of family or a friend, murder of stranger or strangers, torture, robbing or carjacking at gunpoint or knifepoint and kidnapping (128). The LEC has previously been used in South Africa in community-based studies and school samples (125). The scores for the items were summed up and a score <1 indicated more life trauma.

2.3.3 Data Management and Analysis

The primary investigator received a de-identified and cleaned data set from the South African Medical Research Council (SAMRC). Participants who did not have data on the key exposure variables (EIPV, EMIPV, SIPV and PhIPV) and the two outcome variables (depressive symptoms and suicidal ideation) required for the analysis were excluded.

Version 15.1 Stata software was used to analyse the data for the secondary study (126). The study accounted for the stratification and cluster design using the (svy:) command in Stata.

Variables were recoded to align with the questions of the secondary study, where relevant. Variables of the childhood trauma and the relationship control scale were transformed from continuous to categorical variables. Categorical variables were recoded and frequencies and proportions were described. Mean and standard deviation was used to summarise continuous data if normally distributed and median and interquartile ranges were used where the data were not normally distributed. The data were recoded so that depressive symptoms (primary outcome), suicidality (secondary outcome) and EIPV (main exposure variable) were binary. Data were analysed to address the research objectives (Table 2):

Table 2.2 Transformation of variables for the analysis

Objective of the study	**Variable**	**Transformation of variable**
1.To describe the prevalence of EIPV among a representative sample of women from Gauteng Province.	EIPV	A binary variable with options *"no experience"* and *"once or more"* was retained
	EmIPV	A binary variable with options *"no experience"* and *"once or more"* was retained
	SIPV	A binary variable with options *"no experience"* and *"once or more"* was retained

Objective of the study	Variable	Transformation of variable
2.To describe the prevalence of depressive symptoms (main outcome) and suicidal ideation (secondary outcome) among a representative sample of women from Gauteng, Province disaggregated by key exposure variables. 3. To determine the associations between EIPV and depressive symptoms and suicidal ideation among a representative sample of women from Gauteng Province	PhIPV	A binary variable with options *"no experience"* and *"once or more"* was retained
	CES-D Scale	20 items, with a 4-point Likert scale with a range of 0 indicating rarely or none of the time to 60 indicating most or all of the time: 5-7 days. The scores were summed as *"no depressive symptoms"* (score ≤21) or *"depressive symptoms"* (score>21).
	Suicidal Ideation	A binary variable with options *"yes"* and *"no"* was retained
	Socio-Demographic variables	
	Age	Recoded nine age groups into five levels *"18-24 years"*; *"25-34 years"*; *"35-49 years"*; and *">50 years*".
	Education	Eight categories were recoded into three categories: *"no education"; "primary school and below"; and "high school and above",* to make provision for some of the original categories with small numbers.
	Employment	Transformed into a binary variable with *"yes"* or *"no".*
	Nationality	Four categories recoded into *"South African"* and *"Non-South African".*
	Race	Recoded five categories into three categories:*"White", "Black/African";* and *"Indian", "Coloured" and Other*'.
	Income/month	Seven categories were recoded into four categories: *"no income*", *"low income:*

Objective of the study	Variable	Transformation of variable
		R501 – R5000" "medium income: R5001 – R10 000", and *"high income: >R10 000".*
	Partnership status	A binary variable with options *"yes"* for currently being in a relationship and *"no"* for not being in a relationship was retained.
	Childhood abuse	Described with a 3 level categorical variable i.e. *"no child abuse"*; *"mild child abuse"* and *"severe child abuse".*
	Relationship control	SRPS scores were categorised as *"low", "medium"*, and *"high"*. A score <22 was regarded as low control, a score ≥ 22 and ≤33 as medium control, and a score >34 as high control.
	Other life trauma	A binary variable with options *"yes" and "no"* was retained.

The categories for the independent variables were regrouped into fewer categories to power the results for the tests of association with the two dependent variables, depression and suicidal ideation (see Table 2). Age, for example, was recategorised given that some categories had very few participants and some cells risked having zero observations. Education, nationality, race, income, childhood trauma, other trauma experiences and relationship control were similarly recoded to create fewer categories.

Associations between exposure and outcome variables were tested using bivariate and multivariable regression analysis. The researcher used the Pearson's chi-squared test to determine associations between the independent categorial variables and each of the outcomes variables, i.e. the association between experiences of life trauma and depressive symptoms. Bivariate analysis was conducted with cross-tabulations with measures of association. The analysis was adjusted for survey design, to determine what proportion of

women experienced IPV and depressive symptoms and suicidal ideation over the confounding variables (socio-demographic, child abuse, relationship control and other life trauma).

The relationship between the independent variables and the dependent variables i.e. depressive symptoms and suicidal ideation respectively was tested using multivariate logistic regressession models. Only past-year IPV (and not lifetime IPV) were included in the multivariate analyses given that the measures for depressive symptoms and suicidal ideation are recent. Using past-year mental health measures strengthens the assumption that the outcomes measures (depressive symptoms and suicidal ideation) are an effect of IPV and eliminates the probabilities that the relationship could be in the other direction, i.e depressive symptoms and suicidal ideation causing IPV.

Factors included in the multivariable logistic regression models were those with a p-value<0.2 in the bivariate analysis for past 12-months IPV or those with theoretical relevance. A p-value<0.2 was used in previous studies that investigated IPV and mental health outcomes using the same population data from the GBV Indicators study (30). Authors criticize the use of the p-value for drawing conclusions. Confidence intervals were therefore also calculated to be considered in the findings (127). Backward elimination was used for the systematic removal of non-significant variables for a parsimonious model. For depressive symptoms, EIPV, EmIPV, SIPV, PhIPV, childhood trauma and other experiences of trauma were included in the regression model. Age, EIPV, EmIPV, SIPV and PhIPV were retained in the regression model for suicidal ideation. The researcher conducted diagnostic tests to test the validity of the regression models for depressive symptoms and suicidal ideation. These tests included the AUC (LROC) to test whether the p-value (>0.5) has a discrimination power bettern than chance (128). The Goodness-of-fit (GOF) test was used to determine whether the models fit the data adequately (p-value>0.05) (129) and the Linktest was used to assess the specificity of the models whereby a p-

value>0.05 indicated a well specified model (130)For both models the p-vale for the AUC>0.5, and the p-values for the GOF and for the Linktest were >0.05.

Statistical significance was established at 5% and 95% Confidence Intervals (CI) were used to present resulted. Adjusted odds ratios (aORs) were reported in the results of the multivariate logistic regression models.

2.4 Ethical considerations

The ethics committees of the Human Research Ethics Committee (Medical) (EC09-012) of the University Of the Witwatersrand and the Medical Research Council Ethics Review Committee of the SAMRC approved the Gender-Based Violence Indicators Project and the Gender-Based Violence Prevalence and Attitudes Household Survey in December 2009 (Appendix B).

Participants received information about the study and was assured of anonymity and confidentiality before providing informed consent to be part of the study. Interviews were conducted privately (131,132). The study assigned anonymous study identification numbers to the participants to ensure that no personal information could be identified. Published data are de-identified and presented in aggregate form. The study adhered to the requirements of the WHO Ethical and Safety recommendations developed for Research on Domestic Violence Against women (133).

Information on accessing services for those who experienced GBV were given to women. When women requested, the researchers gave them local referrals for support (25).

The Human Research Ethics Committee (Medical) (HREC) of the University of the Witwatersrand (M201066) gave ethics approval for the secondary analysis.

The SAMRC gave permission to access and use the data generated from the Gauteng Gender -Based violence (GBV) indicators study.

Chapter 3: Results

3.1 Descriptive findings

The descriptive findings, reported in this chapter, include the socio-demographic characteristics of the participants. The prevalence of the different forms and combinations of EIPV with other forms of IPV and experiences of different forms of IPV and the co-occurrence of EIPV with other forms of IPV, both in a lifetime and over the past 12-months, are described. The prevalence of depressive symptoms and suicidal ideation ideation are described. Other trauma experiences of the women are described including childhood trauma, relationship control and other life trauma. The relationship between EIPV, depressive symptoms and suicidal ideation are further presented while controlling for socio-demographic characteristics and trauma experiences.

3.1.1 Socio-demographic characteristics of the participants

Table 3.1 indicates the demographic characteristics of the participants included in this secondary study (n=491). The majority of the participants (86.9%) were Black African and had South African citizenship (91.7%). The majority of participants (33.2%) were 35 to 49 years old and 27.5% were 25 to 24 years old. A proportion of 23.6% were 50 years and older. Most of the participants (78.8%) were in a heterosexual relationship when the survey was conducted.

Table 3.1: Socio-demographic characteristics of the participants (N=491**)**

Socio-demographic characteristics	**N**	**%**
Nationality		
South African	450	91.7
Non-South African	41	8.4
Race N=490		
African	426	86.9

Other	20	4.1
White	44	9.0
Age (years)		
18-24years	77	15.7
25-34 years	135	27.5
35-49 years	163	33.2
50+ years	116	23.6
Have a husband or boyfriend N=486		
Yes		
No	383	78.8
Missing data	103	21.2
	5	
Education		
Primary school and below	105	21.4
High school and above	386	78.6
Worked in the past 12-months N=472		
No	139	29.5
Yes	333	71.0
Income per month		
No income	282	57.4
Low income (R501-R5000)	158	32.2
Medium income (R5001-R10 000)	28	5.7
High income (>R10 000)	23	4.7

Most of the participants (78.6%) went to high school or post-secondary education, while a fifth had little or no education. More than half (57.4%) of the women had no income and 32.2% of the women earned R5000 and less per month (32.2%)

3.1.2 Prevalence of EIPV, childhood trauma, other life trauma and relationship control

Table 3.2 shows the prevalence of IPV, trauma experiences, and relationship control among the sample. Most prevalent was lifetime EmIPV (44.8%), followed by PhIPV (35.2%), and EIPV (24.4%). SIPV was the least prevalent (21.4%). The prevalence for past 12-months IPV followed a similar pattern: 12.6% of participants experienced EmIPV, 11.4% experienced PhIPV, 9% experienced EIPV and 7.1% experienced past year SIPV.

Women with experiences of EIPV also experienced other forms of IPV: 22% of women experienced lifetime EIPV and PhIPV and 12% of women experienced both EIPV and SIPV in lifetime. The prevalence pattern for the co-occurrence of past 12-month EIPV with other forms of IPV was similar to the lifetime prevalence patterns: 6.7% of women experienced both EIPV and EmIPV in past year, 6.1% experienced both EIPV and PhIPV in past year and 3.7% experienced both EIPV and SIPV in past year.

A proportion of 85.7% of the sampled women experienced mild childhood trauma while 11.8% of women experienced severe childhood trauma. Half of the women (50.7%) experienced one or more traumatic event. The range of scores for the relationship control scale were between 11 and 44. The mean score on the relationship control scale was 27 (12.4). More than a fifth of the women (21.8%) indicated low relationship power while 54.6% reported mid-levelrelationship power and control about decisions in the relationship. Less than a quarter of the participants (24%) felt they had higher relationship power.

Table 3.2 Prevalence of IPV, childhood trauma, other life trauma and relationship control (N=491)

IPV experiences	N	%
PhIPV lifetime		
No experience	318	64.8
Once or more	173	35.2
PhIPV past 12 m		
No experience	435	88.6
Once or more	56	11.4
EmIPV lifetime		
No experience	271	55.2
Once or more	220	44.8
EmIPV past 12 m		
No experience	429	87.4
Once or more	62	12.6
SIPV lifetime		
No experience	386	78.6
Once or more	105	21.4
SIPV past 12		
No experience	456	92.9
Once or more	35	7.1
EIPV lifetime		
No experience	371	75.6
Once or more	120	24.4
EIPV past 12 m		
No experience	447	91.0
Once or more	44	9.0
Co-occurrence of EIPV with EIPV, PhIPV and SIPV		
EIPV and EmIPV lifetime		
No experience	382	77.8

Once or more	109	22.2
EIPV and EmIPV past 12 m		
No experience	458	93.3
Once or more	33	6.7
EIPV and PhIPV lifetime		
No experience	392	79.8
Once or more	99	20.2
EIPV and PhIPV past 12 m		
No experience	461	93.9
Once or more	30	6.1
EIPV and SIPV lifetime		
No experience	431	87.8
Once or more	60	12.2
EIPV and SIPV past 12 m		
No experience	473	96.3
Once or more	18	3.7
Childhood trauma		
No child abuse (score<14)	12	2.4
Mild child abuse (score≥14; ≤28)	421	85.7
Severe child abuse (score>28)	58	11.8
Other life trauma		
No life trauma	242	49.3
Life trauma	249	50.7
Relationship control		
Low (score<22)	107	21.8
Medium (score≥22;≤33)	268	54.6
High (score>34)	116	23.6

3.1.3 Prevalence of mental health outcomes: depression and suicidal ideation

Table 3.3 articulates the prevalence of mental ill health outcomes amongst participants. Depressive symptoms scores ranged from 1 to 60. The mean score was 14.4 and the standard deviation was 12.3. About a quarter (24.2%) of participants scored 21 and above which is indicative of depressive symptoms. Of the participants, 7.5% had thoughts of suicide. Over a third (34.3%) of participants consumed alcohol in the year before the survey. Over a quarter (26.7%) of participants binge drank, i.e they consumed more than five drinks at one occasion in the past year.

Table 3.3 Prevalence of mental health outcomes: depression and suicidal ideation (N=491)

Mental Health Outcomes	**N**	**%**
Depression Scale		
No probable depression (<21)	372	75.8
Probable depression (>=21)	119	24.2
Mean (SD)	14.4 (12.3)	
Range	1-60	
Past 4 week suicidal ideation		
No	454	92.5
Yes	37	7.5

3.1.4 Socio-demographic characteristics disaggregated by Depressive symptoms and suicidal ideation

Table 3.4 shows that no significant relationship between any of the socio-demographic characteristics namely age, education, employment, income, partnership status, race or nationality and depressive symptoms ($p>0.05$).

Table 3.4 Socio-demographic characteristics disaggregated by the depression scale (CESD) (N=491)

Demographic characteristics	No probably Depression (<21) N(%)	Probable Depression (>=21) N(%)	P-value
Age (years)			
18-24years	61(16.4)	16(13.5)	0.81
25-34 years	102(27.4)	33(27.7)	
35-49 years	120(32.3)	43(36.1)	
50+ years	89(23.9)	27(22.7)	
Education			
Primary school and below	80(21.5)	25(21.0)	0.90
High school and above	292(78.5)	94(79)	
Worked in the past 12-months			
N=472			
Yes	251(70.3)	82(71.3)	0.84
No	106(29.7)	33(28.7)	
Income per month			
No income	212(57)	70(58.8)	0.87
Low income	120(32.3)	38(31.9)	
Medium income	23(6.2)	5(4.2)	
High income	17(4.6)	6(5)	
Have a husband or boyfriend N=486			
Yes	294(80)	89(75.4)	0.30
No	74(20)	29(24.6)	
Race			
Black/African	320(86.3)	106(89.1)	0.35
Other	14(3.8)	6(5)	
White	37(10)	7(5.9)	

Nationality			
South African	338(90.9)	112(94.1)	0.26
Non-South African	34(9.1)	7(5.9)	

Table 3.5 shows that there was also no significant relationship between education, employment, income, relationship status, race or nationality and suicidal ideation ($p>0.05$). Age and suicidal ideation ($p<0.05$), however, was signficiantly associated and suicidal thoughts prevalence was greater among younger women between the age of 18 and 24 years (35.1%) than women aged 35 years and above (24.3%). Suicidal ideation prevalence was the lowest among women in the age group 25-35 years (16.2%).

Table 3.5 Socio-demographic characteristics disaggregated by suicidal ideation (N=491)

Demographic characteristics	**No suicidal ideation N(%)**	**Suicidal Ideation N(%)**	**P-value**
Age (years)			
18-24years	64(14.1)	13(35.1)	0.01
25-34 years	129(28.4)	6(16.2)	
35-49 years	154(33.9)	9(24.3)	
50+ years	107(23.6)	9(24.3)	
Education			
Primary school and below	98(21.6)	7(18.9)	0.70
High school and above	356(78.4)	30(81.1)	
Worked in the past 12-months			
N=472			
Yes	308(70.8)	25(67.6)	0.68
No	127(29.2)	12(32.4)	

Income per month			
No income	263(57.9)	19(51.4)	0.85
Low income	145(31.9)	13(35.1)	
Medium income	25(5.5)	3(8.1)	
High income	21(4.6)	2(5.4)	
Have a husband or boyfriend N=486			
Yes	355(78.9)	28(77.8)	0.88
No	95(21.1)	8(22.2)	
Race			
Black/African	396(87.4)	30(81.1)	0.26
Other	19(4.2)	1(2.7)	
White	38(8.4)	6(16.2)	
Nationality			0.96
South African	416(91.6)	34(92)	
Non-South African	38(8.4)	3(8.1)	

3.2 Bivariate Logistic Regression Analysis

3.2.1 Bivariate Logistic Regression results for demographic characteristics by Depressive symptoms

There was no significant association between the socio-demographic characteristics and depressive symptoms.

Table 3.6 Bivariate Logistic Regression results for demographic characteristics and Depressive symptoms (N=491) (Pearson Chi-Squared Test)

Demographic characteristics	OR	95%CI	P-value
Age (years)			
18-24years *(ref)*	*1.0 (base)*		
25-34 years	1.2	0.6 – 2.7	0.58
35-49 years	1.4	0.6 – 3.1	0.45
50+ years	1.2	0.5 – 2.4	0.69
Education			
Primary school and below *(ref)*	*1.0 (base)*		
High school and above	1.0	0.6 – 1.7	0.90
Worked in the past 12-months			
N=472			
No *(ref)*	*1.0 (base)*		
Yes	1.0	0.7 – 1.6	0.82
Income per month			
No income *(ref)*	*1.0 (base)*		
Low income	1.0	0.6 – 1.5	0.85
Medium income	0.7	0.2 – 1.7	0.39
High income	1.1	0.4 – 3.0	0.90
Have a husband or boyfriend N=486			
No *(ref)*	*1.0 (base)*		
Yes	0.7	0.4 – 1.4	0.38
Race N=490			
Black/African *(ref)*	*1.0 (base)*		
Other	1.3	0.5 – 3.5	0.53
White	0.6	0.1 – 2.3	0.42

Nationality			
South African *(ref)*	*1.0 (base)*		
Non-South African	0.6	0.3 – 1.3	0.21

**ref is the reference category*

3.2.2 Bivariate Logistic Regression results for IPV experiences, childhood trauma, relationship control, other life trauma by Depressive symptoms

Women with IPV experiences were higher odds to have depressive symptoms than those who without IPV experiences. For lifetime IPV, women who experienced PhIPV were nearly three times higher oddshigher odds to be depressed than to those who did not experience PhIPV; and women who experienced EmIPV, sexual or EIPV were twice at the same odds to be depressed than to women without experiences of IPV.

Table 3.7 Bivariate Logistic Regression results for IPV experiences, childhood trauma, relationship control, other life trauma by Depressive symptoms (N=491) (Pearson Chi-Squared Test)

Exposure variables	OR	95%CI	P-value
Experiences of IPV			
PhIPV lifetime			
No experience *(ref)*	*1.0 (base)*	1.7 – 3.9	
Once or more	2.6		<0.01
PhIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	4.1	2.1 – 8.0	<0.01
EmIPV lifetime			
No experience *(ref)*	*1.0 (base)*		
Once or more	2.5	1.7 – 3.9	<0.01
EmIPV past 12 m			

No experience *(ref)*	*1.0 (base)*		
Once or more	5.3	3.3 – 8.5	<0.01

SIPV lifetime

No experience *(ref)*	*1.0 (base)*		
Once or more	1.8	1.1 – 2.9	0.02

SIPV past 12

No experience *(ref)*	*1.0 (base)*		
Once or more	3.7	1.8 – 7.9	<0.01

EIPV lifetime

No experience *(ref)*	*1.0 (base)*		
Once or more	1.9	1.3 – 2.9	0.01

EIPV past 12 m

No experience *(ref)*	*1.0 (base)*		
Once or more	6.1	3.5 – 10.6	<0.01

Co-occurrence of EIPV with EIPV, PhIPV and SIPV

EIPV and EmIPV lifetime

No experience *(ref)*	*1.0 (base)*		
Once or more	2.1	1.4 – 3.1	<0.01

EIPV and EmIPV past 12 m

No experience *(ref)*			
Once or more	*1.0 (base)*		
	4.9	2.9 – 8.1	<0.01

EIPV and PhIPV lifetime

No experience *(ref)*	*1.0 (base)*		
Once or more	2.3	1.5 – 3.3	0.01

EIPV and PhIPV past 12 m

No experience *(ref)*	*1.0 (base)*		
Once or more	4.6	2.5 – 8.4	<0.01

EIPV and SIPV lifetime			
No experience *(ref)*	*1.0 (base)*		
Once or more	2.0	1.2 – 3.4	0.01
EIPV and SIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	5.3	2.4 – 11.8	<0.01
Childhood trauma			
No child abuse *(ref)*	*1.0 (base)*		
Mild child abuse	0.8	0.2 – 3.4	0.71
Severe child abuse	3.4	0.7 - 17	0.13
Relationship control scale			
Low *(ref)*	*1.0 (base)*		
Medium	0.6	0.4 – 1.0	0.20
High	0.7	0.4 – 1.2	0.16
Other life trauma			
No life trauma *(ref)*	*1.0 (base)*		
Other life trauma	1.5	1.1 - 2.2	0.01

**ref is the reference category*

For past 12-months, women with EIPV experiences were 6 times higher odds compared women who did not experience EIPV to be depressed, and women with EmIPV experiences were 5 times higher odds than women who did not experience EmIPV to have depressive symptoms. Women with either PhIPV or SIPV experiences were 4 times higher odds to be depressed compared to women who did not have these experiences of IPV. For lifetime IPV women who experienced a co-occurrence of EIPV with other forms of IPV, were twice as likely to be depressed compared to women without experiences of EIPV with other forms of abuse. Women with EIPV experiences together with other forms of IPV in the past 12-months were 5 times higher odds to be depressed compared to women without experiences of concurrent IPV.

Women with experiences of other life trauma were 50% higher odds to have depressive symptoms compared to those women who did not experience other life trauma.

3.2.3 Bivariate Logistic Regression results for demographic characteristics by suicidal ideation

There was a significant association between age and suicidal ideation whereby women 24 years and older were increasingly less likely to have suicidal thoughts than younger women.

Table 3.8 Bivariate Logistic Regression results for demographic characteristics by suicidal ideation (N=491) (Pearson Chi-Squared Test)

Demographic characteristics	OR	95%CI	P-value
Age (years)			
18-24years *(ref)*	*1.0*		
25-34 years	0.2	0.8 – 0.7	0.01
35-49 years	0.3	0.1 – 0.7	0.01
50+ years	0.4	0.2 – 1.1	0.07
Education (N=468)			
Primary school and less *(ref)*	*1.0*		
High school and above	1.2	0.5 – 3.0	0.70
Worked in the past 12-months N=472			
No *(ref)*	*1.0 (base)*		
Yes	0.9	0.5 – 1.5	0.60
Income per month			
No income *ref)*	*1.0 (base)*		
Low income	1.2	0.6 – 2.8	0.59

Medium income	1.7	0.4 – 6.6	0.46
High income	1.3	0.3 – 5.5	0.70
Have a husband or boyfriend N=486			
No (ref)	*1.0 (base)*		
Yes	0.9	0.4 – 2.4	0.89
Race N=490			
Black/African *(ref)*	*1.0 (base)*		
Other	0.7	0.2 – 3.1	0.62
White	2.1	0.8 – 5.7	0.15
Nationality			
South African *(ref)*	*1.0 (base)*		
Non-South African	1.0	0.2 – 4.5	0.96

**ref is the reference category*

3.2.4 Bivariate Logistic Regression results for IPV experiences, childhood trauma, relationship control, other life trauma by suicidal ideation

Except for lifetime PhIPV, women with experiences of any form of IPV or a combination of EIPV with another form of IPV, both lifetime and past 12-month IPV were significantly higher odds compared to women who had not reported experiences of IPV to have suicidal thoughts ($p<0.05$).

For lifetime IPV, women with experiences of PhIPV or EmIPV were twice as likely to present with suicidal thoughts compared to those who did not have experiences of PhIPV or EmIPV. Women with experiences of SIPV were four times higher odds to have suicidal thoughts and women with experiences of EIPV were three times higher odds to present with suicidal thoughts than women who did not have experiences of SIPV or EIPV. In the case of past 12-month experiences of IPV, women with experiences of SIPV were nearly 8 times times higher odds and women with experiences of EIPV were 7 times higher odds

compared to women who did not experience SIPV or EIPV to have suicidal thoughts. Women who experienced EmIPV or PhIPV were nearly 5 times higher odds than women who did not have experiences of EmIPV or PhIPV to have suicidal thoughts.

Women with experiences of EIPV and EmIPV or PhIPV concurrently in their lifetime or over the past 12-months were respectively 3 times and 5 times higher odds to have suicidal thoughts than women who did not experienced the co-occurrence of EIPV with EmIPV or PhIPV. Women who experienced lifetime and past year co-occurrences of EIPV and SIPV were respectively 5 times and 12 times higher odds to have suicidal thoughts than women who have not experienced EIPV and SIPV concurrently.

Table 3.9 Bivariate Logistic Regression results for IPV experiences, childhood trauma, relationship control, other life trauma by suicidal ideation (N=421) (Pearson Chi-Squared Test)

Exposure variables	**OR**	**95%CI**	**P-value**
IPV experiences			
PhIPV lifetime n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	2.3	1.0 – 6.1	0.09
PhIPV past 12 m n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	4.5	1.9 – 10.5	<0.01
EmIPV lifetime n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	2.1	1.0 – 4.5	0.04
EmIPV past 12 m n=491			
No experience *(ref)*	*1.0 (base)*		
Once or mor	4.5	1.9 – 10.3	<0.01

SIPV lifetime n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	4.0	1.8 – 9.0	<0.01
SIPV past 12 n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	7.6	3.5 – 16.3	<0.01
EIPV lifetime n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	3.3	1.7 – 6.5	<0.01
EIPV past 12 m n=491			
No experience *(ref))*	*1.0 (base)*		
Once or more	7.4	3.5 – 16.0	<0.01
EIPV and EmIPV lifetime n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	3.3	1.7 – 6.6	<0.01
EIPV and EmIPV past 12 m n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	4.7	2.0 – 11.2	<0.01
EIPV and PhIPV lifetime n=491			
No experience *(ref)*	*1.0 (base)*	1.5 – 6.0	<0.01
Once or more	3.0		
EIPV and PhIPV past 12 m n=491			
No experience *(ref)*	*1.0 (base)*	2.2 – 13.2	<0.01
Once or more	5.4		

EIPV and SIPV lifetime n=491			
No experience *(ref)*	*1.0 (base)*	2.0 – 11.1	<0.01
Once or more	4.7		
EIPV and SIPV past 12 m n=491			
No experience *(ref)*	*1.0 (base)*	4.2 – 36.1	<0.01
Once or more	12.2		
Childhood trauma n=491			
No child abuse *(ref)*	*1.0 (base)*		
Mild child abuse	0.2	0.7 – 1.0	0.04
Severe child abuse	1.7	0.4 – 8.0	0.50
Other life trauma n=491			
No life trauma *(ref)*	*1.0 (base)*		
Life trauma	0.9	0.5 – 1.6	0.76
Relationship control			
Low *(ref)*	*1.0 (base)*		
Medium	0.3	0.1 – 0.8	0.01
High	0.7	0.2 – 2.2	0.50

**ref is the reference category*

Women who experienced mild childhood trauma were 80% less likely to present with suicidal thoughts compared to women who did not have experiences of childhood trauma. Women with some (medium) control in their relationships were 70% less likely to be suicidal than those women who had very little control.

3.3 Multivariate Logistic Regression models

3.3.1 Multivariate Logistic Regression results for past 12-month IPV and depressive symptoms

Women who experienced past 12-month EIPV and EmIPV were found to be twice twice higher odds to be depressed compared to women without EIPV (aOR=2.3 [CI: 1.2-5.0]) or EmIPV experiences (aOR=2.3 [CI:1.2-4.4]). PhIPV, childhood trauma and other life trauma were not signficiantly association with current depression.

Table 3.10 Multivariate Logistic Regression results for past 12-month IPV and depressive symptoms (N=491;P-value=0.0000) (Pearson Chi-Squared Test)

Exposure variables	aOR	95%CI	P-value
Experiences of IPV			
PhIPV past 12 m n=491			
No experience *(ref)*	*1.0 (base)*		
Once or more	1.2	0.5 – 3.1	0.66
EmIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	2.3	1.2 – 4.4	0.01
SIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	1.0	0.5 – 3.3	1.0
EIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	2.3	1.2 – 5.0	0.02
Childhood trauma			
No child abuse *(ref)*	*1.0 (base)*		
Mild child abuse	0.6	0.1 – 3.1	0.60
Severe child abuse	2.4	0.4 – 13.0	0.30

Other life trauma			
No life trauma *(ref)*	*1.0 (base)*		
Other life trauma	1.3	1.0 – 1.9	0.13

**ref is the reference category. The LROC (AUC) test had a p-vale >0.5 for the model for depressive symptoms and the p-values for the GOF and for the Linktest were >0.05 indicating that the models fit the data adequately and that the models were well specified.*

3.3.2 Multivariate Logistic Regression results for past 12-month IPV and suicidal ideation

Women with past 12-month EIPV experiences were 4 times higher odds to have suicidal thoughts (aOR=3.9 [CI:1.2-12.4]) compared to women without EIPV experiences. Older women were 90% less odds to have suicidal thoughts than younger women (aOR=0.1[0.04 – 0.6]).

PhIPV and EIPV were not significantly associated in the multivariate model for suicidal ideation.

Table 3.11 Multivariate Logistic Regression results for past 12-month IPV and suicidal ideation (N=491; P-value: 0.0001) (Pearson Chi-Squared Test)

Demographic characteristics and exposure variables	**aOR**	**95%CI**	**P-value**
Demographic characteristics			
Age (years)			
18-24years *(ref)*	*1.0 (base)*		
25-34 years	0.1	0.04 – 0.6	0.01
35-49 years	0.2	0.08 – 0.6	0.00
50+ years	0.5	0.2 – 1.3	0.12
PhIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	0.9	0.2 – 5.0	0.92

EmIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	1.7	0.4 – 7.9	0.50
SIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	4.1	1.2 – 14.0	0.02
EIPV past 12 m			
No experience *(ref)*	*1.0 (base)*		
Once or more	3.9	1.2 – 12.4	0.02

**ref is the reference category. The LROC (AUC) test had a p-vale >0.5 for the model for suicidal ideation and the p-values for the GOF and for the Linktest were >0.05 indicating that the models fit the data adequately and that the models were well specified.*

Chapter 4: Discussion

The study findings in relation to the prevalence of past 12-month EIPV, depressive symptoms and suicidal ideation are discussed in this chapter. The prevalence of past 12-month EIPV and the strength of association with depressive symptoms in the past week prior to the survey and past four-week suicidal ideation, are considered in relation to relevant literature. The effect of confounding factors, including demographic factors, childhood trauma, other life trauma and relationship control are discussed. The study's strengths and limitations are considered.

The overall aim of this study was to describe the prevalence of women's experiences of EIPV, depressive symptoms and suicidal ideation among a representative sample of 491 women in the Gauteng Province. The study set out to determine the associations between EIPV, depressive symptoms and suicidal ideation.

This study analysis showed that, among this sample of women who resided in the Gauteng Province, nearly a quarter experienced lifetime EIPV, 1 in 10 women experienced EIPV in the past 12-months, nearly 1 in 4 had depressive symptoms and 8% reported thoughts of suicide. Women who experienced past 12-month EIPV were twice higher odds to have depressive symptoms in comparison to women who did not experience EIPV. Women who experienced past 12-month EIPV were four times higher odds to experience suicidal thoughts than women who did not experience EIPV. Younger women were at highest odds of suicidal thoughts.

4.1 Prevalence of EIPV

This study found considerably high lifetime prevalence of EIPV experiences among women in this sample. The past 12-month prevalence of EIPV in this study was comparable to what was found in a survey which was conducted in a population in three South African provinces, namely the Eastern Cape (10.2%), Mpumalanga (15.7%) and the Northern Province (now Limpopo Province) (10.1%) and which used similar measures as this study (70). Dunkle et al. conducted a study using a large sample of pregnant women≥16 years, who attended antenatal clinics in Soweto in the Gauteng Province, and found comparable past year EIPV prevalence to this study of 11.1% (134). In this study over a third of the women who reported lifetime EIPV had recent experiences of EIPV.

Joyner and Mash's study of a smaller sample of women in primary health care settings, found a lifetime EIPV prevalence nearly twice as high as this study (42.9%) (76). Gibbs et al. measured EIPV using similar data measurements to this study. The Gibbs study was a randomised control trial (RCT). This study was implemented in the eThekwini municipality under young women, aged 18-30 years, from impoverished areas without formal services. At baseline, the study found a higher EIPV prevalence rate comparable to what was found in the current study (43.7%) (12).

The difference in prevalence findings between population-based studies such as this study and the Three Provinces Study, and non-population-based studies, such as the Joyner and Mash and Gibbs et al. studies, are consistent with the known impacts of study design, sampling, and research settings in estimating IPV prevalence data. It is more common for population-based randomised community surveys to estimate lower IPV prevalence rates compared to non-population-based studies in healthcare and intervention settings (11).

4.2 Prevalence of mental ill health outcomes

4.2.1 Prevalence of depressive symptoms

In this study, the prevalence of depressive symptoms was much higher than the prevalence rates in the nationally conducted South African Stress and Health survey (SASH) which found a lifetime prevalence of 9.8% of depressive disorder and a 5% percent prevalence of 12-month major depressive disorder compared to a prevalence of nearly 25% in this study (37). There is no validated cut-off for depression in South African samples using the CES-D scale thus far which contributes to the high prevalence of depressive symptoms in South Africa.

The difference in prevalence rates between this study and the SASH is attributed to the fact that the SASH used diagnostic tools to determine the prevalence and severity of psychiatric disorders, while this study used self-report symptoms tools to determine probable depression. The tool used in this study, that was validated in local contexts, included symptomatic presentations of depression that may exclude individuals who do not fit the diagnostic measures for major depression.

A prospective cohort study by Nduna et al., using data from a cluster randomised controlled trial of an HIV study in another province (Eastern Cape), also used the same CES-D self-report depression measure and discovered a prevalence rate of depressive symptoms among women of 21.1% (135), which is comparable to this study. The Gibbs study also used similar measures but found nearly double the prevalence of depression compared to this study (45.3%). The high prevalence of depression in the Gibbs study is linked to the context of poverty and deprivation. Mental ill-health, including depression, is highest in the poorest communities (136).

4.2.2 Prevalence of suicidal ideation

The SASH estimated the lifetime prevalence of female suicidal ideation at 10.1% (37) comparable to previous clinical estimates (137,138). The prevalence rate in this study is lower than the SASH estimate. This could be attributed to different study designs, sample size and geography. This study used data from a representative sample in Gauteng while the SASH survey used a national sample and estimate. The low suicidal rates in this study could also be because this study used one item that asked about suicidality because of violence exposure rather than asking a general question about suicidal ideation.

The Gibbs et al. study found three times the prevalence for suicidal ideation (30%) compared to prevalence rates in this study. Both depressive symptoms and suicide had prevalence rates much higher in the Gibbs study compared to this study, and the reasons for this might be that the Gibbs study was conducted in a highly impoverished area where there is higher incidence of violence and other traumatic exposures were reported. Existing evidence shows that women living in poor social-economic conditions are at higher risk of mental ill-health (139). The difference in estimates could also be attributed to different study designs whereas this study was population-based, and the Gibbs study was conducted in intervention settings. The age range for women in the Gibbs study sample meant that the women were younger than the women in this study, and younger persons have been found to have a higher prevalence of mood and substance disorders (136). This study did not show a significant association between depressive symptoms and age.

4.3. Association between EIPV and mental ill health outcomes

Women's past 12-month experiences of EIPV were significantly associated in the multivariate analysis with depressive symptoms and suicidality, respectively, as has been shown in previous studies that investigated the impacts of SIPV,

PhIPV and EmIPV (83). The associations between EmIPV or EIPV, depressive symptoms and suicidal ideation are consistent with those found in the Gibbs et al study (13), and have been reported in studies conducted in varied settings and contexts (19,42,107,108,136).

EIPV does not happen in isolation, but happens in a context where women experience other forms of IPV. Women who experience multiple forms of IPV together experience more severe depressive symptoms and increased risk of suicidal ideation (13,78). Combined forms of IPV have a compounding effect on the mental and physical health of women and destroy the self-esteem and social networks of women. The increased feelings of hopelessness resulting from combined abuse affect the quality of women's lives and increase their risk of more severe mental health outcomes (140).

EIPV was strongly associated with depressive symptoms and suicidal ideation in the multivariate analysis over and above PhIPV, SIPV and EmIPV which could be argued by lay people as being more harmful. The multivariate analysis shows that EIPV is equally harmful to women than the other types of IPV. The focus on the other types of violence completely ignores the fact EIPV is happening to women and by doing so underestimates how harmful this exposure is to women's mental health.

4.3.1 Association between EIPV and depressive symptoms

Literature provides some explanations for the association between EIPV and depressive symptoms. Economic insecurity, material hardship, and poverty are associated with EIPV (47). These economic factors create constant stressors which have been shown to be strongly asociated with depression and anxiety (17,107).

Women who experience EIPV often have limited options to engage in economic income generating acitivities or if they do, they risk losing their income to abusive partners which impacts on mental well-being. Women may also be forced to limit their interactions with others including having limited work-based social networks. Experiences of EIPV and depression may impact on work produtivity, increased abseentism from work and compromise the ability to keep a job which may lead to further IPV in its different forms and dependency on perpetrators (141). Women experiencing EIPV has also been found to be less economically self-sufficient which is protective of depression (107). Limited self-sufficiency implies that women have no or little control over economic resources. Furthermore, economic dependency has been implicated as a main reason why victims remain in abusive relationships with the associated mental health consequences (142,143).

4.3.2 Association between EIPV and suicidal ideation

Literature shows a robust positive association between suicide and economic hardship suggesting that economic factors contribute to suicidal thoughts and behaviours (144). Suicidality often occurs in complex co-morbidity with depression and other mental health difficulties including post-traumatic stress and anxiety (145). Women expericing EIPV, especially in South African settings, also experience other forms of IPV and are consistently exposed to other trauma. The accumulated effect of multiple forms of abuse on women increase their odds of suicidal ideation (78).

Women who experience EIPV often have nowhere to turn for support as perpetrators of EIPV use power and controlling tactics to isolate women from their families, friends and communities (146). EIPV creates economic dependency on the abusive partner and women may feel trapped and unable to leave their partners as they have no other means of survival. Women might continue to live in a hostile and threatening environment with their partners, while experiencing more economic stressors and abuse. Feeling powerless,

hopeless and unable to cope with this overwhelming situation, women may experience suicidal thoughts.

There was no significant association between EmIPV and suicidal ideation, but the study found a very strong association between EIPV and suicidal ideation similar to the Gibbs et al. study (13). This finding can be explained by the notion that some social support factors contribute to women's psychological resilience despite IPV. A study by Machisa et al. discovered that women who experienced IPV while having easy access to financial resources in emergency situations were more resilient compared to those who did not have access to financial support (147). Women who experience EIPV are prevented from earning an income and are often isolated from social- and work communities that could give them access to financial support to escape abusive relationships.

4.4 Confounders

No significant associations between the socio-demographic variables and depressive symptoms were recorded in the multivariate logistic regression analysis, indicating that poor mental health outcomes are prevalent amongst all women irrespective of socio-economic divides such as age, education, marital status or other factors.

This finding is related to the fact that all South African women are exposed to common stressors that impact their mental health outcomes, including endemic GBV and IPV (23), high levels of childhood violence (29), and HIV infection (148). These factors are all interrelated. IPV has been associated with higher rates of HIV infection and women living with HIV have an increased risk of poor mental health outcomes compared to those not living with HIV. Equally so, women with experiences of IPV are at increased odds of poor mental health and women with depressive symptoms are at increased odds of IPV. Women who experienced child abuse are at greater odds of depression symptamotology and

IPV, and women who with experiences of both IPV and child abuse are at greater odds of depression. Accepted norms of GBV and gender inequitable attitudes prevail in South African society limiting women's power in decision-making and driving HIV infection, GBV and poor mental health (34).

Age was the only socio-demographic variable that was significantly associated with suicidal thoughts. Younger women were higher odds to be suicidal compared to older women, a finding that correlates with the findings from the SASH (136). In South Africa, young women, including children and adolescents, experience high levels of violence and child abuse, factors associated with the early onset of suicidal ideation and behaviour (29). Research suggests that younger adults are immature, more impulsive and less resilient than older people to cope with traumatic experiences and difficulties, increasing their feelings of hopelessness and despair and their risk of suicidal thoughts and behaviour (149).

There were no significant associations between childhood trauma and experiences of other life trauma with depressive symptoms and suicidal ideation. This finding is contrary to studies that show causal relationships between childhood trauma and a range of mental disorders (150). This might be due to the multivariate model including IPV which is a potential traumatic event that occurred more recently than childhood trauma and was found to be significant in the bivariate analysis. As indicated previously, resilience is a mediating factor between experiences of trauma and mental ill-health. This finding align with the notion of resilience where women may have recovered from past experiences of abuse and regained their mental health so that their present mental health is more closely associated with recent experiences of IPV (151).

There was no significant association in the multivariate analysis between having a controlling partner and depressive symptoms or suicidal ideation. Previous studies have shown that women whose partners had controlling behaviours

were at increased risk of suicide and psychological distress compared to women whose partners were not controlling (42,118).

4.5 Strenghts and limitations of the study

A number of strengths and limitations of the study were identified. The greatest strength of this study was that it analysed data from the GBV Indicators study, the only population-based survey on IPV conducted amongst a respresentative, randomised sample of South African women to date. This made the data and its findings generalisable to the population at the time of the study. Moreover, other scholars have highlighted the slow progress in adressing GBV in South Africa, therefore the survey findings may still be relevant presently (152).

Subsequent to this study, women's IPV experiences were measured in the omnibus South African Demographic and Health Survey (SADHS) (153), but the estimates in this survey were lower than in the dedicated surveys (136). The survey collected data on IPV, traumatic exposures and multiple mental health variables which makes it ideal for studying the mental ill health impacts of IPV. Lastly, secondary analysis of data provides the opportunity to mine good quality data and generate evidence with minimal research costs.

The study had some limitations. The primary study, from which the secondary analysis was conducted, was not designed to answer the research question of the present study to determine the impact of EIPV on mental health outcomes. The study had some limitations around measurements. The suicidal measure only measured suicidal ideation in relation to violence exposure, while women may have experienced suicidal ideation because they have been victims of violence but might not have attributed this to the violence. The measurement used for suicidal ideation is not validated. The depression scale does not measure depression only in the context of violence, but measure it cross-sectionally in the population. There is currently no validated cut-off for depression in South African samples using the CES-D score and this might have

contributed to the high rates of depressive symptoms found in this study and other studies in the country. HIV is a contributing confounder in the South African context but HIV status was not included in this study. Almost no covariates were retained in the multivariate models as they were not found to be significant in the bivariate analysis and might have influenced associations should they have been retained.

This study was cross-sectional, limiting conclusive findings about causal inferences. It was not possible with this study design to determine the directionality of depressive symptoms and suicidal thoughts to establish if these risk factors were present prior to EIPV experiences or whether depressive symptoms was an outcome of EIPV. A systematic review by Devries confirmed the bidirectionality of depression and exposure to SIPV and PhIPV perpetration, but there are no similar studies on EIPV (83). However, the time limitation of past year IPV and mental health symptoms in the past month, allowed leeway to assume that the depressive symptoms could possibly be impacts of violent exposures. Notwithstanding, longitudinal or cohort studies must be conducted to improve an understanding of the association between EIPV and mental ill health in South-African settings. The sample size could have been a limitation. While we found strong associations between past 12-month IPV and suicidal ideation, in some categories the confidence intervals were large or spurious indicating limited precision of the associations.

The researcher was not privvy to some information on the processes and challenges that might have impacted on data collection and quality as she did not participate in the primary study. Missing data was reported for a few variables (race, having a husband or boyfriend, and working in the past 12-months). It is possible that some participants may have not disclosed IPV experiences, and it is unclear to what degree this could have happened. However, the research's compliance to the recommended guidelines for conducting violence against women research may have minimised this. The study used face-to-face interviews to collect data. This method of data collection

could have presented social bias as IPV is a sensitive topic and this could have influenced reporting. The data was self-reported and the responses were subjected to recall bias.

The researcher might be limited in the data manipulation as certain factors such as age data have already been categorised. The relationship control and childhood trauma scales were categorised to simplify the interpretation of results. The categorisation of continuous variables might reduce the statistical power of the analysis to detect relationships.

The survey was conducted in 2010 and there might have been changes in the population over time that was not considered. Not all the factors that could affect mental ill health of women were measured in this study.

Chapter 5: Recommendations and Conclusions

This study has found EIPV as important and potentially as harmful as PhIPV, SIPV, and EmIPV which we know much more about. The implication of this finding for practice and research will be discussed in this chapter. EIPV interlocks with other forms of IPV and this will be considered in the recommendations for interventions. To fully appreciate the scope and magnitude of EIPV and its effect on mental health outcomes, this study shows that much work still has to be done to develop and agree on EIPV measurements and outcome measurements that are globally accepted and validated in local contexts. Specific interventions to address EIPV will be further discussed in this chapter with reference to work that has already been done.

5.1 Recommendations

5.1.1 EIPV reduction interventions - combined approaches to preventing women's experiences of EIPV and mental ill-health

Gender transformative interventions

EIPV similar to other forms of IPV are anchored in gender norms and social beliefs that are upheld by society and are drivers of EIPV. Gender inequality profoundly affects the mental health of women and contribute to high levels of stress and depression (154). Gender-transformative programmes that promote gender equality and shared decision-making, especially around economic resources, are key to the prevention of EIPV and poor mental health (155).

The transformation of power relations is fundamental to EIPV prevention. Broader societal programmes of social change in South Africa should address gendered roles and social norms that give the power and control to men in intimate partnerships to make financial decisions in families. Prevention

programmes should challenge social norms that make it acceptable for men to stop their intimate partners from working or earning moneyor that make it common place to take women's earnings from them against their will. Customary and indigenous laws and legal systems that promote male dominance must be reformed to prevent EIPV (156). Both genders should be valued equally for their abilities to contribute to the economic sustainability of the family and should be free to to engage in economic activities of their choice (157). Norms where men are expected to control finances and women are prohibited from working must be challenged (158). Gendered roles and societal norms foster beliefs, attitudes and behaviours that sustain male perpetration of EIPV against women and keep women trapped in poverty.

Men are mostly the perpetrators of EIPV and must be included in programmes to transform gendered norms and beliefs. Programmes that involve men should address the risk factors for men to perpetrate EIPV and include social constructions of masculinity and the socialisation of men. Not all men who are exposed to similar societal attitudes and beliefs are perpetrators of EIPV and the risk factors for EIPV perpetration should be considered across the social ecology to reduce EIPV perpetration (4).

Economic empowerment programmes

Economic programmes that run alongside programmes to address gender inequities and power relationships can potentially reduce levels of EIPV (159). Many victims of EIPV remain in violent intimate relationships because they are financially dependent on their abusive partners (160). They might not have the skills or the confidence to engage in economic opportunities if they haven't worked for a significant period of time. Economic empowerment programmes can relieve women of the financial stressors that are outside of their control and contribute significantly to their mental ill-health. Such programmes can help women to break out of poverty, to become financially independent and to stop the cycle of abuse (161).

Economic empowerment programmes for victims of EIPV must include skills building and education to improve basic financial knowledge (162). Financial literacy programmes that incorporate information about EIPV and safety plans have been shown to be effective to increase the financial self-efficacy of women (143). Studies have also found that financial literacy is significantly associated with positive outcomes in victims of IPV (16).

Economic empowerment programmes must give women skills to navigate the relationship dynamics that prevent them form participating in the economy and making decisions about how to spend their money. Women who earn their own money will potentially be at less risk of EIPV (6). Victims of EIPV have often experienced EmIPV and economic empowerment programmes should also include skills to help women to regain their self-esteem and trust in their own capabilities to take care of themselves financially.

Economic issues should be a primary element of interventions for EIPV and all stakeholders must be equipped to understand the subtleties unique to EIPV relationships. (163). Advocates can support victims with safety plans to address financial risks independence (143).

5.1.2 Addressing women's mental health and the effects of EIPV in South Africa

Interventions for EIPV need to address the effects of EIPV on the mental health of women. Following from the findings of this study, young women must be targeted to decrease the burden of mental ill-health on women and to decrease young women's risk of EIPV (164). Health systems approaches to addressing the mental health impact of EIPV include a re-orientation of mental health services, training of healthcare workers and multi-sectoral approaches.

Re-orientation of mental health services

Mental health services are severely constrained in South Africa. The health system is orientated towards hospi-centric care for mental health and there is an absence of community-based mental health services (165,166). There is a severe shortage of specialised psychiatric staff and psychologists in the health system and a huge gap in specialised care for young people (167). Mental health services are unequally distributed across provinces and between rural and urban areas, resources are inefficiently used and there are persistent stock-outs of medicines for mental health conditions.

Mental health prevention and health promotion programmes must be developed to target younger women and to improve access to treatment. Mental health services need to be re-orientated to focus on communities for preventative services and early identification and treatment. Community care includes homes visits and parenting programmes for child maltreatment (168) and activities for alcohol and substance use reduction (169).

WHO recommends routine screening for mental health for young people and mental illness must be treated as early as possible in life. Programmes for adolescents and young women must develop resilience in young people to manage difficult circumstances and to limit risk-taking behaviours such as binge drinking (170). There are therapeutic interventions that have shown success in the treatment of the mental ill-health of women such as Cognitive behavioural therapy (CBT) and Dialectical behavioural therapy (DBT) for women at risk of suicide (171). The implementation of these interventions must be strengthened.

Training of health care workers on mental health and EIPV

A key strategy to strengthen the delivery of mental health care and EIPV services is the training of generalists, nurses and community healthcare

workers. Health care workers must be trained to recognise EIPV as it impacts mental health outcomes indepedently from PhIPV, SIPV, and EmIPV and to act as a first reponse (172). Service providers should focus on psycho-social support for EIPV victims where the current focus is on treating injuries related to PhIPV and SIPV and providing biomedical interventions for victims of IPV such as pre-exposure prohylaxis (PrEP). This is because EIPV is not recognised by service providers as an equally harmful form of IPV to PhIPV, SIPV and EmIPV. It is important for healthcare workers to have the knowledge to detect EIPV and to identify the risk of future EIPV. Where health care workers do not suspect EIPV as a possible cause of mental ill-health, they might encourage patients who have attempted suicide, to go back to their parthers risking further EIPV and even suicide (83).

Providers should be trained to identify and respond to EIPV and mental ill-health across services as young women might present at different points of care in the system, such as sexual and reproductive health services, HIV voluntary counseling and testing services (VCT), in emergency departments and for mental health services at tertiary hospitals. The Vezimfihlo training program, for example, works in VCT settings to respond to GBV and should include EIPV specifically in their response strategies (173). Counsellors for pre-exposure prophylaxis (PrEP) and HIV can be equipped to discuss power relations and gender inequality with adolescents and young women and a youth-friendly approach can facilitate EIPV disclosure in young women (174). Health managers must provide clear protocols and care pathways together with a supportive environment for debriefing of health care workers who provide psycho-social support services to victims of EIPV (175).

Multi-sectoral approaches to prevent and address EIPV and its mental health effects

Health services need to work closely with other stakeholders on programmes to reduce EIPV. Campaigns such as the 16 Days of Activism against Gender-Based Violence campaign spearheaded by the Department of Social Development in South Africa, provides a platform to raise awareness about EIPV as a separate form of IPV and to challenge gendered and societal norms about women and economic decision-making. Social media campaigns can be investigated as a strategy to raise awareness og EIPV and to shift attitudes, knowledge and behaviours on EIPV and responses by healthcare workers as is being explored in Egypt, particularly amid COVID-19 (176)

NGOs can play an important role to provide psycho-social services, counseling, temporary shelter, economic empowerment programmes and relationship skills building programmes to victims of EIPV. Victims of EIPV might present at the Thuthuzela Care Centres, as EIPV often co-occurs with SIPV. Thuthuzela Care Centres is an initiative of the National Prosecuring Authority (NPA) that provide multi-disciplinary services to victims of rape (177). The NPA can extend services to support victims of EIPV and to prosecute perpetrators of EIPV. Centre staff can be trained to identify EIPV, to provide pscyho-social support and counseling or to refer women to NGOs for services.

It has been recognised that communities play a pivotal role in reducing violence and improving the mental health coutomes (175). There is evidence that approaches where advocates link survivors with community resources, such as housing, legal, financial, psychological and psychoeducational services, can reduce violence and improve mental health outcomes to some extent (79,178).

5.1.3 Legislation, Policy and Guidelines

South Africa has developed a comprehensive legislative framework to address domestic violence (DV) and to protect victims. The Domestic Violence Act No 116 of 1998 (DVA) recognises EIPV as a separate form of IPV, but is poorly implemented (179). The DVA lacks parliamentary oversight and accountability mechanisms. There is a lack of coordination across the responsible departments and budgets are inadequate to implement the full package of services (180). There is also a need for more effective and victim-friendly implementation of the DVA and intensified efforts to sensitise the population to know about the legislation, criminal justice responses, and health and psychosocial services available for victims of EIPV both at national and grassroots levels.

The National Department of Health has developed guidelines and training curriculum for healthcare workers to screen patients for IPV in primary healthcare settings.The screening tool addresses acts of violence related to PhIPV, SIPV and EmIPV, but does not contain any questions specific to EIPV. The exclusion of EIPV screening does not recognise the particular dynamics of EIPV as a separate form of IPV with specific mental health outcomes and victims of EIPV will not receive the services and support they need if they are not succesfully identified.

The guidelines for IPV screening are poorly implemented. The public sector faces a myriad of health systems challenges in the implementation of guidelines such as a shortage of specialised and trained staff, inadequate budgets and poor integration of services into routine care (181). Healthcare workers are overwhelmed with their workloads and often blame the victims of IPV for the abuse (182). IPV screening also often takes a backburner and is not prioritised.

5.1.4 Future Research

The study shows the need for further research to standardise, test and validate measurements for EIPV to capture its magnitude, scope, and complexity. The 12-item Scale of EIPV (SEA-12) may be tested in South Africa for validation in this context as it has already been found that it showed good reliability and validity and good internal consistency in other contexts (81). The two-dimensional Revised Scale of Economic Aubse (SEA2) has also been found to be psychometrically sound for measuring EIPV and may be tested in the South African context (85). The periodic SADHS surveys have begun to measure PhIPV and SIPV experienced by women and it is important for the surveys to measure and present findings on EIPV.

This study highlighted the need for more research on the measurement of EIPV outcomes to fully appreciate the impact of EIPV on the mental health of women. This study highlighted the importance of developing a validated measure for suicidal ideation and a validated cut-off for measuring depressive symptoms on the CES-D scale in the South African context.

More research is required to appreciate the differential characteristics of perpetrators of EIPV and to recognise risk and protective factors of EIPV behaviours in men. Risk and and protective factors that present in the pathway between child abuse, adult EIPV, and depressive symptoms and suicidal ideation, need to be explored. The effectiveness of interventions to prevent EIPV in the South African context, including economic empowerment programmes, skills building, and psycho-social support interventions, must be evaluated.

5.2 Conclusions

The aim of this study was to describe the prevalence of EIPV in a sample of 491 women in the Gauteng Province between April and July 2010, and to determine

the associations between economic EIPV and depressive symtoms and suicidal ideation. EIPV experiences were prevalent in the sample of women and were significantly associated with with depressive symptoms as well as suicidal ideation. Younger women (25-34 years) were more at risk of suicidal ideation compared to older women.

This study adds on to the emerging evidence of the prevelance and effects of EIPV on the mental health of women in South Africa and shows that EIPV and its associated mental health outcomes is as important as PhIPV, SIPV and EmIPV. Younger women must be prioritised for interventions and services which adress EIPV and ill-mental health.

An urgent need has been identified to reorientate mental health services to community-based services and primary health care to respond to the mental outcomes of the added burden of EIPV which is currently not recognised as a distinct and separate form of IPV in responses. Combined gender transformative and economic empowerment programmes which includes skills building for navigating relationships that prevent women from participating in the economy must be promoted to reduce EIPV. Research on EIPV must prioritise measurements for prevalence and mental health outcomes. EIPV must be recognised as a distinct form of IPV in the Guidelines of the National Department of Health. The implementation of the DVA and Guidelines must be strengthened.

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Appendix 1: Plagiarism Declaration

WITS School of Public Health

PLAGIARISM DECLARATION FOR WRITTEN WORK: MPH RESEARCH REPORT

I, Sunette Pienaar (Student number:**1925103**) am a postgraduate student registered for the degree of Master of Public Health in the School of Public Health in 2018.

I hereby declare the following:

- I am aware that plagiarism is the use of someone else's work without their permission and/or without acknowledging the original source).
- I am aware that plagiarism is wrong.
- I confirm that the work submitted for assessment for the above course is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.



Signature:

2021-06-18

Date:

Appendix 2: Data Usage Permission



GENDER & HEALTH RESEARCH UNIT

5 October 2020

Research Office

Faculty of Health Sciences,

Phillip Tobias Building, Offices 301-304, 3rd Floor

Cnr York Road and 29 Princess of

Wales Terrace Parktown, 2193.

RE: Research data usage permission for Dr Sunette Pienaar (student number 1925103)

This letter serves to confirm that we have given Dr Sunette Pienaar permission to access and use data generated from the Gauteng Gender Based violence (GBV) Indicators study. We have given her permission to conduct secondary analyses required for the fulfilment of her masters' research study titled "Investigating the associations between economic Intimate Partner and health outcomes among women: a cross sectional study from Gauteng Province, South Africa"

Conditions for data usage

1. The data will be made available to Dr Pienaar on approval for the secondary study by the HREC.
2. The primary research investigators will provide support and training to ensure the appropriate application of analytic methods by Dr Pienaar

3. Dr Pienaar will only use the data for the purpose of fulfilling her masters research study. No extra data mining outside what has been specified will be permitted.

4. Dr Pienaar will acknowledge the joint implementing organisations (i.e., South African Medical Research Council Gender and Health Research Unit and Gender Links) in the research report and other publications generated from the master's research study. Dr Pienaar will be required to clarify publication specifics with the primary investigators at the time of publication.

Yours truly,

Mercilene T Machisa

Specialist Scientist

Email: Mercilene.Machisa@mrc.ac.za Tel:0123398596

THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL

1 Soutpansberg Road, Pretoria 0002 | Private Bag X385, Pretoria 0001, South Africa

Tel: +27 (0)12 339 8526 | Fax: +27 (0)12 339 8582 | Web: www.samrc.ac.za

Appendix 3: Ethics Approval for the Gender-Based Violence Study

SOUTH AFRICAN MEDICAL RESEARCH COUNCIL



ETHICS COMMITTEE

PO Box 19070, Tygerberg 7505, South Africa,
Francie van Zijl Drive, Parow Valley 7500, Cape Town.
Tel: +27 (0)21 938 0341, Fax: +27 (0)21 938 0201
Email: adri.labuschagne@.mrc.ac.za
http:// www.sahealthinfo.org/ethics/ethics.htm

30 November 2009

Ms N Christofides
School of Public Health
University of the Witwatersrand/Gender and Health Research Unit

Dear Ms Christofides

Protocol ID: EC09-012
Protocol title: Relationships and health in Gauteng: A household survey
Meeting date: 23 November 2009

Thank you for your response to the Committee, dated 6 November 2009. The Committee granted ethics approval for the study, provided that the following changes are made to the information sheets and consent forms - copies of the amended forms must be submitted for the Committee's records:

1. For focus groups, it must be stated that only the researcher can ensure confidentiality, but that participants will be requested to maintain confidentiality.
2. All the information sheets should mention audiotaping. There should be a request for permission to audiotape, not just a statement that it will be done, with a statement that the tapes will be kept under lock and key and destroyed 2 years after publication of the research.

Wishing you well with your research.

Yours sincerely

PROF. D DU TOIT
CHAIRPERSON: MRC ETHICS COMMITTEE

Appendix 4: Human Research Ethics Committee (Medical) Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

R49 Dr S Pienaar

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M201066

NAME: (Principal Investigator)	Dr S Pienaar
DEPARTMENT:	School of Public Health Medical School University
PROJECT TITLE:	Investigating the associations between economic intimate partner violence (IPV) and mental health outcomes amongst women: a cross sectional study from Gauteng Province, South Africa
DATE CONSIDERED:	2020/10/30
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Drs W Slemming and M Machisa
APPROVED BY:	Dr N Naran, Co-Chairperson, HREC (Medical)
DATE OF APPROVAL:	2021/01/06

This Clearance Certificate is valid for 5 years from the date of approval. An extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office secretariat on the 3rd floor, Phillip Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to submit details to the Committee. **I agree to submit a yearly progress report**. When a funder requires annual re-certification, the application date will be one year after the date when the study was initially reviewed. In this case, the study was initially reviewed in **October** and therefore reports and re-certification will be due in the month of **October** each year. Unreported changes to the study may invalidate the clearance given by the HREC (Medical).

Signature of Principal Investigator

Date 2021/06/18

Appendix 5: Questionnaire for Gender Based Violence Study

PARTICIPANT'S INFORMATION LEAFLET AND INFORMED CONSENT

(Each participant must receive, read or have it read to her this document before the interview)

Household survey on relationships between women and men In Gauteng, South Africa

Introduction

Good day. My name is _____. I am working with the non-governmental organization, Gender Links, on a project to better understand women's relationships in Gauteng. We are working together with the University of Witwatersrand and the Medical Research Council on this project.

You are invited to volunteer to participate in a research study that is conducted all over Gauteng Province; you should not agree to participate in this study unless you fully understand what is asked of you and are completely happy with all the procedures involved. If you do not understand the information or have any other questions, feel free to ask the interviewer.

Purpose of this interview

The purpose of this study is to collect information so we can understand the relationship issues facing women in South Africa. We ask to have an interview with you; in this interview we will ask some information about you, things that have happened in your life that may affect you and about your relationships. The interview will take approximately an hour.

You have been invited to participate because your household was one of 20 houses randomly picked (by chance) from all the houses in this area.

What procedures are involved?

You are being asked to complete a questionnaire. With your consent, I will be handing you this mini computer called a palm pilot which has the interview recorded on it. We are asking you to listen to questions that you can hear through these headphones. You will be able to see the questions on the screen of the palm pilot. You use a small pen to tap on the answer that you want to give. There are no right or wrong answers; we want to know about you, your opinions or experiences. All your answers will be saved in the computer. This computer will not record your name. The interviewer will be in the same room

as you, but will not be able to see what answers you give to the questionnaire. She will only be there to assist you when you need help with the computer. We will save the responses that you give to the questionnaire using a unique identification number. This means that your name will not be linked to the answers that you give. Information that is collected from you will be put together with information from 650 other women.

Are there any risks or discomforts from participating in this study?

We will conduct the interview in a private and safe place for both you and the researcher. The only potential risk from participating in this study is that you may feel uncomfortable answering some of the questions that may deal with some sensitive issues.

Possible Benefits of this study

There are no direct benefits that you may get from participating in this study. However the information collected from this study may be helpful in improving the lives of women in South Africa. Your answers will help us make sure that the views and experiences of women like you are taken into account in designing future community programs.

What are your rights as a participant?

Your participation in this study is entirely voluntary. You can refuse to participate or stop at any time without giving any reason. Some of the questions are very personal. Please remember that you are free to skip over any question you do not want to answer and you are free to stop answering questions at any time.

Confidentiality

All the information that you give in this study will be kept strictly confidential. The consent forms that you will be asked to sign will be securely stored and access will be limited to the research team and study sponsors. The consent forms cannot be linked to the answers you give to the questionnaire. The results of the study will be presented in a respectful manner and no information which could enable anyone to identify you personally will be reported. If you would like to be kept informed of the progress of our project, we will be happy to share any reports or publication we produce with you.

Costs

There is no cost to you for participating in this study.

Compensation

You will be given R25 to compensate you for the time you spend completing the study questionnaire.

Has this study received ethical approval?

Yes, the Medical Research Council Ethics Committee granted written approval for this study. You may contact them using the following details should you have any concerns or queries: The MRC Ethics Committee

The Chairperson: Prof Danie du Toit

Tel: 021 938 0341

Email: adri.labuschagne@mrc.ac.za

Information and contact person

If you have any questions about the research you may contact

Nwabisa Jama Shai: The Research Manager: Gender Links, Tel: 011 622 2877,

Fax: 011 622 4732, Email: research@genderlinks.org.za

INFORMED CONSENT FORM

I hereby confirm that the person seeking my informed consent to participant in this study has given me information to my satisfaction. She explained to me the purpose, procedures involved, risk and benefits and my rights as a participant in the study. I have received the information leaflet for the study and have had enough time to read it on my own and ask questions. I feel that my questions regarding participation in the study have been answered to my satisfaction. I have been told that the information I give to the study will together with other information gathered from other people, be anonymously processed into a research report and scientific publications.

I am aware that it is my right to withdraw my consent in this study without any prejudice. I hereby, freely and voluntary give my consent to participate in the study.

Participant's name……..(Please print)

Participant's signature……Date……

Researcher's name…….(Please print)

Researcher's signature……..Date……

Witness's name……...(Please print)

Witness's signature……Date……

RELATIONSHIPS HOUSEHOLD SURVEY - GAUTENG

(ENGLISH)

WOMEN'S QUESTIONNAIRE

Study ID number: _____

WOMEN'S (ENGLISH) QUESTIONNAIRE

Study identification number	**[ ][ ][ ][ ]**
Visit Number	**[ ]**
Interviewer name	
Date of interview	**__ __ / __ __ / 200 __** **D D M M Y**
Interview Site	Specify:
Cluster number:	[ ][ ]
Start Time of Interview	**_____h_____**

Data Entry:

First __ __ / __ _____ Second __ __ / __ _____
Entry: __/200 __ Initials Entry: __/200 __ Initials
D D M M Y D D M M Y

Notes and Queries:

Thank you very much for agreeing to participate in this survey. The interviewer is available to help you if you have any difficulties completing the questionnaire or if there is anything you do not understand.

She will not look at how you answer the questions unless you ask her to, and will not look at the survey once it is complete so nobody will ever know that it is you

who told us particular things. We have organised it this way to protect your privacy because we want you to feel free in answering our questions.

We know some questions are more difficult to answer than others. Please take your time and relax. All the questions are about your life and your ideas. There are no right or wrong answers. **The first questions we will ask you are about yourself, your home and your childhood. If there is a question you do not want to answer please indicate by hitting a Refuse button and skip to the next question.**

SECTION ONE: BACKGROUND **Let us begin. Please remember that everything you tell me will be kept secret.**			
NO.	**QUESTIONS AND FILTERS**	**CODING CATEGORIES**	**SKIP**
101	How old are you?	18-20……..……..1 21-24……...2 25-29……...3 30-34……...4 35-39…….....5 40-44……6 45 -49……..……7 50 - 54 ……..……..……8 55 or older ……..…… 9	
102	What is the highest standard or grade you have completed at school?	No schooling……..……..1 Primary school incomplete ……..……2 Primary school complete (std4) ……...…3 High school incomplete……..……4 High school complete……..…..…….5 Further degree/Qualification incomplete……6 Further degree/Qualification complete……...7 DON'T KNOW……..……..8	

103	Are you currently studying?	YES ..... 1 NO 0	
104	With which race group do you identify?	Black/ African ……..…….. 1 Coloured …… 2 Indian ……..…… 3 White ……..…… 4 Other: ……..…… 5	
105	What is your religion, if you have one?	Christian ……..……..……..…….. 1 Islam ……..……..……..…… 2 Hindu ……..…… 3 Judaism ……..……..……..…… 4 Buddhist ……..…….. 5 Other ……..……..……..6 None ……..……..…… 7	
105 **b**	What nationality are you?	South African……..1 Southern Africa……..2 African country outside Southern region..3 Other…… ….4	
106	Have you worked to earn money in the last 12-months?	YES ……1 NO……..……0	→ 109
107	How much do you earn per month, before tax, and including benefits?	R1 – R500……..1 R501 – R1000…….2 R1 001 – R2000…….3 R2001 – R5000..……..……4 R5001 – R10 000…….……..5 R10 001 – R20 000…….……..6 R20 000 or more…….7	

108	What kind of work do you mainly do?	Police, security or armed forces……...1 Professional……2 Domestic worker/cleaner……..……3 Driver/transportation industry …….…... 4 Other ……..…….5	
109	Do you usually work …	Throughout the year…….....1 Seasonally…….……...2 Once in a while……...3 Never worked…….…...4	
110	Would you say that the people in your home often, sometimes, seldom or never go without food?	OFTEN…….……...…..……1 SOMETIMES……..……2 SELDOM……..……..……..…..3 NEVER……..……....……..….4	
111	If you have an emergency and R200 was needed immediately, would you say it would be very easy, easy, quite difficult or very difficult to find the money?	VERY DIFFICULT……..……..…..……1 QUITE DIFFICULT…….……2 EASY……..……..……..3 VERY EASY……..……..….4	
112	How many people, including all the children, live in your home?	1……..1 2-5……..2 6-10……3 10 or more……..…..4	
113	What level of schooling did your mother complete?	No schooling…….……1 Primary school incomplete …….……2 Primary school complete (std4) ……..…...3 High school incomplete…….……4 High school complete……..…….5 Further degree/Qualification incomplete…….6 Further degree/Qualification complete……...7 DON'T KNOW……..8	
114	What level of schooling did your father complete?	No schooling…….……..1 Primary school incomplete …….……...2 Primary school complete (std4) ……..…….3 High school incomplete…….……4 High school complete……5 Further degree/Qualification incomplete……6	

		Further degree/Qualification complete……...7 DON'T KNOW……..……..8	

SECTION 2: CHILDHOOD EXPERIENCES (FROM BIRTH TO 18 YEARS)

I want to ask you some questions about your childhood and teenage years. Can you tell me how often the following things happened to you? I will read out some statements and I want to know if each one was never true, sometimes true, often true or very often true.

		Never **1**	**Sometimes** **2**	**Often** **3**	**Very Often** **4**
140	Before I reached 18 I did not have enough to eat	1	2	3	4
141	Before I reached 18 I lived in different households at different times	1	2	3	4
142	Before I reached 18 I saw or heard my mother being beaten by her husband or boyfriend	1	2	3	4
143	Before I reached 18 I was told I was lazy or stupid or weak by someone in my family	1	2	3	4
144	Before I reached 18 someone touched my buttocks or genitals or made me touch them when I did not want to	1	2	3	4
145	Before I reached 18 I was insulted or humiliated by someone in my family in front of other people	1	2	3	4
146	Before I reached 18 I was beaten at home with a belt or stick or whip or something else which was hard	1	2	3	4
147	Before I reached 18 I had sex with a man who was more than 5 years older than me	1	2	3	4
148	Before I reached 18 one or both of my parents were too drunk to take care of me	1	2	3	4

149	Before I reached 18 I was beaten so hard at home that it left a mark or bruise	1	2	3	4
150	Before I reached 18 I spent time outside the home and none of the adults at home knew where I was	1	2	3	4
151	Before I reached 18 I had sex with someone because I was threatened or frightened or forced	1	2	3	4
152	Before I reached 18 I was beaten or physically punished at school by a teacher	1	2	3	4
153	Before I reached 18 I was forced to have sex against my will by a boyfriend	1	2	3	4

SECTION 3: COMMUNITY IDEAS ABOUT GENDER RELATIONS (Social norms)

Now I would like to ask your opinion on some statements on what the community thinks about relations between men and women, can you tell me if your community strongly agree, agree, disagree or strongly disagree with the following statements:

201	My community thinks that a woman should obey her husband	SA 1	A 2	D 3	SD 4
202	I think that a woman should obey her husband	1	2	3	4
203	My community thinks that if a woman works she should give her money to her husband.	1	2	3	4
204	I think that if a woman works she should give her money to her husband.	1	2	3	4
205	My community thinks that a man should have the final say in all family matters.	1	2	3	4
206	I think that a man should have the final say in all family matters.	1	2	3	4
207	My community thinks that men should share the work around the house with women such as doing dishes, cleaning and cooking.	1	2	3	4
208	I think that men should share the work around the house with women such as doing dishes, cleaning and cooking.	1	2	3	4
209	My community thinks that a woman needs her husband's permission to do paid work.	1	2	3	4

210	I think that a woman needs her husband's permission to do paid work.	1	2	3	4
211	My community thinks that a woman cannot refuse to have sex with her husband.	1	2	3	4
212	I think that a woman cannot refuse to have sex with her husband.	1	2	3	4
213	My community thinks that children belong to a man and his family.	1	2	3	4
214	I think that children belong to a man and his family.	1	2	3	4
215	My community thinks that there is nothing a woman can do if her husband wants to have girlfriends.	1	2	3	4
216	I think that there is nothing a woman can do if her husband wants to have girlfriends.	1	2	3	4
217	My community thinks that if a wife does something wrong her husband has the right to punish her	1	2	3	4
218	I think that if a wife does something wrong her husband has the right to punish her	1	2	3	4
219	My community thinks that if a man has paid Lobola for his wife, he owns her.	1	2	3	4
220	I think that if a man has paid Lobola for his wife, he owns her.	1	2	3	4
221	My community thinks that if a man has paid Lobola for his wife, she must have sex when he wants it.	1	2	3	4
222	I think that if a man has paid Lobola for his wife, she must have sex when he wants it	1	2	3	4
223	My community thinks that if a man beats you it shows that he loves you.	1	2	3	4
224	I think that if a man beats you it shows that he loves you.	1	2	3	4
225	My community thinks that people should be treated the same whether they are male or female	1	2	3	4
226	I think that people should be treated the same whether they are male or female	1	2	3	4

SECTION 4: COMMUNITY IDEAS ABOUT RAPE:

Now I would like to ask what the community thinks, can you tell me if your community strongly agrees, agrees, disagrees or strongly disagrees with the following statements:

227	My community thinks that when a woman is raped, she is usually to blame for putting herself in that situation.	SA 1	A 2	D 3	SD 4
228	I think that when a woman is raped, she is usually to blame for putting herself in that situation.	1	2	3	4
229	My community thinks that in some rape cases women actually want it to happen.	1	2	3	4
230	I think that in some rape cases women actually want it to happen.	1	2	3	4
231	My community thinks that if a woman doesn't physically fight back, it's not rape.	1	2	3	4
232	I think that if a woman doesn't physically fight back, it's not rape.	1	2	3	4
233	My community thinks that it is possible for a woman to be raped by her husband	1	2	3	4
234	I think that it is possible for a woman to be raped by her husband	1	2	3	4
235	My community thinks that in any rape case one would have to question whether the victim is promiscuous.	1	2	3	4
236	I think that in any rape case one would have to question whether the victim is promiscuous	1	2	3	4

Thank you for answering those. We know it was a lot of questions but we hope you found them interesting. We want to ask you a few more that are very similar.

	SECTION 5: GENDER EQUITABLE WOMEN SCALE	SA 1	A 2	D 3	SD 4
250	You don't talk about sex, you just do it.	1	2	3	4
251	There are times when a woman deserves to be beaten.	1	2	3	4
252	Changing nappies, giving kids a bath, and feeding the kids are the mother's responsibility.	1	2	3	4
253	It is a woman's responsibility to avoid getting pregnant.	1	2	3	4
254	Men are always ready to have sex.	1	2	3	4

255	My husband or boyfriend would be outraged if I asked him to use a condom.	1	2	3	4
256	A man needs to be tough.	1	2	3	4
257	Men should be embarrassed if they are unable to get an erection during sex.	1	2	3	4

SECTION 6: WITNESSING DOMESTIC VIOLENCE **We are going to ask you a few questions about witnessing domestic violence in your community. This is not about your personal experiences of violence.**			
350	Do you know of anyone that has been abused by her husband/boyfriend in your community?	YES……1 NO……..0	
351	Do you know of anyone that has been abused by her husband/boyfriend in your family?	YES……1 NO……..0	
352	How often have you talked to someone about domestic violence?	Never …… 1 Once/or twice …… 2 Sometimes …… 3 Often …….…….. 4	
353	Have you ever personally intervened in violence in a relationship?	YES……1 NO……..0	□300
354	Has this happened in the past 12-months?	YES……1 NO……..0	
355	What did you do to intervene?	Called the police ……..…….. 1 Tried to make the man stop abusing his wife/girlfriend ……..…… 2 Tried to make the wife/girlfriend stop doing things to make her husband abuse her…...…3 Reported to the family ……..…4 Other …… 5	

SECTION 7: SEX AND PREGNANCY The next set of questions is about different aspects of your health and any children you may have.			
NO.	**QUESTIONS AND FILTERS**	**CODING CATEGORIES**	**SKIP**

300	Have you ever had sex?	YES……1 NO……..0	□350
301	At what age did you first have sexual intercourse?	12 and younger……1 13……2 14……3 15……4 16……5 17……6 18……7 19……8 20 and over……9	
302	Which of the following statements most closely describes your experiences the first time you had sexual intercourse? **I was willing; I was persuaded; I was forced; I was raped.**	I was willing……1 I was persuaded……2 I was forced ……3 I was raped ……4	
303	Who was this with?	BOYFRIEND……1 HUSBAND……2 FATHER OR FAMILY MEMBER……3 TEACHER……4 BOY FROM SCHOOL/AREA……5 MAN FROM AREA……6 STRANGER/UNKNOWN PERSON……7 FRIEND OF THE FAMILY……8 OTHER……9	
304	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES ..... 1 NO 0	□306

305	Which method are you using?	INJECTION……1 PILL……2 CONDOM……3 IUD……4 HERB/OTHER TRADITIONAL METHOD……5 CONDOM & PILL/INJECTION……6 OTHER_____ 7 (specify)	□307 □307 □307 □307 □307 □307 □307
306	Have you ever used contraception?	YES……1 NO……0	
307	Have you ever been pregnant?	YES……1 NO……0	□401
308	How many children have you given birth to?	1……1 2……2 3……3 4……4 5……5 6……6 7……7 8 or more……8	□350
309	At the time you became pregnant did you want to become pregnant then, did you want to wait until later, or did you not want to have any children at all?	THEN……1 LATER……2 NOT WANT ANY CHILDREN……3	
310	How old were you when you had your first child?	14 or Younger……1 15……2 16……3 17……4 18……5 19……6 20 and over……7 Miscarried/aborted ……8	

311	Do you have any children under 18 who do not live with you?	YES……1 NO……0	□313
312	How often do you give money for their upkeep?	Every month……1 Not monthly but more than 3 times a year……2 1-2 times a year……3 Less often than once a year……4	
313	Thinking about the role you have in your child's/children's life/lives, would you like it to be:	Bigger……1 The same……2 Less in some way……3 I don't have a role ……4	
314	Thinking about the role you have in your child's/children's life how does it compare with your mother's role in your life, is it:	Bigger……1 The same……2 Less in some way……3 Didn't have a role ……4	

SECTION 8: PARTNER			
NO.	**QUESTIONS AND FILTERS**	**CODING CATEGORIES**	**SKIP**
401	Do you currently have a boyfriend or are you married or living with a man or are you a widow, separated or divorced or married in a polygamous relationship?	MARRIED TO A MAN ..... 1 LIVING WITH MAN ..... 2 BOYFRIEND ..... 3 NO BOYFRIEND ..... 4 IN A SAME SEX RELATIONSHIP …… 5 WIDOW……6 SEPARATED……7 DIVORCED……8 POLYGAMOUS MARRIAGE……9	□403 □403 □403 □406 □406 □403 □403 □403 □ 402
402	If you are in a polygamous marriage, in addition to you and his other wives, is your husband having sex with someone else? Would you say he definitely is, probably is, probably is not or definitely is not?	DEFINITELY IS ……1 PROBABLY IS……2 PROBABLY NOT ……3 DEFINITELY NOT……4	

403	How old is your current or most recent boyfriend/husband?	17 or younger……..1 18-20……..2 21-24……..3 25-29……4 30-34……5 35-39……..6 44……..7 45 or older……8	
Check if NOT MARRIED, GO TO q407			
404	**How old were you when you got married?**	17 or younger……1 18-20……2 21-24……3 25-29……4 30-34……5 35-39……..6 40-44……7 45 or older……8 Never married …… 9	□407
405	**What were the circumstances around getting married? Was it an arranged marriage, were you abducted, did you elope or was it for love?**	Arranged …….. 1 Abducted …….. 2 Elopement …….. 3 Love …….. 4	
406	Have you ever had a boyfriend or husband?	YES……1 NO……..0	□ 543
407	**Does** your current or most recent boyfriend/husband **drink alcohol?** **How often?**	EVERY DAY/NEARLY EVERY DAY……1 ONLY AT WEEKENDS……2 A FEW TIMES IN A MONTH……3 LESS THAN ONCE A MONTH……4 NEVER …….. 5 NOT NOW……6 DON'T KNOW……..7	
408	**Does** your current or most recent boyfriend/husband **use drugs?** **How often?**	EVERY DAY/NEARLY EVERY DAY……1 ONLY AT WEEKENDS……2 A FEW TIMES IN A MONTH……3 LESS THAN ONCE A MONTH……4 NEVER …….. 5	

		NOT NOW……..……..6 DON'T KNOW…….....7	
409	How likely do you think it is that your husband or boyfriend is having sex with someone else? Would you say he definitely is, probably is, probably is not or definitely is not?	DEFINITELY IS ……1 PROBABLY IS……..……2 PROBABLY NOT ……3 DEFINITELY NOT……...……4	
410	**Is your husband or boyfriend your ONLY partner?**	NO……..……...0 YES 1	

SECTION 9: RELATIONSHIP CONTROL

I **would now like to read out some statements and I would like you to think about your relationship with _____and for each statement to tell me if you strongly agree, agree, disagree or strongly disagree**

450	If I ask my partner to use a condom, he would beat or hit me	SA 1	A 2	D 3	SD 4
451	If I ask my partner to use a condom, he would get angry	1	2	3	4
452	My partner won't let me wear certain things	1	2	3	4
453	My partner has more to say than I do about important decisions that affect us.	1	2	3	4
454	My partner tells me who I can spend time with.	1	2	3	4
455	I could leave our relationship any time I wanted to.	1	2	3	4
456	My partner does what he wants, even if I don't want him to.	1	2	3	4
457	If I ask my partner to use a condom, he would think that I'm having sex with other people	1	2	3	4
458	When my partner and I disagree, he gets his way most of the time	1	2	3	4

459	Because my partner buys me things he expects me to please him.	1	2	3	4
460	My partner always wants to know where I am	1	2	3	4

SECTION 10: EXPERIENCE OF IPV			
NO.	**QUESTIONS AND FILTERS**	**CODING CATEGORIES**	**SKIP**
	EMOTIONAL ABUSE **In any relationship there are good times and bad times. I now want to ask you about some of the bad times we have in relationships and what has happened. Remember there are no right or wrong answers and any thing you say will be kept confidential.**		
500	Has a current or previous husband or boyfriend ever insulted you or made you feel bad about yourself? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
501	Has a current or previous husband or boyfriend ever belittled or humiliated you in front of other people? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
502	Has a current or previous husband or boyfriend ever done things to scare or intimidate you on purpose for example by the way he looked at you, by yelling and smashing things? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
503	Has a current or previous husband or boyfriend ever threatened to hurt you? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
504	Has a current or previous husband or boyfriend ever stopped you from seeing any of your friends? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
505	Has a current or previous husband or any boyfriend ever boasted about or brought home girlfriends? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW 3	

		MANY 4	
506	Have any of these things happened in the past 12-months?	YES……1 NO……..0	
	EIPV **Sometimes the man controls the finances in relationship. I would like to discuss some of the economic issues within your relationships. I want you to speak freely and remember that everything you say will be confidential.**		
507	Has a current or previous husband or any boyfriend ever prohibited you from getting a job, going to work, trading, earning money or participating in income generation projects? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
508	If you have had any income, has a current or previous husband or any boyfriend ever taken your earnings from you? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
509	Has a current or previous husband or any boyfriend ever forced you or your children to leave the house where you were living? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
510	**H**as a current or previous husband or any boyfriend ever not provided money to run the house or look after the children, but has money for other things? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
513	Have any of these things happened in the past 12-months?	YES……1 NO……..0	
PHYSICAL ABUSE **Men often fight with their girlfriends/wives and often these fights get physical. I am going to ask some questions about this because we want to learn more about what women experience in their lives. I want you to speak freely and remember that everything you say will be confidential.**			
512	Has a current or previous husband or boyfriend ever slapped you or threw something at you which could hurt you? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	

513	Has a current or previous husband or boyfriend ever pushed or shoved you? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
514	Has a current or previous husband or boyfriend ever hit you with a fist or with something else which could hurt you? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
515	Has a current or previous husband or boyfriend ever kicked, dragged, beat, choke or burnt you? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
516	Has a current or previous husband or boyfriend ever threatened to use or actually use a gun, knife or other weapon against you? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
517	Have any of these things happened in the past 12-months?	YES……1 NO……..0	

CHK3	**IF ANY PHYSICAL VIOLENCE IS REPORTED PROCEED TO THE NEXT QUESTION OTHERWISE SKIP TO Q.254**		
518	Have you ever been injured during any of these physical disputes?	YES……1 NO……..0	□530
519	How many times?	_____ TIMES	
520	Did you ever stay in bed because of these injuries?	YES……1 NO……..0	□ 522
521	How many days?	_____DAYS	
522	Did you ever take days off from income generating work because of these injuries?	YES……1 NO……..0 HAS HAD NO PAID WORK 4	524 524
523	How many days?	_____DAYS	

524	Did you ever not leave the house because of these injuries	YES……1 NO……..0	□ 526
525	For how many days did you not leave the house?	_____DAYS	
526	Did you seek medical attention for these injuries?	YES……1 NO……..0	□ 528
527	What form of treatment did you receive?	SURGERY.....1 ADMITTED TO HOSPITAL ……...2 BROKEN BONES TREATED……....3 STITCHES.....4 DENTAL CARE.....5 PAINKILLERS.....6 BANDAGING/ OINTMENT……...7 OTHER.....8	
528	Did you tell them about the cause of your injury?	YES……1 NO……..0	□530
529	What was the main reason why didn't you tell them the cause of your injury?	IT'S A PRIVATE ISSUE…….....1 SCARED OF YOUR PARTNER…….……...2 THEY WERE NOT FRIENDLY……..3 ASHAMED.....4 DID NOT ASK.....5 OTHER.....6	
530	Have you ever reported any abuse or threats to the police	YES……1 NO……..0	□532
531	How did the police respond?	They opened a docket ……..……..1 They sent me away ……..……..…….. 2 They tried to make peace between my husband/boyfriend and me …….…….. 3 Other …….. 4	
531 **b**	Did you ever get a protection order (an instruction from the court) against your abusive husband/boyfriend?	YES……1 NO……..0	

532	Where do these incidents generally occur?	AT HOME.....1 AT HIS HOME…….....2 AT WORK.....3 AT SCHOOL.....4 OUTSIDE/NEAR HOUSE……5 AT FRIENDS /RELATIVES.....6 AT BARS/NIGHTCLUBS.....7 OTHER.....8	
533	Did you tell anyone in your family?	YES……..……1 NO……..0	□536
534	Who did you tell?	Female member of your family…....Yes=1No=0 Male member of your family……Yes=1 No=0 Female member of your in-laws……..….Yes=1…No=0 Male member of your in-laws ….Yes=1… No=0 Your child……Yes=1… No=0	
535	How did they respond?	They blamed me for it……Yes=1… No=0 They supported me……Yes=1… No=0 They were indifferent……..Yes=1… No=0 They told me to keep it quiet ……Yes=1… No=0 They were hurt by it……Yes=1… No=0 They advised me to report to police…….Yes=1… No=0	
536	Did you ever go to a shelter?	YES……1 NO……..0	
536 **b**	Did your stay at the shelter do any of these?	Enable me to get a job……1 Enable me to look after my children……2 Enable me to make decision to stay/leave according to what I thought was best for me ……3 Take control of my relationship and to end the abuse……4 Did not make a difference to my life……..5 Other…… 6	
537	Did you ever speak out publically about the abuse?	YES……1 NO……..0	□539

538	Where did you speak out?	To the media (TV, radio, newspaper)…..Yes=1… No=0 To the community/community group……Yes=1… No=0 To friends ……Yes=1… No=0 To work colleagues……Yes=1… No=0 To my religious community ……...Yes=1… No=0	
538 **b**	What happened after you spoke out?	I felt empowered ……....Yes=1… No=0 I helped other women……Yes=1… No=0 I was victimized ……Yes=1… No=0	
SEXUAL ABUSE **There are also other things which women experience that they sometimes do not talk about. I want you to speak freely and remember that everything you say will be confidential.**			
539	Has a current or previous husband or boyfriend ever physically forced you to have sex when you did not want to? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
540	Have you ever have sex with a current or previous husband or boyfriend when you did not want to because you were afraid of what he might do? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
541	Has a current or previous husband or boyfriend ever forced you to do something sexual that you found degrading or humiliating? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	
542	Have any of these things happened in the past 12-months?	YES……..……1 NO……..…..0	
CHECK if SEXUAL ABUSE is reported GO TO q542a			
542 **a**	Where did this incident take place?	AT HOME.....1 AT HIS HOME.....2 AT WORK.....3 AT SCHOOL.....4 OUTSIDE/NEAR HOUSE..…….....5 AT FRIENDS /RELATIVES…….....6 AT BARS/NIGHTCLUBS.....7	

		OTHER.....8	

SECTION 11: SEXUAL VIOLENCE PERPETRATED BY A PERSON OTHER THAN A BOYFRIEND **ALL WOMEN, EVEN THOSE WHO HAVE NEVER HAD A BOYFRIEND, SHOULD BE ASKED THE FOLLOWING QUESTIONS**			
IF INTERVIEWEES HERE MENTION BEING FORCED TO HAVE SEX BY A BOYFRIEND/HUSBAND, CHECK THAT THIS WAS REPORTED IN RESPONSE TO QUESTIONS 539, 540, or 541. IF SHE DID NOT MENTION IT THEN, GO BACK TO QUESTIONS 298, 299 AND 300 AND ASK THE QUESTIONS AGAIN AND RECORD THE RESPONSES. THEN ASK QUESTION 543 AGAIN AND PROBE BY SAYING "DID ANYONE WHO OTHER THEN YOUR BOYFRIEND DO THIS TO YOU"			
543	How many times have you been forced or persuaded to have sex against your will by a man who wasn't your husband or boyfriend?	Never ..... 1 Once ..... 2 More than 1 time ……..... 3	548
544	Can you tell me who did this the first time?	FATHER OR FAMILY MEMBER……1 TEACHER……..….2 BOY FROM NEIGHBOURHOOD……..3 MAN FROM NEIGHBOURHOOD……..4 STRANGER/UNKNOWN PERSON……...5 FRIEND OF THE FAMILY……...6 EX-BOYFRIEND…….…....7 OTHER…….…..8 Specify:	

545	How old were you?	17 or younger……1 18-20……2 21-24……..3 25-29……..……4 30-34……5 35-39……..6 40-44……7 45 OR OVER……..……8	
545 **a**	Where did this incident take place?	AT HOME.....1 AT HIS HOME.....2 AT WORK.....3 AT SCHOOL.....4 OUTSIDE/NEAR HOUSE..……5 AT FRIENDS /RELATIVES.....6 AT BARS/NIGHTCLUBS.....7 OTHER.....8	
546	Did this happen in the last 12-months?	YES……..……1 NO……..……..0	
547	Can you tell me who did this the last time?	FATHER OR FAMILY MEMBER……..…1 TEACHER……..….2 BOY FROM NEIGHBOURHOOD……..3 MAN FROM NEIGHBOURHOOD……..…4 STRANGER/UNKNOWN PERSON……...5 FRIEND OF THE FAMILY……...6 EX-BOYFRIEND……..…....7 OTHER……..…..8 Specify:	
548	How many times has a man who was not your husband or boyfriend tried to force or persuade you to have sex against your will but did not succeed in doing this?	Never ..... 1 Once .....2 More than 1 time 3	□chk2

549	How old were you?	17 or younger……1 18-20……2 21-24……..3 25-29……..……4 30-34……5 35-39……6 40-44……..……..7 45 OR OVER……..……8	
550	Can you tell me who did this the first time?	FATHER OR FAMILY MEMBER……..…1 TEACHER……..….2 BOY FROM NEIGHBOURHOOD…….…..3 MAN FROM NEIGHBOURHOOD…….….4 STRANGER/UNKNOWN PERSON……...5 FRIEND OF THE FAMILY……...6 EX-BOYFRIEND…….……....7 OTHER……..…..8 Specify:	
550 **a**	Where did this incident take place?	AT HOME.....1 AT HIS HOME.....2 AT WORK.....3 AT SCHOOL.....4 OUTSIDE/NEAR HOUSE……..…….5 AT FRIENDS /RELATIVES……...6 AT BARS/NIGHTCLUBS.....7 OTHER.....8	
551	Did this happen in the last 12-months?	YES……1 NO……..0	
552	Can you tell me who did this the last time?	FATHER OR FAMILY MEMBER……..…1 TEACHER……..….2 BOY FROM NEIGHBOURHOOD……...3 MAN FROM NEIGHBOURHOOD…….….4 STRANGER/UNKNOWN PERSON……...5 FRIEND OF THE FAMILY……...6 EX-BOYFRIEND…….……....7 OTHER……..…..8	

		Specify:	
553	How many times were you forced to have sex with one man when you were too drunk or drugged?	Never ..... 1 Once ..... 2 More than 1 time……..…3	
554	How many times have you been forced or persuaded to have sex with more than one man at the same time?	Never ..... 1 Once ..... 2 More than 1 time…….3	

CHECK 2

PLEASE RESPOND ABOUT THE MOST RECENT INCIDENT. If she answered yes to Q543, OR Q 548 OR Q539, 540, 541 You may have answered some questions about what you did after being physically or emotionally abused. We are now going to ask these questions again about your experience of forced sex.

555	What was your main concern after this experience of forced sex?	Someone would find out …… 1 It would happen again …… 2 HIV/AIDS …….. 3 Pregnancy …… 4 STI ……..…. 5 Other …….. 6	
556	Did you report the incident to anyone?	YES……..1 NO…….0	□601
557	Did you report the incident to the police?	YES……..…1 NO…….0	□561
558	How did the police respond?	They opened a docket ……..……1 They sent me away ……..…... 2 Other ……..…….. 3	
559	Was the perpetrator arrested?	YES……..…1 NO…….0	
560	Was he convicted?	YES……..…1 NO…….0	

561	Did you report it to a health service (Dr or nurse)	YES……..…1 NO…….0	□568
562	Did you receive any medication/treatment for sexually transmitted infection?	YES……..…1 NO…….0 Don't know……..…..99	
563	Did you receive any medication/treatment for preventing pregnancy	YES……..……1 NO ……..…..……0 Don't know……..……99	
564	Did you receive any medication/treatment for preventing transmission of HIV (PEP)	YES……..……1 NO ……0 Don't know……..…..99	
565	Did you return to the hospital for a follow up visit?	YES …… 1 NO ……..…..... 0 CAN'T REMEMBER …… 2	566 566
566	How were you treated at the health service?	Kindly ……..1 Blamed ……..…… 2 Indifference……..…..…. 3 They didn't go out of their way…... 4 Other ……..……..5	
567	Did you receive counselling with regards to the incident that you experienced?	YES……..…1 NO…….0	
568	Did you tell someone in your family about the incident?	YES……..…1 NO…….0	□601
569	Who did you tell?	Female member of your family……..Yes=1… No=0 Male member of your family……..Yes=1… No=0 Female member of your in-laws……Yes=1… No=0	
		Male member of your in-laws ……Yes=1… No=0 Your child……Yes=1… No=0	
570	How did they respond?	They blamed me for it……Yes=1… No=0 They supported me……Yes=1… No=0 They were indifferent……Yes=1… No=0 They told me to keep it quiet ……Yes=1… No=0 They were hurt by it……Yes=1… No=0 They advised me to report to police…. Yes=1… No=0	

571	Did you ever speak out publically about the incident?	YES……..……..…1 NO……..……0	
572	Where did you speak out?	To the media (TV, radio, newspaper)Yes=1…. No=0 To the community/community group Yes=1…. No=0 To friends ……..…….Yes=1… No=0 To work colleagues……..……..Yes=1… No=0 To my religious community ……Yes=1… No=0	
573	What happened after you spoke out?	I felt empowered ……Yes=1… No=0 I helped other women……..……..Yes=1… No=0 I was victimized ……..Yes=1… No=0	

SECTION 12: ABUSE IN PREGNANCY

CHECK 3 CHECK QUESTION Q307

Ever pregnant - go to 601. Has never been pregnant - go to 650.

Although pregnancy is highly valued in South African culture, in some cases, a woman's difficulties do not stop whilst she is pregnant. During any of your pregnancies, did anyone ever do any of the following to you?

601	During any of your pregnancies, did your husband/boyfriend ever refuse to buy clothes to prepare for the baby?	YES……..…1 NO……0	
602	During any of your pregnancies, did your husband/boyfriend ever prevent you from going to the clinic for check-ups?	YES……..…1 NO……0	
603	During any of your pregnancies, did your husband/boyfriend ever kick, bite, slap, hit you, or throw something at you?	YES……..…1 NO……0	□650
604	In how many pregnancies has this occurred?	_____PREGNANCIES	
605	Did this happen for the first time after you told your husband/boyfriend that you were pregnant?	YES……..…1 NO……0	
606	Were you hurt on the stomach?	YES……..…1 NO……0	
607	Have you ever had a miscarriage which you think was because of being beaten?	YES……..…1 NO……0	

608	Have you ever gone into premature labour which you think was because of being beaten?	YES……..…1 NO……0	
609	Have you ever been physically forced to have sex when you did not want to while you were pregnant? Did this happen many times, a few times, once or did it not happen?	NEVER ..... 1 ONCE ..... 2 FEW ..... 3 MANY 4	

SECTION 13: SEXUAL HARASSMENT AND ABUSE

In many instances, women are treated badly simply because they are girls or women. I would like to ask you about some of the ways in which some men try to make advances and persuade or force women to have sexual relations with them. Although some of the questions are difficult to answer, I would like you to try to answer them openly. Your answers will be kept secret.

650	Has any man ever hinted or threatened that you could lose your job, or that your work might be hurt if you did not have sex with him?	YES.....1 NO.....2 NEVER WORKED.....3	 653 653
651	What did you do?	I had sex and kept my job ……...1 I had sex and lost my job anyway……2 I rejected the proposal and kept my job……..…..3 I rejected the proposal and lost my job ……..…4 Something else……..……..5	
652	Did you report it to any authority (senior person at work, police)?	YES……..……..…1 NO……..……0	
653	Has any teacher/principal/lecturer ever hinted or threatened that you could fail your exams or get bad marks, or that your schooling would be damaged if you did not have sex with him?	YES.....1 NO.....0 NEVER WENT TO SCHOOL.....3	 656 658

654	What did you do?	I had sex and passed ……1 I had sex and failed anyway ……..2 I rejected the proposal and passed ……. 3 I rejected the proposal and failed ……4 Something else ……5	
655	Did you report it to any authority (another teacher/ lecturer / admin, police)?	YES……..……..…1 NO……..……0	
656	Has any teacher/principal/lecturer ever said something sexually explicit to you?	YES……..……..…1 NO……..……0	
657	Has any teacher/principal/lecturer ever touched you sexually?	YES……..……..…1 NO……..……0	
658	Has any man ever insisted that you have sex with him before he would give you a job?	YES .....1 NO.....0 NEVER TRIED TO GET WORK.....3	□ 661 □663
659	What did you do?	I had sex and kept my job ……...1 I had sex and lost my job anyway……..……..…2 I rejected the proposal and kept my job…3 I rejected the proposal and lost my job….4 Something else ……5	
660	Did you report it to any authority (senior person at work, police)?	YES……..……..…1 NO……..……0	
661	Has any employer/ colleague in the workplace ever said something sexually explicit about you?	YES .....1 NO.....0 NEVER WORKED.....3	
662	Has any employer/colleague in the workplace ever touched you sexually?	YES .....1 NO.....0 NEVER WORKED.....3	
663	Has a traditional healer ever said that you should have sex with him to solve your problem?	YES .....1 NO.....0 Never been to a traditional .healer……2	665 665

664	What did you do?	I had sex ……..……..1 I rejected the proposal ……..2 I rejected the proposal and reported it to the authorities ……3	
665	Have you ever been touched sexually by a conductor/taxi driver/taxi rank marshal while taking public transport?	YES……..……..…1 NO……..……0	□365
666	Did you report it to the police?	YES……..……..…1 NO……..……0	

SECTION 14: SEXUAL BEHAVIOUR

The next questions are about your sexual relationships. I know that these questions can be embarrassing. Please remember that everything you say will be kept secret and your name will not appear anywhere on the questionnaire. We are asking over 600 women the same questions, and we know that women have a wide range of experiences. Some start having sex in their early teens; some start a bit later. Most of us have more than one partner. Please remember that everything you say will be kept secret and cannot be linked to you.

365	When was the last time you had sex?	1 week ago……..……...1 2 weeks ago……...……..….2 1 month ago……..3 3 months ago……4 6 months ago……..…….……5 1 year ago …….……6 More than a yea rago……..……7 Never had sex ……8	□**1**
366	In the past year, would you say you use condoms always, often or sometimes?	NO USE ..... 1 ALWAYS ..... 2 OFTEN ..... 3 SOMETIMES…….4	
367	How many sexual partners have you had sex with in the last year?	0……..…….0 1……...1 2-4 ……2 5-9 ……3 10-14 ……..……4 15-19 ……..……..5 20-29 ……...6 30-50 ……..……7 50 or more ……..…… 8	
	We would like to ask you about the number of sexual partners you have had in your WHOLE LIFE including this year. We want to know about the number of different partners.		

370	How many sexual partners have you had sex with in your whole life?	1…… 1 2-4 …… 2 5-9 ……..…….. 3 10-14 ……..……. 4 15-19 ……5 20-29 ……...…… 6 30-49 ……. 7 50 to 99 ……..... 8 100 or more ……..…… 9	

We as women often find ourselves in situations where we need someone to help us.

371	I have stayed with a main partner longer than I wanted to because I was worried about how to pay for things I couldn't afford by myself	True 1	Somewhat true 2	Somewhat false 3	False 4
372	I have stayed with a main partner longer than I wanted to because I was worried about having a place to live or paying for food, or other bills	1	2	3	4
373	I have stayed with a main partner longer than I wanted to because I was worried about my ability to support my children or someone else who depends on me for financial support	1	2	3	4
374	I have stayed with a main partner longer than I wanted to …because I was worried about maintaining the social status or lifestyle that my partner provided for me.	1	2	3	4
375	I have had a relationship with a casual partner/khwapheni/nyatsi in part because I hoped he would help me pay for things I couldn't afford by myself.	1	2	3	4
376	I have had a relationship with a casual partner/khwapheni/nyatsi in part because I hoped he would help me pay for things like housing, food, or other bills.	1	2	3	4

377	I have had a relationship with a casual partner/khwapheni/nyatsi in part because I hoped he would help me support my children or other people who depend on me for financial support.	1	2	3	4
378	I have had a relationship with a casual partner/khwapheni/nyatsi in part because he gave me cosmetics, clothes, jewelry, cell phone or other items I could not afford on my own.	1	2	3	4
379	I've had sex with a once-off partner because I needed help paying for things I couldn't afford by myself	1	2	3	4
380	I have had sex with a once-off partner because I needed help with expenses such housing, food, or other bills	1	2	3	4
381	I have had sex with a once-off partner because I needed help with expenses related to my children or other people who depend on me for financial support.	1	2	3	4

Section 15: SEXUALLY TRANSMITTED DISEASES AND HIV TESTING

Thank you for answering these questions. Now we just have a few more questions about your health

382	How many times have you ever had an ulcer on your vagina or genitals?	NEVER ..... 0 ONCE ..... 1 TWICE ..... 2 THREE OR MORE TIMES……3	
383	How many times have you had a discoloured, smelly, itchy or uncomfortable discharge from your vagina?	NEVER ..... 0 ONCE ..... 1 TWICE ..... 2 THREE OR MORE TIMES……3	
384	Have you ever been told by a health worker that you had a sexually transmitted disease?	YES ..... 0 NO 1	
385	When did you last have an HIV test?	Last 12-months……1	

		2-5 years ago……..2 More than 5 years ago……...3 Never tested……4	
386	Did you take the result?	YES ..... 0 NO 1	
387	Was the HIV test positive?	YES ..... 0 NO 1	
388	Have you experienced violence because of your HIV status?	Emotional abuse…….. YES=1 NO=0 Physical abuse…….. YES=1 NO=0 Sexual abuse…….. YES=1 NO=0	
389	One should access treatment to reduce the possibility of being infected with HIV after rape or sexual assault? (PEP)	YES ..... 0 NO 1	
390	One should access treatment to reduce the possibility of being infected with HIV after unprotected sex? (PEP)	YES ..... 0 NO 1	

Section 16: Experiences of trauma

We would like to ask you about your past experiences. However, you may find some questions upsetting. If so, please feel free not to answer. Have you ever experienced any of the following:

1.	Imprisonment	Yes……1 No……0
2.	Civil unrest/war	Yes……1 No……0
3.	Serious injury	Yes……1 No……0
4.	Being close to death	Yes……1 No……0
5.	Murder of family or friend	Yes……1 No……0

6.	Unnatural death of family or friend	Yes……1 No……0
7.	Murder of stranger or strangers	Yes……1 No……0
8.	Torture	Yes……1 No……0
9.	Robbed / carjacked at gunpoint or knifepoint	Yes……1 No……0
10.	Kidnapping	Yes……1 No……0

SECTION 17: MENTAL HEALTH STATUS QUESTION - CES-D Scale

Thank you very much for answering all these questions we are now getting towards the end of the questionnaire and I would like to ask you some questions about how you have been feeling in the past week. I am going to read out some statements and ask you to say how many days you have had particular feelings or ideas or whether you have not had them at all.

		Rarely or none of the time	Some or a little of the time (1-2 days)	Moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
701	During the past week I was bothered by things that usually don't bother me	0	1	2	3
702	During the past week I did not feel like eating, my appetite was poor	0	1	2	3
703	During the past week I felt I could not cheer myself up even with the help of family and friends	0	1	2	3
704	During the past week I felt I was just as good as other people	0	1	2	3
705	During the past week I had trouble keeping my mind on what I was doing	0	1	2	3
706	During the past week I felt depressed	0	1	2	3
707	During the past week I felt that everything I did was an effort	0	1	2	3
708	During the past week I felt hopeful about the future	0	1	2	3

709	During the past week I thought my life had been a failure	0	1	2	3
710	During the past week I felt fearful	0	1	2	3
711	During the past week my sleep was restless	0	1	2	3
712	During the past week I was happy	0	1	2	3
713	During the past week I talked less than usual	0	1	2	3
714	During the past week I felt lonely	0	1	2	3
715	During the past week people were unfriendly	0	1	2	3
716	During the past week I enjoyed life	0	1	2	3
717	During the past week I had crying spells	0	1	2	3
718	During the past week I felt sick	0	1	2	3
719	During the past week I felt that people dislike me	0	1	2	3
720	During the past week I could not get 'going'	0	1	2	3
721	Have you ever attempted suicide because of violence you've experienced in your life?	YES……1 NO……0			
722	Now I want to ask you a question about the past **four weeks**, Has the thought of ending your life been in your mind?	YES……1 NO……0			

SECTION 18: SUBSTANCE USE ALCOHOL AND DRUG USE

Please remember that whatever you share in this research will be kept confidential and will only be used for the purpose of understanding women's lives and relationships. Now we have some different questions. We are going to ask you about drinking alcohol and some questions about your health.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
723	Have you drunk alcohol in the past 12-months?	YES …….…… 1 NO ……..……..... 0	□ **263**

724	How often do you have a drink containing alcohol?	Monthly or less…….....1 2-4 times a month……..……..2 2-3 times a week…….……3 4 + times a week…..…….…..……4	
725	How often do you have 5 or more drinks on one occasion?	Never ……..……..1 Less than monthly …….…..…..2 Monthly…….…….…….…....3 Weekly……..…….…….…...4 Daily or almost daily…….....5	
726	When did you first start drinking alcohol? that is having more than a few sips?	Before the age of 2……...1 Between 13 and 16 years old……..2 Between 17 and 20years…….3 At age 21 or hereafter…….…4 Never drunk alcohol……..……5	
727	How many times have you used dagga in the last 12-months? Would you say it was once, twice or three or more times?	Never……..……..……0 Once…….……..……...1 Twice……..……..……2 Three or more times. ……..3	
728	When did you first smoke dagga?	Before the age of 2……...1 Between 13 and 16 years old……..2 Between 17 and 20years…….3 At age 21 or hereafter…….…4 Never smoked dagga……...5	
729	Have you ever been an injecting drug user?	Never……1 Once…….2 Few Times……..……3 Many Times…….……4	

SECTION 19: PTSD

The following are symptoms that people sometimes have after experiencing hurtful or terrifying events in their lives. Please read each one carefully and decide how much the symptoms bothered you <u>in the past week</u>.

		(0) Not at all	(1) A little	(2) Quite a bit	(3) Extremely

730	Recurrent thoughts or memories of the most hurtful or terrifying events	0	1	2	3
731	Feeling as though the event is happening again	0	1	2	3
732	Recurrent nightmares	0	1	2	3
733	Feeling detached or withdrawn from people	0	1	2	3
734	Unable to feel emotions	0	1	2	3
735	Feeling jumpy, easily startled	0	1	2	3
736	Difficulty concentrating	0	1	2	3
737	Trouble sleeping	0	1	2	3
738	Feeling on guard	0	1	2	3
739	Feeling irritable or having outbursts of anger	0	1	2	3
740	Avoiding activities that remind you of the traumatic or hurtful event	0	1	2	3
741	Inability to remember parts of the most traumatic or hurtful events	0	1	2	3
742	Less interest in daily activities	0	1	2	3
743	Feeling as if you don't have a future	0	1	2	3
744	Avoiding thoughts or feelings associated with the traumatic or hurtful experience	0	1	2	3
745	Sudden emotional or physical reaction when	0	1	2	3
	reminded of the most hurtful or traumatic events				
746	Feeling that people do not understand what happened to you	0	1	2	3
747	Difficulty performing work or daily tasks	0	1	2	3

748	Blaming yourself for things that have happened	0	1	2	3
749	Feeling guilty for having survived	0	1	2	3
750	Hopelessness	0	1	2	3
751	Feeling ashamed of the hurtful or traumatic events that have happened to you	0	1	2	3
752	Spending time thinking about why these events happened to you	0	1	2	3
753	Feeling as if you are going crazy	0	1	2	3
754	Feeling that you are the only one who suffered these events	0	1	2	3
755	Feeling others are hostile toward you	0	1	2	3
756	Feeling that you have no one to rely on	0	1	2	3
757	Finding out or being told by other people that you have done something that you cannot remember	0	1	2	3
758	Feeling as if you are split into two people and one of you is watching what the other is doing	0	1	2	3
759	Feeling someone you trusted betrayed you	0	1	2	3

	SECTION 20: CAMPAIGNS AND LAWS AROUND THE PREVENTION OF VIOLENCE AGAINST WOMEN		
801	Do you know of events or campaigns on gender based violence?	YES …… 1 NO ……..……..... 0	□ **820**
802	Please tell me where you know these campaigns/events on gender based violence from:	On the radio …… 1 In the newspaper ……2 On TV ……..……3 From a neighbour /friend ……. 4 Community meeting/Imbizo ….. 5 Other ……..6	

803	Have you heard about Protection Orders?	YES …… 1 NO …….... 0	
804	Have you heard about People Opposed to Women Abuse (POWA)?	YES …… 1 NO …….... 0	
805	Have you heard about Gender Links?	YES …… 1 NO …….... 0	
806	Have you heard about Soul City?	YES …… 1 NO …….... 0	

807	Have you heard about the Stop Women Abuse telephone Helpline?	YES …… 1 NO …….... 0	□ **810**
808	Have you ever made use of the Stop Women Abuse telephone Helpline?	YES …… 1 NO …….... 0	
809	Which symbol do you most associate with campaigns to end gender violence?	The dove ……....1 The drum ……....2 The white ribbon ……..……..3 A butterfly being set free……4	
810	Which slogan do you most associate with campaigns to end gender violence	Act against abuse……1 Peace begins at home …… 2 Don't look away……..3 Real men don't abuse……..…..4	
811	In the past 12-months, have you heard of, or seen anything on the **16** Days campaign?	YES …… 1 NO ……..……..... 0	
812	In the past 12-months, have you heard of, or seen anything on the **365** Days campaign?	YES …… 1 NO ……..……..... 0	
813	Have you ever participated in a march or event to protest against violence against women?	YES …… 1 NO ……..……..... 0	
814	Have you ever participated in a cyber dialogue on gender-based violence?	YES …… 1 NO ……..……..... 0	

815	Which statement best describes how you felt about participating in cyber dialogues?	Being in an anonymous space helped me speak out ……..……1 I got help through the chat …….…… 2 I felt empowered by this technology…….. 3 The chatting made very little difference to me ……..…… 4	
816	Which statement best describes your reaction to campaigns to end gender violence?	I feel empowered ……..…… 1 I feel angry ……..…….. 2 I feel helpless ……..……..…… 3 I feel I am not alone ……..…… 4 I feel indifferent ……..……..…. 5 None of the above …… 6	

Please say whether you strongly agree, agree, disagree or strongly disagree with the following statements:

		SA	A	D	SD	Don't know
817	Campaigns to end violence against women have to make people more aware that this is a violation of women's rights	0	1	2	3	4
818	Campaigns to end violence against women have helped to change the attitudes of men.	0	1	2	3	4
819	Campaigns to end violence against women have made women more aware of where to go for help	0	1	2	3	4
820	Campaigns to end violence against women have made politicians take action to end gender violence	0	1	2	3	4
821	Campaigns to end violence against women only happen once a year therefore they are of little value	0	1	2	3	4

822	Are there any laws in South Africa that protect women and children against violence or abuse?	Yes……..……..……..……1 No……..……..0 Don't know.....…….....……99	☐ **825**

823	Have you heard about the law against domestic violence in South Africa **(Domestic Violence Act)?**	YES ……..…… 1 NO …….…….... 0	**823**
824	Where did you hear about it?	On the radio …….. 1 In the newspaper ……..……2 On TV ……..…….. 3 From a neighbour /friend ……..…… 4 Community meeting/Imbizo ……..…… 5 Other ……..…… 6	
825	Have you heard about the new law against sexual violence and rape in South Africa? **(Sexual Offences Act)?**	YES ……..…… 1 NO …….…….... 0	**825**
826	Where did you hear about it?	On the radio ……..…… 1 In the newspaper ……..……2 On TV ……..…….. 3 From a neighbour /friend ……... 4 Community meeting/Imbizo ……..…… 5 Other ……..…… 6	
827	The news sometimes shows very sexual images of women. When you see something like this in the news how do you respond? **Pick the one that describes your main response.**	I find these stories and images entertaining and/or interesting ……..……1 I don't really notice them ……..……2 I feel uncomfortable when I see them ……..3 I feel they are insulting to women…….....4 They encourage me to buy the newspaper or watch the news ……..…….. 5	

828	Which statement best describes your view of media coverage of violence against women?	It is fair and balanced; the media gives the facts as they are ……..……..……..……. 1 It is biased against women; the voices of those most affected is seldom heard……..……..……..2 It is biased against men; they are always treated as though they are to blame …….…… 3 It fuels such violence even more by naming victims and showing little sensitivity towards them……..….. 4 None of the above ……. 5	
829	How do you think the media could best improve its coverage of gender violence?	By relying less on what they hear in court and more on talking to survivors of violence…….. 1 By being less sensational ……..…… 2 By having more women reporters covering such stories ……..……..….3 By respecting the privacy of victims……..…….. 4	

SECTION 21: ACCESSING SUPPORT DURING EMOTIONAL DIFFICULTIES

You are now very nearly at the end of the questionnaire. Thanks you very much for your time. The last five questions are about sources of help that you may have at times when you feel sad or frustrated. All men feel sad, disappointed or frustrated sometimes.

441	When feeling sad, disappointed or frustrated have you ever sought help from older relatives?	YES ……..…… 1 NO ……..... 0
442	When feeling sad, disappointed or frustrated have you ever sought professional counselling?	YES ……..…… 1 NO ……..... 0
443	When feeling sad, disappointed or frustrated have you ever sought help through family meetings?	YES ……..…… 1 NO ……..... 0
444	When feeling sad, disappointed or frustrated have you ever sought help from a guidance teacher or a human resource person at work?	YES ……..…… 1 NO ……..... 0
445	When feeling sad, disappointed or frustrated have you ever sought help from a doctor?	YES ……..…… 1 NO ……..... 0

FINISH

I would like to thank you very much for helping us. We have talked about some very difficult things today. I appreciate the time you have taken. I realise that these questions may have been difficult for you to answer, but it is only by hearing about women's lives that we can really begin to understand them. We really appreciate your openness with us. Most women have difficult times in their lives and it's good to share them and remember we did not bring them on ourselves. We really appreciate your participation in this study. By sharing this personal information with you are helping us with our research and that will ultimately help many other people in the country.

End Time of Interview: _____ h _____