

CHAPTER 5

Effects of GBV



Photo: Gender Links

Key facts

- ✓ 25.4% of physically abused women were injured.
- ✓ 11.8% of these women had serious injuries and were bedridden as a result of assault.
- ✓ 12.4% of women survivors had to take time off work because of their injuries.
- ✓ 10.9% of women who experienced sexual or physical IPV tested HIV positive.
- ✓ 28.7% of women who experienced sexual or physical IPV were diagnosed with a Sexually Transmitted Infection (STI).
- ✓ 5.3% of women raped by a non-partner tested HIV positive.
- ✓ 35% of women raped by a non-partner were diagnosed with an STI.
- ✓ 19.1% of women sexually or physically abused by their partner had attempted suicide.
- ✓ 25% of non-partner rape survivors had attempted suicide.
- ✓ 15.4% of women sexually or physically abused by a partner had Post Traumatic Stress Disorder (PTSD).
- ✓ 28.1% of women who had been raped by a non-partner had PTSD.
- ✓ In 2009/2010, more than R61 million was spent in Gauteng on GBV programmes and in response to the province's high rate of domestic violence.
- ✓ 28.6% of politicians' speeches refer to the link between GBV and HIV.



When I (Mmabatho Moyo³⁵) was 17 years old, I was going home after a basketball match at a nearby school with four friends when a stranger offered to give us a lift home. We reluctantly accepted. He dropped my friends first. I felt uneasy about being alone with him, but he reassured me that he would take me home.

I gave him directions to our home just a few metres from where my last friend had been dropped off but to my dismay he went in the opposite direction. He took out a gun and threatened to

kill me if I screamed. I tried to protest but he angrily told me to keep quiet. Instead, he took me to a secluded place and parked the car under a big tree.

Despite my attempts to run away he dragged me out of the car placing his hand on my mouth and forced me to the ground. He tore off my pants and raped me. He told me not to tell anyone, including my parents, or he would kill me and everyone I told.

He gave me R20 and directed me to a taxi home. I felt sick by the time I got home, but just told my parents that I had been delayed at the match and had a stomach ache. I could see my mother did not believe me and I felt ashamed of myself. The next day my trail of lies continued. I told my sister that I had fallen on a sharp object, and she gave me painkillers. I eventually healed physically, but mentally I was devastated. I went back to school after three days. Life continued as if everything was normal.

Three months lapsed, and exam time came. I had started to bulge, and I knew I was pregnant. My mother noticed and took me to the clinic, where a doctor confirmed her fears. My mother, father, aunt and an uncle summoned me to a meeting to enquire who the father was. When I told them I did not know, they became agitated. How was I supposed to know when a stranger raped me? My family was supportive. I gave birth to a three-month premature baby girl. My sister offered to take my daughter in and raise her on my behalf to give me a chance to pick myself up.

³⁵ Not her real name.

One Sunday, when my daughter was three, a man driving a Mercedes Benz arrived at our house and asked to see me. I went up to him but could not identify him. He then asked me where his child was and I instantly remembered who he was because he had a resemblance to my daughter. Six months later, he sent his elders to negotiate for lobola.

My parents did not want me to marry him but my uncles persuaded them to give him a chance. We got married in 1987 and lived happily until 1990, when everything changed. The first thing he did was force me to resign from work, based on the cultural expectation that women do not work. I received my provident funds upon resignation. My husband used it to buy two taxis so he could start a business.

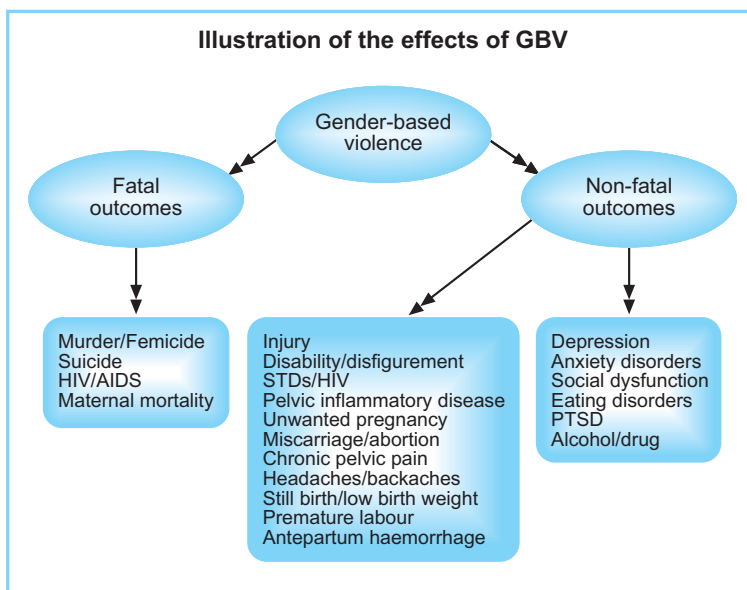
I could no longer have children and so my husband threatened to marry two other wives but I took it as a joke. Then the cycle of abuse started. He bought lots of groceries and then went away from home for almost three months, leaving me locked in the house. He went with all keys to the house and gate.

He came back, bought more groceries, and stayed for four days before disappearing again. It became my way of life. In some instances, he would leave me with R4000 to buy anything I wanted despite the fact he left me locked in the house. Upon his return, he would tell me how stupid I was for not using the money. His taxi business was booming. My life was hell, held prisoner in my own house.

In 2001, he came home just after midnight and woke me up demanding a cup of tea. I declined and he became aggressive. He threatened to shoot me. I woke up and went to the kitchen in tears. Reaching for the cup in the cupboard, I decided to turn and as I did so, he released the trigger and shot me. Fortunately, the bullet did not go straight into my head but became lodged close to my scalp.

I fell unconscious and woke up in hospital four months later. The Metro Police had picked me up in Zuurbekom. I was hospitalised for 13 months, as I had lost my speech and could not walk from severe shock and blood loss. I had to go through speech therapy, counselling and physiotherapy. I then went to a mental institution where I was hospitalised for seven months.

My husband came, threatened me and pointed firearms at patients and staff with whom I shared the ward. Instead of protecting me, the hospital discharged me to go back to him. The abuse



Adopted from Jewkes et al 2010

started again and became worse. For instance, one day he came and told me to climb on the coffee table. He then put his finger in my vagina to check if I had been with any other men.

After that day I made up my mind, I was going to divorce him.

The consequences of GBV are pervasive, affecting the health and well-being of survivors, their families, and their societies as illustrated by Moyo's story. She had an unwanted pregnancy, was forced to quit her job, suffered multiple injuries and lost all her belongings. This was made worse by the fact that her community, family and health care workers continuously encouraged her to return to a man who had physically abused and shot her.

Abuse may cause permanent damage to a woman's physical health and have a long-term emotional impact, possibly resulting in depression, anxiety, sleep disturbance, substance abuse and difficulty forming relationships with children.³⁶ Women experiencing these effects may not be aware they are symptoms linked to abuse.

This chapter reports on the responses on these issues from women participating in this study. The women were asked questions on a range of indicators about their health, including about contraceptive use, condom use, HIV testing and results, sexually transmitted infections, and aspects of their mental health.

Physical injuries

The effects of physical abuse include death; permanent disability such as blindness, deafness, seizures, loss of mobility; hospitalisation for broken bones, concussion, head and spinal injuries; gynaecological problems including losing an unborn baby, or birth defects; infertility; treatment for broken teeth, cuts, headaches; and bruises, pain, trauma. Women who participated in the survey were asked about the injuries they sustained as a result of physical abuse.

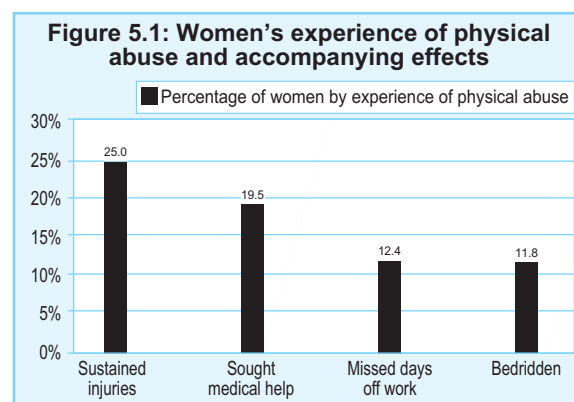


Figure 5.1 shows that a quarter of women who were physically abused sustained injuries; 19.5% of women went to a health facility after sustaining injuries; 11.8% of these women had serious injuries and were bedridden as a result of assault; and 12.4% had to take leave from work because of the injuries sustained.

These findings show that not all women who sustain physical injuries from abuse seek medical help.

³⁶ Fox S. 2003. *Gender Based Violence and HIV/AIDS in South Africa*. Center for AIDS Development, Research and Evaluation.

The physical pain of GBV

Women who contributed to the “I” Stories project mentioned a myriad of ways they were physically affected, not just during the violence but also long after. An example is an excerpt below from Germina Setshedi’s “I” Story.

“He started pushing me. He pushed me until he threw me out the window. It was from the fourth floor to the ground. Both my legs and my spine were broken. I spent three months in a hospital sleeping. When I came out of the hospital, I opened a case against him but nothing was done because my husband was friends with one of the officers... I moved back home to my husband. Oh... oh... oh... God, after three days he started swearing and pointing at me again. Remember that by that time I could not walk fast, I was still on crutches. That was the beginning of the end. One day he hit me with hammer on my head. I was bleeding so badly and that was a good chance to get him arrested.”

- From the “I” Story *When abuse can lead to disability* by Germina Setshedi.

Many women reported that violence left them with physical scars. For many women, these scars are a source of shame, especially if they are on the face, arms, or another visible area.³⁷

Puni Matsimbi describes how she sustained a broken eardrum and was bedridden for more than a week after her husband assaulted her.

“I felt like my life was going to end. There was blood everywhere. Every part of my body was

aching from the pain and injuries. After trying and failing several times, I managed to open the door. I tried running, but had no strength. I could not walk.



Puni Matsimbi, a survivor.

Photo: Colleen Lowe Morna

As time went by, I hoped for things to get better. I waited with faith hoping that he would change and things would be different. Things never changed. The beatings continued and with the beatings, my time in bed recovering from injuries increased.

Once after spending time in bed recovering, I decided to go to the doctor for a check-up. The doctor asked me questions about my injuries and sent me to Baragwanath hospital to the abuse centre. When I arrived there, they sent me to the social workers who took down the details of my abuse and sent me back for examinations and reports at the abuse centre. I realised my

³⁷ Walter, D & Lowe Morna, C (eds). 2010. *The South African “I” Stories experience: Speaking out can set you free*. Gender Links, Johannesburg.

visit to the abuse centre resulted in the arrest. I was so happy. The courts gave him free bail and a five year suspended sentence.

Within a month of the sentencing, he beat me again and broke my eardrum. Just as he had

before, my eldest son pleaded with his father to forgive me. I realised that if I continued to stay with this man, one day he would kill me. I had to leave before that happened.”

- From the “I” Story *Finding strength is not easy*
by Puni Matsimbi

Sexual and reproductive health

Other effects of GBV may include pregnancy, miscarriage, Sexually Transmitted Infections including HIV, and pregnancy-related problems. In the introduction, Mmabatho Moyo³⁸ spoke of becoming pregnant as a result of rape. Today she supports the daughter conceived during this ordeal.

Marco Ndlovu, a South African lesbian, spoke of the trauma of “corrective rape” and how she also conceived a child. She wrote: “For the sake of everyone around me I hung out with Theophilus. Then one fateful day that shattered my dreams he flung himself on me and raped me in just three to five minutes. I screamed and kicked but nobody came to my rescue.



Marco Ndlovu. Photo: Gender Links

When I threatened to lay charges against him, he apologised and asked for my forgiveness. He compelled me to take a bath, threatening not to let me go if I

refused to do so. I was bleeding. I wanted to take my panties that he tore and had hidden away. In those days, when no one, least of all your parents, talked about sex, rape or abuse, I had no idea that he had torn them to destroy the evidence.

Soon after this ordeal my cousin took me to the doctor for a pregnancy test. To my horror, I discovered I had become pregnant as a result of the rape. Theophilus wanted me to terminate the pregnancy but in those days it was taboo and illegal.”

-From the “I” Story *Finding the real me*
by Marco P. Ndlovu

HIV and AIDS

Some survivors of sexual violence, like Mickey³⁹, contracted HIV and other sexually transmitted infections as a result of rape. Mickey speaks of how she tested HIV positive after her ordeal.

“Before being raped I hadn't had a partner since my divorce in 1996. I just had an HIV test done and it came back negative. So I told myself there's no way you can be raped once and get it and I said I'm not going to bother going back and I didn't bother. Last year in January something

³⁸ Not her real name.

³⁹ Not her real name.

just told me: 'Hey Mickey just go and test yourself.' I had a boyfriend who wanted to get married so we both went for tests. His was negative and I was positive. What do I do, where do I start, where do I go?"

- From the "I" Story *I'm doing well and surviving* by Mickey*



It is essential to get tested for HIV within 72 hours after a sexual assault. Photo: Gender Links

The impact of gender inequity and violence and its link to HIV infection has been well documented among South Africa women.^{40,41} A study among young rural South African women over a two year period showed that those beaten by their partners were 50% more likely to acquire HIV. Those women who had the least power in their relationships had a similarly elevated risk.⁴²

This study did not test for HIV, but women were asked if they had been tested, and if they knew the result. Although this is an imperfect measure

of HIV sero-status, it is notable that women who had experienced physical or sexual IPV were significantly more likely to disclose that they were also HIV positive.

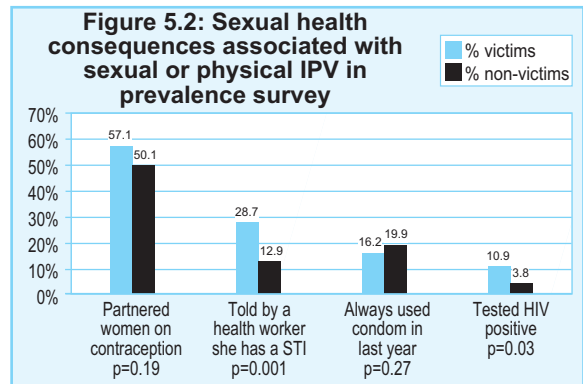


Figure 5.2 illustrates that women who had experienced sexual or physical IPV were significantly more likely to have tested for HIV and been found to be HIV positive. They were also significantly more likely to have been told they had a sexually transmitted infection by a health worker with more than a quarter having experienced this, a prevalence more than twice that disclosed by women who had not experienced IPV.

The survey also collected data on condom use, including whether women reported always using a condom in the past year. There were no differences in this measure between survivors and non-survivors of IPV and rape by a non-partner. However, less than one in five women disclosed consistent condom use. There is no

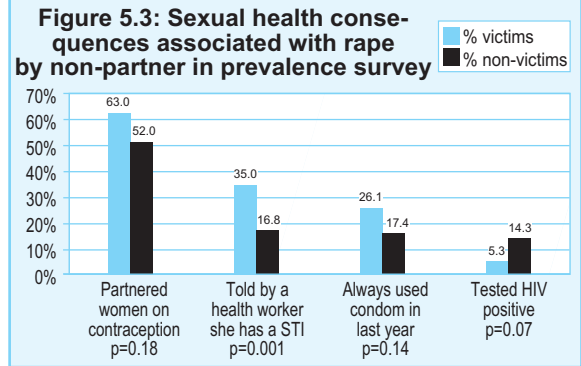
⁴⁰ Dunkle KL, Jewkes RK, Brown HC, Gray GE, McIntyre JA, Harlow SD. Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *Lancet*. 2004 May 1;363(9419):1415-21.
⁴¹ Jewkes R, Dunkle K, Nduna M, Shai N. Intimate partner violence, relationship gender power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. *The Lancet*. 2010;367:41-8.
⁴² Jewkes R, Dunkle K, Nduna M, Shai N. Intimate partner violence, relationship gender power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. *The Lancet* 2010; 367:41-48.

statistically significant difference in the use of condoms by survivors and non survivors.

When women negotiate condom use it is often interpreted by their male partners as a lack of trust. Women find it difficult to insist on condom use lest this also be perceived as an accusation of infidelity. Women also fail to negotiate condom use because they fear their partner, whom they are financially or otherwise dependent, may desert them.

Overall, these are worrying findings considering the very high prevalence of HIV in South Africa. This also confirms that GBV is a driver of the HIV and AIDS epidemic.

Figure 5.3 illustrates that women who had been raped by non-partners were less likely to have



tested for HIV and been found to be HIV positive. However, they were more likely to have been told by a health worker that they had a Sexually Transmitted Infection.

Apart from survey findings, political speeches were also analysed for mention of GBV. HIV was most commonly referred to as an effect of GBV.

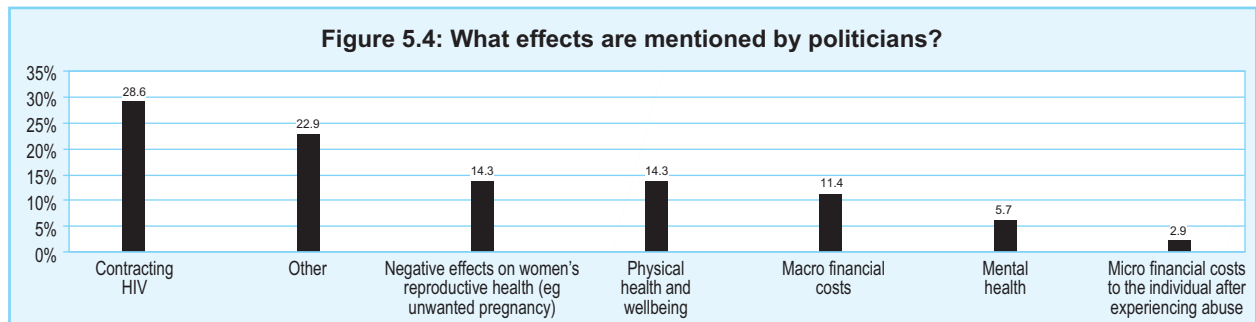
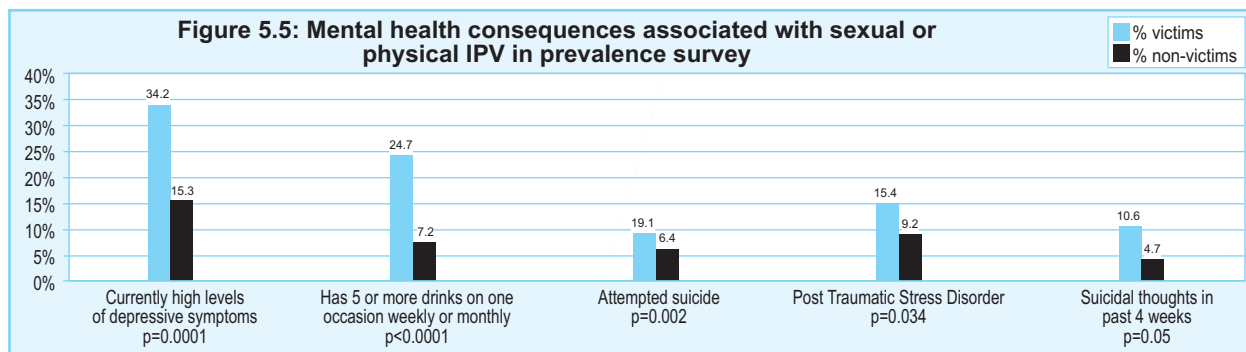


Figure 5.4 shows that 28.6% of speeches referred to the relationship between HIV and GBV. This indicates that politicians are beginning to recognise that addressing GBV is an important part of South African efforts to prevent HIV. The second most mentioned effects of GBV, both at

14.3%, were: negative effects on women's reproductive health and physical health and wellbeing. Mental health effects are by far the most common health consequence of GBV, causing the greatest burden after HIV, yet politicians very rarely acknowledge this.

Figure 5.5: Mental health consequences associated with sexual or physical IPV in prevalence survey



Mental health

Survey results show the serious negative mental health impact of GBV. Figure 5.5 illustrates the proportion of women who had experienced physical or sexual IPV and have current mental health problems. The most common mental health problem among women who had experienced IPV is depression. More than a third of this group expressed high levels of depressive symptoms at the time of interview, a proportion more than double that found among women who had not experienced physical or sexual IPV.

One in ten women who had been abused disclosed having suicidal thoughts in the four weeks prior the interview, a proportion that was again more than double that found among women who had never been abused. The serious risk of suicide among women who have experienced IPV was seen in the finding that nearly one in five of these women had attempted suicide. This proportion was three times higher

than that found among women who had not experienced physical or sexual IPV. Heavy drinking featured as the second most common problem. One in four women who had experienced abuse admitted drinking heavily, a proportion nearly five times greater than that found among other women. Alcohol use has been widely described as a coping mechanism used by women who experience IPV and it often provides part of the context for repeated episodes of violence. Alcohol is also often used by women who experience PTSD as a way of coping with the symptoms.

Women who had experienced IPV were also significantly more likely to have Post Traumatic Stress Disorder than other women. The proportion of women with PTSD who had not experienced IPV was very similar to the figure of 6% found in a general population study (using slightly different methods).⁴³ These findings are indicative of a particularly high mental health burden among women who have been abused by their partners.

⁴³ Kaminer D, Grimsrud A, Myer L, Stein DJ, Williams D. Risk for post-traumatic stress disorder associated with different forms of interpersonal violence in South Africa. *Social Science & Medicine*. 2008;67(10):1589-95.

Figure 5.6: Mental health consequences associated with rape by non partner in prevalence survey

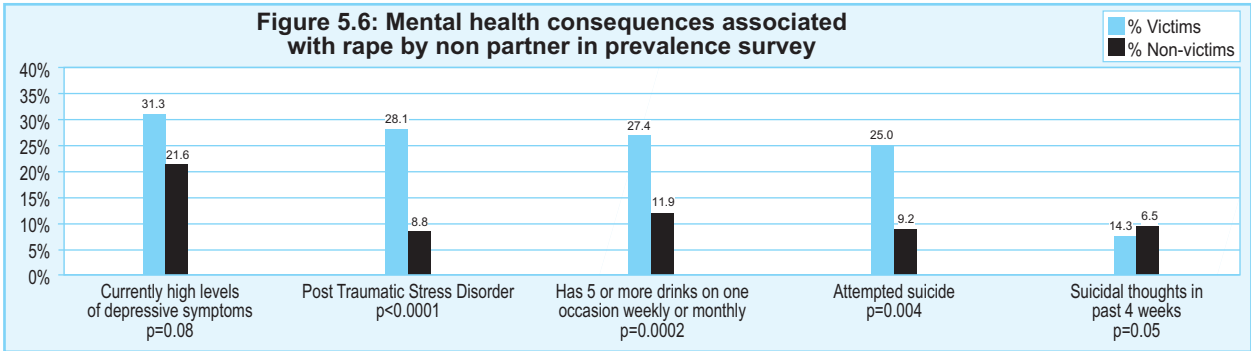


Figure 5.6 shows that women who had experienced rape by a non-partner were also more likely to have mental health problems, especially compared to those found among women who had not been raped. It is, however, important to remember that many of the women who had not been raped had experienced IPV. More than a quarter of women who had been raped by a non-partner currently have symptoms of PTSD. A third of women surveyed who had been raped expressed high levels of depressive symptoms. Although one third higher, there was

no statistically significant difference from the levels found among those who had not been raped. As in the case of IPV, women who had been raped by a non-partner were more likely to binge drink and to attempt suicide. They were also significantly more likely to have had suicidal thoughts in the previous week.

Mental health was only referenced in 5.7% of political speeches analysed (Figure 5.4). This shows that there is an underestimation on the part of political leaders of the high prevalence of mental health issues stemming from abuse. Given the high levels of emotional violence reported in the survey and the accompanying effects on mental health, politicians should be encouraged to address the lack of mental health services for survivors of GBV.



Counselling is necessary for rape survivors.

Photo: Trevor Davies

These findings also point to the dramatic toll of violence on women's lives as well as the failure of health services to adequately meet women's mental health needs. The major problems of depression, PTSD and

substance abuse are treatable, especially for women not currently experiencing abuse.

Stigma and secondary victimisation

One effect of rape is that women are blamed and condemned by their communities. Apart from this, women experience stigma and labelling associated with having experienced rape. Some women, like Cara Ann, have experienced condemnation because of their experience. She speaks of how she was jeered by men in her community:

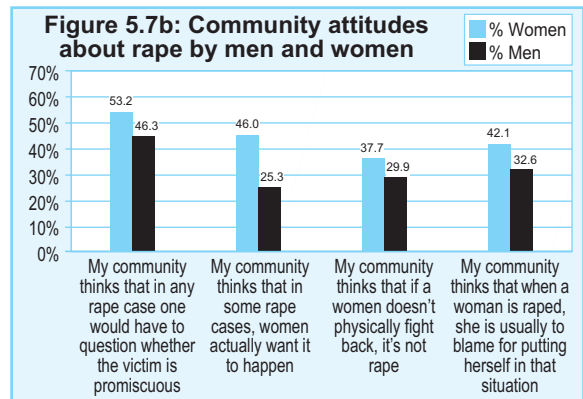
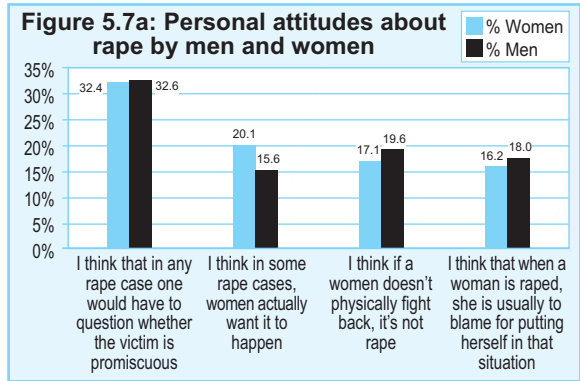
“The next day I took a long bath. I looked at my bruised legs and I saw the blood in my underwear. I ignored the obvious fact. I could not admit that he raped me. I am a strong woman. I went to another party the next night. The same people were there, it was a different scene. Everyone stared at me as I entered the room with a tired smile. The guys pointed and made comments about me. That’s when they started teasing and singing at me, saying that I was drunk and had sex with their friend.”

- From the “I” Story *Date rape can happen to anyone* by Cara Ann.

Women and men participating in the survey responded to questions about their personal views of rape survivors and the views they think are held by other members of their community.

Figure 5.7a shows that the majority of women and men do not think women are to blame for rape, that they want it to happen or that they would not be raped if they fought back. Yet Figure 5.7b shows that more women than men perceived community social norms to generally

blame and stigmatise survivors of violence. Negative community attitudes are indicative of the increased likelihood that survivors will be blamed and stigmatised.



Out of pocket costs of domestic violence

Apart from the physical, emotional and health effects of abuse, women who experience abuse also encounter costs associated with reporting the incident or seeking out care for an injury or other health problem associated with the abuse. Of the total sample of women, 13 (7.7%) of physically abused women said they had spent money on medication after experiencing physical abuse. Of these, seven (4.1%) had spent less than R100, while six (3.6%) had spent more than R100

on medication. Some women also mentioned transport and counselling costs.

Costs of leaving

Women also face major costs when they decide to leave an abusive relationship. These costs were explored in focus group discussions with abused women who had fled their homes. There were a number of costs related to leaving an abusive partner including financial and material. Most women reported that the financial costs associated with transportation to women's shelters were relatively affordable and constituted less of an inconvenience compared to the loss of material goods such as collectables and crockery. Loss of property, including clothes and furniture was also common. Identity

documents and other certificates were also commonly lost with the end of abusive relationships.

These losses potentially impact on women's sense of self and well-being and may lead to a shift in socio-economic status.

Costs to the economy

GBV has consequences not only for survivors but also for society. Responding to GBV requires a substantial amount of financial resources allocated to programmes targeted at survivors. The study assembled information on budget votes from relevant government departments for GBV programmes for the year 2009-2010 in Gauteng.

Table 5.1: Budgetary allocations or costs of GBV programmes

Department/Organisation	GBV programme description	Budgetary allocation 2009-2010/ Costs of running programme
Gauteng Department of Community Safety	Safety promotion through Ikhaya Lethemba for the period 2009-2010. These funds were to be channelled towards providing a comprehensive package of services for abused children and women.	R35 800 000
	Re-conceptualisation of the decentralised survivor empowerment model. ⁴⁴	R4 900 000
Gauteng Department of Health and Social Development	Shelters for women.	R7 065 150
	Survivor empowerment programme	R13 694 050
National Prosecuting Authority Thuthuzela Care Centres	Five TCCs in Gauteng province at estimated running cost per annum for each TCC at R1 120 045.	R5 600 225
Department of Justice and Constitutional Development	Issuing and breach of protection orders	R185 399 ⁴⁵
Total costs		R61 644 599

⁴⁴ Speech by Gauteng MEC for finance and economic development, Mandla Nkomfe, on the occasion of the tabling of the 2009/2010 Gauteng budget to the legislature, 24 February 2009 <http://www.treasury.gpg.gov.za/docs/BudgetSpeech2009.pdf>

⁴⁵ In 2005 a Protection order cost R228.84 and breach, R16.19, Vetten et al, 2005. Applying CPIX to this figure till 2010 results in R324,86 for a protection order and R22.98 for a breach. The police statistics reflect 533 breaches of protection orders, this implies that 533 were issued. The cost is therefore calculated using the cost of getting a Protection and a breach.

From the available data, Gauteng province spent R61 644 599 on specific GBV-related services.

The 2009 Statistics South Africa mid-year population estimate for women over 18 years in Gauteng is 3 515 397. The prevalence of GBV for women in the Gauteng sample over the last year according to this study is 18.1%. This means that the actual number of women who experienced GBV in last year can be estimated at 636 287, which means if every woman who experienced GBV in Gauteng accessed services, the province will have spent R97 per person. If the cost is calculated using only police reported cases, this figure is substantially higher. The number of reported cases is 12 093. The cost per person in this case is R5 097.

It should be noted that these figures are only for specific services. Available data does not make it possible to disaggregate the proportion of mainstream justice and health budgets that is spent on GBV.



Health costs are difficult to disaggregate.

Photo: Trevor Davies

Further research on costing

Further research is required to investigate the costs associated with different forms of GBV at an individual and societal level in South Africa. Specific objectives include:

- To determine the direct costs associated with Intimate Partner Violence, sexual violence perpetrated by a non-partner, child sexual abuse and other forms of GBV e.g. sexual harassment.
- To determine the indirect costs associated with IPV, sexual violence perpetrated by a non-partner, child sexual abuse and other forms of GBV e.g. sexual harassment.
- To determine the costs of GBV that is carried by the individual who is a victim/survivor.

Determining the burden of gender-based violence is a costly research exercise that is best done nationwide as the costs do not differ significantly from one province to the next. Detailed studies in a few provinces can thus be used to upscale the costs for the whole country and the figures adjusted for different provinces depending on the prevalence and the facilities in those provinces. As this research study is cascaded to the rest of South Africa, the intention is to conduct a scientific costing exercise that will establish the societal and individual costs of GBV.

Societal level:

The Centre for Disease Control (CDC) conceptualised and described two types of costs:

- Direct costs are actual expenditures related to GBV, including health care services, judicial services and social services.
- Indirect costs represent the value of lost productivity from both paid work and unpaid

work, as well as the foregone value of lifetime earnings for women who have died as a result of GBV.

Direct cost estimates:

- Step 1. Determining utilisation of services by women who report experiences of GBV. Usage will be calculated separately for intimate partner violence (IPV), sexual violence perpetrated by a non-partner, child sexual abuse and other forms of GBV e.g. sexual harassment. This will be obtained from the Gauteng survey and enhanced once we have national data. The services that will be included are: health, police, courts, counseling and shelters.
- Step 2. Establishing the unit cost of services used. Costs will be categorised into fixed costs of health service provision and patient level variables costs such as drugs, laboratory, staff time associated with consultations, patient transport and other supplies, and these unit costs were then multiplied by service usage as revealed in survey.
- Step 3. Calculating total direct costs as the product of unit costs times the number of times a service was used.

Indirect cost estimates

Indirect cost estimates highlight the impact of GBV on productivity and earnings of women and of male perpetrators. The indirect costs will focus on loss of earnings due to death and lost productivity (CDC, 2003), job loss, lost productivity of the women, lost productivity of the abuser due to incarceration, and mortality (Laurence and Spalter-Roth, 1995), loss of tax revenues due to death and incarceration (Greaves et al., 1995), and decrease in women's earnings (Morrison and Orlando, 1999; Sánchez et al. 2004; CDC, 2003).

The total number of days of paid work or household chores lost due to GBV (which is identified by responses to some of the survey questions) is multiplied by the mean daily earnings to yield a monetary estimate of lost earnings, whether this incapacitation is temporary (due to injury) or permanent (due to death or incapacitating injury).

Mean daily earnings will be calculated for the mean age of women affected by the various types of GBV, IPV, sexual violence perpetrated by a non-partner, child sexual abuse and other forms of GBV e.g. sexual harassment). In the case of non-paid household chores, an imputed wage is used.

Individual level:

Individual level costs are defined as out of pocket expenses for victims/survivors associated with GBV. These costs would include transport costs to police stations, health services or other services used. Costs of medical care including over-the-counter medication, counseling, and protection orders will also be determined. These calculations will be based on a more in-depth interrogation of the survey findings than has been possible in this analysis.

Conclusions

GBV has a range of effects, physical, emotional and financial. The costs to individuals as well as to the economy require further investigation as this study is cascaded to other provinces of South Africa. The figures presented here scratch the surface as they only concern direct costs. Even then, a strong case can be made that if more resources were put into prevention rather than response, this would be a wiser policy option.