# Costs of Violence against Women

This is an extensive summary of a report published in Swedish in December 2006, which was produced and written mainly by Elis Envall, Senior Advisor and Annika Eriksson, PhD at the National Board of Health and Welfare, Sweden.

## Background

Violence against women is a widespread and important social problem. It is a multi-faceted problem with many actors involved. It constitutes a *legal problem* as it is a crime. It also constitutes a *public health problem* and a *social problem* that affects many women and their children. In addition, it entails major *economic strains* for society in the form of the costs of the various social measures to deal with it. Intimate partner violence against women is a *gender equality problem* and not least it is a serious *violation of human rights* of women.

Violence against women does not only entail suffering and ill-health for those directly involved; it also leads to major financial strains on society with regard to medical care, the judicial system, the social services, social insurances, unemployment, production loss, and so on.

There is as yet no overall study of the costs to society of violence against women in Sweden. The National Board of Health and Welfare considers this unsatisfactory as the problem and its consequences remain hidden or are insufficiently known and the Board has therefore taken the initiative in making such an analysis. Knowledge of the scope and economic consequences of the problem is important to enable society to tackle it constructively and correctly.

However, there are many difficulties involved and the analysis can never be anything more than a *cautious estimate*, in which some calculations are more uncertain than others and several aspects have not been possible to include. This does not mean, however, that we are completely unable to make any assumptions regarding the costs. We would risk belittling or hiding parts of the problem and its consequences if we refrained entirely from making an estimate because we lacked certain, fully-comprehensive data.

#### Definition

Different terms have been used in reports, official inquiries and in the debate on the societal problem, which is generally referred to as *violence against women*. It is important here to make clear that the concept of "violence" covers not only physical violence, but also threats, psychological violence, sexual abuse, financial control and in certain cases even stalking. This report focuses on the violence experienced by women in intimate partner relationships.

It is the intimate partner relationship that gives the violence a different nature and often has consequences that distinguishes it from other types of violence. The nature of power and control in the violence means that the battered woman may experience social isolation, financial problems, negligible financial freedom and acute accommodation problems. The perpetrator has constant "access" to the victim and can, in addition to the direct physical violence, also exercise other forms of violence. It is also the framework of the intimate partner relationship, which makes it so difficult for the woman to leave the man.

It may be important to clarify that this report will not make explicit calculations with regard to children who are affected. Intimate partner violence against women and violence against children often overlap. However, to also include violence against children within the framework of this study would make an already difficult task almost impossible. We will therefore not calculate these costs, but the question of children who witness intimate partner violence directed against their mother will to some extent be addressed. Correspondingly, it must be made clear that while the focus is on men's violence against women, the full report also touches on violence in same-sex partnerships and violence against men in heterosexual relationships. These costs are not, however, included in the calculations.

## Understanding of the problem

The World Health Organisation, WHO, describes in its report *The economic dimensions of interpersonal violence*, WHO, 2004 how it is necessary to understand the causes of the violence and to identify risk factors for violence. This has often been depicted as violence being regarded either as a structural/social phenomenon, as a social psychology relationship problem or as an individual psychological problem. No single factor can explain violence in an individual, a group or a society. It is therefore necessary to regard the violence as a whole with factors at different interacting levels.

Much of the research in this field shows that the perpetrators of the violence are a heterogeneous group and it is therefore not possible to find one cause or model that applies to all. Researchers as well as the WHO therefore use an holistic model (the WHO and several others however use the term "ecological", which we consider to be misleading). This model entails an understanding of the interaction between personal, situational and socio-cultural factors. According to this holistic model, it is not one individual factor that causes violence, but a number of covarying factors.

## Purpose

The purpose of this study is to describe the total – estimated – costs to society. Violence against women may lead to, for instance, intervention by the police, absence from work, visits to medical centres and the social services. The perpetrator may be imprisoned, which would lead to direct costs for correctional treatment and indirect costs regarding a production loss.

One reason for making a socio-economic analysis and describing society's total costs for violence against women is to increase knowledge

and awareness of the existence, the scope and the economic consequences for society.

Another reason for carrying out this study is to show the limitations in the existing statistics and data and to point out the need for improvements.

### Reservations

It should be made clear that it is very difficult to make a socio-economic analysis of and to calculate – or even to estimate – the costs of intimate partner violence. We do not know for certain what the scope of this violence is, that is, how many women – and children – are affected. The sources available (criminal and medical statistics and surveys of crime victims) do not provide entirely reliable data due to the number of unrecorded cases and other problems. Nor is the violence on every occasion of the same character and it is not always experienced in the same way by all of those exposed. In some cases it involves long-term abuse with very serious beatings and in other cases it is a question of less serious abuse or beatings. Moreover, intimate partner violence covers much more than physical violence. Psychological violence and intimidation and other types of emotional abuse may be very serious and extensive, but may perhaps not lead to visits to casualty departments in hospitals or to police reports.

The other decisive uncertainty factor is the data collection of the social institutions and their reporting of measures taken. The health care services' registers hold a high quality with regard to hospital treatment, but there is nevertheless considerable uncertainty over details, such as data on the exact cause of the injury. The primary health care statistics are as yet even more insufficient and cannot be used as a basis for our calculations. Reports of measures taken within the different parts of the criminal justice system differ substantially and are very uncertain. It is not possible to follow a case on its way through the criminal justice system. It is also difficult to distinguish which costs are attributable to intimate partner violence and other closely linked problems. The social services' records and statistics do not include variables that enable them to describe measures and calculate costs in a satisfactory manner.

The uncertainty in the available data – and sometimes a lack of data – thus means that this analysis can only be said to be a cautious estimate of the socio-economic costs. However, this is, in the opinion of the National Board of Health and Welfare, not a justification for choosing *not* to make an estimate or analysis.

## Method

The method used in this study essentially consists of two parts or stages. In the first stage the scope of the violence against women in Sweden must be clarified. This forms one basis for the second stage, namely attempting to calculate – and in some areas if anything to estimate – the total costs to society ensuing from intimate partner violence. Both parts are characterised by uncertainty, a limited knowledge base and in some cases a lack of data.

The calculations in a socio-economic analysis are based on the effects that violence against women has on society and its inhabitants. The effects are

then valued in economic terms. A limited knowledge base and in some cases a lack of data mean that both the scope and the costs have in some cases been estimated and may be uncertain. The information applies to the year 2004 and the costs are per year unless stated otherwise. The number of inhabitants in Sweden in 2004 was 9,011,392 persons.

In scientific literature the socio-economic cost calculations have primarily dealt with ill-health, especially with regard to illnesses (these are often referred to as cost-of-illness-studies). However, there is also relatively comprehensive literature on health-related ways of living, such as alcohol consumption and smoking. Social problems have been described from a socio-economic cost perspective to a much lesser degree. A socio-economic cost calculation mainly provides a picture of the size of the problem and does not describe the measures that are most cost-efficient and thus does not give any information on what resources might be required to reduce the costs.

We have attempted as far as possible to identify the costs that can be attributed to intimate partner violence. This refers to society's costs for health and medical care, police, public prosecutors, courts, prison services and social services as well as costs to the civil society (women's refuges and other volunteer organisations) and costs to the business sector/employers. In addition there are also costs to central government agencies for reducing the effects of the violence and trying to counteract it, as well as all preventive measures. The individual woman herself, her children and all those close to her are affected by costs in connection with the violence and in the future. However, we have not been able to calculate these costs to the same extent as other costs. Intimate partner violence also affects the total production and therefore wealth in society through the women affected (and to some extent also men who are sentenced to imprisonment) working to a lesser extent than they would have done if the violence had not occurred. Such indirect costs constitute a socio-economic loss and are therefore also included in the calculations.

Transfers, i.e. flows of resources that do not constitute real costs, are not normally included in a socio-economic cost analysis. It may nevertheless be of interest to show the size of some of these transfers. In this report we also try to calculate certain transfers, for instance, the sickness benefit insurance, social assistance and crime victim compensation that the violence induces.

#### A socio-economic cost calculation

When a woman is subjected to violence from her partner a number of functions in society may be affected. The most important ones are:

- Health care and medical services (hospital treatment, treatment of outpatients, mental health care and dental service)
- Criminal justice system (police, public prosecutor, court, prison and probation services)
- Women's shelters and victim support centres
- Social services
- Social insurance system

The individual woman may also face substantial costs as a result of the violence. The group of individuals also includes the woman's children, other relatives, colleagues and friends as well as the perpetrator. An attempt is made in this study to calculate the costs of the violence for all of the abovementioned functions, with the exception of costs that affect individuals. We calculate the direct costs by sector and also present a rough analysis of how they are broken down into the different sectors/responsible authorities.

Intimate partner violence has a powerful effect, not only on the woman concerned, but also on any children in the family and on other family members. To some extent we will include these in the costs incurred by intimate partner violence (for instance, it is not possible, nor meaningful, to demarcate how large a percentage of the social services' efforts are aimed at women and children respectively). Our cost calculation otherwise does not include any costs for measures specifically aimed at children or other family members. This means that we will under-estimate the total costs to society of intimate partner violence.

#### Direct and indirect costs

The costs in a socio-economic cost analysis are divided into *direct costs* and *indirect costs*. Direct costs are the costs of the resource consumption entailed in trying to prevent, repair and alleviate the effects of the violence. Also included in direct costs are both fixed and floating costs, where floating costs (for example, wages) are affected by how many people benefit from a particular measure, while the fixed costs (for example, premises) are not affected by this in the short term.

Production loss, i.e. the difference between what is produced and what could have been produced if the intimate partner violence had not existed, is the most common example of an indirect cost. A production loss can arise as a result of the fatal outcome of violence, longer or shorter periods of sick leave, of the fact that those affected by the violence may be assumed to be less productive in their work during certain periods or of the fact that perpetrators are incarcerated and cannot work. It may therefore be either temporary or long-term. The reason why socio-economic analyses often include a production loss as an indirect cost is that an overall decline in production will have the consequence of a decline in consumption, which in turn will lead to a reduction in welfare in society.

Another category of indirect costs is *intangible costs* which may cover, e.g. pain, anxiety and suffering that affect the quality of life of those involved. Such costs are relatively seldom included in socio-economic cost calculations because of their subjective nature and because of the difficulty to estimate the value of them in monetary terms. We have not in this study made any attempt to estimate this type of costs, which may without doubt be substantial, but we refer to some foreign studies that include calculations of this type.

#### Estimating production loss

The indirect costs in our model only comprise costs for production loss. The value of the production loss is usually calculated by means of two main methods, the human capital method or the friction cost method. Both of

these methods have been criticised. The human capital method is the one used most frequently, as it is relatively simple to apply. This has been used as a base for the calculations in this report. It is based on the fundamental idea that an individual represents a valuable economic resource, attaining a particular stream of production during his or her life and that this production can be valued on the basis of gross wages according to prevailing market conditions. The value often covers only the production loss for paid working hours as it is difficult to value production in leisure hours.

#### Sources

## The scope of the violence

There are different sources from which knowledge can be drawn with regard to the scope of the violence. One source is the official criminal statistics maintained by the Swedish National Council for Crime Prevention (Brå). However, the statistics on the number of crimes reported to the police are very uncertain as there are a large number of unrecorded cases. The majority of those subjected to intimate partner violence do not report this, for various reasons. The Council estimates that only 20-25 per cent of the violence against women in intimate partner relationships is reported to the police. The crimes reported can also provide a distorted picture, as they basically capture certain groups.

Another source is victim of crime surveys. Statistics Sweden's Living Conditions Surveys, which include questions about threats and violence, are an important source in this context.

#### Costs

Intimate partner violence leads to direct costs within a number of different functions in society. Several sources have been used to calculate these.

Annual reports from central government agencies concerned, in some cases supplemented with special accounts, are one starting point. In one case (the Swedish Police Service) a special calculation of the estimated actual costs has been used.

Annual reports have also been gathered from several activities financed or co-financed by local governments, such as various crisis centres.

With regard to costs within medical care, two main sources have been used: the National Board of Health and Welfare's own register within the Centre of Epidemiology with regard to the number of treatments and information from the Swedish Association of Local Authorities and Regions' database on Cost per patient, CPP, with regard to the costs of the identified treatments.

To capture the costs that arise within the scope of the work by women's refuges and crisis centres, we have used a special questionnaire. This gathered data on contributions from society in various forms, paid and voluntary work etc.

One major problem concerns the costs of the social services. The social services' official statistics do not contain any variables that relate to whether a person has been subjected to violence. To obtain some form of basis for making assumptions with regard to this, we have held discussions with three local authorities and asked them to complete questionnaires.

With regard to indirect costs for production loss, the most important source has been a study carried out by the Swedish Rescue Services Agency's Centre for Lessons Learned from Incidents & Accidents regarding the costs to society of accidents and a study by the Stockholm County Social Insurance Office with regard to sick leave.

Several sources are used as a basis for calculating transfers; a local authority questionnaire and a study by the Stockholm County Social Insurance Office, comparison figures for the social services, the National Board of Health and Welfare's annual statistics on financial assistance, the Swedish Social Insurance Administration's statistics on current cases of illness in 2004, Statistics Sweden's Living Conditions Survey, Statistics Sweden's special data runs and information from the Swedish Crime Victim Compensation and Support Authority.

#### Other sources

In addition to the sources presented above, other studies of the socioeconomic costs of intimate partner violence and related areas have been used, primarily from other countries. These studies have mainly been used to supplement and test the assumptions made in this study.

## Results

## Scope

The official statistics regarding the number of cases of assault and battery against women reported to the police maintained by the Swedish National Council for Crime Prevention, supplemented with the Council's analysis of unrecorded cases, forms a central starting point for our analysis. A study made by the Swedish National Council for Crime Prevention on fatal violence constitutes the source of our assumption regarding the number of women killed per year. We have also had access to results from the surveys of victims of threats and assault and battery included in Statistics Sweden's Living Conditions Survey, both through the surveys and a special processing of these surveys.

On the basis of the above-mentioned sources, we have assumed that at least 75 000 women in Sweden are subjected to intimate partner violence of some form every year.

We have further assumed that 16 women are killed every year and that yet another woman takes her own life as a result of being subjected to violence by a partner or ex-partner. We have also assumed that on average 4 men commit suicide every year in connection with killing their partner/expartner. The number of women treated in hospitals following intimate partner violence has been estimated to at least 210 and perhaps as many as 550 a year. We have assumed, on the basis of Statistics Sweden's Living Conditions Surveys as a supplement to the inadequate data in the patient registers, that the number of women who have received out-patient treatment at hospitals, emergency centres or primary care centres is at least 12 000 and possibly as many as 14 000 per year.

The annual statistics of the national organisations of women's shelters also show that 3 100 women and children have been given sheltered housing in one year (2004) for a total of 102 000 nights.

#### Relative risks of violence

Data for the years 2000 and 2001 in the social medical database have been processed for this study. This database has been created by the Centre for Epidemiology by means of combining several registers. The information covers the entire population and mainly applies to the years 1990-2002. The variable studied in this processing is receipt of social assistance (income support).

The processing of the data shows that the relative risk of being killed in intimate partner violence is just over five times greater for those women who have received social assistance (income support) during a year, compared with women without these subsidies. The risk of receiving injuries that require hospitalisation due to external violence is just over ten times higher for women on social assistance. For women with long-term financial assistance (during three years) the relative risk is even higher; the risk of being killed is 6.6 times higher and the risk of needing to seek medical attention at a hospital is 18.5 times higher.

#### Children who witness violence

Various attempts have been made to estimate the number of children who experience violence in the home between adults in intimate partner relationships. According to Save the Children, Sweden (Rädda Barnen) the figures could be between 85 000 and 190 000 children. The *Committee against child abuse* claims that around ten per cent of all children have witnessed this type of violence at least once; five per cent have witnessed it often. Save the Children carried out a study in Varberg municipality in 2004. 713 pupils in school year six responded to a questionnaire. Five per cent (35 pupils) responded that they had seen or heard their parents fighting. However, there are substantial difficulties in ascertaining how many children are affected. For instance, violence is sometimes perceived as a family secret that should not be revealed to outsiders.

As mentioned earlier, we have not specifically calculated the cost of the damage to children who witness violence. In certain cases, however, these costs have been included without being reported separately. In most cases it has not been possible to make such calculations. This applies to special costs for psychiatric care for children and young people.

## Costs

#### The results of the calculations

Given the assumptions and in many cases the considerable uncertainty involved, the socio-economic costs are estimated at between SEK 2 695 million and SEK 3 300 million a year.

These costs can be broken down as follows.

Direct costs of Intimate Partner Violence in Sweden, 2004 in Swedish Kronor (SEK)

Cost bearer	Costs in million SEK	Sub-divided costs
Health care and medical services	21 – 38	
Criminal justice system	1,098 – 1,189	
police		623
public prosecutors		171
courts		153 – 162
prison and probation services		151 – 235
Social services	706 – 1,149	
Women's shelters and victim	73 – 79	
support centres		
Public sector treatment and support	44	
for violent men		
Central government agencies	17 – 18	
Social Insurance Administration	19	
Total direct costs	1 978 – 2 536	

Indirect costs of Intimate Partner Violence in Sweden, 2004 in Swedish Kronor (SEK)

Cost bearer	Costs in million SEK	
Production loss Value of voluntary work	679-720 38-44	
Total indirect costs	717-764	

Transfers in the form of health insurances have been estimated at SEK 690 million, of which sickness benefit is estimated at SEK 347 million. Transfers concerning social assistance (income support) have been estimated at SEK 378 million and crime victim compensation at SEK 10 million.

In addition to this there are costs that we have not been able to calculate in this study, such as costs for dental services, medicines, mental health care, damage to children, pain and suffering, and so on. These costs can be very high, as indicated by international studies.

## Concluding discussion and comments

This study shows how difficult it is to gain an understanding of all parts of the problem and the various costs for damage and measures that arise. Some deficiencies in identifying the problem, accounting and reporting needs and measures have become clear.

## Development needs

We can observe that there are relatively extensive deficiencies that make it impossible to calculate with any certainty both the scope of the violence and the total costs to society and to the individuals, directly or indirectly caused by violence in intimate partner relationships. Intimate partner violence concerns several different authorities and there are deficiencies in the respective areas of responsibility with regard to knowledge of the scope and measures for women and children subjected to intimate partner violence.

At present there is uncertainty over the extent of the intimate partner violence. Current statistics and surveys have not made it possible to determine how many women are subjected to violence every year. The statistics on the number of crimes of various types reported to the police do not provide a comprehensive picture, partly because it is the number of crimes and not the number of victims that is reported, and partly because all types of crime attributable to the concept of violence in intimate partnerships are not reported jointly. The calculation of the unrecorded cases that is generally accepted provides an estimate of the total dimensions, but Statistics Sweden's Living Conditions Surveys indicate that the number probably is greater. It is not satisfactory that the picture is so uncertain and that the base for calculations of this type is not more solid.

Yet another deficiency in the various government agencies' reporting of measures to counteract, alleviate and combat intimate partner violence is that one uses a number of different ways to describe and define what one is talking about. As we have shown, the Swedish National Council for Crime Prevention and the Swedish Police Service do not even use the same criminal codes when defining the area "violence against women".

The system for criminal statistics currently makes it impossible to follow a "case" along criminal justice system, as the various sectors use different variables for their statistics (crimes reported, victims of crimes, perpetrators/criminals, sentenced offenders). To be able to describe, chart and combat the violence in a satisfactory manner it is necessary to be able to follow the crime, the victim of the crime and the perpetrator through the criminal justice system and in other measures by social institutions.

One group that appears to be especially subjected to intimate partner violence is women and households dependent on social assistance (income support). It is therefore clearly unsatisfactory that this particular group is one of the groups with the largest falling-off in volume surveys such as Statistics Sweden's Living Conditions Surveys and others.

There is a good system within the medical services for reporting cases of external violence of the nature referred to here. However, one problem is that this is only fully-comprehensive with regard to hospitalisation. Outpatient treatment, dental treatment and psychiatric treatment for adults as well as children and young people should be important sources of knowledge for gaining a better understanding of violence in intimate partnerships. At present, the information from these areas is almost non-existent.

In the same way, the social services are a blank field. Measures for women subjected to violence in intimate partnerships and their children are not reported in any official statistics and as our, admittedly limited, contacts with the social services showed they appear to have only very rudimentary knowledge of the scope of the measures. The most recent equality policy inquiry found this lack of knowledge remarkable. The inquiry into the social services' support for women subjected to violence proposed that the social services' measures to assist these women should be included in the official social services statistics.

The costs that afflict the individual woman, her children and those around her, as well as the long-term consequences of the violence, are extremely difficult to capture and report, as we have shown. Calculations and assumptions made in international studies in this field indicate that very large amounts and very long-term effects are involved, which may be expected to affect children who have witnessed violence all their lives and thereby cross several generations. The need for greater knowledge and more research in this field is thus evident and urgent.

## Comparison with other studies

If one looks at international studies, one finds that it is very difficult to make any comparisons. This is mainly because the various studies have had such different starting points, used different types of cost, made different delimitations, and so on. As we have already pointed out, one should also be cautious when making comparisons with results from other countries, as costs may vary due to, for instance, differences in wage levels.

The compilation we have made in the Swedish version of the report shows that the results vary between just over SEK 100 per inhabitant and almost SEK 6 400 per inhabitant and with a median of just over SEK 700 and mean value of just over SEK 1 800 per year and inhabitant. This corresponds to a total cost for a country with a population the size of Sweden's to SEK 6.6 billion and SEK 15.9 billion respectively per year.