Health Impacts of Violent Victimization on Women and their Children

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Contents

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Executive Summary

There is growing evidence of the strong links between violence against women and children and significant physical and mental health impairment, and risky health behaviours. These are prevalent among children, youth and adults victimized during childhood and/or adulthood. Certain groups, for example Canada's Aboriginal women, are at increased risk of more, and more severe, violence, and potentially more significant health impacts.

While physical injuries and death form an important sub-set of the health impacts of violence, the more prevalent consequences are longer-term mental health problems, which in turn contribute to health risks as well as increasing the likelihood of being a violent offender or being re-victimized at a later point in time. As well, newer research points to the longer term chronic diseases associated with violent victimization.

Key findings from the report specific to health impacts of violent victimization are:

Intimate partner violence (IPV) and its impact on women & children's health

- Physical health problems associated with IPV exposure include chronic pain, disability, fibromyalgia, gastrointestinal disorders, irritable bowel syndrome, sleep disorders and general reductions in physical functioning/health-related life quality. Recent analyses indicate that IPV may be associated with cardiac disease.
- In terms of women's reproductive health, IPV is associated with gynaecological disorders, infertility, pelvic inflammatory disease, pregnancy complications/miscarriage, sexual dysfunction, sexually transmitted diseases, including HIV/AIDS, unsafe abortion, and unwanted pregnancy.
- IPV during pregnancy is associated with femicide, and causing direct harm to the fetus, which can result in pre-term birth or injury and low birth weight.
- Adverse outcomes that result from witnessing IPV in childhood include an increased risk of psychological, social, emotional and behavioral problems including mood and anxiety disorders, and drug abuse and school-related problems in children and adolescents.
- IPV is consistently associated with high rates of depression, anxiety disorders (especially post-traumatic stress disorder - PTSD), protracted disabling sleep disorders, phobias and panic disorder, psychosomatic disorders, and suicidal behaviour and self-harm, eating disorders, substance dependence, antisocial personality disorders, and nonaffective psychosis.
- For Aboriginal women with abuse histories, rates of these conditions, especially depression, may be higher, though Aboriginal women exposed to violence self-rate their health at the same levels as do non-Aboriginal women.
- IPV exposure is associated with health risk behaviours, including alcohol and drug abuse, smoking, unsafe sexual behaviour and physical inactivity

Non-partner sexual assault of women

- Most sexual assaults do not result in physical injury however when they do, they may impact reproductive health, including pregnancy and gynaecological complications (vaginal bleeding or infection, fibroids, decreased sexual desire, genital irritation, pain during intercourse, chronic pelvic pain and urinary tract infections), along with sexually transmitted diseases, including HIV infection.
- The mental health consequences of sexual assault mirror those outlined above for IPV, with depression and anxiety, especially PTSD, being most strongly associated with this kind of victimization. Stigmatization may lead to increased rates of suicidal behaviour.

Child sexual abuse (CSA)

- Exposure to CSA is associated with impairment in a broad range of domains, including mental health, physical health, education, criminal behaviour and interpersonal functioning.
- Sexual abuse of girls is associated with both short- and long-term negative effects on mental health, depending on the severity, persistence, and presence of risk and protective factors, both genetic and environmental.
- CSA is a non-specific risk factor for both internalizing and externalizing disorders in girls and adult women; it is associated with neurobiological dysregulation in both child- and adulthood including alterations in the hypothalamic-pituitary-adrenal (HPA) axis, the sympathetic nervous system and more recently, the immune system.
- CSA has mental health impacts into adulthood. Among adult women, there is strong evidence of significant associations between CSA and depression, PTSD, panic disorder, drug and alcohol dependence and suicide attempts.

Multiple forms of child maltreatment/adverse childhood experiences

- Exposure to multiple forms of child maltreatment results in short-term emotional harm, manifested by such behaviours as bed-wetting, nightmares and social withdrawal.
- Longer-term consequences can include:
    - physical health impairment, including chronic obstructive pulmonary disease (COPD), ischemic heart disease (IHD), liver disease, sexually transmitted diseases (STDs), fetal death, and unintended and adolescent pregnancies;
    - mental health impairment including depression, suicide attempts, sleep disorders, and health-related quality of life; and
    - health risk behaviours including alcoholism and alcohol abuse, illicit drug use, risk for intimate partner violence, multiple sexual partners, smoking and early initiation of smoking, and early initiation of sexual activity.

1. Introduction

Violence against women and children is a pervasive social problem in Canada, with significant impacts on a broad range of social and economic outcomes for women, children, families and communities. The present report examines the consequences of intimate partner violence (IPV) against women, and child witnessing of IPV, emphasizing their association with specific physical and mental health outcomes, including health-related quality of life (QoL) and health risk behaviours, where available. While not a primary emphasis of the report, key evidence on the other forms of violence against women and children (sexual assault of women by strangers and child sexual abuse) will also be summarized. The various types of violence against women, including IPV and sexual assault, often result in similar patterns of health impairment (Jordan et al., 2010), as do the impacts on children of witnessing IPV, and being victims of other forms of maltreatment.

1.1 Purpose of this Report

The specific objectives of the report are to:

1) Provide a synthesis of current research on the links between violence and health, both physical and mental health, as in many instances, the two cannot be separated. Given that most of the research in this area focuses on intimate partner violence (IPV) and children witnessing violence, this will be a focus. The synthesis will highlight key findings, trends, common themes and gaps in the research, and will include Canadian research, as well as major studies from the US (e.g. the Adverse Childhood Experiences (ACE) Study), Australia and the UK, as appropriate.
2) Ensure that links between sexual violence and health in cases of intimate partner violence, familial and non-familial child sexual abuse and sexual assaults perpetrated by strangers are also explored.

2. Definitions and Epidemiology

This section defines key concepts and presents the best available evidence regarding the prevalence of, and risk factors for, each type of violence, in Canada.

2.1 Intimate partner violence (IPV) against women

Defined as physical violence, sexual violence, or emotional or financial abuse between current or former married or common-law spouses (Statistics Canada, 2011), IPV is a significant public health and social problem occurring in all countries and all economic, social, religious and cultural groups, and results in significant personal, economic and social costs (World Health Organization, 2002; Garcia-Moreno & Watts, 2011; Ellsberg et al., 2008, Centers for Disease Control and Prevention, 2011). While affecting both men and women, IPV morbidity and mortality are higher for women (Statistics Canada, 2011;Centers for Disease Control and Prevention, 2011, Black & Breiding, 2008), with women exposed to IPV being at increased risk

of injury and death, as well as a range of physical, emotional and social problems (reviewed below).

Different types of violent relationships exist, and these are well-described in the typology developed by Johnson (2006). A key contribution of this typology is that it distinguishes between *situational couple violence* (i.e., less violent, usually episodic conflict between partners which is often bilateral) and *intimate partner terrorism*, a pattern of physical, sexual and/or emotional abuse almost always directed toward women (Johnson, 2006) with the underlying motive being control. IPV against women characterized by coercive control is both more frequent and severe than IPV against men, and women are more likely to sustain injury and to fear for their lives (Ansara & Hindin, 2010; Leone et al., 2004); for example, in Canada, far more women than men are killed by an abusive partner (General Social Survey, Victimization; Statistics Canada, 2011). It is this type of violence that is more likely to result in the kinds of health consequences described below.

Studies of IPV between women in same-sex relationships suggest that the dynamics of abuse are similar to those experienced by women in heterosexual relationships (Eaton et al., 2008; Tjaden & Thoennes, 1999). Clinically-oriented guidance for those serving LGBT clients indicates similar mental and physical health consequences of abuse as for heterosexual victims (e.g., Ard and Makadon, 2011; McClennen, 2005; Balsam, Lehavot and Beadnell, 2011; Kulkin, Williams, Borne, de la Bretonne and Laurendine, 2007), however these studies also outline that some risk factors may differ (e.g., the threat or "outing" as a form of abuse) and that the availability of services specific to LGBT people lags far behind those for heterosexual victims of violence, which themselves are often insufficient (e.g., lack of emergency shelters for abused gay men). Thus in considering the health impacts of victimization reviewed below, it should be noted that, based on current research evidence, they are equally likely to apply to female victims of same sex violence (or adult lesbians exposed to child sexual abuse or sexual assault as an adult), as to heterosexual women.

2.1.1 Prevalence of IPV in Canada

According to Statistics Canada's General Social Survey, approximately 6-7% of Canadian women report exposure to IPV in the past 5 years (Statistics Canada, 2011), and IPV has been estimated to affect one third (Cohen & MacLean, 2004) of Canadian women, while lifetime violence victimization of all types is reported by up to one half of Canadian women (Johnson, 2005). However, this kind of self-reporting is known to underestimate IPV, as are estimates made based on official reports to police or other authorities (Johnson, 2005). Additionally, reported rates of IPV will vary according to where and how women are asked. Studies that use brief screening-type questions may overestimate abuse (Wathen et al., 2008), whereas those that focus solely on physical or sexual violence may underestimate it. Studies that ask women presenting to health settings, or to hospitals versus community clinics, may also not represent all women experiencing violence. For example, in two large-scale Canadian studies set in hospital emergency departments, community-based clinics or family doctors' offices, the prevalence of IPV ranged (in one study of over 2400 women), from 4% (using a screening tool focused on physical and sexual abuse only) to almost 18% (in emergency departments) – across settings,

women least preferred being asked about abuse in face-to-face interviews (versus written or computerized forms), and reported lower rates of abuse when asked this way (MacMillan et al., 2006). Similarly, in a study of over 5600 women presenting to one of 26 Ontario health care sites, IPV assessment using a longer, validated measure that accounts for different types and severity of violence identified 14.4% of these women as experiencing IPV in the past year (Wathen et al., 2008; MacMillan et al., 2009). While it may be that women using health care are more likely to be exposed to violence than those not using health care, it is also likely that these data reflect an underestimation of IPV when relying solely on self-report population surveys.

Based primarily on US data, rates of IPV during pregnancy range from 0.9% to 20.1% with the most stable estimates being 4 to 8% (Shah & Shah, 2010; Devries et al., 2010; Gazmararian et al., 1996; Gazmararian et al., 2000; Martin et al., 2001; Gielen et al., 1994). Estimates from clinical samples of Canadian women place the prevalence of IPV during pregnancy at approximately 6% (Muhajarine and D'Arcy, 1999; Stewart and Cecutti, 1993); in the 1993 Canadian Violence Against Women Survey (VAWS), 21% of women reported abuse during pregnancy, and in under half (40%) of these, the abuse began during pregnancy (Statistics Canada, 1993).

Aboriginal women in Canada are 2-4 times as likely to experience violence by a male partner (Perreault, 2010; Brownridge, 2008), with the most recent GSS data indicating that Aboriginal women report about 3 times more spousal violence than do non-Aboriginal women (about 15% versus 6%), and were more likely to report more severe forms of violence (Brennan, 2011). The dynamics of violence in Aboriginal communities has been partially attributed to the unique experiences of colonization, including ongoing racism and discrimination (Brownridge, 2003; 2008).

IPV does not always end when a relationship ends. Canadian criminal harassment data from the Uniform Crime Reporting (UCR) Survey and the Adult Criminal Court Survey (Milligan, 2011) indicate that women accounted for three-quarters of all victims (76%) of criminal harassment in 2009, with 45% being harassed by a former partner and an additional 6% harassed by a current partner. This differs significantly from patterns of criminal harassment among men (Milligan, 2011). These ongoing forms of harassment and abuse continue to have health and economic impacts on women (see below).

2.1.2 Risk factors for IPV

Many Canadian studies, including national, population-based surveys (Johnson, 2005), as well as large-sample research studies in different settings (e.g., Wathen et al., 2007) have shown a fairly consistent pattern in demographic and relationship- and partner-specific indicators associated with IPV, including: being young, being in a common-law (versus legally married) relationship or being separated; substance abuse by, or un- or under-employment in, male partners; and controlling behaviours on the part of male partners. In addition, witnessing violence in childhood raises the risk of both victimization and perpetration of partner violence (Johnson, 2005).

Exposure to abuse prior to pregnancy is the strongest predictor of victimization during pregnancy (Martin et al., 2001).

2.2 Sexual assault of women

Sexual assault, including rape, is defined as "forced sexual activity, an attempt at forced sexual activity, or unwanted sexual touching, grabbing, kissing, or fondling" (Perreault & Brennan 2010). Rates of sexual assault in Canada, as calculated using Statistics Canada's population-based General Social Survey (GSS), are relatively stable, with a significant increase in the 2009 cycle, as follows: 1999 – 21 per 100,000 (502,000 assaults); 2004 - 21 per 100,000 (546,000 assaults), 2009 - 24 per 100,000 (677,000 assaults), with the majority of reported assaults being the least serious forms (sexual touching, unwanted grabbing, kissing, or fondling) (Perreault & Brennan 2010, Table 6; Dauvergne & Turner 2010). However, rates of sexual assault are almost twice the rate for women as for men, accounting for approximately 70% of all sexual assaults. In just over half (51%) of the cases of self-reported sexual assault, the perpetrator was known to the victim (friend, acquaintance, or neighbour of the victim) (Perreault & Brennan 2010).

2.2.1 Risk factors for sexual assault

Other than being female, which carries 5 times the risk of sexual assault compared to being male, the following have been identified as increasing the risk of sexual assault: being young, attending school, and frequent participation in evening activities (Brennan & Taylor-Butts, 2008).

2.3 Child witnessing of IPV & child sexual abuse

[Both of these exposures are considered forms of child maltreatment, therefore for the purposes of describing their epidemiology, they are presented together in this section, since that is the way they are often assessed. In the review of health-specific outcomes, below, they are presented separately.]

The Canadian Incidence Study (CIS) of Reported Child Abuse and Neglect – led by the Public Health Agency of Canada (PHAC) - is a nation-wide study to examine the incidence of reported child maltreatment and the characteristics of the children and families investigated by Canadian child welfare services. It has now completed three cycles, allowing comparison of trends. While five kinds of acts are generally included in studies describing child maltreatment, the present analysis focuses on two of these: child witnessing of IPV, and child sexual abuse (the other forms: child physical abuse, psychological abuse and neglect, are reported in detail in the CIS Report – PHAC, 2010).

Witnessing, by a child, of any incident of threatening behaviour, violence, or abuse (psychological, physical, sexual, financial, or emotional) between adults who are, or have been, intimate partners or family members is defined as a form of child maltreatment (Gilbert et al., 2009), and in the context of this report, another way in which IPV victimization can have short and longer term health impacts.

Child sexual abuse (CSA) is defined as *"a type of maltreatment that refers to the involvement of the child in sexual activity to provide sexual gratification or financial*

benefit to the perpetrator, including contacts for sexual purposes, molestation, statutory rape, prostitution, pornography, exposure, incest, or other sexually exploitative activities. This can include the risk of sexual abuse." (U.S. Department of Health and Human Services , 2010).

The Canadian Incidence Study (PHAC, 2010) found, in 2008, that 34% (25,259) of the over 85,000 substantiated investigations of child maltreatment were specific to witnessing IPV and 3% (2,607) were cases of child sexual abuse. However, as with IPV, official reports are known to underestimate the actual prevalence and incidence of child maltreatment. For example, findings from a large Ontario community-based survey found that 12.8% of females and 4.3% of males reported sexual abuse during childhood (MacMillan et al., 1997). While no Canadian community-based data are available for rates of witnessing IPV, a review of US community studies estimated yearly prevalence of 10–20% (Carlson, 2000), similar to other reviews that put the range of adults who report having witnessed IPV during childhood at 13% to 27% (Gilbert et al., 2009; Osofsky, 2003; Henning et al., 1996; Dube et al., 2002).

Again, the type of reporting methods used in these studies has a significant impact on reported prevalence and incidence. A recent meta-analysis of global studies conducted by Stoltenborgh et al. (2011) examined estimates by type of report, and concluded that "overall estimated CSA prevalence was 127/1000 in self-report studies and 4/1000 in informant studies. Self-reported CSA was more common among female (180/1000) than among male participants (76/1000)."

In terms of trends in the incidence of CSA, the evidence is mixed; some studies have noted that rates of CSA, along with crime rates generally, are declining, particularly in the US (Finkelhor, 2009); however more comprehensive analyses point to differences in trajectories according to type of report, type of abuse and geographic setting (Gilbert et al., 2012).

2.3.1 Risk factors for child witnessing IPV and child sexual abuse

Risks for these kinds of child maltreatment are complex, involving the interplay of child-specific indicators as well as family and community factors. Female children are more likely to be sexually abused than male children, with international studies and reviews from developed countries finding that the prevalence of sexual abuse is 2-4 times higher among girls than boys (Gilbert et al., 2009). The Canadian Incidence Study (PHAC, 2010), reports the following factors, specific to the child's primary caregiver, as being associated with all forms of child maltreatment, including witnessing IPV and CSA: being a victim of IPV (i.e., 46% of substantiated cases of child maltreatment occurred in situations where the primary caregiver was a victim of IPV); having few social supports (39%); having mental health issues (27%); alcohol (21%) and drug (17%) abuse; being a perpetrator of IPV (13%); physical health issues (10%); history of foster care/group home (8%) and cognitive impairment (6%). Household-level risk factors included: social assistance, employment insurance or other benefits (33% of substantiated cases of child maltreatment occurred in situations where the household was in receipt of these income supports); one move in the past 12 months (20%); at least one household hazard (i.e., drugs or drug paraphernalia, unhealthy of unsafe living conditions, weapons in the home) (12%); public housing (11); and two or more moves in the past 12 months (10%) (PHAC, 2010).

3. Health Consequences of Violent Victimization

In Canada and worldwide, violence is a significant cause of morbidity and mortality for women aged 15-44 years (WHO, 2005). The long-term health consequences of abuse are well documented and vary by the form (i.e., bilateral couple conflict versus intimate partner terrorism), severity and chronicity of abuse, and by exposure to multiple types of abuse (physical, sexual, psychological) that co-occur and recur across the lifespan. Thus, women's health is affected not only by IPV but also their lifetime cumulative abuse experiences, including other forms or sexual assault and abuse during childhood (Scott-Storey, 2011).

This section provides data on the physical and mental health consequences of the various kinds of violence that are the subject of this report. While there are significant physical health consequences of violence against women and children, including injury, death and specific infectious and chronic diseases, much of the burden of suffering arising from violence exposures manifests itself in acute and chronic mental health conditions. Mental health disorders generally account for 13% of total global disease burden (World Health Organization, 2011), and while the overall prevalence of mental health problems is similar in men and women, women experience almost twice as much depression and anxiety as men (Johnson & Stewart, 2010), differences accounted for, in part, by more negative life events including a greater burden of violent victimization (Astbury & Cabral, 2000; Hegarty, 2011).

As reviewed below, the key types of mental health disorders that have been established, through research, to be associated with violence are mood disorders, primarily depression, anxiety disorders, primarily post-traumatic stress disorder (PTSD), substance use disorders and somatic disorders. These and others referred to below are briefly defined and described in Appendix 1.

Another way that research has assessed the impact of violence, and also the impact of interventions meant to reduce violence, is through the concept of quality of life, specifically health-related quality of life. Data on this kind of outcome is also presented, where available and appropriate.

The section is organized such that the main types of violence exposures – IPV and child witnessing of IPV, along with sexual assault of women and child sexual abuse – are each reviewed in terms of the research available on their physical and mental health consequences. Where available, Canadian data are presented and given priority, but in many cases these data are either not available, or not of sufficient scope and quality to provide a complete picture. In these cases, data from comparable settings and jurisdictions (i.e., USA, UK, Australia) are presented. The goal is to present "best available evidence" for each type of health outcome from relevant jurisdictions, highlighting their strengths and limitations. This will provide insight on what will be 'highly' versus 'probably' versus 'probably not' relevant to Canada, and also where specific knowledge gaps exist.

3.1 Health consequences of intimate partner violence

3.1.1 Physical health consequences

3.1.1.1 Injury and Death

Between 2000 and 2009, there were 738 spousal homicides in Canada, representing 16% of all solved homicides and nearly half (47%) of all family-related homicides; women are about three times more likely to be victims of spousal homicide (Statistics Canada, 2011). In 2010, there were 89 victims of homicide by an intimate partner (including a dating partner). However, trends in spousal and dating partner homicide are gradually declining (Statistics Canada, 2011; Hotton Mahoney, 2011). Specifically, the rate of intimate partner homicide decreased 32% from 1980 to 2010 (Hotton Mahoney, 2011). This decline has been attributed to different factors, including improvements in women's socioeconomic status and the increased availability of resources for victims of violence (Dawson et al. 2009; Pottie Bunge 2002; Dugan et al. 1999).

Few comparative studies have examined specific differences in injury patterns indicative of IPV, versus other potential causes (i.e., unintentional injuries). However, a recent systematic review and meta-analysis by researchers at Canada's McMaster University examined all available studies with data comparing injury patterns of those with and without IPV exposures, among women presenting in emergency departments (Wu, Huff & Bhandari, 2010). Wu et al. found that specific injury patterns can differentiate those exposed to IPV versus other kinds of injurious events; specifically head, neck, or facial injuries that were not witnessed (i.e., as would be a car accident); as well, multiple injuries were associated with IPV exposure, whereas thoracic, abdominal, or pelvic injuries, or extremity injuries alone, did not differentiate between abused and non-abused women (Wu et al., 2010). This is consistent with individual, non-comparative studies, which also find that head, especially oral/dental injuries, ocular injuries, strangulation wounds, concussion, internal and external contusions, fractures and open wounds are strongly associated with IPV assaults (WHO, 2005; Fanslow et al., 1998; Sheridan & Nash, 2007).

In Canada, Aboriginal women exposed to IPV are more likely to report injuries than are non-Aboriginal women (59% versus 41%), and they are also more likely to report fearing for their lives (52% versus 31%) (Brannen, 2011).

3.1.1.2 Other physical health outcomes

IPV has been linked to a number of other physical health outcomes, including those related to reproductive health, and chronic and infectious diseases. An international systematic review and meta-analysis by the World Health Organization (WHO) found IPV to be associated with, in addition to the injuries above: chronic pain syndromes (see also below), disability, fibromyalgia, gastrointestinal disorders, irritable bowel syndrome, sleep disorders and general reductions in physical functioning/health-related life quality (AuCoin & Beauchamp, 2007; WHO, 2005).

IPV is also associated with gynaecological disorders, infertility, pelvic inflammatory disease, pregnancy complications/miscarriage, sexual dysfunction, sexually transmitted diseases,

including HIV/AIDS, unsafe abortion, and unwanted pregnancy (WHO, 2005). A number of studies of IPV during pregnancy show it to be significantly associated with femicide (Campbell et al., 2003), and causing direct harm to the fetus, which can result in pre-term birth or injury and low birth weight (WHO, 2005; Campbell et al., 1999; Murphy et al., 2001; Shah & Shah, 2010; Cokkinides et al., 1999).

IPV is associated with health risk behaviours, including alcohol and drug abuse, smoking, unsafe sexual behaviour and physical inactivity (WHO, 2005).

3.1.2 Mental health consequences

IPV is consistently associated with high rates of depression, anxiety disorders (especially PTSD), protracted disabling sleep disorders, phobias and panic disorder, psychosomatic disorders, and suicidal behaviour and self-harm (see reviews by WHO, 2005 and Jordan et al., 2010). Depression and PTSD are the most prevalent mental health impacts of IPV, with considerable co-morbidity of the two disorders (Jordan et al., 2010, Basile et al., 2004). In a meta-analysis of studies of female IPV victims, the mean prevalence of depression was estimated at 47.6% and of PTSD at 63.8% (3-5, and 5 times the general female population rates, respectively) (Golding, 1999). Loss, feelings of shame and guilt, humiliation, entrapment, and lack of control contribute to the development of poor self-esteem and depression (WHO, 2005; Astbury & Cabral, 2000), findings also seen in the 2004 Canadian General Social Survey (AuCoin & Beauchamp, 2007).

Other studies have also identified increased rates of eating disorders, substance dependence, antisocial personality disorders, and nonaffective psychosis (WHO, 2005; Jordan, 2010; Danielson et al., 1998; Golding, 1999; Afifi et al., 2009; Ehrensaft et al., 2006; Ellsberg et al., 2008; Golding, 1999).

For Aboriginal women with abuse histories, colonization and racism may contribute to higher rates than among non-Aboriginal women, of mental health problems such as depression and substance use (MacMillan et al., 2008; Varcoe and Dick, 2008). However Canadian data from the 2009 General Social Survey indicate that Aboriginal women's self-rated mental and physical health does not differ from that reported by non-Aboriginal women (Brannen, 2011), even though, as indicated above, the frequency and severity of their violence exposures are significantly greater.

Because evidence is mounting that depression and PTSD are pathways by which abuse affects physical health (Sutherland et al., 2002; Weaver & Resnick, 2004; Wuest et al., 2009), addressing mental health effects may be important to preventing physical health problems such as chronic pain or cardiac disease. It has also been found that when violence decreases or is eliminated, physical and mental health both improve (Bybee & Sullivan , 2002). However, simply ending a relationship does not mean that the violence and harassment end, as indicated by the Canadian criminal harassment data presented in Section 1 (Milligan, 2011). Recent Canadian data indicate that the ongoing intrusion of former partners impacts women's health for years after they leave the abusive relationship (Wuest et al., 2009).

3.2 Health consequences of sexual assault

Many of the mental and physical health consequences of sexual assault by non-partners mirror those described above, with the significant difference being the generally acute nature of sexual assault, when compared to the more chronic nature of IPV, which often takes multiple forms of physical, sexual and psychological abuse and control. This aspect of chronicity may be why most reviews that evaluate especially the mental health consequences of violent victimization find that IPV has more severe and far ranging consequences on these aspects of women's health. That said, the specific type of sexual assault suffered by a woman, along with any previous history of trauma and abuse, will make each woman's response to victimization unique. Presented below are data from high quality reviews indicating the main types of health consequence of sexual assault of women outside the context of IPV.

3.2.1 Physical health consequences

As summarized in the WHO *World Report on Violence and Health* (Krug et al., 2002), "physical force is not necessarily used in rape, and physical injuries are not always a consequence. Deaths associated with rape are known to occur, though the prevalence of fatalities varies considerably across the world. Among the more common consequences of sexual violence are those related to reproductive, mental health and social wellbeing (p. 162)." Thus while Canadian data from the 2004 General Social Survey indicate that most (93%) sexual assaults resulted in no physical injury to the victim, particularly for victims of sexual touching (96%) compared to sexual attack victims (78%) (Brennan & Taylor-Butts, 2008), findings in the WHO Report, which also examined sexual assault in the context of war, etc., did find a link between these kinds of assaults and reproductive health consequences, including pregnancy and gynaecological complications (vaginal bleeding or infection, fibroids, decreased sexual desire, genital irritation, pain during intercourse, chronic pelvic pain and urinary tract infections), along with sexually transmitted diseases, including HIV infection (Krug et al., 2002).

3.2.2 Mental health consequences

The mental health consequences of sexual assault mirror those outlined above for IPV, with depression and anxiety, especially PTSD, being most strongly associated with this kind of victimization (Krug et al., 2002). The WHO Report, which comprehensively examines the full range of violent victimization, across ages, genders, sites (e.g., individuals, families, communities) and countries, and their impact on health, also highlights that social stigma and ostracism among assaulted women is a significant issue, with the related risk of suicidal behaviour.

3.3 Health consequences of child maltreatment and other traumatic exposures in childhood

3.3.1 Child witnessing of IPV

Adverse outcomes that result from witnessing IPV in childhood include an increased risk of psychological, social, emotional and behavioral problems including mood and anxiety disorders

(see below), and drug abuse and school-related problems in children and adolescents (Gilbert et al., 2009; Kitzmann et al., 2003; Evans et al., 2008; Osofsky, 2003).

These negative effects may continue into adulthood and become part of an intergenerational cycle of violence (Gilbert et al., 2009; Osofsky, 2003; Dube et al., 2002; Doumas et al., 1994); specifically, children who witness violence in the home are more likely to maltreat their own children (Doumas et al., 1994; Schwartz et al., 2006) and are more likely to have violent dating and intimate relationships as adults (either as victims or perpetrators) (Stith et al., 2000; Ehrensaft et al., 2003; Carr & VanDeusen, 2002). Children exposed to IPV are at increased risk of experiencing other forms of abuse by caregivers (e.g., physical and sexual abuse) (Margolin, 1998; McCloskey et al., 1995).

3.3.2 Child sexual abuse

Exposure to CSA is associated with impairment in a broad range of domains, including mental health, physical health, education, criminal behaviour and interpersonal functioning (Gilbert et al., 2009; Friesen et al., 2010), and overlap exists across these domains. For example, a girl who has suffered sexual abuse and is experiencing one or more mental health problems is also at risk for low educational achievement and involvement with the law, among other negative outcomes.

Sexual abuse of girls is associated with both short- and long-term negative effects on mental health, depending on the severity, persistence, and presence of risk and protective factors, both genetic and environmental (Fergusson et al., 1996a,b; Banyard et al., 2001; Putnam, 2003). Of particular note, children who have experienced CSA are at increased risk of exposure to other types of maltreatment, including physical abuse and neglect (Fergusson & Mullen, 1999) and for sexual re-victimization in subsequent years (Roodman & Clum, 2001). Factors associated with more negative outcomes among those exposed to CSA include severity (contact or intercourse compared with non-contact sexual abuse); frequency, duration and the occurrence of other types of maltreatment (Andrew et al., 2004).

CSA is a non-specific risk factor for both internalizing and externalizing disorders in girls and adult women; it is associated with neurobiological dysregulation in both child- and adulthood including alterations in the hypothalamic-pituitary-adrenal (HPA) axis, the sympathetic nervous system and more recently, the immune system (Nunes et al., 2010). Regardless of whether individuals exposed to CSA develop a specific psychiatric disorder, they are at risk for difficulties with affect regulation, impulse control, somatization, cognitive distortions, altered self-perceptions and socialization problems (Putnam, 2003).

Children who have been sexually abused may present with a wide range of symptom patterns, including no symptoms (Kendall-Tackett et al., 1993). In a comprehensive review of studies that involved predominantly samples from sexual abuse assessment or treatment programs, between 21% and 49% were asymptomatic at the time of initial assessment. Sexually abused children were more symptomatic than non-abused children in a broad range of domains that included depression, PTSD, somatic complaints, aggression, behaviour problems and sexualized behaviour. For two other outcomes – suicidal behaviour and poor self-esteem – minimal differences were found.

CSA has mental health impacts into adulthood (Mullen et al., 2000; Andrew et al., 2004). Among adult women, there is strong evidence of significant associations between CSA and depression, PTSD, panic disorder, drug and alcohol dependence and suicide attempts (Andrew et al., 2004). Other mental health conditions related to CSA exposure include somatization, eating disorders, personality disorders and, more recently, psychotic symptomatology (Maniglio, 2009; Afifi et al., 2011). Most studies have found that although the effect of CSA on mental health problems is reduced when family environment is controlled for, CSA still has a significant association with a broad range of adult mental health outcomes.

Some literature suggests that exposure to CSA is linked with higher risk of impairment among adult women compared with men (MacMillan et al., 2001; Molnar et al., 2001), while others have concluded there is no significant difference (Andrew et al., 2004) or that males have higher rates of impairment for some outcomes (Rhodes et al., 2011). It is clear, however, given the higher prevalence of CSA among girls, that CSA is associated with a higher percentage of disability-adjusted life years for females compared with males (Andrew et al., 2004).

3.4 Multiple forms of child maltreatment/adverse childhood experiences

IPV, sexual violence, and child maltreatment often overlap in families (Gilbert et al., 2009; Dong et al., 2004), and, as mentioned above, many studies evaluate the impact of multiple forms of child maltreatment at once, including physical and sexual abuse, neglect and exposure to IPV. While the above sections have identified studies which have looked at the impacts of the two forms of violent victimization of children that are the focus of this report, the next section provides an overview of major studies that have looked more comprehensively at child maltreatment exposures and different kinds of health outcomes across the lifespan.

Data from the Canadian Incidence Study (CIS) of Reported Child Abuse and Neglect (PHAC, 2010) indicate that few cases of substantiated abuse result in physical injury, with 8% reporting some kind of injury, and most of these (6%) being cuts, scrapes and bruises. Disaggregated by type of abuse, these data showed that sexual abuse more often accounted for these injuries (11%) than did witnessing IPV (1%) (physical abuse accounted for 26% of these injuries, emotional abuse 5% and neglect 6%).

In terms of short-term emotional harm, the CIS found that 29% of cases of substantiated abuse result in some form of harm apparent to the assessors (note, these were not clinically diagnosed) including bed-wetting, nightmares and social withdrawal. Disaggregated by type of abuse, these data showed that sexual abuse more often accounted for this kind of harm (47%), which was more severe, than did witnessing IPV (26%) (physical abuse accounted for 26% of emotional harms, emotional abuse 36% and neglect 30%). The CIS does not follow cases to assess long-term consequences of this kind of abuse.

The US Adverse Childhood Experiences (ACEs)[1] Study is a very large, longitudinal study designed to assess the impact into adulthood of exposure to 10 types of ACEs, grouped into three categories that occurred in the participant's first 18 years of life. These ACE categories and

[1] see http://www.cdc.gov/ace/index.htm for links to reports, summaries, data and methods issues, and publications

events are: 1) emotional, physical or sexual abuse; 2) emotional or physical neglect; and 3) five kinds of household dysfunction: mother treated violently; household substance abuse; household mental illness; parental separation or divorce; incarcerated household member. The ACE Score is calculated by assessing the cumulative exposure to different types of ACE. Generally, the higher the ACE score, the more significant the association with negative health impacts.

The primary findings of various ACE Study analyses indicated the following relationships between ACE exposures and adult health:

- **Physical health**: chronic obstructive pulmonary disease (COPD), ischemic heart disease (IHD), liver disease, sexually transmitted diseases (STDs), fetal death, and unintended and adolescent pregnancies.

- **Mental health**: depression, suicide attempts, sleep disorders, and health-related quality of life.

- **Health risk behaviours**: alcoholism and alcohol abuse, illicit drug use, risk for intimate partner violence, multiple sexual partners, smoking and early initiation of smoking, and early initiation of sexual activity.

While the ACE cohort sample is very large (over 17,000 participants), and follows people longitudinally, the sample was drawn from a US Health Management Organization (HMO) population, which might limit its generalizability to other groups, for example more poor or marginalized people without health insurance (in the US context), or to other countries with different health systems.

4. Synthesis and Conclusions

4.1 Summary of evidence

4.1.1 IPV and its impact on women & children's health

- IPV remains a significant cause of death and injury among Canadian women, with certain groups, in particular Aboriginal women, experiencing more, and more severe forms of, violence.

- Other physical health problems associated with IPV exposure include chronic pain, disability, fibromyalgia, gastrointestinal disorders, irritable bowel syndrome, sleep disorders and general reductions in physical functioning/health-related life quality. Recent analyses indicate that IPV may be associated with cardiac disease.

- In terms of women's reproductive health, IPV is associated with gynaecological disorders, infertility, pelvic inflammatory disease, pregnancy complications/miscarriage, sexual dysfunction, sexually transmitted diseases, including HIV/AIDS, unsafe abortion, and unwanted pregnancy.

- IPV during pregnancy is associated with femicide, and causing direct harm to the fetus, which can result in pre-term birth or injury and low birth weight.

- Adverse outcomes that result from witnessing IPV in childhood include an increased risk of psychological, social, emotional and behavioral problems including mood and anxiety disorders, and drug abuse and school-related problems in children and adolescents.

- IPV is consistently associated with high rates of depression, anxiety disorders (especially PTSD), protracted disabling sleep disorders, phobias and panic disorder, psychosomatic disorders, and suicidal behaviour and self-harm, eating disorders, substance dependence, antisocial personality disorders, and nonaffective psychosis.

- For Aboriginal women with abuse histories, rates of these conditions, especially depression, may be higher, though Aboriginal women exposed to violence self-rate their health at the same levels as do non-Aboriginal women.

- IPV exposure is associated with health risk behaviours, including alcohol and drug abuse, smoking, unsafe sexual behaviour and physical inactivity

4.1.2 Sexual assault of women

- Most sexual assaults do not result in physical injury however when they do, they may impact reproductive health, including pregnancy and gynaecological complications (vaginal bleeding or infection, fibroids, decreased sexual desire, genital irritation, pain during intercourse, chronic pelvic pain and urinary tract infections), along with sexually transmitted diseases, including HIV infection.

- The mental health consequences of sexual assault mirror those outlined above for IPV, with depression and anxiety, especially PTSD, being most strongly associated with this kind of victimization. Stigmatization may lead to increased rates of suicidal behaviour.

4.1.3 Child sexual abuse

- Exposure to CSA is associated with impairment in a broad range of domains, including mental health, physical health, education, criminal behaviour and interpersonal functioning.

- Sexual abuse of girls is associated with both short- and long-term negative effects on mental health, depending on the severity, persistence, and presence of risk and protective factors, both genetic and environmental.

- CSA is a non-specific risk factor for both internalizing and externalizing disorders in girls and adult women; it is associated with neurobiological dysregulation in both child- and adulthood including alterations in the hypothalamic-pituitary-adrenal (HPA) axis, the sympathetic nervous system and more recently, the immune system.

- CSA has mental health impacts into adulthood. Among adult women, there is strong evidence of significant associations between CSA and depression, PTSD, panic disorder, drug and alcohol dependence and suicide attempts.

4.1.4 Multiple forms of child maltreatment/adverse childhood experiences

- Exposure to multiple forms of child maltreatment results in short-term emotional harm, manifested by such behaviours as bed-wetting, nightmares and social withdrawal.

- Longer-term consequences can include:
  - physical health impairment, including chronic obstructive pulmonary disease (COPD), ischemic heart disease (IHD), liver disease, sexually transmitted diseases (STDs), fetal death, and unintended and adolescent pregnancies.
  - mental health impairment including depression, suicide attempts, sleep disorders, and health-related quality of life.
  - health risk behaviours including alcoholism and alcohol abuse, illicit drug use, risk for intimate partner violence, multiple sexual partners, smoking and early initiation of smoking, and early initiation of sexual activity.

4.2 Conclusions

There is growing evidence of the strong links between violence against women and children and significant physical and mental health impairment, and risky health behaviours. These are prevalent among children, youth and adults victimized during childhood and/or adulthood. Certain groups, for example Canada's Aboriginal women, are at increased risk of more, and more severe, violence, and potentially more significant health impacts.

While physical injuries and death form an important sub-set of the health impacts of violence, the more prevalent consequences are longer-term mental health problems, which in turn contribute to health risks as well as increasing the likelihood of being a violent offender or being re-victimized at a later point in time. As well, newer research points to the longer term chronic diseases associated with violent victimization, including gastrointestinal disorders, chronic pain, and cardiac disease.

The present report focused on the burden of suffering of several forms of violence victimization of women and children, in particular the prevalence, incidence and risk factors for these kinds of violence, and their physical and mental health consequences. The report did not endeavour to summarize the literature on health and other (e.g., social service, justice) interventions for these kinds of abuse – i.e., what can be done to prevent them in the first place, or to prevent recurrence or impairment after exposure.

Briefly, while more is known in some intervention areas (i.e., child maltreatment, see MacMillan et al., 2009b), little evidence exists for interventions in others (e.g., IPV, see Wathen & MacMillan, 2003; Ramsay et al., 2009). A full review of interventions is beyond the scope of this report.

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Appendix 1: Definitions of Mental Health Disorders

(from DSM-IV - http://allpsych.com/disorders/dsm.html)

Post-traumatic Stress Disorder (PTSD)

Category: Anxiety Disorders

By definition, PTSD always follows a traumatic event which causes intense fear and/or helplessness in an individual. Typically the symptoms develop shortly after the event, but may take years. The duration for symptoms is at least one month for this diagnosis.

Symptoms include re-experiencing the trauma through nightmares, obsessive thoughts, and flashbacks (feeling as if you are actually in the traumatic situation again). There is an avoidance component as well, where the individual avoids situations, people, and/or objects which remind him or her about the traumatic event (e.g., a person experiencing PTSD after a serious car accident might avoid driving or being a passenger in a car). Finally, there is increased anxiety in general, possibly with a heightened startle response (e.g., very jumpy, startle easy by noises).

Prognosis ranges from moderate to very good. Those with the best prognosis include situations where the traumatic event was acute or occurred only one time (e.g., car accident) rather than chronic, or on-going trauma (e.g., ongoing sexual abuse, war).

Major Depressive Disorder (Unipolar Depression)

Category: Mood Disorders

Research has shown that depression is influenced by both biological and environmental factors. Studies show that first degree relatives of people with depression have a higher incidence of the illness, whether they are raised with this relative or not, supporting the influence of biological factors. Situational factors, if nothing else, can exacerbate a depressive disorder in significant ways. Examples of these factors would include lack of a support system, stress, illness in self or loved one, legal difficulties, financial struggles, and job problems. These factors can be cyclical in that they can worsen the symptoms and act as symptoms themselves.

Symptoms of depression include the following:

- depressed mood (such as feelings of sadness or emptiness)
- reduced interest in activities that used to be enjoyed, sleep disturbances (either not being able to sleep well or sleeping to much)
- loss of energy or a significant reduction in energy level
- difficulty concentrating, holding a conversation, paying attention, or making decisions that used to be made fairly easily
- suicidal thoughts or intentions.

Major Depressive Disorder has a better prognosis than other mood disorders in that medication and therapy have been very successful in alleviating symptomotology. However, many people with this disorder find that it can be episodic, in that periodic stressors can bring back symptoms. In this case, it is often helpful to have an ongoing relationship with a mental health professional just as you would a physician if you had diabetes or high blood pressure.

Substance Abuse

Category: Substance Related Disorders

There is evidence that genetic factors play a role in both dependence and abuse. Other theories involve the use of substances as a means to cover up or get relief from other problems

(e.g., psychosis, relationship issues, stress), which makes the dependence or abuse more of a symptom than a disorder in itself.

A pattern of substance use leading to significant impairment in functioning. One of the following must be present within a 12 month period: (1) recurrent use resulting in a failure to fulfill major obligations at work, school, or home; (2) recurrent use in situations which are physically hazardous (e.g., driving while intoxicated); (3) legal problems resulting from recurrent use; or (4) continued use despite significant social or interpersonal problems caused by the substance use. The symptoms do not meet the criteria for substance dependence as abuse is a part of this disorder. Prognosis is variable. Both substance abuse and dependence is difficult to treat and often involves a cycle of abstinence from the substance and substance use.

Sleep Disorders: Dyssomnias

Primary Sleep disorders are divided into two subcategories: Dyssomnias are those disorders relating to the amount, quality, and timing of sleep. Parasomnias relate to abnormal behavior or physiological events that occur during the process of sleep or sleep-wake transitions. We use the perm primary to differentiate these sleep disorders from other sleep disorders that are caused by outside factors, such as another mental disorder, medical disorder, or substance use.

Somatization Disorder

Category: Somatoform Disorders

The exact cause of this disorder is unknown. Research has shown some evidence for genetic as well as environmental factors may play a role. These disorders include a history of physical complaints prior to age 30 which occur over a period of several years. There must be a significant impairment in functioning or a history of resulting medical treatment. After appropriate assessment by a physician, there is a lack of explanation for the reported symptoms or for at least the severity of the complaints. Treatment typically includes long term therapy. The involvement of a single physician is important as a history of seeking medical attention and 'doctor shopping' is common. Somatization is typically a chronic condition with a variable course. Individuals with this disorder do not experience any significant difference in mortality rate or significant illness.