Mental health consequences of violence against women and girls

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Purpose of review
Recent studies on mental health consequences of violence against women and girls were reviewed in a range of situations.

Recent findings
Although several studies continued to show cross-sectional associations between child sexual abuse (CSA) and mental health outcomes, a few prospective studies showed a robust association between CSA and depression. Studies on the impact of dating violence are still at a nascent stage and focus on antecedents of violence rather than its consequences. Women at higher risk, such as adolescents, migrants, the homeless, and women in the perinatal period have been studied and specific vulnerabilities identified. Women reporting bidirectional violence had higher rates of depression and post-traumatic stress disorder (PTSD). Cumulative violence, severity of violence, and recent violence are associated with higher morbidity. Studies among women in conflict zones have emphasized the role of different forms of sexual and physical violence on mental health.

Summary
Newer emerging areas that need more research include mental health consequences of women in conflict zones and among same sex relationships. There are also few studies on the violence experience of both older women and adolescents. The need to better delineate the psychopathology of complex manifestations of PTSD is underscored.

Keywords
childhood sexual abuse, dating violence, intimate partner violence, mental health, pregnant women

INTRODUCTION

The impact of interpersonal violence on a woman's mental health and wellbeing is evident both immediately as well as in the long term. Violence or interpersonal trauma render women vulnerable to a range of psychiatric disorders such as depressive disorders, anxiety disorders, posttraumatic stress disorder, eating disorders, somatoform disorders, substance use disorders, and personality disorders [1].

The current review is an update of empirical research published globally in the area of 'mental health consequences of physical, psychological, and sexual violence against women and girls' from April 2014 to April 2015. Specifically, the review focuses on mental health consequences of childhood sexual abuse (CSA), intimate partner violence, and violence in special populations such as pregnant women. More recent areas of interest include the emotional consequences of violence against women in conflict zones of the world, in the area of dating violence and that which occurs in same sex relationships.

Popular search engines such as, *Pubmed, Google Scholar, Scopus* were accessed. The review includes both qualitative and quantitative studies that are cross-sectional/correlational. It does not include intervention studies, review studies, or meta-analyses. Attempts have been made to ensure that there is a representation of studies from different parts of the world.

CHILD ABUSE AND MENTAL HEALTH OUTCOMES

Childhood experiences of violence have been significantly associated with negative mental health, substance use outcomes across the lifespan [2–7], and suicide attempts and self-injurious behaviors [8,9].

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KEY POINTS

- Research has established a relationship between violence and mental health outcomes among women and girls.
- Most research has been cross-sectional/correlational studies and there is a need for prospective, longitudinal, meditational, and mixed methods designs.
- A nuanced approach to research is warranted to understand relative contributions of risk and protective factors in the association between violence and mental health outcomes.
- Greater research attention may be given in future to vulnerable populations such as women in conflict zones, same sex relationships, older women, and adolescents.
- The overlay of sociocultural variables on the link between violence and mental health in developing countries with patriarchal norms may be further investigated.

Prospective studies have been gaining prominence in understanding the long-term consequences of childhood abuse experiences. The causal links between CSA and adult major depression were assessed among female twins ($N = 1493$) from the Virginia Adult Twin Study of Psychiatric and Substance Use Disorders. Structural equation modeling was applied to test the fit of the model to data that consisted of retrospective self and cotwin reports on history of CSA, confounding covariates, and lifetime history of major depression. The model showed that CSA is significantly associated with lifetime major depression. However, it failed to prove a causal association [10▪▪].

Data from 7700 women aged between 28 and 33 years, born between 1973 and 1978 in the Australian Longitudinal Study on Women's Health was analyzed to understand the impact of CSA and experiences of violence in adulthood, on physical and mental health in a community sample [11▪▪]. Women with CSA experience were 1.4 times more likely to experience bodily pain [AOR = 1.37, 95% confidence interval (CI) 1.19–1.58] and 1.3 times more likely to be depressed in the past three years (AOR = 1,44, 95% CI 1.22–1.71) compared with women without CSA experiences. The risk for physical health and mental health problems was two to three times higher if the women experienced CSA as well as violence in adulthood. Women with experiences of CSA and adult violence compared with women without such history reported more depression [adjusted odds ratio (AOR) = 2.84, 95% CI 2.13–3.78] and anxiety (AOR = 3.10, 95% CI 2.12–4.53). This study showed that women who reported violence in adulthood in addition to CSA had more mental health problems compared with women with CSA alone. A study on the association of suicidal behavior with CSA found that depressive and posttraumatic stress symptoms significantly predicted suicidal ideation [12▪].

The literature on child abuse among girls and later mental health problems is continuing to develop, but has been mostly confined to selective geographical areas with smaller samples and cross-sectional studies. Prospective studies, although aimed at showing a causal association between childhood abuse and later mental health problems, could only demonstrate a consistent temporal association. Failure to establish a causal association does not necessarily indicate a lack of association. Therefore, research efforts should be intensified to find out factors that are less known, for instance, understanding protective factors and resilience among women and girls with experience of abuse and also factors that might confer additional risk.

DATING VIOLENCE AND MENTAL HEALTH

With many young adolescent girls and boys initiating dating relationships, studying violence in this context becomes pertinent [13]. Research has shown a greater prevalence of bidirectional violence (victimization and perpetration) in dating relationships by men and women alike, contrary to the literature on intimate partner violence (IPV) in which women report higher victimization rather than perpetration. Although studies have mainly examined antecedents of dating violence, [14,15] those examining mental health outcomes of dating violence are few. Findings from the National Comorbidity Survey-Revised indicated that both internalizing and externalizing disorders were associated with involvement in bidirectional physical dating violence. Girls with attention deficit hyperactivity disorder and substance use disorder were at greatest risk [16▪▪]. Another study indicated that self-rated health was low and depressive symptoms were high for those involved in an abusive dating relationship and observed that health ramifications persisted long after the relationship had ended [17▪]. In another study the prevalence of dating violence was 34% and psychopathology was 15% in a sample of undergraduate students. Both psychoticism and neuroticism traits predicted dating violence and were correlates of psychopathology [18].

With an initial focus on physical aggression, studies have grown to incorporate psychological and sexual violence. Although studies have mostly

relied on undergraduate student samples and retrospective accounts of violence, longitudinal research, and mediation models will be beneficial in tracing antecedents, mediating/moderating variables, and outcomes more efficiently. Further, use of qualitative or mixed methods will be essential to better understand the changing sociocultural fabric and its relation to dating violence and mental health especially in countries where secrecy about these relationships may prevent reporting.

INTIMATE PARTNER VIOLENCE AND MENTAL HEALTH

Intimate partner violence is known to impact mental health of women in diverse ways, although symptoms and disorders of anxiety, depression, post-traumatic stress disorder (PTSD), suicide, and substance use are most common. In a multi country cross-sectional survey on the impact of IPV on adolescent women's health, both IPV and nonpartner sexual violence were associated with poor mental health, substance use, sexual and reproductive health, and self-rated health [19▪]. Interestingly, a greater proportion of women with IPV had poor mental health outcomes but similar physical health outcomes compared with women without IPV [20].

On sex and ethnicity differences, it was found that African–Americans, Hispanics, and women were more likely to be victims, perpetrators or both compared with Whites and men [21]. Further a population-based study in Rwanda [22▪▪] showed sex differences in the rates of psychiatric disorders in that the rates of depression, suicide, and PTSD were more than two times higher for women reporting IPV compared with men, although rates of generalized anxiety disorder was comparable between sexes. Among other social adversities, migration was an important variable associated with both IPV and poor mental health [23–25]. Higher rates of psychiatric disorders were observed among homeless women who were victimized by both intimate and nonintimate partners [26] and for these women interestingly, social isolation, which otherwise acts as a risk factor [27] actually decreased the odds of victimization.

When examining differences in rates of psychiatric disorders by the type of violence, it was found that all types of violence (physical, psychological, and sexual) were strongly associated with all types of psychiatric disorders in women [22▪▪]. Studies have found specific associations between different types of violence or victim/perpetrator/bidirectional and psychiatric disorders, but these associations have not been very consistent [20]. However, a qualitative study from Iran has emphasized that emotional and covert forms of violence are as significant as overt forms (physical and sexual) for mental health and wellbeing [28]. Further, severity of psychiatric symptoms increased stepwise with increasing severity of IPV [29]. Women who reported past year IPV had greater odds of reporting current PTSD compared with women who reported lifetime PTSD. Interestingly, women who reported conflict violence/violence during armed conflict were less likely to develop PTSD [30▪▪]. Sexual trauma in particular was also found to be associated with greater somatic symptoms [31,32]. Population-based studies have also shown that the presence and severity of different psychiatric disorders was highest for those reporting bidirectional violence [33]. Among women experiencing bidirectional IPV, avoidance coping was found to mediate the relationships between psychological and sexual IPV victimization and the outcomes of PTSD symptom severity, depression severity, and drug use problems [34▪▪].

Although most studies reviewed here are cross-sectional, very few have examined the role of predictor, mediator, and moderator variables. Prospective studies in this area are also relatively few. One such study enrolled women without a history of depression to test the independent effect of IPV on depression. Findings indicated that IPV independently accounted for poor mental health after controlling for socioeconomic deprivation, childhood maltreatment, young motherhood, and personality. Women who were abused both in childhood and adulthood were four to seven times more likely to suffer from depression and psychosis spectrum symptoms than never-abused women [35▪▪]. Although it is clear that women reporting IPV can experience a range of psychiatric disturbances, and thereby constitute a high-risk group, they are ironically less likely to utilize mental health services [36]. Studies examining factors that protect women from IPV and poor mental health outcomes found better problem focused coping [37], attachment security [38,39], social support [40], and resilience [41] to be significant.

VIOLENCE AND MENTAL HEALTH IN SAME SEX RELATIONSHIPS

Interpersonal violence and mental health in same sex relationships have received relatively less research attention. We have reviewed a few studies that focused on violence and mental health in lesbian and gay relationships. A study on Mexican adolescents found that teenagers in same sex relationships had an increased risk for depressive symptoms, suicidal intention, attempted suicide, and alcohol abuse [42]. In another study, history

of exposure to violence in the family and school made them more vulnerable for victimization. Lesbian and bisexual women reported higher rates of trauma (including sexual assault) in their lifespan compared with heterosexual women veterans. Childhood trauma and trauma during military service added most variance to PTSD and depression models [43]. The relationships among history of sexual assault, drinking norms (perceptions about drinking), and alcohol use in lesbian and bisexual women was examined [44▪▪]. Severity of CSA was associated with a higher likelihood of experiencing sexual assault in adulthood that was under the influence of alcohol and exerting greater physical force. Further, sexual assault in adulthood was associated with higher drinking norms and drinking behavior. Another study [45▪▪] used logistic regression models to analyze the National Violence Against Women Survey dataset and found partial support for the hypothesis that nonheterosexuals who reported experiencing child abuse were more likely to report IPV victimization as adults than heterosexuals. The above studies indicate that individuals in same sex relationships are as vulnerable if not more, to interpersonal trauma and subsequent mental health concerns. However, research in this area is nascent and very little research exists in developing countries.

IMPACT OF VIOLENCE ON THE MENTAL HEALTH OF PREGNANT AND POSTPARTUM WOMEN

It is now well known that intimate partner violence occurs even during pregnancy and affects the mental health of women both in pregnancy and the postpartum. However, a few studies included in the current review elaborated on specific issues, which have hitherto been less researched. These included the impact of timing of abuse on postpartum mental health (i.e., before or/and during pregnancy), relationship of type of abuse (i.e., psychological, physical, or sexual), specific postpartum mental health problems (stress, anxiety, depression, obsessive compulsive disorder, and posttraumatic stress disorder), and the effect of severity and cumulative impact of different types of abuse in pregnancy.

Suicidal ideation in pregnancy and its relation to IPV was assessed in a sample of 166 low-income urban women. The study found that experiencing IPV was associated with an over nine times increased odds for suicidal ideation [46]. Further, violence during pregnancy had a greater impact on mental health compared with that experienced before pregnancy [47▪▪]. Physical violence during pregnancy appeared to have the most impact on postpartum mental health and was associated with depression, obsessive-compulsive disorder, and posttraumatic stress disorder. The study also emphasized that cumulative effect of violence and severity of violence had a higher impact on postpartum mental health. Research from three developing countries raised several important issues. In a study among 660 women from rural Bangladesh, more than half (52%) reported that their husbands were physically violent with them after childbirth. Sixty-five percent of the women reported being forced to have sex against their will. There was a strong association between physical violence and poor mental health but not so much with psychological violence or sexual coercion [48▪].

In Malawi, Stewart *et al.* [49,50], found that IPV was strongly associated with mental health problems and also found a buffering effect of perceived significant other support against depression in those exposed to IPV. In Peru, Barrios *et al.* [51▪] studied 1500 low-income pregnant women and found a higher rate of IPV among those with a history of childhood physical and sexual abuse. A history of childhood abuse was associated with 30% higher odds of self-reported poor health status and higher rates of depression in pregnancy.

The pregnancy and postpartum period continue to be a time for great vulnerability for violence. This has implications for fetal and infant health as well as pregnancy outcomes, both directly as a physical consequence of violence and mediated through maternal stress. Cumulative violence and the absence of buffering effects such as social support, confers a higher risk for mental health problems. More studies are needed that focus on the combination of mental health and reproductive consequences.

MENTAL HEALTH CONSEQUENCES OF CONFLICT-RELATED VIOLENCE

Several reports studied the impact of violence on the mental health of women in conflict zones in Africa. A cross-sectional survey of Congolese refugee women living in Rwanda studied the association of mental health with conflict-related violence and IPV [52▪▪]. Almost half of the 548 women studied reported experiencing violence during the conflict period. Using Latent Class Analysis the authors identified four classes: the low all violence class; the high violence during conflict class; the high IPV class which had high levels of IPV but not conflict-related violence; and the high violence during and after conflict class. The odds of experiencing emotional distress was highest among women in the High IPV class, approximately, that is, 4.7 times greater than those in the Low Violence group (95% CI 2.53–8.59) and

twice that of women in the High Violence During Conflict class (95% CI 1.04–3.98).

A similar study done in Côte d'Ivoire in West Africa, found that IPV experiences were a stronger and more consistent correlate of PTSD than violence experienced during the war [53]. These findings underscore the importance of considering the critical role partner violence has in the mental health of women, even in the face of conflict-related violence.

Sexual violence is used in most conflict zones as a 'weapon of war'. Women may be raped, experience nonconsensual sex, and/or have a Sexual Violence-Related Pregnancy (SVRP). Using a Respondent Driven Sampling method, 750 women from the Democratic Republic of Congo who were raising a child born of an SVRP participated in a study on mental health outcomes [54▪▪]. About 48.6% women met symptom criteria for depression, 57.9% for PTSD, 43.3% for anxiety, and 34.2% reported suicidality. Women who reported having a spouse at the time of the survey were less likely to meet criteria for depression. However, those who reported stigma from the community, spouse, or family toward themselves or toward the child were more likely to meet criteria for depression (56.8 versus 43.9%, $P = 0.002$), PTSD (71.9 versus 52.0%, $P < 0.0001$), anxiety (60.5 versus 35.8%, $P < 0.0001$), and suicidality (47.1 versus 25.7%, $P < 0.0001$). Women who reported acceptance following sexual violence and/or acceptance of the child from the spouse, family and/or community were less likely to meet criteria for mental health disorders.

Adolescent girls are especially vulnerable both to sexual violence and mental health problems in conflict ridden zones. The effect of sexual violence maybe influenced both by rape-related stigma and stressors-related or unrelated to war. A sample of 1034 girls from the eastern Democratic Republic of Congo, a region afflicted by armed conflict, were interviewed to assess the above factors. A total of 14% (183) confirmed having been raped, whereas 24% (315) reported having a nonconsensual sexual experience. Symptoms of PTSD, anxiety, and depression were all high among girls who reported any form of sexual violence. Interestingly, girls reporting nonconsensual sex had higher rates of mental health problems than those reporting rape, indicating the role of labeling in perceived stigma and shame. Higher scores on war-related trauma and daily stress and higher levels of stigma were also associated with more psychological problems [55,56▪▪].

These studies about the impact of different kinds of violence on mental health of women in conflict zones have important policy implications for humanitarian assistance programmes and can inform strategies to optimize mental health among conflict-affected populations.

CONCLUSION

Although substantial research has been published in the field of mental health consequences of violence against women and girls, what is lacking are prospective, longitudinal, meditational, and mixed methods designs.

Newer emerging areas that merit greater research attention include mental health consequences of women in conflict zones, among older women and adolescents.

What is not clear, however, is the multiple pathways through which this occurs, including neurobiological and psychological pathways.

A more nuanced approach to research appears to be needed based on the above review. Why does intimate partner violence have a higher impact on mental health than any other form of violence? Why do women with both CSA and IPV have higher rates of posttraumatic stress disorder than CSA alone? Do standard definitions and descriptions of PTSD apply in these more intimate forms of violence or should we be describing a different psychopathology? Should research focus on better forms of measurement, rather than using scales that have been developed for a completely different kind of trauma? These are areas that future research in the field may be able to shed some light on.

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Conflicts of interest

There are no conflicts of interest to declare.

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- ▪ of special interest
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Both the above studies done in the same sample of adolescent girls in conflict zones of Africa, highlight the role of stigma and self labeling among victims of sexual violence. Both rape and nonconsensual forms of sexual violence are used as 'weapons of war' and enhance the vulnerability of women in conflict areas. The fact that nonconsensual sexual violence was associated with more mental health problems than violence labeled as rape, indicates the need for a broader definition of sex-based violence both in nomenclature and in the way society views different forms of violence against women.