Domestic Violence and Perinatal Mental Health

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28.1 Domestic Violence

Violence against women is recognised by the World Health Organization (WHO) as a major public health problem, the majority of which comprises intimate partner violence (IPV) [1]. IPV is behaviour by an intimate partner or ex-partner causing physical, sexual or psychological harm. The broader definition of domestic violence and abuse (DVA) adopted in the United Kingdom (UK) includes such behaviour perpetrated by other family members aged 16 years or older, as well as by partners and ex-partners [2]. However, most research on the perinatal period focuses on IPV. Examples of DVA include physical aggression, sexual coercion, psychological, emotional, financial abuse and controlling behaviours. The growth of digital technology means that DVA may continue online, when survivors and perpetrators are not physically co-located.

IPV is common, worldwide. Global prevalence estimates suggest that around 30% of ever-partnered women have experienced IPV [3]. The WHO multi-country study, which surveyed 24,000 women across 10 low-, middle-, and high-income countries, found high rates of physical IPV (13–61%), sexual IPV (6–59%) and psychological IPV (20–75%) [4]. In England and Wales, 29% of women and 14% of men have experienced DV [5]. In the United States (US), a national survey found that 36% of women and 33% of men experienced IPV in their lifetime [6].

IPV appears to be even commoner among people experiencing mental health problems. England's Adult Psychiatric Morbidity Survey of over 7400 people identified elevated odds of lifetime IPV among women with common mental disorders (adjusted odds ratio (aOR) = 4.4) [7]. A UK survey also found higher odds of IPV

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among female mental health service users than the general population (aOR = 2.7) [8]. A review of the literature found that lifetime prevalence of severe DV among people admitted to psychiatric inpatient wards ranged from 30% to 60%, although rates were lower for men, when disaggregated by gender. Routine detection of DV in clinical mental health settings was uncommon [9]. It is important that mental health professionals are aware of and consider DV as part of patient-centred bio-psycho-social assessment and management plans.

28.2 Domestic Violence in Pregnancy

IPV during pregnancy is associated with a range of adverse health outcomes for the woman and foetus [10]. Fatal outcomes are homicide and suicide, whilst non-fatal outcomes include physical and mental ill-health and injuries, reproductive and sexual health problems and deleterious health behaviours (see Fig. 28.1).

The WHO multi-country study of women's health applied standardised instruments and research methods to survey populations across ten countries. It found that

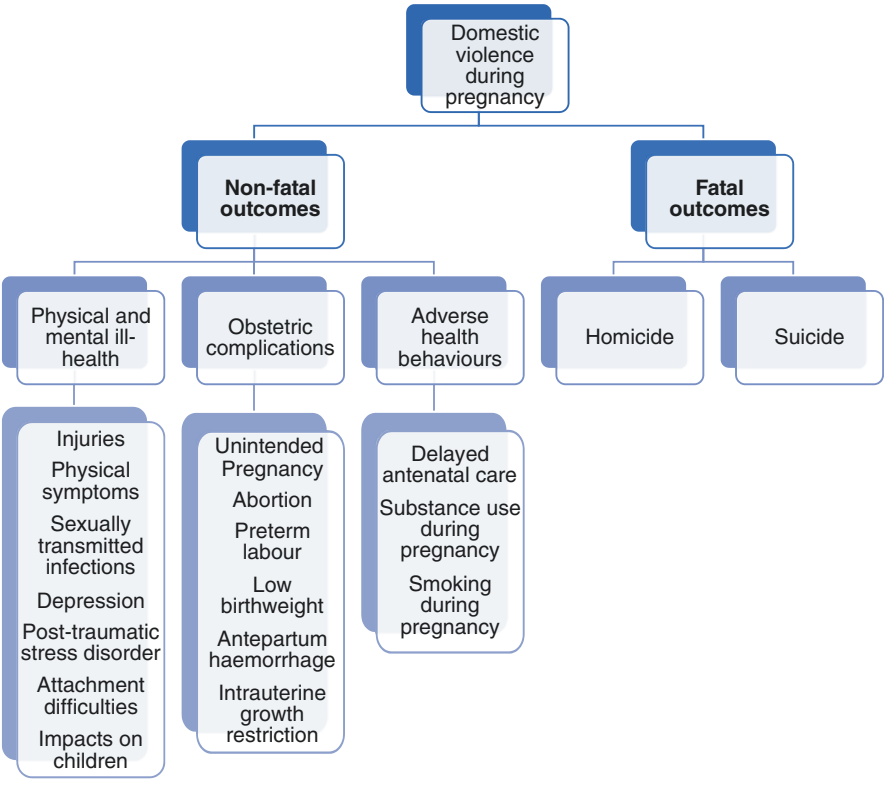

Fig. 28.1 Health impacts of DV during pregnancy [10]

the prevalence of physical IPV during pregnancy ranged from 1% in urban Japan to 28% in provincial Peru, ranging from 4% to 12% in most sites [11]. A meta-analysis of 92 studies of DV during pregnancy found an average reported prevalence of 28% for emotional abuse, 14% for physical abuse and 8% for sexual abuse [12]. In the 55 studies reporting risk factors, pre-pregnancy abuse and lower education were strong predictors of IPV during pregnancy; lower socio-economic status, being unmarried and 'unintended' abuse were moderate predictors.

A meta-analysis of African studies found high heterogeneity of reported IPV prevalence (e.g. between 2% and 49% in Nigerian studies) during pregnancy but an overall prevalence of 15% across 13 studies [13]. Five studies showed a significant association between HIV-positive status and experiencing IPV during pregnancy (OR = 1.48–3.10) after adjusting for confounders, although two studies found no association. Alcohol use by the partner (OR = 2.52–4.10) or the woman (OR = 4.59–11.60) was significantly associated with IPV during pregnancy in the five Nigerian, South African and Rwandan studies examining this relationship. Seven studies reported associations between prior abuse and IPV during pregnancy. It is therefore important that all health professionals are aware of the potential for DV during their contacts with pregnant and postpartum women.

28.3 Impacts on Physical Health

Homicide and suicide are fatal outcomes associated with IPV. A study of female victims of reproductive age using the US National Violent Death Reporting System between 2003 and 2007 found pregnancy-associated suicide and femicide rates of 2.0 and 2.9 per 100,000 live births, respectively [14]. Fifty-four percent of pregnancy-associated suicides featured contributory intimate partner conflict, and 45% of pregnancy-associated femicides were associated with IPV. IPV during pregnancy is a risk factor for intimate partner femicide [15], making it particularly important that health professionals in contact with pregnant and post-partum women always consider the possibility of IPV. Risks, including femicide, can escalate when the woman tries (or is suspected of planning) to leave and after separation [16], making safety planning a central part of supporting women experiencing IPV (see Box 28.1).

IPV can cause a range of direct and indirect non-fatal injuries. The WHO multi-country study identified significant associations between lifetime IPV and self-reported poor health (OR = 1.6), emotional distress, suicidal thoughts (OR = 2.9) and suicide attempts [17]. Lifetime IPV was also associated with past month pain (OR = 1.6), dizziness (OR = 1.7), memory loss (OR = 1.8), vaginal discharge (OR = 1.8), difficulty walking (OR = 1.6) and difficulty with daily activities (OR = 1.6).

Large studies [18] and meta-analyses [19] show that the risk of smoking during pregnancy is greater for women experiencing IPV. Smaller studies support a similar relationship for alcohol [20] and other substance use [21]. A review of research into

adverse health consequences of prenatal IPV proposed a range of intersecting pathways between maternal stress, mental ill-health, attachment, substance use, nutritional intake, antenatal care use and infection and long-term child development [22]. The authors highlighted the need for more research in low- and middle-income countries (LMICs), studies designed to overcome confounding and research into interventions addressing these pathways.

Box 28.1 Inquiring About DV in Perinatal Settings

WHO recommends the LIVES framework for providing women with first-line support for IPV in any clinical context [23]. Healthcare professionals should:

- **Listen** closely, with empathy, without judging.
- **Inquire** about the woman's emotional, physical, social and practical needs and concerns.
- **Validate her**: Show that you understand, respect and believe the woman, assuring her that she is not to blame.
- **Enhance her safety**: Does she feel safe to go home today? What would she do if DV recurred?
- **Support** her to make her own decisions. Help her to access information, services and social support. She may prefer you to refer her for support or to refer herself when she feels ready. DV agencies can advocate for women, help them to access accommodation and support them with safety planning to mitigate risks associated with continuing the relationship or leaving.

Antenatal care is a particularly important opportunity to provide women with first-line support, because the regularity of appointments and potential for continuity of care can build trusting relationships that enable women to disclose DV.

28.4 Impacts on Pregnancy

Studies in low- [24] and high-income countries [25] indicate that IPV is associated with late presentation to antenatal care (ANC). A review of demographic and health surveys in 10 LMICs found that in the Dominican Republic and Zambia, women experiencing IPV were less likely to seek antenatal care within the first 3 months of pregnancy, after multivariate adjustment [26]. In Rwanda, women experiencing IPV were less likely to deliver at a health facility, after multivariate adjustment.

Analysis of WHO multi-country study data for over 17,500 women across 10 countries found elevated odds of unintended pregnancy (aOR = 1.69) and abortion (aOR = 2.68) among women experiencing physical and/or sexual IPV after adjusting for confounders [27]. Assaults during pregnancy are associated with immediate

(e.g. uterine rupture) and long-term (e.g. premature delivery) harm to the woman and foetus [28].

Meta-analyses support an association between DV and low birthweight (aOR = 1.53) and preterm birth (aOR = 1.46) [29]. A cohort study of 4750 pregnant women in Canada found an increased risk of antepartum haemorrhage (aOR = 3.79), intrauterine growth restriction (aOR = 3.06) and perinatal death (aOR = 8.06) in women experiencing physical IPV [30]. Mechanisms which may explain the relationship between IPV and adverse maternal and foetal outcomes include physical trauma, negative maternal coping, poor maternal nutrition, inadequate ANC and elevated stress levels [31].

28.5 Impacts on Mental Health

An analysis of WHO multi-country study data for almost 21,000 women across 13 rural and urban sites showed that after adjusting for common mental disorders, the most consistent risk factors for suicide attempts were IPV, non-partner physical violence, relationship separation, childhood sexual abuse and maternal history of IPV [32]. Twenty-five to 50% of women with suicidal thoughts in the past 4 weeks had seen a health worker during that time, underscoring the role clinicians can play in supporting women experiencing DV.

IPV and mental health have a bidirectional relationship: IPV increases the risk of mental health problems, and mental health problems increase vulnerability to IPV. For example, systematic reviews show associations between IPV and subsequent depression and alcohol use disorders and that depressive symptoms and alcohol use disorders predict later IPV [33, 34]. A meta-analysis found associations between the severity of IPV and the severity of depression and post-traumatic stress disorder (PTSD) and that rates of depression decrease with time since cessation of IPV [35]. A systematic review suggested that IPV frequency is associated with risk of depression and PTSD and that IPV severity was associated with anxiety symptoms [36].

Qualitative interviews with mental health service users and staff in South London identified a range of barriers to disclosing DV [37]. Survivor barriers to disclosure included fears of social services involvement and subsequent child protection proceedings, not being believed, disclosure leading to further violence and feelings of shame. Staff barriers to inquiry included concerns about their role and its boundaries, their confidence and competence. Both groups considered the biomedical model of care to be a barrier to disclosure and inquiry but reported that a supportive and trusting relationship between service users and professionals is facilitative. A qualitative meta-synthesis of 12 studies found that mental health services often fail to inquire and facilitate disclosure of DV or to respond in ways that prioritise safety [38]. Insufficient consideration was given to the impact of DV in triggering or worsening mental ill-health, and the stigma associated with DV obstructed effective responses. These findings demonstrate the need for strong leadership to prioritise DV in mental health settings, for high-quality training, clear referral pathways and supervision structures for staff.

28.6 Impacts on Perinatal Mental Health

A meta-analysis of 67 studies found that the odds of postpartum depressive symptoms (OR = 3.1) were elevated in women who experienced IPV during pregnancy and that women with high perinatal depressive, anxiety and post-traumatic stress disorder symptoms had increased odds of having experienced DV [39]. A large UK birth cohort study of over 13,500 child-mother dyads found that after adjusting for potential confounders, antenatal DV was associated with antenatal (OR = 4.02) and postnatal (OR = 1.29) depressive symptoms [40]. Antenatal DV predicted future behavioural problems in children at 42 months of age (OR = 1.87), but the association was not significant after adjustment for maternal antenatal or postnatal depressive symptoms or postpartum DV.

A Swedish longitudinal cohort study of almost 1,700 pregnant women found that a history of childhood or adulthood abuse (including DV) was associated with depressive symptoms, lower stress management scores, unemployment, being single, living apart from a partner and financial hardship [41]. Women with a history of abuse were more likely to have premature labour and to require caesarean section (OR = 1.33). Women with a history of emotional abuse were more likely to have a planned or emergency caesarean (OR = 1.5).

A prospective cohort study of over 1,500 nulliparous women in Australia found that postpartum depressive symptoms were associated with emotional abuse alone (aOR = 2.72), physical abuse (aOR = 3.94), antenatal depression (aOR = 2.89) and unemployment in early pregnancy (aOR = 1.6) [42].

Smaller studies have found associations between DV during pregnancy and maternal attachment [43] and maternal assessments of infant temperament [44]. A systematic review which included 16 papers found that in half or more of the studies reporting relevant data, IPV was associated with shorter breastfeeding duration and early cessation of exclusive breastfeeding [45]. Evidence for an association between IPV and reduced initiation of breastfeeding was mixed. One study of 1,200 Chinese women in Hong Kong found that women who did not experience IPV during pregnancy were more likely to initiate breastfeeding (aOR = 1.84) than those who did, after adjusting for potential demographic, socioeconomic and obstetric confounders [46].

Box 28.2 Additional Considerations when Working Remotely

Increased help-seeking for DV and higher numbers of domestic homicides were reported in the UK [47] and internationally [48] during the coronavirus (COVID-19) pandemic [49]. Many in-person clinical services stopped, with much routine healthcare (including some ANC) being delivered remotely. Telemedicine has a range of potential benefits but limits women's opportunities to disclose DV to clinicians outside their home. During any national

emergency, women and families may have less contact with schools, community centres, voluntary sector agencies and other settings where DV might usually be detected. Guidance on safeguarding [50] and responding to DV [51] during COVID-19 remains relevant to any remotely delivered perinatal care:

- Consider social, emotional and financial stressors women are experiencing. Ask them about their life and relationships as well as their health.
- Remember that DV can happen to anyone. Do not assume that a pregnant woman cannot be experiencing DV because she does not look or act distressed.
- Do not forget that DV is perpetrated by family members as well as intimate partners. During national emergencies, family members may be living in more confined proximity for longer periods of time than is usual, increasing the risk of abuse.
- In cases of social distancing and lockdown, remember that women and children experiencing DV may be trapped at home with an abuser, isolated from support.
- For all telephone and video consultations, check who else is in the room or at home and if it is safe to talk.
- For remote contact via email, text messaging or apps, discuss with the woman whether an abusive partner has access to her phone or computer.
- Consider using closed 'yes'- or 'no'-answered questions, so that the content of discussion cannot be understood by someone else in the room.
- Agree a 'safe phrase' which the woman will use if interrupted by an abusive partner during the contact, such as 'thanks but I am not interested'. Agree how you will contact her to follow up, if the call is terminated in this way.
- Do not use friends, family members or carers to provide language interpretation. Plan a separate call involving a professional interpreter at a time when the conversation will not be overheard.
- Offer telephone follow-up at another time.
- Encourage women to use telephone or online means to connect with friends, family and professionals.
- Share contact details of relevant support organisations, and inform women that DV is a justification for breaking lockdown rules.
- Consider whether a face-to-face assessment is required where you have concerns about a woman's safety. Call the police in an emergency.
- In maternity settings, accompaniment by partners to routine appointments is sometimes restricted. Whilst this increases opportunities to enquire about DV, abusive partners may try to control women's hospital attendance. Ensure that all unattended appointments are followed up.

28.7 Perinatal Mental Health Interventions for Women Experiencing DV

Given the risks to the health and wellbeing of the woman and foetus during pregnancy, ANC is an important opportunity to support women experiencing DV. In low-resource contexts, ANC may be a woman's only healthcare contact. Furthermore, regular appointments, potential for continuity of care provider and postpartum follow-up make ANC well-suited to building the trust and rapport required to discuss sensitive subjects [10].

A systematic review identified 17 interventions for pregnant women experiencing IPV, of which two targeted mental health and three addressed both mental health and violence [52]. The first mental health-focused study was a randomised feasibility study of five sessions of interpersonal psychotherapy between pregnancy and 2 weeks postpartum, for women with low incomes experiencing IPV in Rhode Island [53]. The intervention was associated with lower PTSD symptoms at 3 months postpartum but not fewer perinatal depressive episodes. The second mental health-focused study was an uncontrolled pilot study of weekly perinatal child-parent psychotherapy from the third trimester until 6 months postpartum, for women experiencing IPV in San Francisco [54]. The intervention was associated with improvements in depressive and post-traumatic stress symptoms, but drop-out rates were high (44%).

One integrated intervention for mental health and IPV was evaluated by a cluster-randomised trial of 12 months of weekly at-home befriending, advocacy, parenting support and referrals, from trained, supervised English- and Vietnamese-speaking local mothers in Melbourne [55]. The authors found significant reductions in IPV scores for the intervention group compared with the control group, but only non-significant differences in depression and mental wellbeing.

A Hong Kong randomised controlled trial (RCT) of a one-off ANC empowerment intervention for women experiencing IPV found improved physical functioning and role limitation due to physical and emotional problems in the intervention group [56]. Women in the intervention group reported less psychological and minor physical abuse, but the same levels of sexual and severe physical abuse as women in the control group, post-participation. Women who received the intervention had lower postnatal depression scores but reported more body pain than control participants.

Four studies identified by the systematic review [52] evaluated the (Washington) DC Healthy Outcomes of Pregnancy Expectations (DC-HOPE) integrated education and counselling intervention. Aimed at African American women experiencing at least one of smoking, environmental tobacco smoke exposure, depression and IPV, DC-HOPE was delivered in four to eight sessions. The RCT found no difference between the intervention and control groups in depressive symptom improvement at follow-up [57], but frequency of minor IPV during pregnancy and severe IPV postpartum was reduced in the intervention group [58]. Obstetric findings were

lower rates of very preterm birth in the intervention group [59] but no difference in a range of other adverse pregnancy and neonatal outcomes [60].

A systematic review of interventions for pregnant women reporting DV in LMICs identified only six eligible studies [61]. Of these, only one reported impacts on depression. This quasi-experimental study evaluated an empowerment-based three-session psychosocial intervention focused on explaining gender-based violence, safety assessment and signposting to support in Kisumu, Kenya. Women in the intervention group had lower mean depressive symptom scores post-participation than women in the control arm [62].

Reviews of the evidence show that most DV-focused and mental health-DV integrated interventions have only limited impacts on perinatal mental health. Our recent meta-analysis found that five generic psychological interventions (n = 728) for common mental disorders in LMICs showed greater improvements in anxiety symptoms among women reporting IPV than women not reporting IPV [63]. There was no significant difference in women's treatment response for depression (12 interventions, n = 2940), PTSD (8 interventions, n = 1436) or psychological distress (4 interventions, n = 1591), by IPV status. Only three included studies were conducted with pregnant women, and several listed pregnancy as an exclusion criterion. These findings suggest that psychological interventions delivered by appropriately trained and supervised health-care staff in LMICs are effective for women experiencing IPV, even when not tailored for this population or targeting violence directly. More research is required to determine whether tailoring perinatal mental health interventions for the needs of women experiencing IPV improves their feasibility, acceptability and efficacy.

28.8 Conclusion

DV is common worldwide, both during and outside the perinatal period. DV has a range of consequences for the health, wellbeing and safety of pregnant women, the foetus and other children. Women with pre-existing mental health disorders are at increased risk of experiencing DV, and people who have experienced DV are at risk of developing mental health problems. A relatively small number of studies have evaluated integrating DV and mental health support for pregnant women, with mixed results. In LMICs, brief psychological interventions for common mental disorders are at least as effective for women experiencing IPV as for women not experiencing IPV, but more research is needed that explores tailoring perinatal mental health treatments for survivors. The 'LIVES' framework of listening, inquiry, validating, enhancing the woman's safety and connecting her with sources of support should be used by all clinicians to provide first-line support to women experiencing DV. Holistic perinatal mental healthcare requires clinicians to identify and respond to all bio-psycho-social factors precipitating and perpetuating symptoms, to promote women and families' health, wellbeing and safety.

References

1. WHO. violence against women 2017. Available from https://www.who.int/en/news-room/fact-sheets/detail/violence-against-women.
2. Home_Office. Information for local areas on the change to the definition of domestic violence and abuse 2013. Available from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/142701/guide-on-definition-of-dv.pdf.
3. WHO. Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence: World Health Organization; 2013.
4. Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. Lancet. 2006;368(9543):1260–9.
5. Office_for_National_Statistics. Domestic abuse prevalence and trends, England and Wales: year ending March 2019; 2019. Available from https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/domesticabuseprevalenceandtrendsenglandandwales/yearendingmarch2019.
6. Smith SG, Zhang X, Basile KC, Merrick MT, Wang J, Kresnow M-J, et al. National intimate partner and sexual violence survey: 2015 data brief; 2018.
7. Jonas S, Khalifeh H, Bebbington PE, McManus S, Brugha T, Meltzer H, et al. Gender differences in intimate partner violence and psychiatric disorders in England: results from the 2007 adult psychiatric morbidity survey. Epidemiol Psychiatric Sci. 2014;23(2):189–99.
8. Khalifeh H, Moran P, Borschmann R, Dean K, Hart C, Hogg J, et al. Domestic and sexual violence against patients with severe mental illness. Psychol Med. 2015;45(4):875–86.
9. Howard L, Trevillion K, Khalifeh H, Woodall A, Agnew-Davies R. Domestic violence and severe psychiatric disorders: prevalence and interventions. Psychol Med. 2010;40(6):881–93.
10. WHO. Intimate partner violence during pregnancy 2011. Available from https://apps.who.int/iris/bitstream/handle/10665/70764/WHO_RHR_11.35_eng.pdf?sequence=1.
11. WHO. WHO multi-country study on women's health and domestic violence against women: initial results on prevalence, health outcomes and women's responses: World Health Organization; 2005.
12. James L, Brody D, Hamilton ZJV. Victims. Risk factors for domestic violence during pregnancy: a meta-analytic review. Violence Victims. 2013;28(3):359–80.
13. Shamu S, Abrahams N, Temmerman M, Musekiwa A, Zarowsky C. A systematic review of African studies on intimate partner violence against pregnant women: prevalence and risk factors. PLoS One. 2011;6(3):e17591.
14. Palladino CL, Singh V, Campbell J, Flynn H, Gold K. Homicide and suicide during the perinatal period: findings from the National Violent Death Reporting System. Obstetr Gynecol. 2011;118(5):1056.
15. Campbell JC, Webster D, Koziol-McLain J, Block C, Campbell D, Curry MA, et al. Risk factors for femicide in abusive relationships: results from a multisite case control study. Am J Public Health. 2003;93(7):1089–97.
16. BMA_Board_of_Science. Domestic abuse 2014. Available from https://www.bma.org.uk/collective-voice/policy-and-research/equality/healthcare-for-vulnerable-group/domestic-abuse-report.
17. Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. Lancet. 2008;371(9619):1165–72.
18. Cheng D, Salimi S, Terplan M, Chisolm MS. Intimate partner violence and maternal cigarette smoking before and during pregnancy. Obstetr Gynecol. 2015;125(2):356.
19. Crane CA, Hawes SW, Weinberger AH. Intimate partner violence victimization and cigarette smoking: a meta-analytic review. Trauma Violence Abuse. 2013;14(4):305–15.

20. Flynn HA, Walton MA, Chermack ST, Cunningham RM, Marcus S. Brief detection and co-occurrence of violence, depression and alcohol risk in prenatal care settings. Arch Women's Mental Health. 2007;10(4):155–61.
21. Udo IE, Lewis L, Jessica B, Tobin JN, Ickovics JR. Intimate partner victimization and health risk behaviors among pregnant adolescents. Am J Public Health. 2016;106(8):1457–9.
22. Murray AL, Kaiser D, Valdebenito S, Hughes C, Baban A, Fernando AD, et al. The intergenerational effects of intimate partner violence in pregnancy: mediating pathways and implications for prevention. Trauma Violence Abuse. 2020;21(5):964–76.
23. WHO. Responding to intimate partner violence and sexual violence against women: WHO clinical and policy guidelines 2013. Available from https://apps.who.int/iris/bitstream/handle/10665/85240/9789241548595_eng.pdf;jsessionid=E19DCC3CDAB9BE390EE6F8360C6F1D7E?sequence=1.
24. Rahman M, Nakamura K, Seino K, Kizuki M. Intimate partner violence and use of reproductive health services among married women: evidence from a national Bangladeshi sample. BMC Public Health. 2012;12(1):913.
25. Goodwin MM, Gazmararian JA, Johnson CH, Gilbert BC, Saltzman LE, Group PW. Pregnancy intendedness and physical abuse around the time of pregnancy: findings from the pregnancy risk assessment monitoring system, 1996–1997. Matern Child Health J. 2000;4(2):85–92.
26. Hindin MJ, Kishor S, Ansara DL. Intimate partner violence among couples in 10 DHS countries: Predictors and health outcomes. Calverton, MD: Macro International Inc.; 2008.
27. Pallitto CC, García-Moreno C, Jansen HA, Heise L, Ellsberg M, Watts C. Intimate partner violence, abortion, and unintended pregnancy: results from the WHO Multi-country Study on Women's Health and Domestic Violence. Int J Gynecol Obstetr. 2013;120(1):3–9.
28. El Kady D, Gilbert WM, Xing G, Smith LH. Maternal and neonatal outcomes of assaults during pregnancy. Obstetr Gynecol. 2005;105(2):357–63.
29. Shah PS, Shah J. Maternal exposure to domestic violence and pregnancy and birth outcomes: a systematic review and meta-analyses. J Women's Health. 2010;19(11):2017–31.
30. Janssen PA, Holt VL, Sugg NK, Emanuel I, Critchlow CM, Henderson AD. Intimate partner violence and adverse pregnancy outcomes: a population-based study. Am J Obstetr Gynecol. 2003;188(5):1341–7.
31. Alhusen JL, Ray E, Sharps P, Bullock L. Intimate partner violence during pregnancy: maternal and neonatal outcomes. J Women's Health. 2015;24(1):100–6.
32. Devries K, Watts C, Yoshihama M, Kiss L, Schraiber LB, Deyessa N, et al. Violence against women is strongly associated with suicide attempts: evidence from the WHO multi-country study on women's health and domestic violence against women. Soc Sci Med. 2011;73(1):79–86.
33. Devries K, Child JC, Bacchus LJ, Mak J, Falder G, Graham K, et al. Intimate partner violence victimization and alcohol consumption in women: a systematic review and meta-analysis. Addiction. 2014;109(3):379–91.
34. Devries KM, Mak JY, Bacchus LJ, Child JC, Falder G, Petzold M, et al. Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. PLoS Med. 2013;10(5):e1001439.
35. Golding JM. Intimate partner violence as a risk factor for mental disorders: a meta-analysis. J Fam Violence. 1999;14(2):99–132.
36. Lagdon S, Armour C, Stringer M. Adult experience of mental health outcomes as a result of intimate partner violence victimisation: a systematic review. Eur J Psychotraumatol. 2014;5(1):24,794.
37. Rose D, Trevillion K, Woodall A, Morgan C, Feder G, Howard L. Barriers and facilitators of disclosures of domestic violence by mental health service users: qualitative study. Br J Psychiatry. 2011;198(3):189–94.
38. Trevillion K, Hughes B, Feder G, Borschmann R, Oram S, Howard LM. Disclosure of domestic violence in mental health settings: a qualitative meta-synthesis. Int Rev Psychiatry. 2014;26(4):430–44.

39. Howard LM, Oram S, Galley H, Trevillion K, Feder G. Domestic violence and perinatal mental disorders: a systematic review and meta-analysis. PLoS Medicine. 2013;10(5):e1001452.
40. Flach C, Leese M, Heron J, Evans J, Feder G, Sharp D, et al. Antenatal domestic violence, maternal mental health and subsequent child behaviour: a cohort study. Br J Obstetr Gynaecol. 2011;118(11):1383–91.
41. Finnbogadóttir H, Baird K. Thies-Lagergren LJBp, childbirth. Birth outcomes in a Swedish population of women reporting a history of violence including domestic violence during pregnancy: a longitudinal cohort study. BMC Pregnancy Childbirth. 2020;20(1):1–10.
42. Woolhouse H, Gartland D, Hegarty K, Donath S, Brown S. Depressive symptoms and intimate partner violence in the 12 months after childbirth: a prospective pregnancy cohort study. Br J Obstetr Gynaecol. 2012;119(3):315–23.
43. Pires de Almeida C, Sá E, Cunha F, Pires EP. Violence during pregnancy and its effects on mother–baby relationship during pregnancy. J Reprod Infant Psychol. 2013;31(4):370–80.
44. Quinlivan JA, Evans S. Impact of domestic violence and drug abuse in pregnancy on maternal attachment and infant temperament in teenage mothers in the setting of best clinical practice. Arch Women's Mental Health. 2005;8(3):191–9.
45. Normann AK, Bakiewicz A, Madsen FK, Khan KS, Rasch V, Linde DS. Intimate partner violence and breastfeeding: a systematic review. BMJ Open. 2020;10(10):e034153.
46. Lau Y, Chan KS. Influence of intimate partner violence during pregnancy and early postpartum depressive symptoms on breastfeeding among Chinese women in Hong Kong. J Midwifery Women's Health. 2007;52(2):e15–20.
47. Kelly J, Morgan T. Coronavirus: domestic abuse calls up 25% since lockdown, charity says. BBC News; 2020. Available from https://www.bbc.co.uk/news/uk-52157620.
48. Graham-Harrison E, Giuffrida A, Smith H, Ford L. Lockdowns around the world bring rise in domestic violence. The Guardian; 2020. Available from https://www.theguardian.com/society/2020/mar/28/lockdowns-world-rise-domestic-violence.
49. Roesch E, Amin A, Gupta J, García-Moreno C. Violence against women during covid-19 pandemic restrictions. Br Med J. 2020;369.
50. Royal_College_of_General_Practitioners. COVID-19 and safeguarding; 2020. Available from https://elearning.rcgp.org.uk/pluginfile.php/149180/mod_resource/content/2/COVID-19%20and%20Safeguarding%20%286%29.pdf.
51. IRISi. Guidance for general practice teams responding to domestic abuse during telephone and video consultations; 2020. Available from https://irisi.org/wp-content/uploads/2020/04/Guidance-for-General-Practice-Covid-19-FINAL.pdf.
52. Howell KH, Miller-Graff LE, Hasselle AJ, Scrafford KE. The unique needs of pregnant, violence-exposed women: a systematic review of current interventions and directions for translational research. Aggression Violent Behav. 2017;34:128–38.
53. Zlotnick C, Capezza NM, Parker D. An interpersonally based intervention for low-income pregnant women with intimate partner violence: a pilot study. Arch Women's Mental Health. 2011;14(1):55–65.
54. Lavi I, Gard AM, Hagan M, Van Horn P, Lieberman AF. Child-parent psychotherapy examined in a perinatal sample: depression, posttraumatic stress symptoms and child-rearing attitudes. J Soc Clin Psychol. 2015;34(1):64–82.
55. Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA. Mothers' AdvocateS In the Community (MOSAIC)-non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. BMC Public Health. 2011;11(1):178.
56. Tiwari A, Leung W-C, Leung T, Humphreys J, Parker B, Ho P. A randomised controlled trial of empowerment training for Chinese abused pregnant women in Hong Kong. Br J Obstetr Gynaecol. 2005;112(9):1249–56.
57. El-Mohandes AA, Kiely M, Joseph JG, Subramanian S, Johnson AA, Blake SM, et al. An integrated intervention in pregnant African Americans reduces postpartum risk: a randomized trial. Obstetr Gynecol. 2008;112(3):611.

58. Kiely M, El-Mohandes AA, El-Khorazaty MN, Gantz MG. An integrated intervention to reduce intimate partner violence in pregnancy: a randomized trial. Obstetr Gynecol. 2010;115(2 Pt 1):273.
59. El-Mohandes AA, Kiely M, Gantz MG, El-Khorazaty MN. Very preterm birth is reduced in women receiving an integrated behavioral intervention: a randomized controlled trial. Matern Child Health J. 2011;15(1):19–28.
60. Subramanian S, Katz KS, Rodan M, Gantz MG, El-Khorazaty NM, Johnson A, et al. An integrated randomized intervention to reduce behavioral and psychosocial risks: pregnancy and neonatal outcomes. Matern Child Health J. 2012;16(3):545–54.
61. Daley D, McCauley M, van den Broek N. Interventions for women who report domestic violence during and after pregnancy in low-and middle-income countries: a systematic literature review. BMC Pregnancy Childbirth. 2020;20(1):1–9.
62. Mutisya RK, Ngure K, Mwachari C. A psychosocial intervention to reduce gender-based violence and antepartum depressive symptoms in pregnant women in Kisumu County, Kenya: a quasi-experimental study. Pan African Med J. 2018;29(1):1–9.
63. Keynejad RC, Hanlon C, Howard LM. Psychological interventions for common mental disorders in women experiencing intimate partner violence in low-income and middle-income countries: a systematic review and meta-analysis. Lancet Psychiatry. 2020;7(2):173–90.