ship between trauma exposure and onset of other psychiatric disorders, there are several mechanisms that can be considered, and these arguably function in an interactive manner.

One key potential mechanism is the impact of PTSD on the capacity to down-regulate emotional distress. It is well documented that PTSD involves impaired emotion regulation, and it is possible that this impairment predisposes people to develop new psychiatric disorders or worsens others[5]. The capacity to regulate emotions in PTSD can be related to the well-documented deficits in executive functioning[6]. Deficient working memory and attentional capacity can limit the extent to which one can regulate emotions, which can result in greater risk for mental health problems.

Moreover, avoidance is a key symptom of PTSD, and this can trigger a cascade of strategies that can be maladaptive. Avoidance can involve situations or thoughts and memories related to the traumatic experience. This tendency can generalize to more pervasive avoidance of social networks, emotional states, and activities that promote good mental health. This can lead to a worsening of depression, anxiety and other psychiatric conditions.

Another common form of avoidance for people with PTSD is self-medicating with prescription or non-prescription substances to numb the distress that is experienced along with traumatic memories. This behaviour can not only lead to substance abuse, which has been documented in longitudinal studies of PTSD, but also facilitate other psychiatric problems, because issues may not be addressed in a constructive manner. Avoidance tendencies can also result in not seeking help from mental health services, which can impede early intervention or adequate treatment for other psychiatric disorders.

The DSM-5 explicitly recognizes the presence of harmful behaviors in PTSD, including such risk-taking behaviors as dangerous driving, severe alcohol use, and self-harm. These reactions are conceptualized as a result of the extreme arousal and the difficulties in impulse control that can be experienced by people with PTSD[7]. These behaviors can lead to a range of events and habits triggering repetitive cycles of exposure to trauma. This can compound the sensitization that has been reported in PTSD, in which the condition results in neural sensitivity to threats and stressors in one's environment, such that the person is more reactive to these events.

One of the strongest transdiagnostic predictors of risk for mental health problems is represented by maladaptive or catastrophic appraisals about oneself or the environment[8]. A key feature of PTSD is the tendency to engage in catastrophic appraisals after the traumatic experience, and these appraisals can generalize to many aspects of a person's life, such as one's self-esteem, trust in others, fears of negative evaluations, germs, or self-blame. These cognitive tendencies are major risk factors for an array of psychiatric conditions, including anxiety, depression, eating disorders, and obsessive-compulsive disorder. Relatedly, the tendency to ruminate is well documented after trauma, and this habit of repeatedly thinking about negative events is a major risk factor for many psychiatric conditions.

In considering these various mechanisms for how PTSD can moderate other psychiatric problems, it is worth noting that many of the risk factors reviewed here may be present prior to trauma exposure, and in fact predispose the person to developing PTSD. These elements can be intensified as PTSD develops, and then contribute to other psychiatric conditions which have a shared vulnerability. In this context, it is especially worth recognizing the emerging evidence on shared genetic vulnerabilities to a range of psychiatric disorders[9]. In the wake of trauma exposure and PTSD development, gene expression can predispose an individual to develop other psychiatric disorders by means of the shared genetic vulnerability.

Overall, this evidence reflects the interactive multifactorial nature of the processes explaining how PTSD can lead to the onset or worsening of other psychiatric conditions. Understanding how PTSD can impact on other psychological problems is an important area of future research, because it has important treatment implications. Targeting PTSD may have downstream benefits for many problems beyond the specific domain of that disorder.

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Intimate partner violence and mental health: lessons from the COVID-19 pandemic

Domestic violence and abuse is a global public health issue adversely impacting both physical and mental health. Intimate partner violence is one of the most common forms, and includes physical, sexual and emotional abuse (including technology-enabled abuse) and controlling or coercive behaviour from a partner or ex-partner.

Women and girls are particularly at risk for intimate partner violence. Globally, 27% of ever-partnered women aged 15 years

and older have experienced this violence, with the highest prevalence in low-income countries[1]. Risk factors can occur at four levels: a) individual (e.g., disability); b) relationship (e.g., partner exposure to parental violence, substance misuse); c) community (e.g., poverty, crime) and d) societal (e.g., inequitable gender roles, humanitarian and conflict settings, inadequate laws, such as those regarding marital rape, or inadequate law enforcement)[2]. The risk of intimate partner violence may increase during the perinatal period, particularly in unplanned pregnancies.

Public health restrictions during the COVID-19 pandemic have led to an increase in time at home with partners, with an associated rise in intimate partner violence, as evidenced by an increase in calls to helplines and contact with other support services[3]. In many countries, frequent lockdowns and quarantine rules have resulted in women having poor access to transport, shelters, safe houses and third sector services, compounding the problem. Remote delivery of health care has also presented new challenges for practitioners identifying and responding to intimate partner violence and addressing its effects on mental health.

While many of the studies in this area are cross-sectional, there is longitudinal evidence from high- and lower-income countries that exposure to violence and abuse across the life course can increase the risk of subsequent mental ill health[4]. Possible confounders of this association include socioeconomic adversity and early life exposure to violence and abuse.

However, the relationship between intimate partner violence and mental health is complex. There is also evidence that people with mental disorders across the diagnostic spectrum are disproportionately affected[4]. Evidence from meta-analyses suggests that women with depression and anxiety disorders are three to four times more likely to be exposed than those without, and exposure may affect up to 60% of women with severe mental illness[4]. Men with severe mental illness are also at increased risk.

While the majority of people with a mental disorder are not violent, there is some evidence for an association between being diagnosed with a mental disorder and violence perpetration, including intimate partner violence, although the absolute risk is low. This appears to be largely mediated by substance misuse. However, it may also be confounded by familial factors such as early exposure to family violence[4].

Clinical guidelines highlight the need to ask about experiences of intimate partner violence in people presenting with mental ill health, as part of any routine mental health assessment, but this practice is not uniformly followed. The World Health Organization (WHO) and the World Psychiatric Association (WPA), supported by qualitative meta-syntheses, recommend facilitating disclosure and response through a "LIVES" approach: *Listening* non-judgmentally and empathically, *Inquiring* about needs and concerns, *Validating* experiences, *Enhancing* safety for victim and family, and *Supporting* and connecting to information and services[5].

Risk assessment of violence perpetration is routine within mental health assessment, but has tended not to focus on risk to partners or ex-partners. A recent meta-synthesis of six studies found that barriers to disclosure of intimate partner violence perpetration to health care staff included perpetrators' negative emotions and attitudes towards their abusive behaviours and lack of trust in practitioners' abilities to address the problem[6]. Facilitators of disclosure included experiencing social consequences of abusive behaviours and receiving offers of emotional and practical support. However, there is only weak evidence for effectiveness of interventions in health care settings; early evidence suggests that cognitive behavioural and motivational interviewing interventions addressing alcohol use may reduce intimate partner violence.

Systematic reviews from both high- and lower-income settings report a range of psychological interventions that can improve mental health outcomes, including depression and anxiety, in women experiencing intimate partner violence and mental ill health[4]. However, there is little evidence on interventions for other disorders, such as post-traumatic stress disorder, or in male victims. It is also unclear the extent to which the effectiveness of the interventions is moderated by recent, current or historical abuse.

There is evidence that advocacy interventions reduce abuse. Where advocates also train mental health or primary care practitioners on domestic violence, with care pathways to deliver both advocacy and mental health interventions, both abuse can be reduced and mental health improved. However, the success of this may be moderated by the extent to which advocates are integrated within the clinical teams with whom they work. A recent meta-synthesis reported that practitioners perceive themselves to be more ready to address intimate partner violence when they collaborate both with expert team members internal to their organizations and with specialist professionals outside their team, and when supported by the health system[7].

The COVID-19 pandemic has emphasized the need for these collaborations. A reliance on online and tele-consultations has highlighted the need to assess abuse and deliver mental health interventions remotely in a manner that does not compromise safety[8]. Several organizations have produced guidance on how to provide mental health support by telephone, and in many parts of the world there has been an expansion in helplines alongside investment in shelters and other safe accommodation options.

A number of innovative interventions have been devised for those without access to mobile technology during the pandemic. These include utilizing existing public places such as pharmacies and shops by providing helpdesks or phone booth stations where support can be given. Other more discrete strategies include the use of code words, silent alarms or other signals that can be presented at the site of a support organization, or displayed outside the home[9]. Potentially these strategies could also be implemented by mental health facilities, although they have not been used to our knowledge to date.

The WPA has developed a curriculum and core competencies for psychiatrists focusing on intimate partner violence and sexual violence against women[5]. Similar undergraduate and postgraduate training initiatives are needed for other practitioners, including community health workers in low- and middle-income countries, with research to establish how best to intervene.

Moreover, mental health policies should recognize the need for trauma-informed approaches that support the identification and response to intimate partner violence. During the pandemic, the WPA, the International Association of Women's Mental Health and the International Marcé Society for Perinatal Mental Health have provided webinars to promote shared learning and discussion among health care professionals supporting those affected by intimate partner violence.

Services should provide routine data collection on intimate partner violence, and research should ensure measurement and analysis of the impact of this violence – in trials of (pharmacological and non-pharmacological) interventions, in observational cohort studies, and in the evaluation of public health interventions that have the potential to reduce the extent of the problem (e.g., minimum alcohol pricing). Finally, through the WHO, United Nations and national bodies, psychiatrists could also be advocates for wider changes that focus on tackling the social and structural drivers of intimate partner violence, and in doing so reduce its burden on mental health.

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