Breaking down the silos of treatment for post-traumatic stress disorder: integrating mind and body

Scalable interventions for PTSD that target mental health and comorbid cardiometabolic health are urgently required

There is increasing awareness of post-traumatic stress disorder (PTSD) among the general community, particularly in relation to the high incidence of the condition and its impact on high-risk populations, such as defence force veterans and emergency service first-responders. PTSD is a highly prevalent and costly condition associated with high rates of comorbid mental disorders, including anxiety and depression, and substance use.

There is growing interest in second-line or adjunctive treatments for PTSD. For example, a recently published randomised controlled trial established the efficacy of mindfulness-based stress reduction (an intervention that teaches individuals to attend to the present moment in a non-judgemental, accepting way) for treating PTSD among veterans.[1] Participants were randomly assigned to receive either 8 weeks of mindfulness-based stress reduction therapy, delivered during weekly 2.5 hour group sessions, or an active control condition consisting of group sessions focusing on life problems. The majority of patients were also receiving pharmacotherapy (51/58 in the mindfulness group and 49/58 in the control group). Participants in the adjunctive mindfulness group were significantly more likely to experience clinically meaningful improvements in PTSD symptoms at 2-month follow-up (48.9% v 28.1%). Research among other trauma-affected populations suggests that improvements associated with mindfulness interventions can be maintained for up to 2.5 years following treatment.[2]

The scalability of the mindfulness intervention (ie, the ability to demonstrate efficacy under controlled and real-world conditions, and the capacity to reach a greater proportion of the eligible population[3]), combined with low levels of participant dropout and a robust effect size,[1] represent a positive step towards establishing mindfulness interventions as an adjunctive treatment for PTSD. This is particularly pertinent where first-line interventions such as trauma-focused cognitive behaviour therapy may not be available.

There is growing evidence that PTSD, along with other mental disorders, is strongly associated with somatic, lifestyle-related comorbidities including obesity, diabetes and cardiovascular disease, with 39% and 49% of patients with PTSD meeting criteria for metabolic syndrome and abdominal obesity respectively.[4] In people with psychotic disorders, this overwhelming burden of poor physical health across their lifespan, and its link with premature mortality, has been described as a scandal,[5] with numerous calls to arms from clinicians and researchers, and the development of effective prevention-focused interventions. Such initiatives are starting to challenge the view that weight gain and poor cardiometabolic health are inevitable comorbidities for people with mental illness.

The high rate of preventable cardiometabolic disease in PTSD warrants consideration when developing and testing adjunctive or second-line treatments such as mindfulness. In the general population, physical activity is the cornerstone of treatment and prevention of cardiovascular disease, yet people with PTSD are known to be less physically active than the general population, highlighting the need for interventions to address this key modifiable risk factor. A recent systematic review and meta-analysis identified four randomised controlled trials investigating the effect of varying modalities of physical activity interventions for people with PTSD, including structured exercise and yoga.[6] Physical activity was found to be more effective than control conditions at reducing PTSD symptoms, while also reducing depressive symptoms. The physical activity interventions ranged from 6 to 12 weeks involving 1–2 supervised sessions per week, including resistance training, yoga-based exercises, aerobic exercise, or a combination of all three modalities. Based on previous research in other mental disorders, the optimal exercise program

Simon Rosenbaum
BSc, PhD[1]

Zachary Steel
PhD, MClinPsych[1,2]

1 University of New South Wales, Sydney, NSW.
2 St John of God Health Care, Richmond Hospital, Sydney, NSW.

s.rosenbaum@unsw.edu.au

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(frequency, intensity, duration and modality) is contingent on individual factors including previous exercise history, severity of psychiatric symptomatology, somatic comorbidities and motivation. Australian physical activity guidelines[7] provide clinicians with a structured framework for increasing habitual levels of physical activity in daily living.

"There is growing evidence that PTSD … is strongly associated with somatic, lifestyle-related comorbidities"

The moderate to high effect sizes reported in trials of physical activity-based interventions in comparison to usual care alone are comparable to those achieved with mindfulness.[6] In addition to reducing symptoms of PTSD and depression, structured resistance training and walking have been found to reduce cardiometabolic risk through significant reductions in waist circumference and self-reported sedentary behaviour, which are established independent risk factors for all-cause mortality.[8] Further, exercise, particularly resistance-based (strengthening) exercise, can be seen as a mindful activity[9] in which the basic principles of mindfulness (attending to the present moment in a non-judgemental and accepting manner) can be utilised. In addition, mindfulness and exercise are both known to be highly acceptable, and may the reduce perceived barriers and stigma that some patients experience when accessing mental health treatment, given that both are considered mainstream and health-benefiting behaviours.

The challenge for future research lies in designing and implementing combined interventions on a large scale, incorporating both best-practice mindfulness and exercise components in addition to usual care. Allied health clinicians with expertise in exercise programming (such as exercise physiologists[10] and physiotherapists[11]) may assist in the design and delivery of best-practice physical activity interventions. Robust economic evaluations also need to accompany such research to establish their cost-effectiveness. Such an approach is likely to contribute to breaking down the silos of PTSD treatment, in order to integrate interventions that address the body and the mind. The physical consequences of PTSD can no longer be ignored and it is time to implement effective multidisciplinary treatments.

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