Check for updates

In This Issue

Editorial Comments by Nicole J LeBlanc[1] and Luana Marques[1,2]

Despite ongoing research on the aetiology, phenomenology and treatment of anxiety disorders, these conditions continue to afflict myriads of individuals worldwide. An estimated 11.6% of the global population meets criteria for an anxiety disorder each year,[1] and individuals with anxiety disorders experience both functional impairment[2] and increased risk for physical health problems.[3] In addition to the personal suffering associated with anxiety disorders, these conditions lead to considerable costs for society, including medical expenditures and lost work productivity.[4] Moreover, although efficacious interventions for anxiety disorders are available, many individuals do not respond to these treatments[5] or struggle to access evidence-based care.[6] Thus, much work remains to be done to reduce the global burden of anxiety disorders.

In response to this challenge, this special issue highlights emerging directions in the field of anxiety disorders research. Dr Jerrold Rosenbaum, emeritus Psychiatrist-in-Chief at the Massachusetts General Hospital, provides an introduction to the issue with a commentary on current challenges and opportunities in the field of anxiety disorders research.[7] The articles that follow highlight a variety of approaches to reduce the suffering associated with anxiety disorders, including studies exploring the aetiology of anxiety and those examining novel methods for prevention, early intervention and treatment.

First, several authors present articles that explore biological and psychological factors associated with the development of anxiety disorders. For example, Clauss presents a review of studies suggesting that the bed nucleus of the stria terminalis (BNST) may serve as the neural substrate for behavioral inhibition, which is a risk factor for anxiety disorders.[8] In support of this hypothesis, she reviews research showing an association between the experience of uncertain threat and BNST activation in both animal models and humans.

Robinaugh, Ward and colleagues also explore the aetiology of anxiety disorders in their systematic review of studies examining response to biological challenge paradigms as a predictor of panic attacks and panic disorder.[9] Specifically, they note that cognitive-behavioural theories of panic disorder posit a causal link between catastrophic misinterpretations of bodily sensations and the experience of panic attacks. Thus, these theories predict that individuals who experience anxiety in response to physiological arousal will be at increased risk for panic attacks and the development of panic disorder. The authors tested this prediction by conducting a systematic review and meta-analysis of published studies examining participants' response to biological challenge paradigms (eg, CO_2 inhalation) as a predictor of future panic attacks and panic disorder. They found a small but significant effect for the prediction of panic attacks and no effect for the prediction of panic disorder. However, they note a paucity of studies on this topic, indicating a need for more research to test causal models of anxiety disorders.

In addition to studies examining the aetiology of anxiety, several authors present research exploring novel prevention and early intervention strategies. For example, Bui and colleagues report the results of a study that evaluated intranasal oxytocin as a potential secondary prevention intervention for PTSD.[10] Specifically, they used a classical conditioning paradigm to investigate whether intranasal oxytocin administered following fear conditioning would lead to reduced fear consolidation in healthy individuals. Their results did not support the efficacy of intranasal oxytocin for reducing fear acquisition, which suggest that further innovation is needed to develop prevention methods for PTSD.

In another article, Hirshfeld-Becker and colleagues report on two case studies that tested the feasibility and potential efficacy of family-based cognitive-behavioral therapy (CBT) for anxiety in toddlers.[11] The authors note that anxiety in young children tends to be persistent and interferes with cognitive and social development. They therefore propose that early intervention with anxious toddlers could shift patients' mental health trajectories across childhood. As an initial test of this hypothesis, the authors adapted family-based CBT for use with 2- and 3-year-olds and administered the treatment to two patients. Their results suggest that the treatment was feasible, acceptable and shows promise for reducing patients' symptoms. The next step will be to test the treatment in a controlled trial.

Finally, several authors report on research aimed at improving existing treatments for anxiety disorders and increasing access to evidence-based care. For example, Robinaugh, Brown and colleagues explore the use of ecological momentary assessment (EMA) data to personalise CBT for panic disorder.[12] Specifically, they demonstrate the use of EMA data to derive indices of symptom variability at different time-points in treatment and discuss how these indices could inform the clinical picture of individual patients. In addition, they demonstrate the use of a vector autoregressive modelling approach to identify patient-specific relationships among panic disorder symptoms. These models could ultimately be used to guide the selection of specific CBT interventions in treatment.

Youn and colleagues address the topic of patient engagement in CBT for anxiety disorders in a study

BMJ

investigating patient-level predictors of engagement in cognitive processing therapy for PTSD.[13] Their results indicated that individuals receiving treatment in Spanish (relative to English) were more likely to require the repetition of treatment content and were more likely to be impacted by logistic and financial barriers to treatment. The authors discuss the importance of attending to these patient characteristics when delivering CBT for PTSD, as doing so could improve treatment engagement and potentially response.

Finally, Baker and Simon present the results of a study examining the psychometric properties of the Anxiety Symptom Questionnaire (ASQ), which is a potential new screening instrument for anxiety disorders.[14] The ASQ had good internal consistency and test–retest reliability in this study, and improved the detection of patients with anxiety disorders above and beyond a clinician-rated measure. Thus, the ASQ shows promise as a tool to identify individuals who could benefit from evidence-based treatment for anxiety.

As these articles demonstrate, research on anxiety disorders is thriving and experts are working continuously to develop and test novel research questions regarding the aetiology, prevention and treatment of anxiety. Collaboration between research groups will be essential for future progress in this area—a point illustrated by Barako and colleagues in their article describing the partnership between Massachusetts General Hospital and the Shanghai Mental Health Center.[15] Continued teamwork and innovation will be paramount to reduce the global burden of anxiety disorders.

REFERENCES

1 Baxter AJ, Scott KM, Vos T, *et al*. Global prevalence of anxiety disorders: a systematic review and meta-regression. *Psychol Med* 2013;43:897–910.
2 Hendriks SM, Spijker J, Licht CMM, *et al*. Long-Term disability in anxiety disorders. *BMC Psychiatry* 2016;16:248.
3 Scott KM, Lim C, Al-Hamzawi A, *et al*. Association of mental disorders with subsequent chronic physical conditions: world mental health surveys from 17 countries. *JAMA Psychiatry* 2016;73:150–8.
4 Greenberg PE, Sisitsky T, Kessler RC, *et al*. The economic burden of anxiety disorders in the 1990s. *J Clin Psychiatry* 1999;60:427–35.
5 Roy-Byrne P. Treatment-Refractory anxiety; definition, risk factors, and treatment challenges. *Dialogues in Clinical Neuroscience* 2015;17:191–206.
6 Alonso J, Liu Z, Evans-Lacko S, *et al*. Treatment gap for anxiety disorders is global: results of the world mental health surveys in 21 countries. *Depress Anxiety* 2018;35:195–208.
7 Rosenbaum J. New directions in anxiety disorder treatment. *General Psychiatry*. In Press.
8 Clauss JA. Behavioral inhibition and the bed nucleus of the stria terminalis. *General Psychiatry*. In Press.
9 Robinaugh DJ, Ward MJ, Toner ER, *et al*. Assessing vulnerability to panic: a systematic review of reactivity in biological challenge paradigms as a prospective predictor of panic attacks and panic disorder. *General Psychiatry*. In Press.
10 Bui E, Hoge E, Rosenscrans P, *et al*. Influence of intranasal oxytocin on fear conditioning in healthy humans. *General Psychiatry*. In Press.
11 Hirshfeld-Becker D, Henin A, Rapoport SJ, *et al*. Very early family-based intervention for anxiety: two case studies with toddlers. *General Psychiatry*. In Press.
12 Robinaugh DJ, Brown ML, Losiewicz OM, *et al*. Toward a precision psychiatry approach to treating anxiety disorders with ecological Momentary assessment and network analysis: the example of panic disorder. *General Psychiatry*. In Press.
13 Youn SJ, Mackintosh M, Wiltsey Stirman S, *et al*. Client-level predictors of treatment engagement, outcome, and dropout: moving beyond demographics. *General Psychiatry*. In Press.
14 Baker AW, Simon NM. The anxiety symptom questionnaire (ASQ): development and validation. *General Psychiatry*. In Press.
15 Barako T, Li C, Yeung A. Massachusetts General Hospital and the Shanghai mental health center: the past, present, and future of a psychiatric research partnership. *General Psychiatry*. In Press.