



## Integrated psychological care for youth with epilepsy



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Young people with epilepsy experience high rates of mental health and behavioural difficulties, which substantially increase disease burden, yet remain an area of considerable unmet need.<sup>1,2</sup> Leading neurology authorities, such as the International League Against Epilepsy, recommend routine screening and management of patient mental health.<sup>3</sup> However, this is rarely achieved in clinical reality, partly due to a lack of research to guide best practice.<sup>4</sup>

A recently published study by Sophie D Bennett and colleagues<sup>5</sup> is filling this research gap. Bennett and colleagues conducted a large, multisite trial in the UK evaluating a personalised mental health intervention for children with epilepsy (MICE), based on principles of cognitive behavioural therapy.

Young people aged 3–18 years with epilepsy and clinical mental health difficulties were randomly assigned to a treatment (MICE plus usual care; n=166; mean age 10.5 years [SD 3.6]; 49% female; 73% White) or control group (assessment-enhanced usual care; n=168; mean age 10.3 years [SD 4.0]; 52% female; 69% White). Usual care for mental health difficulties varied by site but usually involved hospital-based paediatric psychology services or referrals to youth mental health services. The MICE intervention involved remote delivery of mental health modules targeting anxiety, depression, and conduct problems relevant to the participants' diagnosis, alongside epilepsy-specific modules. Non-specialist clinicians delivered the intervention to the participants, caregivers, or both, depending on the participants' age, mental health needs, and cognitive ability.

Researchers found that MICE plus usual care was superior to assessment-enhanced usual care in improving the primary outcome of emotional and behavioural difficulties, assessed via the Strengths and Difficulties Questionnaire, at 6 months post-randomisation. This was shown through an adjusted between-group difference of  $-1.7$  (95% CI  $-2.8$  to  $-0.5$ ;  $p=0.0040$ ). This difference corresponds to a small between-group effect ( $d=0.3$ ), and numbers needed to treat of between four and six. These clinical effects are within the range reported in other trials of cognitive behavioural therapy in young people with chronic conditions,<sup>6</sup> with numbers needed to treat comparable to trials of both psychological<sup>7</sup> and

pharmacological interventions<sup>8</sup> for young people with mental health difficulties or chronic conditions.

This is the first trial to tailor a pre-existing, evidence-based mental health intervention to young people with a chronic condition and various internalising and externalising presentations. Previous trials have instead focused on single emotional or behavioural presentations and frequently exclude young people with mental health comorbidities.<sup>6</sup> This is also one of the first trials to treat a wide age range of young people and include those with co-occurring intellectual disability (40% of the sample) and autism spectrum disorder (24% of the sample), which substantially enhances the findings' generalisability. Given the varying needs of the sample, the incorporation of personalised mental health modules alongside epilepsy-specific content represents a highly patient-centred and collaborative approach to care—as does the flexible and tailored use of caregiver involvement, and remote delivery by onsite multidisciplinary non-specialist clinicians. The intervention's highly adaptable and practical nature holds significance for its implementation in real-world health-care settings.

This trial also has implications for the treatment of chronic conditions more broadly. The tailoring of the intervention for epilepsy was the result of considered consumer involvement. This approach has set foundations for future intervention adaptations for other chronic conditions in which youth have unmet mental health care needs (eg, asthma, chronic pain, diabetes, and brain injury).

However, future work might benefit from more inclusive mental health entry criteria. Inclusion required clinical-range mental health difficulties on both a psychometric measure and diagnostic interview. This resulted in at least 12% of consenting families being excluded. This is somewhat restrictive and given that the diagnostic instruments were not re-administered, it is unclear whether the intervention led to diagnostic remission. Removing diagnostic inclusion criteria and offering proactive psychological care to sub-threshold patients might still improve mental health outcomes and reduce the risk of future problems.

Researchers' use of caregiver-reported measures of young people's mental health is understandable given the wide age range and levels of intellectual disability

in young participants. However, these measures can have poor caregiver-child concordance, especially as age and symptom prevalence increase.<sup>9</sup> Future work might consider multi-informant assessment and classifying youth 'at risk' if either the child or caregiver endorses clinical symptoms. Nevertheless, an important strength was the assessment and improvement of caregiver mental health outcomes, which also remains an area of burden and unmet care needs.<sup>10</sup>

This trial underscores the advantages of integrated psychological care models in seizure care settings.<sup>11</sup> However, it required substantial commitment from participating sites, necessitating dedicated staff workloads for training and administering therapy. This raises concerns about implementing intensive care models in resource-limited health-care systems and those with restrictions on billing for remotely delivered care. Nevertheless, the modest clinical advantages observed in the assessment-enhanced usual care control group are encouraging, emphasising that comprehensive assessment and feedback alone can offer benefits, highlighting the potential of less resource-intensive care models.

This trial represents an important contribution to achieving targets set by WHO's Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders aimed at advancing "the quality of life of people with neurological disorders, their carers and families".<sup>12</sup> The encouraging findings warrant investment in further efforts to enhance the psychological care of both adults and young people with neurological or chronic conditions and provide an innovative model to encourage future health-care initiatives.

MG is the co-chair of the Integrated Mental Health Care Pathways Task Force of the International League Against Epilepsy (ILAE) Psychiatry Commission, but does not receive payment for this role. In 2023, MG received a Per Diem Speaker Payment to present on the topic of Managing Anxiety in Epilepsy at the International Epilepsy Conference in Dublin, Ireland, and received partial travel

reimbursement from the ILAE to attend this conference. MG is currently supported by a Postdoctoral Fellowship Grant from MS Australia to conduct research at Macquarie University. MS Australia is Australia's national multiple sclerosis not-for-profit organisation. MG's research has involved the development and evaluation of a digital mental health intervention for adults with neurological disorders (eg, epilepsy, multiple sclerosis, Parkinson's disease, and Acquired Brain Injury), but she does not receive financial benefit from it. JD declares no competing interests.

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## In-person physiotherapy versus video conferencing for chronic knee pain

Musculoskeletal pain affects about 20% of the world's population and is a leading source of disability and diminished quality of life.<sup>1</sup> Structured exercise, physical activity, and patient education, often provided by physiotherapists, are recommended treatments.<sup>2</sup>

Consistent provision of evidence-based care for musculoskeletal pain has proven challenging for many reasons including the volume of patients and health-care access challenges related to geography, transportation, and provider availability. Leveraging technology to permit



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