Global commission: New clinical guidelines for mental health and the use of nutraceuticals and medicinal plants

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New findings from a major international review examining the 'best of the best' available scientific evidence reveals which nutraceuticals (nutrient-based natural products) and phytoceuticals (plant-based natural products) are beneficial in the management of a range of mental health disorders.

The review and new clinical guidelines focused on studies involving common and severe mental disorders: mood disorders such as major depressive disorder and bipolar disorder; anxiety disorders such as generalized anxiety disorder, obsessive compulsive disorder and trichotillomania (hair-pulling disorder); psychotic disorders such as schizophrenia; and attention deficit hyperactivity disorder (ADHD).

Commissioned by The World Federation of Societies of Biological Psychiatry (WFSBP) and Canadian Network for Mood and Anxiety Treatments (CANMAT) and published today in the latest clinical guidelines are the evidence-based recommendations of an expert taskforce involving 30 leading academics and clinicians from 15 countries, including Western Sydney University, University of British Columbia, Harvard University, University of Arizona College, Deakin University, University of Melbourne, The University of Tokyo, University of Toronto/the Centre for Addiction and Mental Health (CAMH), Federal University of Rio de Janeiro, China Medical University, and University of Canterbury.

The chair of the taskforce, Jerome Sarris, Professor of Integrative Mental Health at NICM Health Research Institute, Western Sydney University, said the review and new clinical guidelines are a significant piece of work that help address the current guideline gaps and assist clinicians in an evidence-informed approach to decision-making around the growing interest and use of supplements for major psychiatric disorders.

"Clinicians and the public often aren't sure of what is effective and isn't. Our research and guidelines provide much more assurance based on the evidence, giving firmer guidance on effectiveness, dosage, population base for use, conditions, and special considerations," said Professor Sarris.

"Despite what some people may say or believe, there is actually a lot of high-quality evidence out there, and the purpose of these guidelines were to provide a synthesis of this evidence as well as clinician input to provide definitive practice guidelines.

"In this most recent research, we have included our initial meta-reviews from 2019 and 2020, supplemented with a current additional literature search—it is the world's largest meta-synthesis in..."
this field analyzing top-tier evidence, from clinical trials and data worldwide, in over 10,000 individuals treated for psychiatric disorders," Professor Sarris said.

Patients often ask clinicians about the utility of various nutrient or plant based natural products in the treatment of various psychiatric illnesses says Dr. Lakshmi Yatham, President of the World Federation of Societies of Biological Psychiatry. "The WFSBP/CANMAT guidelines provide evidence-based recommendations for use of these products and thus are extremely helpful for clinicians in advising patients about the role of these agents and in choosing the most appropriate agents for managing various psychiatric illnesses," he said.

Several key findings from the review:

- **Mood Disorders:**
  - Adjunctive (co-use with antidepressants) omega-3 fatty acids and monotherapy St John’s wort are recommended.
  - Adjunctive probiotics, zinc, methylfolate, and adjunctive or monotherapy saffron and curcumin are provisionally recommended.
  - Adjunctive or monotherapy vitamin D and lavender, monotherapy probiotics, and adjunctive S-adenosyl methionine (SAMe) are provisionally recommended.
  - Adjunctive or monotherapy omega-3 fatty acids and SAMe, adjunctive N-acetyl cysteine (NAC), and adjunctive and monotherapy vitamin C, tryptophan, creatine, and rhodiola for unipolar depression treatment have mixed data and cannot currently clearly be recommended.
  - Adjunctive or monotherapy folic acid, inositol, and magnesium showed no efficacy, and thereby cannot be recommended for use in depression.

- **Anxiety disorders:**
  - Adjunctive or monotherapy ashwagandha and lavender are provisionally recommended, while adjunctive NAC and monotherapy galphimia are weakly recommended. In the case of adjunctive or monotherapy chamomile, there were mixed data.
  - Monotherapy use of kava in generalized anxiety disorder showed no efficacy and thereby cannot be recommended for this specific application.

- **Schizophrenia:**
  - Adjunctive NAC and methylfolate are provisionally recommended for negative symptoms in schizophrenia, while adjunctive vitamin D or ginkgo are weakly recommended.
  - Adjunctive and monotherapy omega-3 fatty acids showed no efficacy in schizophrenia and thereby cannot be recommended for this condition.
  - Weak support however existed for omega-3 in bipolar depression, while NAC was not currently recommended for use in this application.

- **ADHD:**
  - Monotherapy micronutrients and adjunctive or monotherapy vitamin D are weakly recommended, while there was mixed data in the case of adjunctive or monotherapy omega-3 fatty acids, zinc, and ginkgo.
  - Adjunctive or monotherapy omega-9 fatty acids and acetyl-L carnitine showed no efficacy and thereby cannot be recommended in ADHD.

The review also provides detail on safety and tolerability issues, and clinical advice regarding prescription and consideration for use in specialized populations.

Senior leadership team member of the taskforce and co-author Dr. Arun Ravindran, Professor of
Psychiatry at the University of Toronto and Clinician Scientist at CAMH added that "the use of alternative and complementary therapies by the public has grown exponentially in recent years. Patients often expect physicians to prescribe them appropriately and safely. These guidelines from a global panel of opinion leaders will serve as a user-friendly resource for both physicians and consumers."

Harvard Medical School Professor of Psychiatry, Director of Depression Clinical Research Program at Massachusetts General Hospital and co-author Dr. David Mischoulon further added that "I prescribe several of these therapies in my practice, which includes many people who have not obtained benefit from approved treatments. But I always make sure to have a careful discussion with the patient about the known and potentially unknown risks and benefits. I also advise that individuals with more serious psychiatric conditions who are interested in using these natural remedies preferably do so under the supervision of a qualified clinician."


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