



Identifying priority topics for interprofessional education on lifestyle interventions in mental healthcare: a modified Delphi study

Oscar Lederman, Sam Manger, Linda Barron, Felice Jacka & Tetyana Rocks

To cite this article: Oscar Lederman, Sam Manger, Linda Barron, Felice Jacka & Tetyana Rocks (2026) Identifying priority topics for interprofessional education on lifestyle interventions in mental healthcare: a modified Delphi study, *Critical Public Health*, 36:1, 2607924, DOI: [10.1080/09581596.2025.2607924](https://doi.org/10.1080/09581596.2025.2607924)

To link to this article: <https://doi.org/10.1080/09581596.2025.2607924>



© 2026 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



[View supplementary material](#)



Published online: 23 Jan 2026.



[Submit your article to this journal](#)



Article views: 1355



[View related articles](#)



[View Crossmark data](#)

RESEARCH ARTICLE



Identifying priority topics for interprofessional education on lifestyle interventions in mental healthcare: a modified Delphi study

Oscar Lederman^{a,b} , Sam Manger^{c,d} , Linda Barron^e, Felice Jacka^{f,g,h,i}  and Tetyana Rocks^{f,j} 

^aHuman Performance Research Centre, School of Sport, Exercise and Rehabilitation, University of Technology Sydney (UTS), Sydney, Australia; ^bDiscipline of Psychiatry and Mental Health, School of Clinical Medicine, University of New South Wales, Sydney, Australia; ^cCollege of Medicine and Dentistry, James Cook University, Australia; ^dAustralasian Society of Lifestyle Medicine, Melbourne, Australia; ^eContinuing Care Unit (CCU), Mental Health and Addiction Services (MHAS) Sunshine Coast Hospital Health Service (SCHHS), Mountain Creek, Australia; ^fThe Institute for Mental and Physical Health and Clinical Translation (IMPACT), Food & Mood Centre, School of Medicine and Barwon Health, Deakin University, Geelong, Australia; ^gCentre for Adolescent Health, Murdoch Children's Research Institute, Melbourne, Australia; ^hBlack Dog Institute, Sydney, Australia; ⁱCollege of Public Health, Medical & Veterinary Sciences, James Cook University, Townsville, Australia; ^jTranslational Health Research Institute, Eating Disorders, and Body Image, School of Medicine, Western Sydney University, Penrith, Australia

ABSTRACT

People living with severe mental illness (SMI) experience significant physical health disparities, including higher rates of cardiovascular disease, diabetes, and obesity, resulting in reduced life expectancy compared to the general population. Lifestyle interventions that include physical activity, dietary changes, and behaviour modification, are essential in addressing these health inequities. Mental health service providers play a critical role in facilitating and promoting lifestyle management as part of comprehensive care for individuals living with SMI, yet interprofessional education and training is required to overcome current knowledge and training gaps. This study aimed to achieve expert consensus on interprofessional education topics related to lifestyle-based interventions, behaviour change science, and holistic program implementation in mental healthcare. Using a three-round modified Delphi method, experts from diverse professional and lived-experience perspectives ($n=18$) identified and prioritised essential educational topics pertaining to lifestyle medicine components including assessments, interventions, medication optimisation, behaviour-change strategies, clinician-perceived barriers, and key research priorities. Findings provide an evidence-informed and expert-validated foundation for developing interprofessional education resources to enhance the capacity of mental health service providers to implement effective lifestyle interventions. Continued refinement and evaluation will help ensure this work contributes to lasting improvements in the mental and physical health of people living with SMI.

ARTICLE HISTORY

Received 9 March 2025
Accepted 10 December 2025

KEY WORDS

Lifestyle interventions; lifestyle medicine; mental disorders; severe mental illness; interprofessional education

Introduction

People living with severe mental illness (SMI) (often referred to as 'serious mental illness and defined as schizophrenia, bipolar disorder or major depressive disorder) face a higher prevalence of cardiovascular disease (CVD) (Correll et al., 2017), metabolic abnormalities (Vancampfort et al., 2015), and other physical health conditions such as respiratory and neurological disorders (Mirza et al., 2021), resulting in a 15-20 years reduction in life expectancy compared to the general population (Fiorillo & Sartorius, 2021; Hjorthøj et al., 2017). For example, diabetes prevalence is significantly higher in schizophrenia, bipolar disorder, and major depressive disorder (Vancampfort et al., 2016). Such a significant health disparity

CONTACT Oscar Lederman  oscar.lederman@uts.edu.au

 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/09581596.2025.2607924>.

© 2026 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

among people living with SMI is largely attributed to modifiable cardiometabolic risk factors (CMRFs) such as tobacco smoking, low cardiorespiratory fitness, physical inactivity, sedentary behaviour, poor sleep and diet quality, which are commonly exhibited in people with SMI and significantly contribute to these health disparities (Firth et al., 2020). Psychotropic medication exacerbates cardiometabolic ill health through side effects such as weight gain, metabolic abnormalities (e.g. hyperglycaemia and hyperlipidaemia) (Rotella et al., 2020), increased sedation, and increased appetite and cravings for energy-dense food (Teasdale et al., 2020).

Lifestyle interventions are effective in preventing and managing CMRFs, improving outcomes such as weight management (Curtis et al., 2016; Speyer et al., 2019), improved biochemical (lipids, glucose, insulin) and blood pressure outcomes (Teasdale et al., 2017), and promotive healthier lifestyle behaviours such as improved physical activity (Lederman et al., 2020), reduced sedentary behaviour (Williams et al., 2019) and improved diet quality (Teasdale et al., 2017). Importantly, sustained lifestyle interventions have also been associated with reductions in cardiovascular disease incidence and all-cause mortality in people living with SMI (Stubbs et al., 2018; Vancampfort et al., 2019). Lifestyle interventions also benefit mental health. For instance, the 2020 Royal Australian and New Zealand College of Psychiatrists (RANZCP) Clinical Practice Guidelines for Mood Disorders (Malhi et al., 2021), advocate for the inclusion of lifestyle interventions in the management of psychiatric symptoms. These recommendations are supported by a recent meta-review (Firth et al., 2020) and the International Clinical guidelines for the use of lifestyle-based mental health care in Major Depressive Disorders (Marx et al., 2023), both supporting the use of physical activity, mindfulness-based therapies, nutrition and 'green space' interventions as effective approaches to support the well-being of individuals with SMI. This approach is also reflected in key papers from leading agencies, such as the 2018 World Health Organisation (WHO) (Gronholm et al., 2021) and 2017 RANZCP consensus statement (Lambert et al., 2017), which both recommend lifestyle interventions as an integral part of first-line treatment in adults with SMI.

Despite the evidence, the integration of lifestyle interventions into clinical practice remain limited (Firth et al., 2020; Pape et al., 2022; Peckham et al., 2023) due to various barriers in implementation such as funding, competing priorities, and lack of integration of health promotion (Bartels et al., 2015). Interprofessional approaches to address such disparities are essential and can be achieved through the collaboration and integration of specialist lifestyle intervention professionals such as accredited allied health professionals (e.g. physiotherapists, exercise physiologists and dietitians) and nurse specialists (Lederman et al., 2017), yet such resources are not widely accessible across health services. In lieu of this, mental health service providers (e.g., medical, allied health), primary care physicians and peer-support workers, are well placed to provide lifestyle interventions to people with SMI within their scope of practice. The recognition that these professionals play a key role in facilitating health behaviours aligns with the emerging field of 'lifestyle psychiatry' (Noordsy, 2019), which emphasises the interconnectedness between physical and mental health. This field highlights the significant influence of 'lifestyle factors', such as physical activity, sleep, and nutrition, alongside broader contextual factors like social determinants of health, and the role that mental health services and providers play in addressing these factors (Firth et al., 2019). However, lack of specific education and training (Crowley et al., 2019), low confidence of staff to deliver interventions, diagnostic overshadowing (overlooking risk factors for physical conditions due to a mental health diagnoses), and heavy workloads, have been identified as key limitations to the adoption of integrated physical health care by mental health providers when providing care for people living with SMI (Bailey et al., 2019; Deenik et al., 2019). Promisingly, education and training initiatives have been shown to positively impact their knowledge, confidence and attitudes surrounding physical health issues and lifestyle interventions in individuals with SMI (Watkins et al., 2020), yet no study has clearly described or collated the priority education topics needed to guide mental health service providers in delivering lifestyle interventions for people living with SMI. Identifying these priorities is therefore essential to provide a structured foundation for future training initiatives.

To overcome the significant gap of availability of appropriate training in lifestyle interventions for people living with SMI, it is crucial to identify essential interprofessional educational topics that can enhance holistic and collaborative practice. These topics can inform both the emerging mental health workforce and existing service providers, ensuring access to reliable, evidence-based interprofessional education resources. To achieve this, consultation with experts from diverse health disciplines is essential.

Therefore, the aim of this study was to systematically generate key educational topics related to lifestyle-based interventions, behaviour change science, and integrated program implementation in mental healthcare. This interprofessional approach supports the development of training and educational resources that enhance knowledge for health professionals and others involved in the treatment of people living with SMI, specifically focusing on the identification, prevention, and management of physical health co-morbidities.

Methods

Participants

In November 2021, a panel of interprofessional experts was identified by the research team and were selected based on their contribution to the field of 'lifestyle medicine' or 'lifestyle psychiatry' through clinical expertise, research, advocacy and/or lived experience (for example, based on publications on the topic, demonstrated impact in service implementation/delivery or previous collaborations with the research team). Clinical and academic experts (including Accredited Exercise Physiologists, clinical psychologists, psychiatrists, mental health nurses, and allied health academics) were required to have ≥ 5 year's experience in mental healthcare, with demonstrated interdisciplinary practice and/or research in exercise-based mental health interventions. Exclusion criteria included individuals with fewer than five years of relevant clinical or research experience, those without demonstrated expertise in lifestyle psychiatry or lifestyle medicine, and those not engaged in interprofessional or lifestyle-focused mental health practice. This threshold was selected to ensure that all contributors had sufficient depth of clinical or research experience to provide informed, discipline-specific insights into the development of interprofessional lifestyle medicine education priorities. Recruitment aimed to capture variation across Australian states and service settings. Lived experience experts had direct experience of exercise physiology-delivered care and were engaged in research, advocacy, or service co-design. Ethics approval was obtained through Deakin University (HEAG-H 92_2021).

Recruitment

Identified experts were contacted by email with an invitation to participate directly by the research team between November 2021- July 2022. The initial email also included a Participant Information Sheet and Consent Form, outlining the research process, consent, and withdrawal procedures. One follow-up email was sent after the initial invitation to participate and after each of the two rounds if experts did not respond within two weeks. A signed and dated consent to participate was obtained via returned email from all experts who wished to participate. Experts who provided their consent to participate were issued a unique alphanumeric code to allow them to access the online portal for both rounds of the study.

Design

Advisory committee formation and scope development

A multidisciplinary Advisory Committee (comprising the authorship team) was established to oversee the conceptual development, methodological integrity, and operationalisation of the Delphi process. Members were selected based on their clinical and/or research experience at the intersection of physical health and mental healthcare, alongside recognised expertise in areas such as lifestyle medicine, nutritional mental health, exercise and mental health, and interdisciplinary education. The Committee defined the initial scope and aims of the study, identified the broad topic areas relevant to lifestyle medicine in mental healthcare, and developed the preliminary list of domains and items for inclusion in the first-round Delphi survey. In accordance with Delphi best practice, Advisory Committee members provided methodological oversight only and did not participate in any rating or ranking exercises to prevent undue influence on consensus formation.

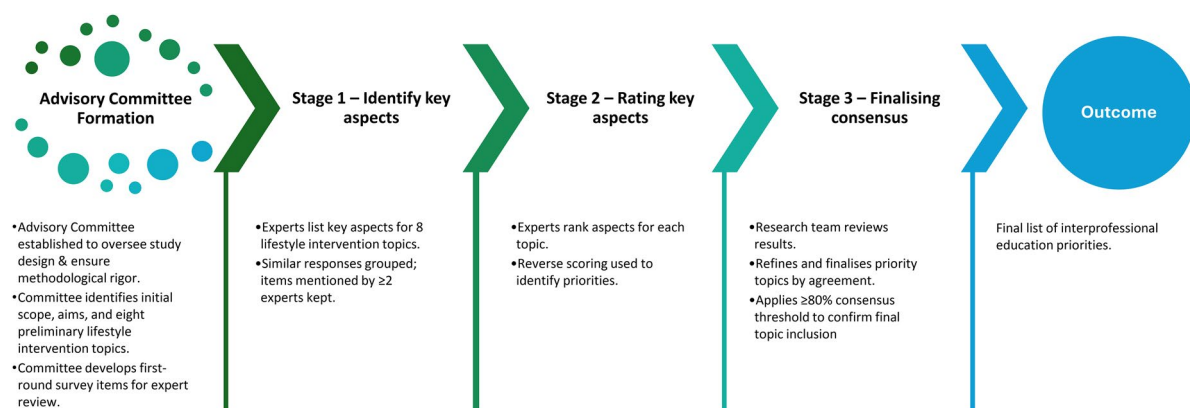


Figure 1. Flowchart of the modified delphi process. A three-stage Delphi process was used to identify, rate, and reach consensus on interprofessional education priorities for lifestyle intervention topics. Experts listed and grouped key aspects (Stage 1), ranked them to determine priorities (Stage 2), and the research team refined and finalised topics by agreement (Stage 3), resulting in a final priority list.

Following this preparatory stage, a modified Delphi technique was employed across the subsequent three stages to identify and refine key topics relating to lifestyle interventions in mental healthcare to inform the development of education and training resources (Figure 1). This approach was guided by earlier research by Woodcock and colleagues (Woodcock et al., 2020), who used a similar methodology to gain consensus on the ‘features of high quality measurement plans for healthcare improvement projects’. Consistent with recommended Delphi procedures, consensus in the present study was operationalised as $\geq 80\%$ agreement during the final refinement stage. This threshold was informed by existing literature, where consensus levels in Delphi studies typically range from 50% to 80%, with 75% representing the median threshold used to define consensus, depending on the study design and objectives (Diamond et al., 2014; Sinha et al., 2011).

Stage one: identifying key aspects

In Stage one, experts were asked to provide three key aspects for each of the eight broad topics initially generated by the research team with expertise within the field of ‘lifestyle medicine’ and ‘lifestyle psychiatry’ and based on the current evidence. The topics included: 1) individual/clinical lifestyle assessment; 2) lifestyle-related intervention and management features; 3) medication optimisation to reduce physical health side effects; 4) behaviour change; 5) development/maintenance of lifestyle-related programs in related services; 6) implementation barriers/challenges for the staff/service; 7) implementation barriers/challenges for service-users; and 8) generating valid and useful lifestyle-related research. This process was used to elicit information that experts considered to be essential to understanding the topic considering the varying experience and expertise among experts. Questions used within this Stage are presented in [Supplementary text 1](#).

Responses from Stage one were first independently reviewed by two members of the research team and then reviewed and contrasted by a third member of the research team. Responses were summarised into the minimum number of statements or ‘categories’ necessary to accurately reflect all perspectives. Where possible, statements were summarised verbatim to limit researcher bias. Changes were only made to statements to assist in grouping answers. The frequency of each response was captured and reported in the results for Stage Two. All items listed with 2 or more of the same response were presented for Stage Two ranking.

Stage two: rating key aspects

In Stage two, experts were presented with the most frequent responses identified as key aspects for each of the broad topics and were asked to rank each of these from most important to least important. Responses were analysed by applying scores in reverse, with the most preferred choice in each of the eight topics having the highest score and the least preferred choice having the lowest score. For

example, for the topic 1) individual/clinical lifestyle assessment, experts were asked to rank eight aspects. Therefore, the #1 choice was assigned a score of 8, the #2 choice – a score of 7, the #3 choice – a score of 6, the #4 choice a score of 5, the #5 choice – a score of 4, the #6 choice – a score of 3, the #7 choice – a score of 2, and the #8 choice – a score of 1. The scores for each aspect of the eight topics were summed, with the highest score representing the most important aspect of this topic and the lowest score representing the least important aspect.

Stage 3: finalising consensus

In Stage three, members of the Advisory Committee team held an online meeting to review the results from Stages one and two (i.e. frequency and ranking). During the meeting, the team collectively examined results for each question to inform priority educational topics. During this phase, consensus was operationalised as $\geq 80\%$ agreement among Advisory Committee members. Items that did not initially meet this threshold were discussed, clarified, or merged until consensus was achieved. The final list of priority educational topics reflected unanimous agreement across the Committee.

Results

Participants

The Advisory Committee ($n=5$), comprising the authorship team, oversaw the design, scope, and methodological integrity of the study. The Committee comprised five clinical-academic experts, including two dietitians, a psychiatrist, a general practitioner, and an exercise physiologist, whose broader expertise spanned lifestyle medicine, nutritional psychiatry, primary care, exercise and mental health, and interdisciplinary education. Collectively, the group brought substantial experience in lifestyle medicine research, development of clinical education resources, interdisciplinary collaboration in mental health settings, and leadership across academic, clinical, and professional policy domains.

Of the 28 invited experts, 20 (71%) agreed to participate, and 18 (64%) completed Stage one and two of the study. Of the participating experts, 11 considered themselves as someone with a combination of clinical and/or research and/or lived experience; five identified themselves as clinicians; three considered themselves as researchers; with the remaining expert identifying as someone with a lived experience only. Of those who identified as clinicians, professional disciplines included: Psychiatry, Psychology, General Practice physicians, Dietetics, Physiotherapy, Exercise Physiology and Nursing.

Stage one results: identifying key aspects

Results from Stage one were captured, and the frequency of each response is reported in [Supplementary text 2](#). Key findings across the eight questions included the importance of assessing lifestyle factors such as physical activity, social support, and cardiometabolic markers. Personalised approaches, medication optimisation, and multidisciplinary approaches were highlighted as crucial. Barriers for staff and services included limited training and resources, while service-users faced challenges related to both accessibility and lack of support. Experts' views on future research directions indicated collaboration, use of validated tools, and appropriate study design as key priorities. These findings emphasise the need for comprehensive lifestyle assessments, tailored interventions, and overcoming barriers to provide effective mental health services.

Stage 2 results: ranking of stage 1 results

After stage one, all aspects that received two or more unique responses were presented to the experts for ranking in order of importance in Stage two. [Table 1](#) presents the final ranked results in Stage 2 within each of the eight broad topics.

Table 1. Delphi Stage 2 summary of ranking of lifestyle-related priorities identified by interprofessional experts.

Lifestyle medicine topic	Rank	Key aspects
Individual and clinical lifestyle assessments	1	Nutrition and diet
	2	Social support
	3	Physical activity and exercise
	4	Smoking and other substances
	5	Cardiometabolic monitoring
	6	Sleep quality and quantity
	7	Stress management
	8	Cardiovascular fitness
Lifestyle-related interventions	1	Personalised and person-centred
	2	Lifestyle/holistic (e.g. including various aspects)
	3	Socioeconomic and social needs (including employment)
	4	Social/family engagement, support, connection, and shared care
	5	Motivational counselling principles
	6	Regular follow up, monitoring and registration
Medication optimisation	1	Shared decision making based on consumer-centric holistic approach
	2	Medication rationalisation
	3	Education, monitoring for side effects, and regular (consumer) response
	4	Co-prescription of metabolic medications to reduce side effects of psychotropic agents
	5	Fortification with non-medication options including lifestyle interventions
	6	United and inclusive approach to prescribing from multidisciplinary team
Assisting behaviour change	1	Tailored health coaching and behaviour change methodologies
	2	Support networks (e.g. personal social support, regular professional review)
	3	Build environment design (e.g. access to resources, supportive culture)
	4	Education
	5	Culturally responsive and relevant
Development and maintenance of lifestyle-related program	1	Co-design and customisation of programs based on feedback
	2	Evidence-based
	3	Staff culture (e.g. identifying champions, role-modelling to consumers, promoting good culture)
	4	Range of programs (e.g. individual, group, flexible, digital)
	5	Multidisciplinary and group-based design and program (e.g. multi-profession, peer support, role models)
	6	Sourcing and supporting funding
	7	Adequate delivery of information (e.g. regular contact, written programs, feedback using technology)
Most important barriers or challenges for the staff and service	1	Internal service priorities and resources (e.g. funding priorities, staff, administrative load)
	2	Service culture and attitudes (e.g. lack of leadership and management support, lack of relevant KPIs)
	3	Lack of training
	4	Lack of time
	5	Lack of external services to support continuity of care
	6	Lack of evidence or related guidelines
Most important barriers or challenges for the service users	1	Accessibility (e.g. service availability, cost, transport)
	2	Lack of skilled support to engage or navigate system, lack of social support
	3	Symptoms of mental illness or side effects of medication
	4	Motivation and self-efficacy
	5	Health literacy
Most important aspects for clinical research	1	Co-design
	2	Sourcing funds for research
	=3	Study design
	=3	Attitude towards clinical research of clinical staff (perceived value, integrating into service)

KPIs – key performance indicators.

'=' When a response received the same score on the ranking round.

Stage 3 results: determining consensus

Consensus was achieved across all eight lifestyle intervention topics. All items met the $\geq 80\%$ agreement threshold following Advisory Committee review, with no items requiring further clarification. These results are presented in Table 2, which summarises the eight domains and their key elements, outlining the final priority areas to inform future interprofessional educational resources for mental health service providers.

Discussion

This study highlighted expert views on the essential education topics required for interprofessional mental health service providers to deliver effective lifestyle medicine-based healthcare. Importantly, it

Table 2. Interprofessional educational topics for lifestyle intervention in mental healthcare.

Domain	Key elements
Screening and Assessment of Modifiable Risk Factors	- Screening for diet, physical activity, smoking, and sleep. - Assessing cardiovascular fitness as a risk factor for cardiometabolic disease and functional recovery. - Screening for cardiovascular and metabolic health indicators. - Evaluating social support networks and their role in mental health. - Assessing stress management capacity and coping strategies.
Components of Lifestyle-Related Interventions	- Designing person-centred lifestyle care plans. - Integrating biological, psychological, social, and economic factors into intervention planning. - Involving family and social networks to enhance intervention impact. - Applying motivational counselling to support sustained behaviour change. - Monitoring lifestyle changes and providing structured follow-up.
Medication Optimisation	- Co-developing treatment plans with consumers, families, and carers. - Minimising unnecessary medication use while maintaining clinical effectiveness. - Monitoring and managing medication side effects. - Addressing metabolic side effects through adjunctive strategies. - Coordinating medication and care within multidisciplinary teams.
Behaviour Change Strategies	- Using health coaching to promote positive lifestyle changes. - Leveraging social support to maintain healthy behaviours. - Creating environments that facilitate access to health-promoting resources. - Educating consumers to make informed health and lifestyle choices. - Ensuring interventions are culturally safe, relevant, and inclusive.
Integrating Lifestyle Interventions and Building Capacity	- Co-designing lifestyle programs with consumers and care teams. - Implementing evidence-based lifestyle interventions in clinical settings. - Fostering a health-promoting culture within mental health services. - Securing funding and resources to support program sustainability. - Establishing consistent, effective communication with consumers. - Applying clinical guidelines for lifestyle care in mental health.
Addressing Barriers to Implementation	- Overcoming resource and workforce limitations. - Supporting staff capability to deliver lifestyle interventions. - Managing time constraints while maintaining quality of care. - Building partnerships with external services for coordinated support. - Advocating for policy change and research investment. - Engaging leaders to address organisational and systemic barriers.
Minimising Barriers for Consumers	- Connecting consumers with affordable and accessible services. - Supporting navigation of healthcare systems and pathways. - Tailoring interventions to accommodate mental health symptoms. - Building self-confidence and self-efficacy for lifestyle change. - Enhancing health literacy to support informed decision-making.
Involvement in Clinical Research	- Engaging consumers and clinicians as partners in research and co-design. - Selecting and applying validated assessment and outcome tools. - Securing funding for lifestyle-focused interventions. - Designing practical and clinically relevant research studies. - Promoting a positive, engaged research culture among staff.

gathered expert opinion on the core topics that could inform the development of future educational resources in lifestyle medicine. These findings contribute to the broader discourse on effective interprofessional practices, integrating lifestyle interventions as routine mental health care.

Lifestyle screening, assessment, and intervention

Regarding key screening and assessments, our findings suggest that assessment of modifiable lifestyle behaviours (nutrition, physical activity, smoking and substance use) and social support are of highest priority in the education of mental health service providers. Assessments of sleep quality and quantity, cardiometabolic monitoring (including metabolic bloods, anthropometry, and blood pressure), were also considered crucial, but of less importance than the aforementioned factors. Furthermore, results reinforce the perceived importance of lifestyle behaviours (physical activity, sleep, nutrition, and smoking) with respect to the need for integrated and targeted interventions. Nutrition status was cited as the most important assessment of lifestyle. Various tools have been used to assess nutritional quality within clinical and population-level research including the 24-h diet recall, 3-day food diary, Mediterranean Diet Score, or Alternative Healthy Eating Index, yet there remains a need for valid nutrition screening tools within the mental health context (Hancox et al., 2022). For the non-nutritionist mental health professional, a practical step to nutrition assessment is the 24-hour diet recall and 3-day food diary, while dietitians should be employed to perform validated assessments in clinical-research. Second to nutrition

was the 'assessment of social support'. Screening and assessing social support in mental health care is essential for identifying at-risk individuals, tailoring treatment plans, and fostering recovery and resilience (Harandi et al., 2017). Moreover, low social support or 'social connectedness' is associated with a range of chronic health conditions, namely cardiovascular disease (Freak-Poli et al., 2021).

The high importance placed on the modifiable lifestyle behaviours physical activity, sedentary behaviour, and sleep duration, is consistent with the clear evidence describing the significantly impaired lifestyle behaviours in people living with SMI, paired with the clear evidence describing the benefits of targeted interventions to improve such outcomes (Firth et al., 2020). The identified importance of screening for cardiometabolic markers, reflects existing guidelines, which recommend routine assessment of cardiometabolic markers due to the high prevalence of cardiometabolic illness within this population. Examples such as the Positive Cardiometabolic Algorithm (Curtis et al., 2012) provide clear guidance on key cardiometabolic measures including the timing and frequency of assessments and associated intervention recommendations. Despite clear guidelines and recommendations there are ongoing challenges to routine cardiometabolic screening within mental health services (Pearsall et al., 2019). In this study, 'lack of education, time and support' to implement cardiometabolic screening paired with 'lack of access to appropriate training and education surrounding relevant guidelines' were highlighted as major challenges.

Lifestyle intervention approaches

One of the central themes identified by the experts in this study, was the importance of personalised and person-centred care, where consumers are supported to be at the 'centre' of their own care and treated as a person first rather than as a 'condition'. This approach aligns with Peak Healthcare guidelines, which consistently reinforce the importance of integrating person-centred practices and moving away from 'stepped care models' when providing care to people living with mental illness (National Mental Health Consumer & Carer Forum, 2021).

The high value placed on peer-led interventions within the present study is consistent with the growing number of positive examples of peer-lead lifestyle interventions within mental health treatment programs (Stubbs et al., 2016). Despite limited evidence supporting the effectiveness of such interventions on physical health outcomes in SMI, the role of peer-support has demonstrated effectiveness in facilitating improved psychosocial outcomes (White et al., 2020) and may aid engagement within mental health treatment programs that include integrated lifestyle interventions.

Health coaching approaches that utilise evidence-based behaviour change methodologies to improve clinical communication, while modifying the built environments (clinical and social), are key in supporting the initiation and maintenance of health behaviours. Many behaviour change techniques and theories exist, including frameworks such as the theoretical domains framework and techniques such as motivational interviewing and positive psychology coaching, which are person-centred and facilitate intrinsic motivation and are key in facilitating maintenance of long-term behaviours (Vancampfort et al., 2013). Our study supported the inclusion of health coaching as one of the key priorities.

Although not of the highest value, 'Multidisciplinary and group-based design and programs', including multi-professional, peer support, and role models, were the most frequently cited response. Examples of successful multidisciplinary and integrated lifestyle interventions exist within acute, residential and community mental health services, such as the Multidisciplinary Lifestyle Focused Approach In the Treatment of Inpatients with Mental Illness (MULTI+) (Deenik et al., 2019), the Keeping the Body in Mind program (KBIM) (J. Curtis et al., 2024) for people living with psychosis, Nile Ward PICU violence reduction quality improvement project (Rahman et al., 2021), and The Mind-Body Well-being Initiative (Lalley et al., 2021). Psychosocial factors (e.g. social isolation, insecure accommodation, financial distress, lack of education and vocational limitations) paired with complex comorbidities in people with mental illness mean that multidisciplinary teams that include Mental health service providers and Primary Care physicians are required to support patients with healthy lifestyle behaviours (Manger, 2019). Although not focused specifically on lifestyle medicine, recent work has underscored the foundational role of communication, collaboration, and physical-health competence within the mental health workforce (Kaplan & Kul Uçtu, 2022; Tanriverdi et al., 2020). These capabilities directly influence clinicians' capacity to deliver

lifestyle-focused care effectively. Building on these broader workforce insights, the present study provides a more targeted contribution by identifying concrete lifestyle-medicine educational priorities that have not been previously articulated in Delphi-based research.

Perceived barriers and challenges

Importantly, our study also highlighted expert views on the perceived barriers and challenges to successfully implementing lifestyle interventions in mental health care. Perceived consumer-related barriers were comparable to existing evidence, which, has previously highlighted poor physical health, time constraints, lack of knowledge, difficulty breaking old habits, self-perceptions, mental health symptoms, and the social/physical environment as key barriers (Stefancic et al., 2021). Interestingly, experts in the present study highlighted ‘accessibility’, including service availability, cost, and transport as the primary perceived challenge for consumers engaging in lifestyle interventions. ‘Access’ or lack thereof, of available access to appropriate training and education surrounding relevant guidelines was the primary barrier for health professionals. This reinforces the need for targeted educational resources, that support improved knowledge of lifestyle medicine application and implementation among mental health service providers (Attoe et al., 2020). Importantly, new education and training resources should be evaluated for effectiveness, acceptability, and efficacy to ensure it translates into meaningful improvements in care.

With the mainstream adoption of telehealth and web-based platforms, there is growing promise for adapting lifestyle interventions in mental healthcare. Early evaluations show feasibility, acceptability, and potential benefits across diverse groups, for example, a 9-week telehealth lifestyle program for adults with psychiatric illness at cardiometabolic risk (Wright et al., 2025), the CALM trial comparing telehealth lifestyle therapy with psychotherapy (O’Neil et al., 2024), and McKeon et al.’s peer-led Facebook PTSD support, online program for emergency service workers (McKeon et al., 2023), and COVID-19 lifestyle program for older adults (McKeon et al., 2022). Practical considerations for safe and effective delivery have also been explored in studies of exercise professionals’ telehealth practice (Lederman et al., 2021). While these examples highlight the potential to address access barriers, more research is required to evaluate long-term effectiveness, equity, and scalability for people living with SMI, as well as to determine the extent to which lifestyle and physical healthcare training drives clinicians’ adoption of evidence-based practices and how the integration, fidelity, and impact of these approaches can be robustly assessed within routine mental health service delivery.

Perspectives of research within clinical settings

For the development and maintenance of lifestyle-related programs in mental health-related services, the high importance of co-design, collaborative and multidisciplinary approaches was reinforced by the experts, with the most highly rated response being co-design and customisation of programs based on feedback. Co-design is increasingly recognised as an essential framework for including consumers in the conceptualisation, design, implementation, delivery, and evaluation of both research and clinical services (Tindall et al., 2021). In an era of mental health reform that emphasises the consumer voice and experiences as essential in shaping services, it is unsurprising that experts in the present study rated this as of the highest value. This aligns with recent work by Fortuna et al. (2023), who used a Delphi consensus process to develop a lived experience-led research agenda to address premature mortality among people with a diagnosis of SMI. Their findings reinforce the importance of consumer collaboration in identifying priorities and shaping interventions (Fortuna et al., 2023).

The most frequently cited category was ‘Study design’, highlighting the need for clear guidance on appropriate methodologies, recruitment methods, relevant outcome measures, and evaluation strategies surrounding lifestyle interventions in mental health care. The availability of validated tools and collaborating with consumers were considered crucial. These findings highlight the need for proactive and conscious collaboration between clinical settings and research settings, so that they can support each other in their respective strengths and deficiencies. Greater attention to this can support the development of high value evidence-based lifestyle-related research within mental health settings.

This study underscores the need for policies that enhance education in lifestyle medicine for mental health service providers to address health disparities effectively. Training programs should emphasise comprehensive lifestyle assessments and interventions, prioritising nutrition, physical activity, and social support. Practices must incorporate person-centred and peer-led approaches, supported by health coaching to foster sustainable behaviour change. Furthermore, research should focus on overcoming barriers such as limited training access and consumer engagement challenges, ensuring methodologies are inclusive and relevant. The study highlights the necessity of interprofessional collaboration and the integration of evidence-based guidelines into routine mental health care. By aligning policy, practice, and research with the identified educational needs and intervention strategies, mental health services can improve both the physical and mental well-being of those living with mental illnesses.

Strengths and limitations

This study is the first to our knowledge to consider the perspectives of experts in determining the key components of lifestyle medicine interventions to reduce health disparities among people living with mental illness. While this may be the first study using a modified Delphi approach to develop priorities for physical health education for mental health professionals, previous research has examined physical health training needs in other contexts (Happell et al., 2013; Robson et al., 2013). These findings add to the existing evidence base by exploring how different stakeholders can contribute to the co-design of recovery-oriented, context-specific physical health care for people living with mental illness. The modified Delphi methodology used in this study enabled thorough consultation with experts across diverse research and clinical expertise, while also designed to consider the competing demands of participants, all of which with high volume workloads. Important considerations when interpreting the results of this Delphi study are the study limitations and potential for bias. Although our sample size ($n=18$) is consistent with previous Delphi studies in specialist health fields, it is acknowledged that individual responses have greater proportional influence on consensus thresholds, and stability of findings generally increases with larger panels. This is a recognised limitation of Delphi studies in niche or emerging clinical areas, where the pool of eligible experts is inherently limited; for example, Zimmerman et al. (2022) employed a similarly sized panel ($n=19$) in their consensus work on medical and mental health care in assisted living (Zimmerman et al., 2022). Nevertheless, future studies could explore larger panels to assess the reproducibility of these findings (Jorm, 2015). This limitation is typical of Delphi studies recruiting experts in niche clinical areas but it nonetheless warrants caution. While the participation of eighteen experts from diverse professional backgrounds may increase the generalisability and reliability of these findings, the selection of experts and the criteria used to identify and recruit participants may introduce some selection bias, potentially limiting the range of perspectives and insights represented. It is also important to consider potential biases in the Delphi process itself, such as the potential for social desirability bias among participants (Winkler & Moser, 2016). Other potential confounding factors include differing levels of familiarity with lifestyle interventions, and the absence of demographic data, which limited our ability to assess representatives. Therefore, the findings of this study should be interpreted with caution, and future research should aim to address these limitations to ensure the validity and generalisability of the results. Additionally, many participants reported the 'ranking' stage was challenging and often arbitrary given that many of the responses were perceived equally important.

Nonetheless, the results provide a comprehensive insight into the views of mental health experts on the perceived importance of various lifestyle-related screening, assessment, and intervention strategies to improve care within mental health services.

Conclusions

This study garnered and presented expert consensus on the application and implementation of lifestyle medicine for the improvement of the mental and physical health of those with mental illness. The expert opinion gathered from this study is consistent with evidence-based practice recommendations on lifestyle screening, assessment, and intervention strategies for people living with mental illness. The study's findings emphasise the importance of providing reliable, accessible, and practical training for mental health service providers from lived experience, clinical and research backgrounds. Additionally, the study

provides valuable insights into the essential lifestyle-related components that should be included within future interprofessional education and training opportunities.

Acknowledgments

The authors would like to acknowledge the contributions of the experts who participated in this study.

Ethical approval statement

This study was approved by the Human Ethics Review Committee at Deakin University, Melbourne, Australia (institutional human research ethics committee; approval number HEAG-H 92_2021; 18 August 2021). The research was conducted in accordance with the Declaration of Helsinki and relevant institutional guidelines. All participants received written information about the study and provided written informed consent prior to participation.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used ChatGPT4 in order to edit the structure of pre-written bodies of text, thus reducing length to adhere to wordcount limits while ensuring information was clear and articulately communicated. After using this tool for this sole purpose, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

Author contributions

OL: Conceptualisation, Methodology, Investigation, Formal analysis, Writing - Original Draft; SM: Conceptualisation, Methodology, Investigation, Formal analysis, Writing - Review & Editing; TR: Conceptualisation, Methodology, Investigation, Formal analysis, Writing - Review & Editing; LB: Writing - Review & Editing; FJ: Writing - Review & Editing; All authors: Writing - Review & Editing, Approval of final manuscript.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

ORCID

Oscar Lederman  <http://orcid.org/0000-0002-0321-5723>

Sam Manger  <http://orcid.org/0000-0001-7959-3811>

Felice Jacka  <http://orcid.org/0000-0002-9825-0328>

Tetyana Rocks  <http://orcid.org/0000-0002-4529-5872>

Data availability statement

The authors confirm that the data supporting the findings of this study are available within the article and its supplementary materials.

References

- Attoe, C., Retter, S., Minster, R., & Parish, S. (2020). Developing the mental health workforce to meet the physical health needs of people with a serious mental illness. *BMJ Simulation & Technology Enhanced Learning*, 6(5), 297–299. <https://doi.org/10.1136/bmjstel-2019-000505>
- Bailey, J. M., Bartlem, K. M., Wiggers, J. H., Wye, P. M., Stockings, E. A. L., Hodder, R. K., Metse, A. P., Regan, T. W., Clancy, R., Dray, J. A., Tremain, D. L., Bradley, T., & Bowman, J. A. (2019). Systematic review and meta-analysis of

- the provision of preventive care for modifiable chronic disease risk behaviours by mental health services. *Preventive Medicine Reports*, 16, 100969. <https://doi.org/10.1016/j.pmedr.2019.100969>
- Bartels, S., Brunette, M., Aschbrenner, K., & Daumit, G. (2015). Implementation of a system-wide health promotion intervention to reduce early mortality in high risk adults with serious mental illness and obesity. *Implementation Science*, 10(S1) A15, 1-3. <https://doi.org/10.1186/1748-5908-10-S1-A15>
- Correll, C. U., Solmi, M., Veronese, N., Bortolato, B., Rosson, S., Santonastaso, P., Thapa-Chhetri, N., Fornaro, M., Gallicchio, D., Collantoni, E., Pigato, G., Favaro, A., Monaco, F., Kohler, C., Vancampfort, D., Ward, P. B., Gaughran, F., Carvalho, A. F., & Stubbs, B. (2017). Prevalence, incidence and mortality from cardiovascular disease in patients with pooled and specific severe mental illness: A large-scale meta-analysis of 3,211,768 patients and 113,383,368 controls. *World Psychiatry: official Journal of the World Psychiatric Association (WPA)*, 16(2), 163–180. <https://doi.org/10.1002/wps.20420>
- Crowley, J., Ball, L., & Hiddink, G. J. (2019). Nutrition in medical education: A systematic review. *The Lancet. Planetary Health*, 3(9), e379–e389. [https://doi.org/10.1016/s2542-5196\(19\)30171-8](https://doi.org/10.1016/s2542-5196(19)30171-8)
- Curtis, J., Newall, H. D., & Samaras, K. (2012). The heart of the matter: Cardiometabolic care in youth with psychosis. *Early Intervention in Psychiatry*, 6(3), 347–353. <https://doi.org/10.1111/j.1751-7893.2011.00315.x>
- Curtis, J., Teasdale, S. B., Morell, R., Wadhwa, P., Watkins, A., Lederman, O., O'Donnell, C., Fibbins, H., & Ward, P. B. (2024). Implementation of a lifestyle and life-skills intervention to prevent weight-gain and cardiometabolic abnormalities in young people with first-episode psychosis as part of routine care: The Keeping the Body in Mind program. *Early Intervention in Psychiatry*, 18(9), 731–738. <https://doi.org/10.1111/eip.13508>
- Curtis, J., Watkins, A., Rosenbaum, S., Teasdale, S., Kalucy, M., Samaras, K., & Ward, P. B. (2016). Evaluating an individualized lifestyle and life skills intervention to prevent antipsychotic-induced weight gain in first-episode psychosis. *Early Intervention in Psychiatry*, 10(3), 267–276. <https://doi.org/10.1111/eip.12230>
- Deenik, J., Tenback, D. E., Tak, E. C. P. M., Blanson Henkemans, O. A., Rosenbaum, S., Hendriksen, I. J. M., & van Harten, P. N. (2019). Implementation barriers and facilitators of an integrated multidisciplinary lifestyle enhancing treatment for inpatients with severe mental illness: The MULTI study IV. *BMC Health Services Research*, 19(1), 740. <https://doi.org/10.1186/s12913-019-4608-x>
- Diamond, I. R., Grant, R. C., Feldman, B. M., Pencharz, P. B., Ling, S. C., Moore, A. M., & Wales, P. W. (2014). Defining consensus: A systematic review recommends methodologic criteria for reporting of Delphi studies. *Journal of Clinical Epidemiology*, 67(4), 401–409. <https://doi.org/10.1016/j.jclinepi.2013.12.002>
- Fiorillo, A., & Sartorius, N. (2021). Mortality gap and physical comorbidity of people with severe mental disorders: The public health scandal. *Annals of General Psychiatry*, 20(1), 52. <https://doi.org/10.1186/s12991-021-00374-y>
- Firth, J., Solmi, M., Wootton, R. E., Vancampfort, D., Schuch, F. B., Hoare, E., Gilbody, S., Torous, J., Teasdale, S. B., Jackson, S. E., Smith, L., Eaton, M., Jacka, F. N., Veronese, N., Marx, W., Ashdown-Franks, G., Siskind, D., Sarris, J., Rosenbaum, S., Carvalho, A. F., & Stubbs, B. (2020). A meta-review of “lifestyle psychiatry”: The role of exercise, smoking, diet and sleep in the prevention and treatment of mental disorders. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, 19(3), 360–380. <https://doi.org/10.1002/wps.20773>
- Firth, J., Ward, P. B., & Stubbs, B. (2019). *Lifestyle psychiatry*. (Vol. 10, pp. 597) Frontiers Media SA.
- Fortuna, K. L., Lebby, S., Geiger, P., Johnson, D., MacDonald, S., Chefetz, I., Ferron, J. C., St George, L., Rossom, R., Kalisa, J., Mestrovic, T., Nicholson, J., Pringle, W., Rotondi, A. J., Sippel, L. M., Sica, A., Solesio, M. E., Wright, M., Zisman-Ilani, Y., ... Walker, R. (2023). Lived experience-led research agenda to address early death in people with a diagnosis of a serious mental illness: A consensus statement. *JAMA Network Open*, 6(5), e2315479–e2315479. <https://doi.org/10.1001/jamanetworkopen.2023.15479>
- Freak-Poli, R., Ryan, J., Neumann, J. T., Tonkin, A., Reid, C. M., Woods, R. L., Nelson, M., Stocks, N., Berk, M., McNeil, J. J., Britt, C., & Owen, A. J. (2021). Social isolation, social support and loneliness as predictors of cardiovascular disease incidence and mortality. *BMC Geriatrics*, 21(1), 711. <https://doi.org/10.1186/s12877-021-02602-2>
- Gronholm, P. C., Chowdhary, N., Barbui, C., Das-Munshi, J., Kolappa, K., Thornicroft, G., Semrau, M., & Dua, T. (2021). Prevention and management of physical health conditions in adults with severe mental disorders: WHO recommendations. *International Journal of Mental Health Systems*, 15(1), 22. <https://doi.org/10.1186/s13033-021-00444-4>
- Hancox, L. E., Lee, P. S., Armaghianian, N., Hirani, V., & Wakefield, G. (2022). Nutrition risk screening methods for adults living with severe mental illness: A scoping review. *Nutrition & Dietetics: The Journal of the Dietitians Association of Australia*, 79(3), 349–363. <https://doi.org/10.1111/1747-0080.12652>
- Happell, B., Platania-Phung, C., & Scott, D. (2013). Physical health care for people with mental illness: Training needs for nurses. *Nurse Education Today*, 33(4), 396–401. <https://doi.org/10.1016/j.nedt.2013.01.015>
- Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017). The correlation of social support with mental health: A meta-analysis. *Electronic Physician*, 9(9), 5212–5222. <https://doi.org/10.19082/5212>
- Hjorthøj, C., Stürup, A. E., McGrath, J. J., & Nordentoft, M. (2017). Years of potential life lost and life expectancy in schizophrenia: A systematic review and meta-analysis. *The Lancet. Psychiatry*, 4(4), 295–301. [https://doi.org/10.1016/s2215-0366\(17\)30078-0](https://doi.org/10.1016/s2215-0366(17)30078-0)
- Jorm, A. F. (2015). Using the Delphi expert consensus method in mental health research. *The Australian and New Zealand Journal of Psychiatry*, 49(10), 887–897. <https://doi.org/10.1177/0004867415600891>
- Kaplan, V., & Kul Uçtu, A. (2022). The effect of the communication skills psychoeducation program on the communication skills and self-esteem of the care personnel working in a rehabilitation center. *Perspectives in Psychiatric Care*, 58(4), 2489–2496. <https://doi.org/10.1111/ppc.13084>

- Lalley, N. A., Manger, S. H., Jacka, F., Rocks, T., Ruusunen, A., & Barron, L. (2021). The Mind-Body Well-being Initiative: A better lifestyle for people with severe mental illness. *Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists*, 29(4), 434–438. <https://doi.org/10.1177/1039856220978864>
- Lambert, T. J., Reavley, N. J., Jorm, A. F., & Oakley Browne, M. A. (2017). Royal Australian and New Zealand College of Psychiatrists expert consensus statement for the treatment, management and monitoring of the physical health of people with an enduring psychotic illness. *The Australian and New Zealand Journal of Psychiatry*, 51(4), 322–337. <https://doi.org/10.1177/0004867416686693>
- Lederman, O., Furzer, B., Wright, K., McKeon, G., Rosenbaum, S., & Stanton, R. (2021). Mental health considerations for exercise practitioners delivering telehealth services. *Journal of Clinical Exercise Physiology*, 10(1), 20–28. <https://doi.org/10.31189/2165-7629-10.1.20>
- Lederman, O., Suetani, S., Stanton, R., Chapman, J., Korman, N., Rosenbaum, S., Ward, P. B., & Siskind, D. (2017). Embedding exercise interventions as routine mental health care: Implementation strategies in residential, inpatient and community settings. *Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists*, 25(5), 451–455. <https://doi.org/10.1177/1039856217711054>
- Lederman, O., Ward, P. B., Rosenbaum, S., Maloney, C., Watkins, A., Teasdale, S., Morell, R., & Curtis, J. (2020). Stepping up early treatment for help-seeking youth with at-risk mental states: Feasibility and acceptability of a real-world exercise program. *Early Intervention in Psychiatry*, 14(4), 450–462. <https://doi.org/10.1111/eip.12871>
- Malhi, G. S., Bell, E., Bassett, D., Boyce, P., Bryant, R., Hazell, P., Hopwood, M., Lyndon, B., Mulder, R., Porter, R., Singh, A. B., & Murray, G. (2021). The 2020 royal Australian and New Zealand college of psychiatrists clinical practice guidelines for mood disorders. *The Australian and New Zealand Journal of Psychiatry*, 55(1), 7–117. <https://doi.org/10.1177/0004867420979353>
- Manger, S. (2019). Lifestyle interventions for mental health. *Australian Journal of General Practice*, 48(10), 670–673. <https://www1.racgp.org.au/ajgp/2019/october/lifestyle-interventions-for-mental-health> <https://doi.org/10.31128/AJGP-06-19-4964>
- Marx, W., Manger, S. H., Blencowe, M., Murray, G., Ho, F. Y., Lawn, S., Blumenthal, J. A., Schuch, F., Stubbs, B., Ruusunen, A., Desyibelew, H. D., Dinan, T. G., Jacka, F., Ravindran, A., Berk, M., & O'Neil, A. (2023). Clinical guidelines for the use of lifestyle-based mental health care in major depressive disorder: World federation of societies for biological psychiatry (WFSBP) and Australasian society of lifestyle medicine (ASLM) taskforce. *The World Journal of Biological Psychiatry: The Official Journal of the World Federation of Societies of Biological Psychiatry*, 24(5), 333–386. <https://doi.org/10.1080/15622975.2022.2112074>
- McKeon, G., Tiedemann, A., Sherrington, C., Teasdale, S., Mastrogiorganni, C., Wells, R., Steel, Z., & Rosenbaum, S. (2022). Feasibility of an online, mental health-informed lifestyle program for people aged 60+ years during the COVID-19 pandemic. *Health Promotion Journal of Australia: Official Journal of Australian Association of Health Promotion Professionals*, 33(3), 545–552. <https://doi.org/10.1002/hpja.538>
- McKeon, G., Wells, R., Steel, Z., Hadzi-Pavlovic, D., Teasdale, S., Vancampfort, D., & Rosenbaum, S. (2023). An online mental health informed physical activity intervention for emergency service workers and their families: A stepped-wedge trial. *Digital Health*, 9, 20552076221149294. <https://doi.org/10.1177/20552076221149294>
- Mirza, L., Das-Munshi, J., Chaturvedi, J., Wu, H., Kraljevic, Z., Searle, T., Shaari, S., Mascio, A., Skiada, N., Roberts, A., Bean, D., Stewart, R., Dobson, R., & Bendayan, R. (2021). Investigating the association between physical health comorbidities and disability in individuals with severe mental illness. *European Psychiatry: The Journal of the Association of European Psychiatrists*, 64(1), e77, Article e77. <https://doi.org/10.1192/j.eurpsy.2021.2255>
- National Mental Health Consumer & Carer Forum. (2021). Transforming 'person-centred' to 'person-led' approaches. <https://nmhccf.org.au/our-work/advocacy-briefs/transforming-person-centred-to-person-led-approaches?highlight=WyJjYXJlIiwic3VwcG9ydCIsInBlcnNvbi1jZW50cmVklwi1j3BlcnNvbi1jZW50cmVkJyIsImFwcHJvYWN0ZXMiLCJ0b3YslmFwcHJvYWN0ZXMGdG8iXQ>
- Noordsy, D. L. (2019). *Lifestyle psychiatry*. American Psychiatric Pub.
- O'Neil, A., Perez, J., Young, L. M., John, T., Turner, M., Saunders, D., Mahoney, S., Bryan, M., Ashtree, D. N., Jacka, F. N., Bruscella, C., Pilon, M., Mohebbi, M., Teychenne, M., Rosenbaum, S., Opie, R., Hockey, M., Peric, L., De Araugo, S., ... Chatterton, M. L. (2024). Clinical and cost-effectiveness of remote-delivered, online lifestyle therapy versus psychotherapy for reducing depression: Results from the CALM non-inferiority, randomised trial. *Lancet Reg Health West Pac*, 49, 101142. <https://doi.org/10.1016/j.lanwpc.2024.101142>
- Pape, L. M., Adriaanse, M. C., Kol, J., van Straten, A., & van Meijel, B. (2022). Patient-reported outcomes of lifestyle interventions in patients with severe mental illness: A systematic review and meta-analysis. *BMC Psychiatry*, 22(1), 261. <https://doi.org/10.1186/s12888-022-03854-x>
- Pearsall, R., Shaw, R. J., McLean, G., Connolly, M., Hughes, K. A., Boyle, J. G., Park, J., Smith, D. J., & Mackay, D. (2019). Health screening, cardiometabolic disease and adverse health outcomes in individuals with severe mental illness. *BJPsych Open*, 5(6), e97. <https://doi.org/10.1192/bjo.2019.76>
- Peckham, E., Tew, G., Lorimer, B., Bailey, L., Beeken, R., Cooper, C., Gascoyne, S., Gilbody, S., Jones, G., Machaczek, K., Pickering, K., Traviss-Turner, G., & Stubbs, B. (2023). Interventions to increase physical activity and reduce sedentary behaviour in severe mental ill health: How effective are they?—A systematic review. *Mental Health and Physical Activity*, 25, 100547. <https://doi.org/10.1016/j.mhpa.2023.100547>

- Rahman, M., Taylor, C., Abdullahi, R., Okwuokei, A., Waugh, M., Kaji, M., & Magadlela, B. (2021). Nile Ward PICU violence reduction quality improvement project. *BJPsych Open*, 7(S1), S213–S214. <https://doi.org/10.1192/bjo.2021.570>
- Robson, D., Haddad, M., Gray, R., & Gournay, K. (2013). Mental health nursing and physical health care: A cross-sectional study of nurses' attitudes, practice, and perceived training needs for the physical health care of people with severe mental illness. *International Journal of Mental Health Nursing*, 22(5), 409–417. <https://doi.org/10.1111/j.1447-0349.2012.00883.x>
- Rotella, F., Cassioli, E., Calderani, E., Lazzeretti, L., Raghianti, B., Ricca, V., & Mannucci, E. (2020). Long-term metabolic and cardiovascular effects of antipsychotic drugs. A meta-analysis of randomized controlled trials. *European Neuropsychopharmacology: The Journal of the European College of Neuropsychopharmacology*, 32, 56–65. <https://doi.org/10.1016/j.euroneuro.2019.12.118>
- Sinha, I. P., Smyth, R. L., & Williamson, P. R. (2011). Using the Delphi technique to determine which outcomes to measure in clinical trials: Recommendations for the future based on a systematic review of existing studies. *PLoS Medicine*, 8(1), e1000393. <https://doi.org/10.1371/journal.pmed.1000393>
- Speyer, H., Jakobsen, A. S., Westergaard, C., Nørgaard, H. C. B., Pisinger, C., Krogh, J., Hjorthøj, C., Nordentoft, M., Glud, C., Correll, C. U., & Jørgensen, K. B. (2019). Lifestyle interventions for weight management in people with serious mental illness: A systematic review with meta-analysis, trial sequential analysis, and meta-regression analysis exploring the mediators and moderators of treatment effects. *Psychotherapy and Psychosomatics*, 88(6), 350–362. <https://doi.org/10.1159/000502293>
- Stefancic, A., Bochicchio, L., Tuda, D., Gurdak, K., & Cabassa, L. J. (2021). Participant experiences with a peer-led healthy lifestyle intervention for people with serious mental illness. *Psychiatric Services (Washington, D.C.)*, 72(5), 530–538. <https://doi.org/10.1176/appi.ps.202000311>
- Stubbs, B., Vancampfort, D., Hallgren, M., Firth, J., Veronese, N., Solmi, M., Brand, S., Cordes, J., Malchow, B., Gerber, M., Schmitt, A., Correll, C. U., De Hert, M., Gaughran, F., Schneider, F., Kinnafick, F., Falkai, P., Möller, H.-J., & Kahl, K. G. (2018). EPA guidance on physical activity as a treatment for severe mental illness: A meta-review of the evidence and position statement from the european psychiatric association (EPA), supported by the international organization of physical therapists in mental health (IOPTMH). *European Psychiatry: The Journal of the Association of European Psychiatrists*, 54, 124–144. <https://doi.org/10.1016/j.eurpsy.2018.07.004>
- Stubbs, B., Williams, J., Shannon, J., Gaughran, F., & Craig, T. (2016). Peer support interventions seeking to improve physical health and lifestyle behaviours among people with serious mental illness: A systematic review. *International Journal of Mental Health Nursing*, 25(6), 484–495. <https://doi.org/10.1111/inm.12256>
- Tanriverdi, D., Kaplan, V., Bilgin, S., & Demir, H. (2020). The comparison of internalized stigmatization levels of patients with different mental disorders. *Journal of Substance Use*, 25(3), 251–257. <https://doi.org/10.1080/14659891.2019.1675790>
- Teasdale, S. B., Burrows, T. L., Hayes, T., Hsia, C. Y., Watkins, A., Curtis, J., & Ward, P. B. (2020). Dietary intake, food addiction and nutrition knowledge in young people with mental illness. *Nutrition & Dietetics: The Journal of the Dietitians Association of Australia*, 77(3), 315–322. <https://doi.org/10.1111/1747-0080.12550>
- Teasdale, S. B., Ward, P. B., Rosenbaum, S., Samaras, K., & Stubbs, B. (2017). Solving a weighty problem: Systematic review and meta-analysis of nutrition interventions in severe mental illness. *The British Journal of Psychiatry: The Journal of Mental Science*, 210(2), 110–118. <https://doi.org/10.1192/bjp.bp.115.177139>
- Tindall, R. M., Ferris, M., Townsend, M., Boschert, G., & Moylan, S. (2021). A first-hand experience of co-design in mental health service design: Opportunities, challenges, and lessons. *International Journal of Mental Health Nursing*, 30(6), 1693–1702. <https://doi.org/10.1111/inm.12925>
- Vancampfort, D., Correll, C. U., Galling, B., Probst, M., De Hert, M., Ward, P. B., Rosenbaum, S., Gaughran, F., Lally, J., & Stubbs, B. (2016). Diabetes mellitus in people with schizophrenia, bipolar disorder and major depressive disorder: A systematic review and large scale meta-analysis. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, 15(2), 166–174. <https://doi.org/10.1002/wps.20309>
- Vancampfort, D., De Hert, M., Vansteenkiste, M., De Herdt, A., Scheewe, T. W., Soundy, A., Stubbs, B., & Probst, M. (2013). The importance of self-determined motivation towards physical activity in patients with schizophrenia. *Psychiatry Research*, 210(3), 812–818. <https://doi.org/10.1016/j.psychres.2013.10.004>
- Vancampfort, D., Firth, J., Correll, C. U., Solmi, M., Siskind, D., De Hert, M., Carney, R., Koyanagi, A., Carvalho, A. F., Gaughran, F., & Stubbs, B. (2019). The impact of pharmacological and non-pharmacological interventions to improve physical health outcomes in people with schizophrenia: A meta-review of meta-analyses of randomized controlled trials. *World Psychiatry: official Journal of the World Psychiatric Association (WPA)*, 18(1), 53–66. <https://doi.org/10.1002/wps.20614>
- Vancampfort, D., Mitchell, A. J., De Hert, M., Sienaert, P., Probst, M., Buys, R., & Stubbs, B. (2015). Prevalence and predictors of type 2 diabetes mellitus in people with bipolar disorder: A systematic review and meta-analysis. *The Journal of Clinical Psychiatry*, 76(11), 1490–1499. <https://doi.org/10.4088/JCP.14r09635>
- Watkins, A., Stein-Parbury, J., Denney-Wilson, E., Ward, P. B., & Rosenbaum, S. (2020). Upskilling mental health nurses to address the burden of poor metabolic health: A mixed method evaluation. *Issues in Mental Health Nursing*, 41(10), 925–931. <https://doi.org/10.1080/01612840.2020.1744204>
- White, S., Foster, R., Marks, J., Morshead, R., Goldsmith, L., Barlow, S., Sin, J., & Gillard, S. (2020). The effectiveness of one-to-one peer support in mental health services: A systematic review and meta-analysis. *BMC Psychiatry*, 20(1), 534. <https://doi.org/10.1186/s12888-020-02923-3>

- Williams, J., Stubbs, B., Richardson, S., Flower, C., Barr-Hamilton, L., Grey, B., Hubbard, K., Spaducci, G., Gaughran, F., & Craig, T. (2019). 'Walk this way': Results from a pilot randomised controlled trial of a health coaching intervention to reduce sedentary behaviour and increase physical activity in people with serious mental illness. *BMC Psychiatry*, 19(1), 287. <https://doi.org/10.1186/s12888-019-2274-5>
- Winkler, J., & Moser, R. (2016). Biases in future-oriented Delphi studies: A cognitive perspective. *Technological Forecasting and Social Change*, 105, 63–76. <https://doi.org/10.1016/j.techfore.2016.01.021>
- Woodcock, T., Adeleke, Y., Goeschel, C., Pronovost, P., & Dixon-Woods, M. (2020). A modified Delphi study to identify the features of high quality measurement plans for healthcare improvement projects. *BMC Medical Research Methodology*, 20(1), 8. <https://doi.org/10.1186/s12874-019-0886-6>
- Wright, T., Fenton, A., Ling, C., & Tromba, S. (2025). Implementing lifestyle interventions for adults with mental illness via telemedicine. *The Journal for Nurse Practitioners*, 21(3), 105302. <https://doi.org/10.1016/j.nurpra.2024.105302>
- Zimmerman, S., Sloane, P. D., Wretman, C. J., Cao, K., Silbersack, J., Carder, P., Thomas, K. S., Allen, J., Butrum, K., Chicotel, T., Giorgio, P., Hernandez, M., Kales, H., Katz, P., Klinger, J. H., Kunze, M., Laxton, C., McNealley, V., Meeks, S., ... Van Haitsma, K. (2022). Recommendations for medical and mental health care in assisted living based on an expert delphi consensus panel: A consensus statement. *JAMA Network Open*, 5(9), e2233872-e2233872. <https://doi.org/10.1001/jamanetworkopen.2022.33872>