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COMMENTARY

Physical Activity and Mental Health: A Little Less Conversation, a Lot More Action

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From relative obscurity and disdain by some in the medical community, we have seen substantial traction in major guidelines considering the use of physical activity (PA) for the prevention[1] and treatment of various mental health conditions.[2] The tireless efforts of the research and advocacy community have been fundamental in achieving this shift. However, it is *Now or Never* that we must capitalize on this momentum and make a lasting real-world impact.

There are many reasons why PA can have a pivotal role in the lives of people with mental illness. First, people living with mental illness experience substantial physical comorbidity, particularly with regard to a heightened prevalence of cardiometabolic diseases. This constellation of physical health conditions accounts for approximately 15 years premature mortality.[3] PA is known to have a positive impact on the risk and outcomes of many such conditions.[3] Second, people with mental illness often experience profound neuropsychiatric symptoms, which benefit from the procognitive effects of supervised exercise.[2] Third, people with mental illness often experience high levels of social isolation, loneliness, and challenges with functioning in daily life. PA can provide an opportunity to promote life skills and social connectivity.[4] Finally, people with mental illness have substantially reduced levels of PA, reduced cardiorespiratory fitness, and high levels of sedentary behavior.[5]

Perhaps the greatest example of the field being *All Shook up* and accepting PA's role in mental health is in exercise and depression. This has, however, not been plain sailing, but *That's all Right*. There was a low point in 2013 following the publication of a Cochrane Review.[6] The authors[6] found that exercise improved depressive symptoms, but this effect was reduced to small and nonstatistically significant in "high-quality studies" versus other treatments. Unfortunately, the headlines in major news outlets led with the message "exercise does not work for depression," which was misleading given that null findings in a subgroup analysis do not provide any certainty of null effects, especially given positive effects in many other total sample analyses. This was temporarily *Heartbreak Hotel* for those in the field. No matter if we were talking to communities across medicine, research, patients, or the public; it was hard to change the narrative from these misleading headlines from a subsequently updated analysis.[6] Thankfully, a number of other meta-analyses[7,8] subsequently addressed previous methodological concerns and demonstrated that exercise does indeed work for depression, although some critique does remain around the exact magnitude of efficacy, and issues with blinded trials (an issue innate to all exercise studies and psychosocial interventions generally).

There is no doubt that research has spearheaded the change in acceptance. However, we fear that we are at risk of being a victim of our own success, a kind of *Devil in Disguise*, for several reasons. First, the number of systematic reviews is substantially outpacing the number of new innovative trials of exercise for depression, to an extent which is tilting toward "research waste." For instance, in the last 12 months alone, a search on PubMed identified over 50 meta-analyses investigating whether various forms exercise can help people with depression, mostly in the form of duplicitous efforts. While concepts such as preregistration and even "living reviews" could serve to overcome this, we are now at the point where there will need to be more investment, effort, and incentive toward producing high-quality, large-scale implementation trials to advance the field. Second, people with depression (and other mental illnesses) are not able to routinely access exercise schemes in the community. Third, there is not sufficient training of nonclinical exercise staff (eg, fitness trainers) or clinical staff (eg, physiotherapists) in motivating people with depression to engage in exercise. This poor translation of the evidence is setting up the field, and more importantly, people with depression to potentially fail. The success of exercise in the prevention and management of depression/poor mental health will rest or die on the successful implication of valid programs.

Clearly, it is *Now or Never*. We need *a little less conversation and a lot more action* to understand what works, and for whom, and how best to implement successful programs that are accessible for people with poor mental health in the community.

We have several suggestions to turn the tide at this crucial time. First, for researchers, we advocate that a more collegiate and coordinated approach is taken, especially when proposing a systematic review, in order to discourage researchers from sustained duplicitous efforts and encourage larger scale, collaborative projects that can produce genuinely new insights into a saturated field.

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Second, we propose that further research focuses on an implementation approach with a central focus on translation and evaluation in the real world. It is especially important to ensure that interventions are culturally adapted, tested, and appropriate for underrepresented settings such as in low- and middle-income countries. Third, we propose that accredited training for exercise and mental health is developed for health professionals and nonclinical exercise staff. This could include the basics in PA promotion for health professionals and mental health first aid training and behavior change counseling for nonclinical exercise staff. This is urgently needed if we are to effectively roll out the evidence for exercise and mental health, since research has consistently shown better outcomes and less dropout when this is supervised by trained professionals.[2] We believe that by focusing our efforts on action in the real world and evaluating these endeavors, as opposed to staying in our Ivory towers shouting about efficacy, we place ourselves with the best chance to make an impact on the lives of people with poor mental health.

Few now doubt that PA can have a central role in the promotion and treatment of mental health. However, we are at a critical point of producing an exponential amount of research and neglecting the translation and implementation of this. Consequently, people with poor mental health seem set to miss out on the potential benefits of exercise. If we continue down this road, it may not be long before people with depression and the medical community develop *Suspicious Minds*. Further, if people cannot access or benefit from PA in the community, we can expect our message that exercise works for depression will be met with *Return to Sender*.

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