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Rx Exercise: Physical Activity is Good Medicine

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In recent years, there has been increased attention toward integrating mental and physical health, with an emphasis on the role of primary care providers in recognizing and addressing mental health issues among children and adolescents. However, less attention is often paid to the importance of mental health providers recognizing and addressing the physical health of children and adolescents at risk for or with mental health disorders.

In this issue of the *Journal*, Sibold and colleagues¹ remind us of the importance of physical health among adolescents at risk for mental health issues and suicidality, presenting results from the 2013 National Youth Risk Behavior Survey (N=13,583), a nationally representative sample of public and private school students in grades 9 through 12. Thirty percent of students reported experiencing sadness for at least 2 weeks; 22.2% reported suicidal ideation; and 8.2% reported a suicidal attempt in the past year; students who were bullied were two times as likely to report feeling sad and three times as likely to report suicidal ideation or attempt. However, students who reported exercising 4–5 days/week had lower adjusted odds of sadness, suicidal ideation or suicidal attempts than students who exercised 1 or fewer times each week.

Given the increase in recent decades in the proportion of overweight and obese teens, much of the public discussion on youth physical activity has focused on the exertion of energy and the role increased physical activity plays in helping youth maintain a healthy weight. But the benefits of physical activity and exercise extend well beyond just weight control, as noted by a recent position statement that was issued on behalf of Canadian experts representing 14 organizations on active outdoor play: “Access to active play in nature and outdoors—with its risks—is essential for healthy child development. We recommend increasing children’s opportunities for self-directed play outdoors in all settings—at home, at school, in child care, the community and nature.”

These benefits extend to children and adolescents at risk for, or with, mental health disorders. In addition to Sibold and colleagues’ research showing an association between more physical activity, fewer depressive symptoms, and less suicidality among bullied teens,

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others have shown that physical activity has antidepressive, anxiolytic, self-efficacy and mood-enhancing effects among youth,^{2–5} as well as improving cognitive functioning.⁶ The benefits of exercise are not limited to children and adolescents with depressive or anxiety symptoms—a systematic literature review found a range of benefits of physical activity interventions for children and adolescents with ADHD.⁷

The evidence base with respect to exercise and child and adolescent mental health is continuing to evolve. Many studies, such as Sibold and colleagues', report on observational findings, and significant associations should not be considered to imply causality. More randomized controlled trials examining the efficacy and effectiveness of physical activity interventions on mental health outcomes are needed, as are studies that help to elucidate the mechanisms of the benefits of exercise on mental health. Given the commonly known challenges to initiating and maintaining an exercise regimen, equally important are studies examining how to effectively implement and sustain physical activity interventions among children and adolescents with mental health disorders being treated in real world settings.

Despite these challenges, however, the evolving literature suggests that physical activity interventions appear to be potentially promising as preventive interventions for some children and adolescents at risk for developing mental health disorders, as well as for augmenting more traditional interventions for children and adolescents being treated for depressive and anxiety disorders and ADHD. The “side-effects” of such physical activity interventions are likely to be more positive for many children than those of many other therapeutic interventions, as well as having the potential to be less costly.

Professionals who work with children and adolescents at risk for or with mental health disorders should consider what role youth physical activity plays in their own clinical practice. Routinely asking about physical activity during mental health evaluations, discussing the potential physical and mental health benefits of exercise with patients and their families, or prescribing exercise or giving physical activity “homework” as part of therapy when appropriate are just a few ways mental health clinicians can integrate physical health activities. Although further research is needed to show causality, there is likely little harm for most children in using physical activity to augment mental health treatment or as part of prevention efforts. Indeed, if increased engagement in physical activity can enhance resilience to traumatic events such as bullying, as well as other stressors, we can begin to move toward population health approaches that can improve both the health and mental health of neighborhoods and communities.

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