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Research highlight

How physically active are our children? A global view

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In a special issue of the Journal of Physical Activity and Health published in November 2016, guest editors Cooper et al. share the results from the Global Matrix 2.0 arising from the Active Healthy Kids Global Alliance. With participation from 38 countries on 6 continents, the Global Matrix 2.0 provides a Report Card on 9 indicators supportive of physical activity in children and youth. The indicators include overall physical activity levels, organized sports participation, active play, active transportation, sedentary behaviors, family and peers, school, community and built environment, and government strategies and investments. A summary grade is averaged across indicator grades. At first glance, it is startling to see so many C, D, and F grades assigned to the overall physical activity level and sedentary behavior indicators in countries globally. The scores were equally poor regardless of the continent and the country's level of development. The grades were best for active transportation and organized sports participation (mostly Bs and Cs), but incomplete in other indicators for many countries. Overall, across all indicators, 92% of the countries had an average grade of C (68%) or D (24%), and only 3 countries received a grade of B (Denmark, Netherlands, and Slovenia). As noted by Tremblay et al.,2 the grades for these latter 3 countries show that it is possible to provide the infrastructure, programs, and policies that offer physical activity opportunities for children and youth. However, as evidenced by only 2 countries earning an A or B grade in overall physical activity (Slovenia, A-; New Zealand, B-) and 3 countries earning a B (highest grade) in reducing sedentary behaviors (Kenya and Zimbabwe, B; Slovenia, B-), translating gains in infrastructure, programs, and policies is possible, but it is a slow process.

The grades reflected in the *Global Matrix 2.0* are not from a lack of effort from committed persons and organizations worldwide. More likely, the grades reflect the late start (*ca.* 1990) in recognizing that physical inactivity is a global public health problem that affects the health, function, and well-being of a

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large number of people. Although many countries globally were early adopters of initiatives to monitor and increase physical activity, it was not until 2002 that the World Health Organization presented its first resolution on diet, physical activity, and health at the 55th World Health Assembly calling for a strategy on diet and physical activity to reduce the impact of a rising incidence of noncommunicable diseases.³ In 2010, the International Society for Physical Activity and Health (organized in 2008) released the first Toronto Charter for Physical Activity: A Global Call for Action,⁴ and in 2016 they released the Bangkok Declaration on Physical Activity for Global Health and Sustainable Development.⁵

We have come a long way to increase awareness of physical inactivity as a public health problem globally and we must stay the course. The problem of insufficient physical activity, especially in children and youth, is characterized by large social, cultural, political, legal, and economic dimensions that cannot be addressed by a single group of individuals or by a single approach. Growing levels of sedentary behaviors dictate prompt, organized, and coordinated efforts by governments and communities. Tremblay et al.² noted that in Slovenia (the country with the highest grade for overall physical activity) physical activity in children is monitored in the school system with nationwide physical fitness testing; school physical activity programs are modified based on the test results to assure an adequate level of physical activity and fitness. In the United States, school physical education was mandated by most states in the early to mid-20th century; fitness-oriented curricula were adopted during times of national security threats. However, with changes in educational goals and economic challenges, school physical education programs have been reduced without establishing sufficient opportunities for physical activity and fitness programs that reach all children and youth. No doubt, similar stories can be told in other countries.

Overall, the grades presented in the *Global Matrix 2.0* Report Card should be seen as a wake-up call for countries to step up efforts to adopt coordinated multidisciplinary team approaches that assure infrastructures, programs, and policies that can provide opportunities for active lifestyles for children and youth are in place. This is an outstanding report, and the

leaders and each author in the *Journal of Physical Activity and Health* supplement are to be applauded for their efforts in completing this important project.

Competing interests

The author declares no competing financial interests.

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