

EDITORIAL

Why is Physical Activity Important to Study in Childhood and Adolescence?

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One of the most important concerns of pediatrician in this pandemic/post-pandemic period is the damage caused by COVID-19 on children's daily habits, especially physical activity. Children and teenagers were kept indoors during these 2 years, living their lives through digital interactions and becoming forcefully sedentary.

Studies conducted worldwide have shown that the average daily screen time of children and adolescents was greater than 2 hours a day, with the vast majority of them having a higher time than that recommended for any age.¹

And what about babies and toddlers? The impact of the pandemic on their global health is still not fully understood, and there is a concern about the “motor illiteracy” generated by the pandemic, as many were born in this confinement and barely put their feet outside the house.²

And why is physical activity in childhood and adolescence so important?

Some of the reasons which are relevant for the cardiologists include:

(1) Health well-being of the first 1000 days since conception favors epigenetic aspects, predisposing or not to the risk of development of obesity, hypertension, diabetes mellitus, and dyslipidemia.

(2) Lifestyle is defined early in life, as well as the pleasurable feeling of being active; thus, childhood and adolescence are crucial stages for the acquisition and future maintenance of these habits.

(3) Physical activity at any age is an important factor to acquire several other healthy habits, such as good nutrition

and no smoking, in addition to strengthening mental health, aspects that are especially important in adolescents.

(4) In adults, prevention of cardiovascular risk factors is related to an active life.³

Moreover, what is the importance of studying physical activity in childhood? It seems increasingly urgent, mainly because there is less quality research on the subject, to acquire solid knowledge on both the impact of physical activity since childhood and how to measure physical activity in this age group – which significantly influences the evaluation of its association with different outcomes. Obtaining more data would create the possibility of large-scale treatment for this age group, such as implementation of educational and preventive cardiovascular programs in schools, where this group remains most of the time throughout childhood and adolescence.⁴

Therefore, the article entitled “Physical activity and cardiovascular risk factors in children: a meta-analysis update”⁵ should be viewed with great attention. In addition to being a very elegant study, i.e., a well-designed and executed systematic review and meta-analysis, this article highlights important aspects of the relationship between physical activity and cardiovascular outcomes such as the role of physical activity on blood pressure and triglyceride blood levels, aspects also described in adulthood. It also makes a great discussion of the reasons possibly related to the lack of association between physical activity and control of body mass index, or even the role of this body mass index in the overall health in childhood and adolescence.

We are looking forward to having more research on cultural and daily habits since childhood and the associated cardiovascular risk. Perhaps, this is the secret to the successful control of the cardiovascular risks, which

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has not yet been achieved albeit the entire therapeutic arsenal in cardiovascular prevention, treatment, and rehabilitation.⁶

In addition, who knows, our civilization will once again value simple and really important things, such

as a life with a closer contact with nature, leading to a more active lifestyle, where our children can have a pleasurable, intuitive, less stressful, and happier childhood again. Our families, especially our little ones, certainly need and will benefit from this.

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