### Editorial

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# Does Excessive Smartphone Use Reduce Physical Activity in Adolescents?

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Regular physical activity prevents many diseases, including cardiovascular disease, type 2 diabetes, and hypertension. Moreover, physical activity in adolescents has positive effects on cognitive function, academic performance, and memory.<sup>1)</sup> In South Korea, the prevalence of sufficient aerobic activity has been increasing, but in 2020, the prevalence of physical inactivity in Korea was 54.4% and 94.1% in adults and adolescents, respectively. The prevalence of sufficient aerobic physical activity decreased from 58.3% in 2014 to 45.6% in 2020, and sedentary time increased from 7.5 to 8.6 hours.<sup>2)</sup>

In the present issue, Jeong et al.<sup>3)</sup> investigated the association between problematic smartphone use and physical activity among adolescents based on the 2020 Korea youth risk behavior web-based survey. This study found that 25.5% of Korean students were problematic smartphone users. Problematic smartphone use among adolescents was negatively associated with performing an adequate amount of physical activity, which was affected directly and indirectly by various factors such as sex, socioeconomic status (SES), academic performance, and sitting time.

The results showed that female sex, low SES, low academic performance, and high sitting time increased the risk of problematic smartphone use, consequently reducing the extent of physical activity.

Smartphones are very convenient tools, but excessive smartphone usage may cause negative effects on people's physical and psychosocial health.<sup>4)</sup> This study shows that reduced physical activity can be added to the adverse effects of excessive smartphones use.

It is known that many factors are associated with physical

activity, and factors such as depression<sup>5)</sup> and dog ownership<sup>6)</sup> affect physical activity. Therefore, primary care physicians who see adolescents should be mindful of these risk factors, and the fact that primary care is a prime place to increase physical activity through physical activity counseling should also be kept in mind.<sup>7)</sup>

# **CONFLICT OF INTEREST**

No potential conflict of interest relevant to this article was reported.

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#### REFERENCES

- Yang YJ. An overview of current physical activity recommendations in primary care. Korean J Fam Med 2019;40:135-42.
- 2. Seo YB, Oh YH, Yang YJ. Current status of physical activity in South Korea. Korean J Fam Med 2022;43:209-19.
- Jeong A, Ryu S, Kim S, Park HK, Hwang HS, Park KY. Association between problematic smartphone use and physical activity among adolescents: a path analysis based on the 2020 Korea Youth Risk Behavior Web-Based Survey. Korean J Fam Med 2023;44:268-73.
- 4. Kim H, Cho MK, Ko H, Yoo JE, Song YM. Association between smartphone usage and mental health in South Korean adolescents: the 2017 Korea Youth Risk Behavior Web-Based Survey. Korean J Fam Med 2020;41:98-104.
- Chang Y, Park KY, Hwang HS, Park HK. Association between type and intensity of physical activity and depression. Korean

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J Fam Med 2022;43:254-60.

6. Park M, Park HK, Hwang HS, Park KY, Yim HH. Erratum: the relationship between dog ownership and physical activity in Korean Adults. Korean J Fam Med 2021;42:187-8.

7. Wattanapisit A, Wattanapisit S, Wongsiri S. Overview of physical activity counseling in primary care. Korean J Fam Med 2021;42:260-8.