



## **Comparison of Physical Activity Level among Childhood Cancer Survivors in Korea**

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### **Dear Editor-in-Chief**

Cancer is one of the most prevalent diseases in the world. More than 360,000 childhood cancer survivors live in the United States (1). In Korea, 89.4 children per 100,000 in the 0–14 age group suffer from some form of cancer (2). Physical activity is a well-known intervention that can improve quality of life, reduce the risk factors of disease, and improve general health and well-being (3).

We conducted surveys with 282 childhood cancer survivors (153 boys and 129 girls) from 12 to 19 years old. After respondents completed the informed consent form, they were asked if they were aware of their diseases, they also were asked to report on their physical activity levels based on the International Physical Activity Questionnaire-Short Form (IPAQ-S) (4). Multiple logistic regression was used to analyze the data, adjusting for the confounding variables of age and sex.

We found that children's awareness of their disease significantly affected their physical activity level (crude odds ratios [ORs] = 5.663, 95% confidence interval [CI] = 1.665-19.269,  $p = 0.005$ ; adjusted for age and sex ORs = 4.104, 95% CI = 1.106-15.222,  $p = 0.034$ ).

The children who were not being aware of their disease showed a higher physical activity level. Many childhood cancer survivors face long-term health problems such as subsequent cancers or

severe chronic conditions (5-7). They also are at an increased risk of psychological distress and poorer health-related quality of life compared to their siblings and other healthy children in the general population (8-9). This often has a negative impact on their physical activity levels. The awareness of disease might negatively affect physical activity as well as other psychological factors. We recommend that additional well-designed control studies on this topic should be conducted.

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