

Abstract Type : Poster
Presentation No. : PHV 004

Trends in Blood Pressure Levels in Korean Youth: Data from the Korea National Health and Nutrition Examination Survey

Yeonhee LEE¹, Jae Hyun Kim², Heeyeon Cho¹

¹Department of Pediatrics, Samsung Medical Center, Korea, Republic of

²Department of Pediatrics, Seoul National University Bundang Hospital, Korea, Republic of

Objectives:

The prevalence of elevated blood pressure (BP) among US children and adolescents have been reported to decline during the past decade. There is no report for Korean data, and we aimed the recent trends in BP levels among Korean children and adolescents.

Methods:

This study examines data obtained from the Korea National Health and Nutrition Examination Survey (KNHANES) 2007-2015 which were combined into 3 time periods (2007-2009, 2010-2012, and 2013-2015). A total of 7,889 Korean children and adolescents aged 10-18 years were included in the analysis. The sex-, age-, and height-BP standards recommended by the US Forth Report were used to define hypertension.

Results: Mean systolic BP increased by 2.8 mmHg from 2007-2009 to 2013-2015, and there is no significant change in diastolic BP. The prevalence of elevated BP in Korean children and adolescents were 2.5, 2.6, and 3.4%, respectively, and there is no statistical significance. The anthropometric data showed that body mass index (BMI) increased by 0.5 kg/m² from 2007-2009 to 2013-2015. According to the data for life-style factors, the daily intake of total energy, total fat, carbohydrate, protein significantly increased during the period between 2007-2009 and 2013-2015 (all $P < 0.05$), whereas the daily intake of sodium significantly decreased ($P < 0.05$).

Conclusions:

Mean systolic BP have increased, and there was no significant change in the prevalence of elevated BP during the past decade. The changes in dietary factor such as an increase in the intake of total energy and fat and the reduction in sodium intake might be associated with the trends in blood pressure in Korean youth.