

# Association of short stature with life satisfaction and self-rated health in children and adolescents: the CASPIAN-IV study

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## Abstract

**Background:** Data on stature in Iranian children and adolescents at national level are limited. The purpose of this study was to investigate the association of short stature with life satisfaction (LS) and self-rated health (SRH) in children and adolescents.

**Methods:** Data were obtained from a nationwide survey entitled childhood and adolescence surveillance and prevention of adult non-communicable disease (CASPIAN IV). Participants were 14,880 children and adolescents, aged 6-18 years, who were selected using multistage, cluster sampling method from rural and urban areas of 30 provinces of Iran. LS and SRH were evaluated for every participant by the validated questionnaire prepared based on the global school-based student health survey of the World Health Organization (WHO). Height was measured according to the standard protocol. Short stature was defined as height less than -2 standard deviation (SD) below the mean height for age and sex.

**Results:** Overall, 13,484 participants with a mean (SD) age of 12.5 (3.36) years (49.24% girls, 50.75% boys) completed the study (response rate 90.6%). The prevalence of short stature, poor SRH and life dissatisfaction was 9%, 20.04% and 20.09%, respectively. Although in the univariate model, participants with short stature had significantly lower odds of LS [ odds ratio (OR): 0.83, 95% confidence interval (CI): 0.71-0.97] and good SRH (OR: 0.79, 95% CI: 0.68-0.92), in the multivariate model, only the association of short stature with good SRH remained statistically significant (OR: 0.82, 95% CI: 0.69-0.98).

**Conclusions:** Results of the present study show that participants with short stature are at the greater risk of poor SRH and decreased LS in comparison with the subjects with normal height.