

## Socioeconomic Inequality in Physical Activity: The CASPIAN-V Study

**Authors :** Roya Kelishadi, Mostafa Amini-Rarani, Mostafa Qorbani

**Abstract :** Introduction: As a health-related behavior, physical activity (PA) has an unequal distribution relating to individual's socioeconomic status. This study aimed to assess socioeconomic inequality in PA among Iranian students and their parents at national level and according to socioeconomic status (SES) of the living regions. Method: This study was conducted as part of a national surveillance program conducted among 14400 Iranian students and their parents. Non-linear principal component analysis was used to construct the households' socioeconomic status, and the concentration index approach was applied to measure inequality in father, mother, and student's PA. Results: The data of 13313 students and their parents were complete for the current study. At national level and SES regions, students had more PA than their parents (except in the lowest SES region), and fathers have more PA than mothers. The lowest means of mother and student's PA were found in the highest SES region. At national level, the concentration indices of father and mother's PA were -0.050 (95 % CI: -0.067 ~ -0.030) and -0.028 (95% CI: -0.044 ~ -0.012), respectively; indicating pro-poor inequality and, the CI value of student PA was nearly equal to zero ( $P > 0.05$ ). At SES regions, father and mother's PA were more concentrated in the poor, except for lower middle region. Regional concentration indices for students reveal that inequality not statistically significant at all regions. Conclusion: This study suggests that reliable evidence that comparing different aspects of inequality of PA, based on socioeconomic status and residence areas of students and their parents, could be used for better planning for health promotion programs. Moreover, given the average of mother's and student's PA in the richer regions were low, it can be suggested that richer focused-PA planning may further increase the level of PA across higher SES and, consequently, reduce inequality in PA. These findings can be applied in the health system services.

**Keywords :** concentration index, health system services, physical activity, socioeconomic inequality

**Conference Title :** ICSS 2020 : International Conference on Service Systems

**Conference Location :** Prague, Czechia

**Conference Dates :** July 09-10, 2020