

## Self-Reported Lifestyle Activities for Children Living in Single versus Multiple Households

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**Background:** While it is known that parent separation can have an effect on a child's well-being, the exact implications for a child's cardiovascular health are not known. Physicians can provide parents with appropriate health recommendations, but when a child lives in more than one household, coordination of care for cardiovascular health can be more complex. This study aims to determine the correlation of multiple households with a child's body mass index percentile (BMI%) and the child's self-reported exercise and screen time to determine if residing in a single household (SH) versus multiple households (MH) can impact these measures, and consequently a child's cardiovascular health.

**Methods:** Data were collected from the Pediatric Preventive Cardiology Clinic database. Age, gender, BMI%, hours of reported exercise time per day, hours of reported screen time per day, and the number of households residing in were collected from 2/2011-12/31/2015. Patients were  $\leq 18$  years old at the time of initial and followup visits.

**Results:** There were 1301 patient encounters, with 420 initial visits. 233 of 420 patients had at least one follow-up visit. There was no significant difference between BMI% ( $83 \pm 22.8\%$  for SH vs.  $83 \pm 23.2\%$  for MH,  $p=0.96$ ), hours of exercise per day ( $1 \pm 1.1$  hours for SH vs.  $0.9 \pm 0.9$  hours for MH,  $p=0.2$ ), or hours of screen time per day ( $2.9 \pm 2.4$  hours for SH vs.  $2.7 \pm 1.8$  hours for MH,  $p=0.9$ ) based on the number of households reported at the time of the initial visit. However, there was a significant difference in the change of screen time from the initial visit to the final visits for SH patients compared to MH ( $p=0.018$ ). For SH children, there was an average increase of  $0.2 \pm 2.2$  hours of reported daily screen time. Conversely, for MH children there was an average decrease of  $0.3 \pm 1.6$  hours of reported daily screen time.

**Conclusion:** In our study, the number of households a child resides in did not appear to have a significant impact on a child's BMI% or on reported lifestyle measures. There were statistically significant differences in lifestyle changes over time, but it is not clear that these differences are of clinical significance. With this information, providers should adjust their expectations when providing recommendations for families. Limitations of the study include an inability to control for socioeconomic status, which is known to correlate with BMI<sup>1</sup>. In addition, studies have shown that when self-reported exercise time is compared to more objective measures, the self-reported time is frequently overestimated<sup>2</sup>, so results using self-reported data should be interpreted with caution.

### References:

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2. Sarker H, Anderson LN, Borkhoff CM, Abreo K, Tremblay MS, Lebovic G, et al. Validation of parent-reported physical activity and sedentary time by accelerometry in young children. *BMC Res Notes.* 2015;8(1):735.