

STAGES OF BEHAVIOR CHANGE RELATED TO PHYSICAL ACTIVITY ASSOCIATED WITH SLEEP QUALITY AND SLEEP DURATION IN ADOLESCENTS

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Introduction & Purpose: Poor sleep quality and insufficient sleep duration have consequences for adolescents' health. Physical activity (PA) has been evidenced as a protective factor for sleep disturbances. It is hypothesized that stages of behavior change for habitual PA practice present distinct associations with adolescents' sleep behavior. This study aimed to examine the associations of the stages of behavior change related to PA with sleep quality and sleep duration in adolescents. **Methods:** The study included an analysis of the baseline data from the "Movimente" program (2017) with students from six schools in a southern city of Brazil. The sample consisted of 1,259 students (mean age 13.2±0.1 years, 50.5% female). All variables were measured by questionnaire. Sleep quality (frequently/occasionally/rarely sleeping well) and sleep duration on schooldays (≥ 8 hs/day=sufficient; < 8 hs/day=insufficient) were the dependent variables. The independent variable stages of behavior change related to PA was used in three categories: maintenance, action and initial stages (grouped pre-contemplation, contemplation, preparation). Binary and multinomial logistic regressions adjusted for age and gender were used. **Results:** The proportion of students who reported occasionally or rarely sleeping well were 25.1% (95%CI 22.8-27.6) and 9.0% (95%CI 7.5-10.7), respectively. Moreover, 46.6% (95%CI 43.8-49.3) reported insufficient sleep duration on schooldays. Students in the action stage were less likely to report occasionally sleeping well (OR 0.58; 95%CI 0.39-0.86) when compared to those in the initial stages. Those in the maintenance stage had lower odds to report occasionally (OR 0.66; 95%CI 0.49-0.90) or rarely sleeping well (OR 0.41; 95%CI 0.24-0.69). The stages of behavior change related to PA were not associated with insufficient sleep duration on schooldays. **Conclusions:** Students in the maintenance stage were less likely to report occasionally or rarely sleeping well, whereas those in the action stage had lower odds only to report occasionally sleeping well. The stages of behavior change related to PA were not associated with sleep duration. PA practices over a long period of time appear to offer major improvements in adolescents' sleep quality and should be encouraged.

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