

PHYSICAL ACTIVITY AND SCREEN BASED ACTIVITY ASSOCIATED WITH SLEEP PATTERN TO ADOLESCENT IN WATES SUBDISTRICT, KULON PROGO DISTRICT

Siti Nurfadilah H.¹, Madarina Julia², Riris Andono Ahmad³

1. Email: siti.nurfadilah.h@mail.ugm.ac.id
2. Department of Child Health, Faculty of Medicine. Gadjah Mada University/Dr. Sardjito Hospital. Jl. Kesehatan No.1, Sekip, Yogyakarta, Indonesia. Phone: +6281578505740. Email: madarinajulia@ugm.ac.id
3. Field Epidemiology Training Program, Faculty of Medicine, Gajah Mada University, Yogyakarta, Indonesia. Email: risandono.ahmad@gmail.com

ABSTRACT

Background: The prevalence of sleep duration in adolescent decreases approximately one hour each night. Bad sleep patterns may increase the risk of death. Sleep patterns influenced by many factors, one of which are a physical activity and screen based activity. Sleep, physical activity and screen based activity (SBA) are common thing for adolescents. The aim of this study was to explore the relationship between physical activity and SBA with sleep patterns in adolescent.

Method: A cross-sectional study, school-based survey was conducted in August 2016 among junior high school student of Wates Subdistrict. Sample were 536 respondents selected using stratified random sampling. Data were collected through interviews with the structured questionnaire from International Physical Activity Questionnaire (IPAQ) and Pittsburgh Sleep Quality Index (PSQI), measurement height and waist circumference. We conducted a chi-square test, mann-whitney and logistic regression analysis to explore explore the associations of physical activity and screen based activity with sleep pattern.

Results: Of 536 respondents, poor sleep quality (34.5%) and short sleep duration (45.3%) happened on female adolescent. SBA more than 2 hours each day is a risk factor (OR=2.0; 95% CI = 1.3-3.3; p = 0.003) for a bad sleep quality among adolescents. Low and moderate physical activity is a protective factor (OR=0.7; 95% CI= 0.3-0.9; p = 0.05) for sleep duration. Physical activity not associated with sleep quality and SBA not associated with sleep duration

Conclusion: Physical activity and SBA was associated with adolescent sleep patterns. Advocating to Dinas Pendidikan Kabupaten Kulon Progo to conduct physchoeducation at school.

Keyword: sleep, physical activity, screen based activity, adolescent

INTISARI

Latar Belakang: Prevalensi durasi tidur pada remaja menurun sekitar satu jam tiap malam. Pola tidur buruk dapat meningkatkan risiko terjadinya kematian. Pola tidur dipengaruhi banyak faktor, salah satunya adalah aktifitas fisik dan *screen based activity* (SBA). Pada remaja, tidur, aktifitas fisik serta *screen based activity* merupakan suatu hal yang umum. Penelitian ini bertujuan untuk mengetahui hubungan antara aktifitas fisik dan SBA dengan pola tidur remaja.

Metode: Rancangan penelitian ini adalah *cross sectional study* yang dilaksanakan di sekolah menengah pertama Kecamatan Wates, pada bulan Agustus 2016. Sampel penelitian berjumlah 536 responden dengan teknik pemilihan sampel menggunakan *stratified random sampling*. Data dikumpulkan dengan melakukan wawancara dengan kuesioner terstruktur dari *International Physical Activity Questionnaire* (IPAQ) dan *Pittsburgh Sleep Quality Index* (PSQI), pengukuran tinggi badan dan lingkar pinggang. Analisis data menggunakan uji *Chi-square*, *Mann-Whitney* dan regresi logistik.

Hasil: Total 536 responden yang dilibatkan dalam penelitian menunjukkan kualitas tidur buruk (34,5%) dan durasi tidur pendek (45,3%) lebih banyak terjadi pada remaja perempuan. SBA lebih dari 2 jam tiap hari (aOR=2.0; 95% CI= 1.3-3.3; p=0,003) menyebabkan terjadinya kualitas tidur yang buruk. Aktivitas fisik rendah dan sedang (aOR= 0.7; 95% CI=0.5-0.9; p=0.05) menyebabkan terjadinya durasi tidur panjang. Aktivitas fisik tidak berhubungan dengan kualitas tidur serta SBA tidak berhubungan dengan durasi tidur.

Kesimpulan: Aktifitas fisik serta SBA berhubungan dengan pola tidur remaja. Sebaiknya, melakukan advokasi kepada Dinas Pendidikan Kabupaten Kulon Progo untuk melakukan *physchoeducation* di sekolah.

Kata Kunci: tidur, aktifitas fisik, *screen based activity*, remaja