**Correlation of serum cortisol with sleep habits and daytime sleepiness of young adults**

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**ABSTRACT**

**Objective:** To assess the sleep habits and daytime sleepiness of medical students and to relate these to their serum cortisol.

**Study Design:** Cross-sectional observational study

**Place and Duration:** Department of Physiology, Islamic International Medical College Rawalpindi and Railway General Hospital Rawalpindi from 1st March 2010 to 28th February 2011

**Methodology:** Sixty MBBS students, equally from both genders were randomly selected from first year and final year class. Their age, weight, sleep habits, exercise, nap/week and daytime sleepiness were find out through sleep questionnaire and Epworth sleepiness scale. Blood samples for serum cortisol was taken at 9:00am

**Results:** Out of 60 students, sleep duration of 13.33% of students was less than 6 hrs. 16.67% of the students were having daytime sleepiness. Daytime sleepiness was more in female students (26.67%). Female students (76.67%) had more than 3 naps/week. Dreams remembering was more in 66.67% in male students as compared to female students (46.67%). Serum cortisol was 307.8 pg/ml in students having daytime sleepiness as compared to students having no daytime sleepiness (248.8 pg/ml. Daytime sleepiness and weight of the students was positively correlated to the serum cortisol levels.

**Conclusion:** Daytime sleepiness is more in female students resulting in more naps/week as compared to male students. Male students with better sleep at night has more dream remembering as compared to female students. Serum cortisol, a stress marker is raised in students with daytime sleepiness.

## Keywords: Medical students, Sleep habits, Daytime sleepiness, Cortisol, Serum cortisol, Epworth scale

**How to Cite This:**

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