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*Exercise behaviour, sleep habits and time management
among students of Medical University of Lublin*

Despite a large public health interest in physical activity and its role in the pathogenesis of civilisation diseases, little is known about patterns of physical activity among Polish university students. It is widely accepted that they spend more time studying than other people and sleep fewer hours than they actually need. Moreover, it is emphasized that there is a correlation between circadian preferences, regularity of sleep patterns, sleep problems, daytime sleepiness and daytime behaviour. Poor sleepers are more emotionally upset than others, they usually feel bad in the morning, they do not have breakfast and are fewer efficient at work. Good sleepers regularly take exercise and have fewer emotional problems (3,5).

The aim of the study was to assess patterns of daytime behaviour and sleeping habits as well as general daytime management among students of Medical University of Lublin.

MATERIAL AND METHODS

We interviewed 167 third-year medical students (107 women and 60 men, 20 to 29 years old) of Medical Department at Medical University of Lublin using an especially designed questionnaire. Participation in the investigation was voluntary and anonymous. The students were asked to answer 23 multiple and single choice questions.

RESULTS

The time spent for physical activity by the interviewed students varied from 1 to 8 hours a week (Tab.1). The majority of students sleep about 6 hours a day (Tab. 2. Men spend more time with their families and friends than women (men up to 8 hours a day – 30%, up to 4h – 22%, up to 2h – 20%, up to 6h – 18%, up to 1h – 10%; women up to 4h – 36%, up to 2h – 23%, up to 8h – 21%, up to 6h – 15%, up to 1h – 5%). A vast majority of the examined students watch TV for up to 1 hour per day (64% of women and 63% of men), few do not watch it at all (7 and 5%, respectively), some for up to 2 h/day (21 and 13%). Also, there is a little group that does it for 4–8 hours per day (8 and 9%). 86% of all the group use personal computers (PCs), and 83% of them have access to the Internet. Most of them spent up to 1 hour per day using their PCs (67% of women and 66% of men), less up to 2h/day (15 and 22%, respectively). Few

Table 1. Time spent on physical activity

| Time spent on physical activity, dance or different exercise | Female students (% of female group) | Male students (% of male group) |
|--|-------------------------------------|---------------------------------|
| up to 1 h/week | 20 | 22 |
| up to 2 h/week | 36 | 37 |
| up to 4 h/week | 28 | 22 |
| up to 6 h/week | 10 | 12 |
| up to 8 h/week | 6 | 7 |

Table 2. Sleep hours

| Sleep hours | Female students (% of female group) | Male students (% of male group) |
|-------------|-------------------------------------|---------------------------------|
| 3 h/day | 1 | 0 |
| 4 h/day | 2 | 0 |
| 5 h/day | 15 | 5 |
| 6 h/day | 28 | 30 |
| 7 h/day | 28 | 23 |
| 8 h/day | 21 | 25 |
| 9 h/day | 5 | 10 |
| 10 h/day | 0 | 5 |
| 11 h/day | 0 | 2 |

students work with computers for 4–6 h/day (6 and 12%) and very few do not use PCs at all (12% of females, none of males). Surprisingly, 5% of female students and 3% of male students admitted being emotionally dependent on computers. More than half of the examined group spend about 6h/day at university (57% of women and 55% of men), some stayed longer than 8 h (29 and 19%) and a few shorter than 4h/day (14 and 26%). Female students usually spend 4–6 hours studying at home or in libraries, an average male student—approximately 4h/day.

DISCUSSION

Young adults are characterized by a steep decline in the level of physical activity all over the world. Allgower et al. published results of their study investigating the relationship of depressive symptoms, social support and range of personal health behaviours in over 5 000 university students. They revealed that depressive symptoms were significantly associated with lack of physical activity, no breakfast eaten, irregular sleep hours and no use of seat belts both in men and women, and additionally with smoking, not eating fruit and not using sunscreen in women (1). Some German researchers performed a follow-up study assessing the frequency of symptoms and complaints, psychosocial and study-related sources of stress, health attitudes and perceptions in the university freshmen and later, when they were third year students. They found out that the mental stressors with respect to study demands increased within the three years significantly, whereas health awareness and physical activity increased moderately (4). Results obtained in our study suggest that Polish medical students, especially females, do not exercise enough. According to Anding et al. the situation is similar in American students, where

66% of university students live sedentary lives, even though those who participated in the study were attendants of university aerobic courses (2). Some other scientists from the USA found out that the best predictors of exercise behaviour change in adulthood among females were: exercise self-efficacy and family social support. In males they were: social support, physical activity history and exercise self-efficacy (6). It is also known that motivation for physical activity may stem from different backgrounds in both genders, in females it is often a drive for being slim, whereas in males it may be a form of socializing or a reaction to stress.

CONCLUSIONS

1. Third-year students of Medical University of Lublin do not exercise enough. The sedentary lifestyle results from sharing their time between university, libraries and studying medical textbooks at home.
2. Medical students socialise and spend enough time with their families, thus getting family and friend support.
3. The majority of the students neither watch TV nor play with computers longer than 2 hours per day.

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SUMMARY

The aim of the study was to depict and assess patterns of daytime behaviour and sleeping habits as well as general daytime management among students of Medical University of Lublin. On examination of 167 third-year medical students (107 women and 60 men, 20 to 29 years old) we found out that the third-year students did not exercise enough. Their sedentary lifestyles resulted from sharing their time between university, libraries and studying medical textbooks at homes. Medical students socialise and spend enough time with their families, and in this way they get family and friends' support, which allows them to manage with stress and psychological problems. Most of the students neither watch TV nor play with computers longer than 2 hours per day.

Aktywność fizyczna, higiena snu i zagospodarowanie czasu w ciągu dnia przez studentów
Wydziału Lekarskiego Akademii Medycznej w Lublinie

Istnieje wiele doniesień naukowych na temat spadku aktywności fizycznej, zaburzeń rytmów dobowych w związku z brakiem higieny snu oraz wynikających stąd zaburzeń percepcji oraz problemów psychospołecznych wśród dorosłych, począwszy od studentów szkół wyższych. Celem pracy było zbadanie i ocena aktywności fizycznej, higieny snu oraz sposobu zagospodarowania czasu przez studentów III roku Wydziału Lekarskiego Akademii Medycznej w Lublinie. Przy pomocy kwestionariusza ankiety, składającej się z 23 pytań otwartych i zamkniętych, zbadano 167 studentów (107 kobiet i 60 mężczyzn w wieku od 20 do 29 lat). Stwierdzono, że większość z nich prowadzi siedzący tryb życia; nie wykazują oni dostatecznej aktywności fizycznej, dzieląc czas między zajęcia na uczelni, czytanie w bibliotekach i samodzielną naukę w domu. Przy tym większość ankietowanych studentów spędzała 4 i więcej godzin dziennie z rodziną lub przyjaciółmi, zdobywając w ten sposób wsparcie grupy rówieśniczej i rodziny, co pozwalało im radzić sobie ze stresem. Ankietowani studenci w większości nie poświęcali więcej niż 2 godziny dziennie na oglądanie telewizji czy na korzystanie z komputera.