

THE SLEEP IN THE ECONOMY OF THE DAILY ACTIVITIES OF YOUNG PEOPLE

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Abstract: *It represents a pilot study on a group of young subjects, in which we emphasized some aspects regarding how our young people consider and respect the sleep as a basic hygienic habit and mean of biological restoration. We started such study taking also in mind the sleep and wakefulness disorders could be met also among both sedentary and sport young people.*

Key words: *sleep, wakefulness, rehabilitation, young people.*

1. Introduction

The sleep is a psycho-physiological habit incorporated in the circadian clock and alternating with the wakefulness. The sleep is a necessity following to daily activities, requiring more or less efforts. From the physiological point of view, it consists in the suspension of the consciousness and partially of the sensitivity, together with a diminution of the vegetative functions.

The sleep covers about one third part of our human life and there are particularities according to ages or individual reasons, each person having its individual innate sleeping need. The optimal amount of the night sleep, recommended by the World Health Organization is 8 hours. American researchers consider the ideal sleep lasts minimum 7 hours.

According to scientific observations, the length of sleep oscillates between 5 and 10 hours, the average amount being 7 and half hours, depending on the age. The length of sleep is decreasing while a man is growing up: a newborn baby sleeps almost all the time, a child of 1-3 years sleeps 14-15 hours, being 7 sleeps 10 hours and only 8 being 13, or 7 hours as full-aged and 5-6 hours being old one.

A sound sleep starts quickly and soon become deep. The sleep has a fundamental role for the biological restoration after physical and psychical efforts.

The normal structure of a night sleep involves two habitual types: a NREM sleep and a REM sleep, integrated by cycles of 60 – 100 minute, which repeat 4/5 times in a night.

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The NREM (Non Rapid Eyes Movements) sleep is slow or usual and represents about 70-80% of an adult's sleep and its set up involves 3 stages:

- a stage of a superficial sleep, when the body's movements are lesser, when is possible also a sudden awaking;
- a stage of the intermediary sleep;
- a stage of a deep sleep, hard to reach and it induce the relaxation.

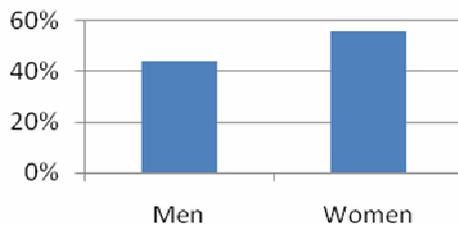
During the slow sleep is restored the protein synthesis of tissues and organs

The REM (Rapid Eyes Movements) (rapid or paradoxical) sleep represents 20-30% of an adult's sleep, in which occurs the ionic, metabolic and protein restoration of the neurons.

Sleep disorders could be classified in four groups of problems: insomnia, hypersomnia, sleepwalking and disorder of the circadian clock. The syndromes of sleep disorders induce serious affections of the wakefulness and functionality in the daytime. Generally the women are more affected by insomnia. According to studies, the average amount of sleep for women is 6 hours and 10 minutes during the night.

Purpose

The purpose of this study is to find in which degree the young people are conscious about the night sleep role to maintain a good health and to have an optimum mood during the day.



Graph A. Gender distribution of the subjects

Working Hypothesis

Starting from the idea the young people do not give enough time to rest through night sleeping, including its duration and quality.

Research Methods

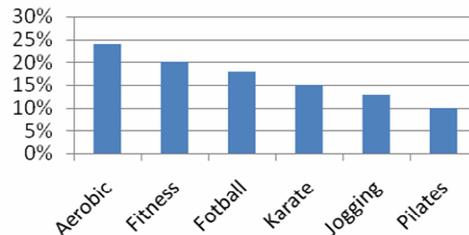
- Study of specialized literature;
- Survey method through questionnaires, to know the subjects' opinion about the significance, duration and role of the night sleep and to emphasize its existence in the induction stage of sleep. It was used a questionnaire with 20 items;
- Method of statistic-mathematic analysis, using parameter showing the general degree of the investigated events;
- Graphic representation of the collected data.

Studied Sample

In the studied sample there were 55 young people (24 men and 31 women) which ages were between 18-21 years, students and employees of a publicity company, involved in sport leisure activities (aerobic, fitness, karate, football, jogging, judo, pilates), 2-3 times by week.

Analysis and Interpretation of Data

The gender representation of the 55 subjects was: 44% men and 56% women (Graph A). The practiced sports are represented in Graph B.



Graph B. Sports activities practiced

Item 1 The length of sleep shows the less over half (58%) have a night sleep of 7-8 hours, and 35% have a short sleep (about 5-6 hours), while 7% are able to get a sleep of 9 hours (Fig. 1).

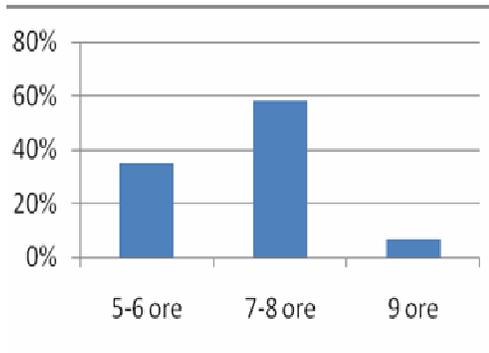


Fig. 1. *Length of night sleep*

Item 2 The most subjects go to bed before the midnight (60%), but too late and 18% can do it only after the midnight. Only 22% go to bed properly (Fig. 2).

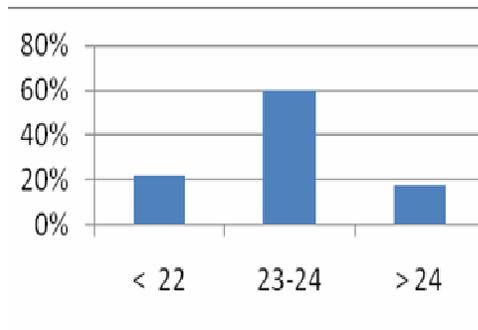


Fig. 2. *Time to go to bed*

Item 3 As per observance and constancy of the sleeping time most of subjects (55%) do not go to bed at the same hour, but 45% are able to have about the same

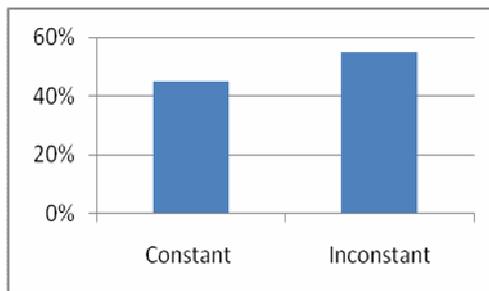


Fig. 3. *Constance of the sleeping time*

time to sleep (Fig. 3). **Item 4** Regarding the waking time most of them, 73% wake up constantly at the same hour, but 27% do not (Fig. 4).

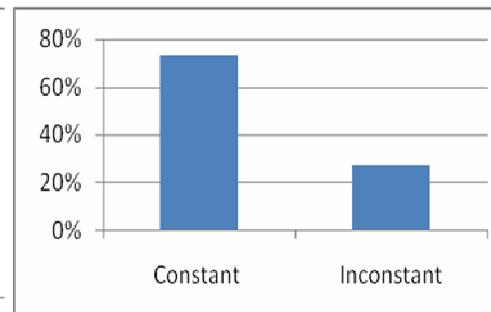
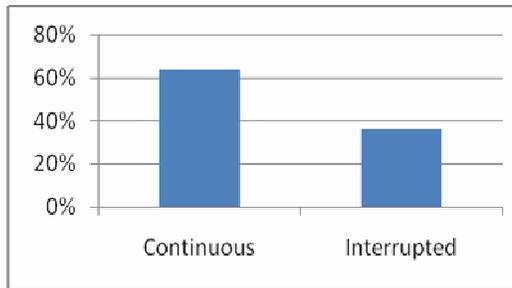
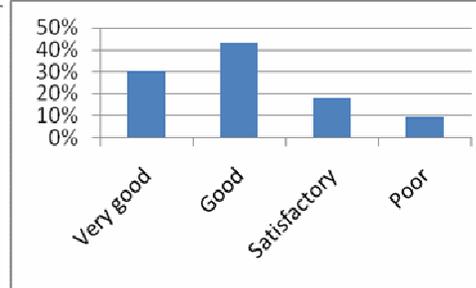


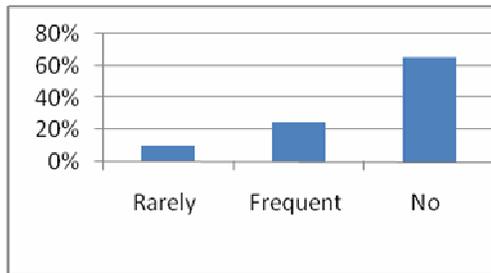
Fig. 4. *Constance of the waking*

Item 5 Most of subjects (64%) have a continuous sleep and the other ones, 36%, have an interrupted sleep (Fig. 5). **Item 6** As concerns the sleep quality (Fig. 6), the

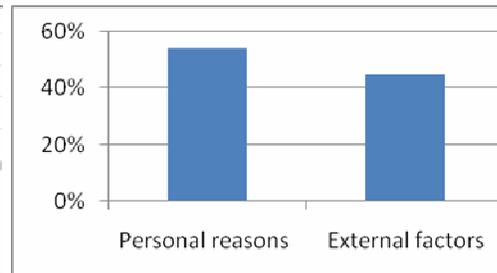
majority considers it very good or good. For 18% of young people the sleep is satisfactory and only 9% consider it is poor.

Fig. 5. *Continuity of sleep*Fig. 6. *Quality of sleep*

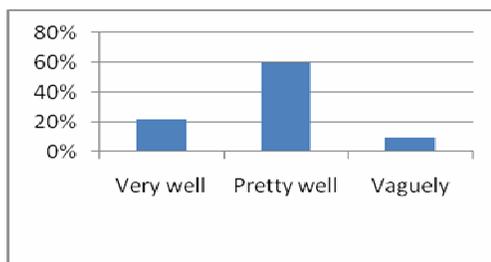
Item 7 To the question if they are disturbed by insomnia 65% of subjects declared they do not have such sindrom, 25% have it often and 10% rarely (Fig. 7).

Fig. 7. *Insomnia frequency*

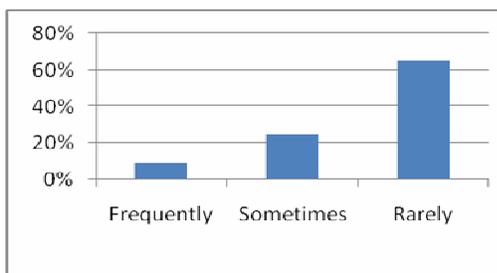
Item 8 The reasons of insomnia are personal and psychological ones (54%), but for 45% depends on bedroom, internal or external, factors (Fig. 8).

Fig. 8. *Insomnia reasons*

Item 9 Referring to dreams 22% declared they remember very well what they have dreamt, 18% vaguely, but most of them, it means 66% remember pretty well their dreams (Fig. 9).

Fig. 9. *Remembering dreams*

Item 10 The majority of subjects (65%) declared they rarely had nightmare, 25% sometimes and only 9% has frequently (Fig. 10).

Fig. 10. *Nightmare frequency*

Item 11 To induce the night sleep 43% of subjects resort to different means, but 36% do not need anyone (Fig. 11).

Item 12 The most frequent means to induce the sleep are: watching TV – 34%,

diet – 23%, listening music / 17%, reading – 14%, hydrotherapy (warm bath or shower) and light medication, both 6% (Fig. 12).

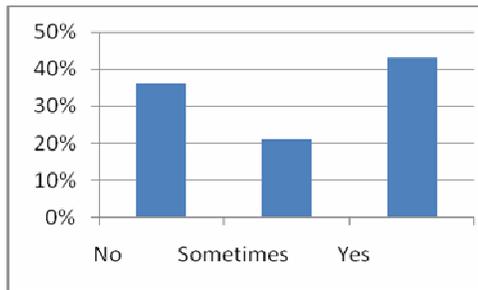


Fig. 11. *Tendency to induce the sleep*

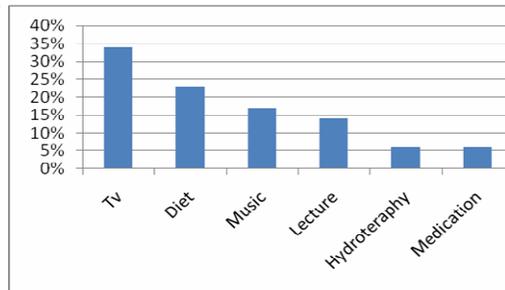


Fig. 12. *Means to induce the sleep*

Item 13 If the night sleep is interrupted 61% of subjects wait quietly to restart the sleep and 39% use simple means to induce the sleep (Fig. 13).

Item 14 To the question if during a week they could renounce/reduce by different reasons the night sleep, 67% gave a negative answer, 20% said occasionally and 13% could reduce or renounce the night sleep (Fig. 14).

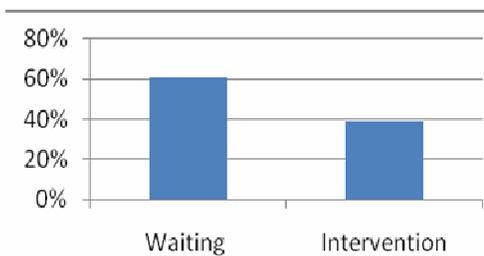


Fig. 13. *Attitude to interrupted sleep*

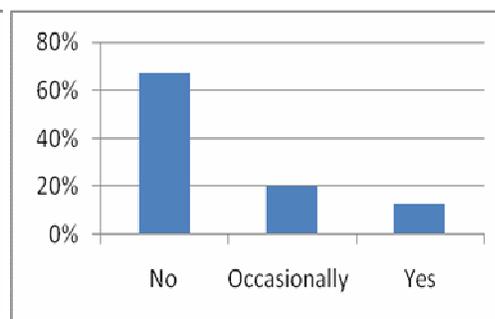


Fig. 14. *Ready to reduce the sleep*

Item 15 To the question if they could sleep in daytime 76% gave a negative answer, 15% said sometimes and 5% had a positive answer (Fig. 15).

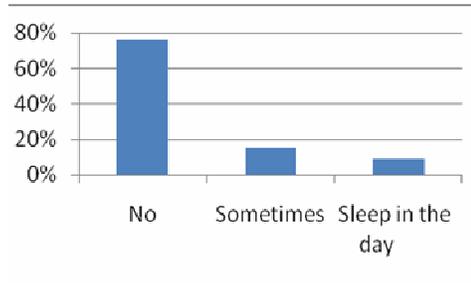


Fig. 15. *Day sleeping*

Item 16 Among the 24% resting in afternoon, 85% sleep less than an hour and 15% extend the siesta over one hour (Fig. 16).

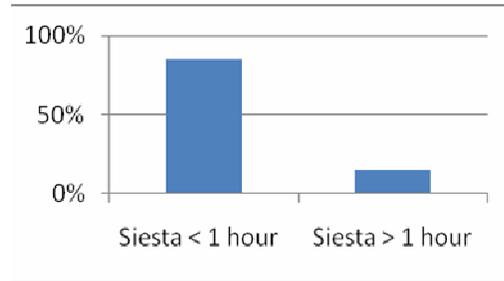


Fig. 16. *Siesta*

Item 17 Regarding the span between the supper the sleeping time, 51% indicated 1-2 hours, 22% -4 hours and 27% have not any span (Fig. 17).

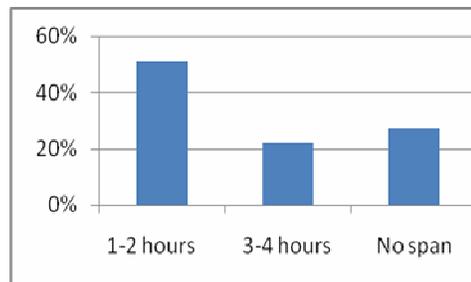


Fig. 17. *Span between supper and sleeping*

Item 18 To the question if they try to avoid coffee and alcohol, 45% said yes, 33% avoid coffee and 22% alcohol only (Fig. 18).

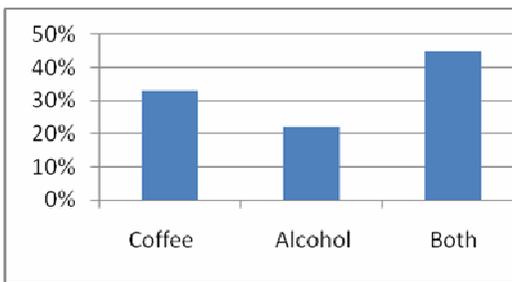


Fig. 18. *Avoided products*

Item 19 To the question about their opinion on the effects of the physical exercises to induce the sleep and to improve the quality of the night rest, 87% answered they get asleep better in a day with physical activities, but 13% did not see any difference (Fig. 19).

Item 20 Challenged to put in order the level of the next day sleep influence, the subjects agreed their health could have a long term influence, by accumulation of effects; then they appointed the psycho-physical comfort, the capacity to communicate and the working mood (Fig. 20).

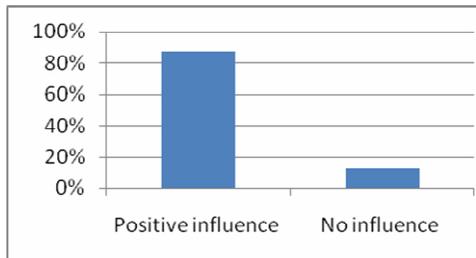


Fig. 19 Relationship between the ph. a. and the sleep

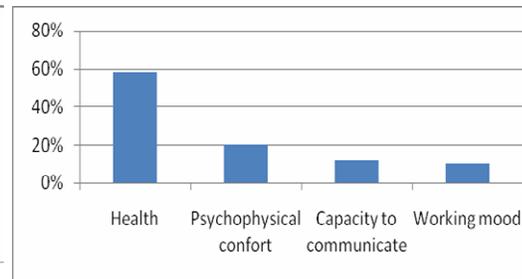


Fig. 20. Influences onto the sleep

Conclusions

The working hypothesis serving as fundament for this study has been partially confirmed.

So:

- As far as the daily routine of young people aged 18-21 years, who study and practice sports activities during their free time, only a little more than half have a nocturnal sleep of 7-8 hours.
- Sleep for most of these young people begins very close to midnight, with only a small percentage of them managing to get to bed around 10 o'clock at night.
- We note that most young people regardless of the duration and the onset of sleep have developed an internal clock, as it is evident in the consistency of bedtime and the time of awakening.
- Young people say that they get good rest, having positive opinions regarding the quality and duration of sleep. For those who need intervention in order to install sleep, most await sleep while watching TV, and very few use some means of hydrotherapy, or medication.
- A small number of young people suffered sleep disorders, which were motivated primarily by personal anguish and secondarily by external factors.
- The statements of most subjects show that they remember quite well the dreams they had during sleep, very few being those who have had the experience of nightmares.
- As far as the situations of sleep interruption, most subjects await for sleep calmly.
- Most young people do not seem to be willing to give up or to reduce nocturnal sleep during the week days.
- Most young people do not have time to sleep during the day, but those very few who succeed, give their siesta a short time, not more than one hour.
- Most young people have their last meal of the day just one or two hours before bedtime and avoid coffee and alcohol consumption.
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- Although the studied subjects declare that they get good rest, due to their youth, we believe that their sleep management can be improved.

References

1. Creţu, A., Bratu, M. (2003) *Refacere în sport*. Bucureşti: ANEFS.
2. *Cronobiologie, ritmuri circadiene, sport*. (2002) Bucureşti: MTS-CCPS.
3. Drăgan, I. (2002) *Medicina sportivă*. Bucureşti: Editura Medicală.
4. *Efortul şi oboseala*. (2003). Bucureşti: ANS-INCS
5. Sabău, E. (2006) *Refacere-Recuperare Kinetoterapie în activitatea sportivă*, Bucureşti: Editura Fundaţiei *România de Mâine*.
6. *Somnul şi refacerea în sport* (2002) Bucureşti: Buletin Informativ, nr.558, I.N.C.S.