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Introduction. The relationship between addiction and sleep disorders has been extensively studied. Indeed, these two pathologies are often co-morbid and develop in bidirectional links. Sleep disorders have been reported in people with Internet addiction, while they paradoxically rarely express a complaint of insomnia.

Objectives. Study the relationship between cyberaddiction and sleep disorders and determine the correlated factors.

Materials and Methods. It is a descriptive correlational, quantitative and transversal study. This study concerned students from the faculty of medicine of Monastir in Tunisia enrolled in the first or second cycle, during the academic year 2018-2019. To assess the prevalence of internet addiction, The Young's Diagnostic Questionnaire for Internet Addiction (YDQ) was applied and to assess sleep quality, we used the *Pittsburgh Sleep Quality Index (PSQI)*.

Results.

1. Demographic and clinical characteristics of the students (table1)

Variables		N=100
Sex (n,%)	Male	36(36)
	Female	64(64)
Age (n,%)		22 ± 0.198
Marital status (n,%)	Single	100(100)
Socioeconomic status (n,%)	High	29(29)
	Medium	66(66)
	Low	5(5)
Personal history (n,%)	Somatic disorders	18(18)
	Psychiatric disorders	10(10)
Existence of traumatic life events (n,%)		25(25)
Life habits (n,%)	Sport practice	83(83)
	Alcohol consumption	16(16)
	Coffe consumption	17(17)
	smoking	16(16)

2. Prevalence of cyberaddiction and sleep disorders

2.1. Cyberaddiction

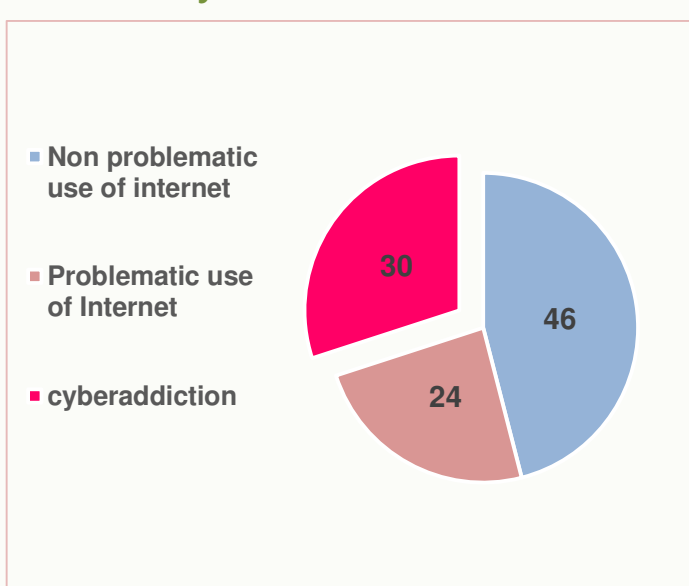


Fig1. Prevalence of cyberaddiction among the students

2.2. Sleep disorders

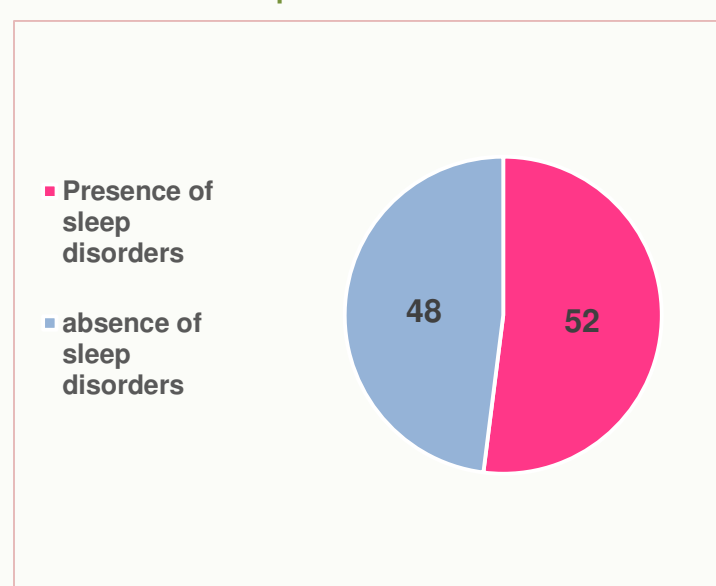


Fig2. Prevalence of sleep disorders among the students

3. Correlational study

- ❑ The prevalence of sleep disorders in cyberaddiction was 70% (21/30).
- ❑ We found a positive correlation between cyberaddiction and sleep disorders ($p=0.009$).

Variables	Addictive internet use with sleep disorders (n=21)	Addictive internet use without sleep disorders (n=9)	P
Somatic personal history	5/21	0/9	0.049
Traumatic life events	10/21	1/9	0.028
Coffee consumption	19/21	6/9	0.05
Sport practice	5/21	5/9	0.04

Discussion.

- In our study, the prevalence of cyberaddiction was 30%. But in the literature, this prevalence varies between 4 and 30,8% [1,2,3]. This could be due to the variability of the tests used and the populations studied.
- We found that the prevalence of sleep disorders in cyberaddiction was 70%. Contrary to our work, studies among adolescents have found approximately 38% [4,5,6]. This higher prevalence found in the general population could be justified by the nature of medical studies characterized by significant stress due to the quest for success [7].
- In our work, sleep disorders in cyberaddiction were positively correlated with somatic personal history. Indeed, the link between somatic diseases and the quality of sleep is bidirectional. A study by Zhang.J et al, found that insomnia and sleep quality are closely associated with pain and somatic symptoms [8].
- In the case of caffeine, it has long been known for its effect on sleep: it prolongs sleep latency, reduces total sleep time and sleep efficiency, and the perceived quality of sleep [9].
- We objectified that the practice of a sport activity was negatively correlated with sleep disorders in cyberaddiction. In fact, Physical activity is generally considered beneficial for helping sleep, but sleep disorders can affect a person's cognitive performance or exercise capacity and increase the risk of exercise-induced injuries [10].

Conclusion. The current study highlighted the frequency of cyberaddiction and sleep disorders among students, as well as a significant association between these two disorders.

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