

# Association between Internet Addiction and Sleep disturbance Among Nursing Students

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## Abstract

Background: Internet addiction was described as an inability to regulate the use of Internet, arising in marked distress or loss of function in daily activities. Objectives: The purpose of this article is to describe the related between (IA) and sleep disorder among nursing students in Mosul City / Iraq. Materials and Method: A survey of (120) nursing students in Mosul / Iraq was conducted. "Young's Internet Addiction Scale" (IAS) was used to describe association between (IA) and sleep troubles. Results: The results from the analysis show association between the sleep disturbance and (IA) is high significant, also found higher sleep disturbance rates especially difficulty waking from sleep. Conclusion: The findings of the study are concluded that the participants from nursing students have sleep disturbance, also more a higher addiction of internet and have problem of sleep is associated with excessive Internet use.

**Keywords:** internet addiction, sleep disturbance, nursing students.

## I. INTRODUCTION:

Internet addiction was described as an inability to regulate the use of Internet, arising in marked distress or loss of function in daily activities<sup>(1)</sup>. In 2016, found the results of study was approximately (48%) of all people worldwide used the Internet every day<sup>(2)</sup>. According to the study (Ben, 2014), estimate that 420 million approximately 6 per cent of the world's population is internet addicted, according to the authors of the study, which was published internet addiction is usually considered problems a lead to the cognitive dysfunctions, anxiety, depression, impaired working memory and sleep disorders<sup>(3)</sup>. However, the internet using in homes, cafes, schools, businesses, and the shopping there has been increased public awareness for people of the potential effects arising from excessive internet usage to internet addiction<sup>(4)</sup>. University students have the highest prevalence rates of Internet addiction especially last five years has extremely increased<sup>(5,6,7)</sup>. Internet addiction and sleep disturbance are common among young. The continued use of cell phones and electronic video games in the bedroom has to do with weak sleep disorder, learning disability<sup>(8)</sup>. Internet addiction is one of the big problems emerged with the development of technology can influence on individuals health and sleep habits leading to sleeplessness, So internet use associated with insomnia, also increased time internet use led to the disturbance of sleep<sup>(9,10,11, 12, 13)</sup>. Research among students indicated that overuse of the internet appears to be related to sleep troubles<sup>(14,15)</sup>. Several internet addiction trials were carried out using (YIAS)<sup>(16)</sup>. Internet addiction is distributed among students in the world as follows, in Spain about 10 percent<sup>(17)</sup>. In Japan<sup>(18)</sup> internet addiction was reported to be about (4%), Taiwan<sup>(19)</sup> it was (15%), it was 35% in Greece<sup>(20)</sup>, Saudi Arabia<sup>(21)</sup>, more than (18%), Egypt<sup>(22)</sup>, it was (17%), while in Iraq (23%). However, there are no reports on the relation between sleep problems and (IA) among nursing students. Finally, the objective of this report was to describe the association between (IA) and disturbance of sleep undergraduate nursing students in Mosul City.

## II. METHODOLOGY:

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Descriptive correlation design has been used to gather information from the research among undergraduate nursing students. Participants sized (300), were (91) male and (209) female. Researchers requested students' participation and informed the questions related internet addiction and sleep disturbance among nursing students. Data collection was conducted in February 2020. This research translated the instrument into Arabic and was established in Part one . This instrument adapted by the researcher consist of two main parts: Part one, involved demographic data (age, gender, grade and matrimonial status ) , Part II: (Y I A Scale ) <sup>(16)</sup>.which comprised of( 20) questions rated on a 5-point Likert scale with scores ranging: always=(5), often=(4) , frequently=(3), occasionally=(4) and rarely=(5); Provided an average score of (20-100) mark, With higher scores showing the (IA) phenomenon. Three forms of internet user class have been defined according to Young's original scheme: Internet addicts = (80), possible internet addicts =(50-79) , non addicts = below 50.As well as, questions related to sleep disturbance were designed as a 5-point Likert scale (Always:5, Frequently:4, Occasionally:3 ,Rarely:2 and Never:1). Data obtained and analyzed by SPSS computer system "ver. 25". Relationship between (IA) and sleep disturbance between undergraduate were described using the (Means, Standard deviation, Frequency and percentage, Person's correlation used to determine significance.

## RESULTS:

**Table (1): Nursing students Socio-demographic features Sample size=300**

Variable	N	%	
<b>(A)Gender</b>			
M	91	30.3	
F	209	69.7	
<b>(B) Age</b>			
18-21 Y	96	32%	Mean± SD 22.6 ± 2.73
21-24 Y	133	44.3%	
24-27 Y	71	23.7%	
<b>(C) Grade</b>			
First stage	68	22.6%	
Second stage	81	27%	
Third stage	88	29.4%	
Four stage	63	21%	
<b>(D) Martial status</b>			
Married	77	25.7%	
Signal	212	70.7%	
Widowed	11	3.6%	

**Table (2): Internet use by nursing students**

Question	number	percentage
<b>1- The sum of time I have used the internet a week?</b>		
Once Week	112	37.4%
2-3 Week	103	34.3%
Every day	85	28.3%
<b>2- How long do you stay on the Internet?</b>		
>30 minutes	76	25.4%
30-60 minutes	103	34.3%
< 1 Hours	121	40.3%

**Table (3): Internet addiction score**

Item	(> 50)	(50-97)	(< 80 )
<b>IAS total score</b>	196(65.4%)	62(20.6%)	42(14%)

**Table (4): Sleep quality amongst nursing students**

Question	V. good	good	Moderate	Bad	V. Bad
<b>How do you rate your quality of sleep?</b>	52(17.3)	74(24.6)	86(28.6)	55(18.4)	33(11)

Table (5): Sleep disturbance among nursing students.

Items	Never N (%)	Rarely N (%)	Occasionally N (%)	Frequently N (%)	always N (%)
1- fall asleep in class	127(42.4)	98(32.6)	64(21.3)	9(3)	2(0.7)
2-Feel sleepy during lecture	43(14.3)	95(31.7)	102(34)	50(16.7)	10(3.3)
3-Have nightmares	93(31)	102(34)	57(19)	40(13.4)	8(2.6)
4-Difficulty waking up from sleep	46(15.4)	96(32)	100(33.3)	51(17)	7(2.3)

Table (6): Relation between total score on internet addiction and disturbance of sleep among graduated nursing students

Items	(> 50)	(50-97)	(< 80 )
<b>IAS total score</b>	IAS=196(65.4%)	62(20.6%)	42(14%)
<b>1- do you sleep in class</b>			
Never or rarely	190(63.4%)	85(28.3%)	25(8.3%)
Occasionally	142(47.3%)	118(39.4%)	40(13.3%)
Frequently or always	102(34%)	135(45%)	63(21%)
<b>2- feel sleepy during the lecture</b>			
Never or rarely	185(61.7%)	71(23.6%)	44(14.7%)
Occasionally	159(53%)	94(31.4%)	47(15.6%)
Frequently or always	138(46%)	127(42.4%)	35(11.6%)
<b>3- you have nightmares</b>			
Never or rarely	182(60.7%)	84(28%)	34(11.3%)
Occasionally	166(55.4%)	89(29.6%)	45(15%)
Frequently or always	141(47%)	102(34%)	57(19%)
<b>4- trouble of waking up</b>			
Never or rarely	165(55%)	89(29.7%)	46(15.3%)
Occasionally	173(57.7%)	90(30%)	37(12.3%)
Frequently or always	141(47%)	104(34.6%)	55(18.4%)

### III. DISCUSSION:

Some students participants in questionnaire do not controlled use of internet lead to health problems such as sleeplessness<sup>(23,24)</sup>.Table(1)demonstrated that Socio-demographic characteristics of nursing student the size sample (300) were male (30.3Percent) were female (69.7 percent). The mean age of the sample was 22.6 ± 2.73years of nursing

students. Internet addiction should be considered big problem among the students. So, necessary for young adults and students to be learning for the proper use of the internet to prevent from internet addiction. Table ( 2 ),the current study mentioned that internet use among nursing students clarifies that (28.3%) of the students reported using internet almost every day. (40.3%) students reported to spend more than one hour when they were online, this study agreement with Manal,et al,2018 in Egypt state (25%) of the adolescents using internet every day and (45%) adolescents to spend more than 1 hour on internet. Table(3) demonstrated that total addiction internet score (65.4%) students had internet addiction total score below than 50, (20.6%) students had internet addiction total score ,from 50 to 79 and (14%) students had internet addiction total score higher than 80.So there is a high percentage of addicts to use the internet .Table(4) Show that sleep quality among nursing students his research agreement with China (Lau et., al., 2017) found low sleep quality among students that the report of problem internet use and sleeping habits correlated a high prevalence of internet addiction with a great risk of insomnia and depression.This study (Karma,et al.,2019) in India similar with my study state that internet addiction was found to affect academic performance and lead to sleeplessness. Table (5) demonstrated the frequencies of nursing students. sleep disturbance, noticed that (21.7%) students reported that they little fall asleep in class, (16.7%) students reported that they frequently feel sleepy during Lecture , a few see nightmares during sleep(2.6), (17%) they had difficulty waking up.Finally, table(6) shows the association between total (IA) and sleep disturbance of nursing students this study showed difference significant between total (IA) and sleep disturbance. The study in Taiwanese similar with my study, who mentioned that internet use linked with sleep problems <sup>(26)</sup>.

#### IV. CONCLUSION:

The findings of the study are concluded that the participants from nursing students have sleep disturbance ,also more a higher addiction of internet and have problem of sleep is associated with excessive Internet use.

#### Recommendation:

This report recommended building of educational program for students to reduce internet addiction should be considered big troubles among the students. So, it's necessary to educate teens, young adults and others about using the Internet correctly to prevent possible internet addictions.

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