

## The Prevalence of Internet Usage Among the Students of Shahid Sadoughi University of Medical Sciences, Yazd, Iran in 2012

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DOI: 10.21859/focsci-030161

Submitted: 10.26.2016

Accepted: 11.12.2016

### Keywords:

Internet  
Behavior, Addictive  
Students  
Iran

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### Abstract

**Introduction:** The Internet was originally designed to facilitate communication and research activities. However, the dramatic increase in internet usage in recent years has led to pathological use (Internet addiction). There is a high incidence of internet addiction in Iran synchronous to the other regions of the world. The aim of this study was to identify the prevalence of internet usage among the students of Shahid Sadoughi University of Medical Sciences.

**Methods:** The present study was done on 400 students of Shahid Sadoughi University of Medical Science. The amount of internet usage was measured with a standard questionnaire and compared with demographic information of volunteers. Data were analyzed by SPSS (Version 17) using chi-square and ANOVA tests.

**Results:** This study included about 400 students of various medical courses and fields. One hundred-sixteen students were female and 284 students were male. Average of 61.6% had degrees of internet addiction. 52.5% of students had low internet addiction and 9.1% of students had moderate internet addiction. On the basis of our findings, amount of internet usage was not related to age, sex, marital status and the field of the students. Duration of internet use, settling and type of search motor were significantly related to internet addiction.

**Conclusions:** Internet addiction is very prevalent among students of Shahid Sadoughi University of Medical Science. It is necessary to design plans for prevention of internet addiction and promoting healthy use of the Internet.

## INTRODUCTION

The most important reason that many parents take the Internet service at home is that the Internet provides faster communication, information resources, entertainment, so-

cial networking websites, online services, e-commerce, educational and social Advantages to their children and other family members. Despite of these expected benefits, there

is problem of excessive Internet usage, which can lead to the deterioration of physical and mental health status and social disconnection [1-3]. There are various causes for too much Internet usage such as playing online games and chatting on social networking websites.

Internet addiction is one of the latest forms of addiction that has attracted the attention of popular media and researchers in recent years. Many authors believe that Internet addiction is a separate disorder that intrinsic worth inclusion in DSM-V. There is a considerable controversy about this opinion [4].

Daily internet use for education, recreation and communication is growing. Nonetheless, the possibility of misuse and addiction leading to destruction in academic performance and emotional balance cannot be denied, particularly among young people [5].

Excessive Internet use is characterized by excessive or poorly controlled preoccupations, urges, or behaviors regarding computer use and Internet access that leads to impairment or distress [6]. Internet addiction has been studied in a range of age groups in many countries, such as in the US,

China, Italy, Iran, Taiwan, Norway, South Korea, Greece, and Taiwan. [1, 3, 4, 7-12]. The aim of the present study was to identify the prevalence of internet addiction among the students of Shahid Sadoughi University of Medical Sciences.

## METHODS

### Study Design

This was a cross-sectional study aimed to assess the prevalence of internet usage among the students of Shahid Sadoughi University of Medical Sciences, Yazd, Iran in 2012.

### Subjects

Totally 400 students from various medical courses and fields (116 females and 284 males) were selected from Shahid Sadoughi University of Medical Sciences. Quota sampling method was used in this study. They completed demographic questionnaire, Young Internet Addiction Test and YDQ.

Name	Normal	Low addiction	Moderate Addiction	P- value
<b>Age</b>				0.67
< 20	12	40	8	
20-25	117	133	24	
> 25	24	38	4	
<b>Sex</b>				0.96
Male	116	140	28	
Female	36	72	8	
<b>Marriage</b>				0.70
Yes	12	32	8	
No	142	178	28	
<b>Field</b>				0.1
Medicine	8	16	8	
Dentistry	20	28	4	
Pharmacy	4	0	0	
Nursing	8	24	0	
Midwifery	0	4	0	
Radiology	12	8	8	
Emergency medicine	8	12	0	
Laboratory medicine	20	32	4	
Anesthetic	36	40	0	
Operating room techniques	0	20	4	
Hygiene	36	28	8	
<b>Duration</b>				0
< 0.5 h	88	56	0	
0.5-1 h	32	100	0	
1-2 h	8	36	0	
2-3 h	0	12	16	
> 3 h	0	8	20	
<b>Settling</b>				0.04
Dormitory	108	176	32	
Personal house	40	36	4	
Rented house	4	0	0	
<b>Website</b>				0.01
Yahoo	4	28	4	
Google	60	56	8	
MSN	0	0	4	
More than one site	88	128	20	

## Measurement Tools

The amount of internet addiction was measured with a standard questionnaire and compared with demographic information of volunteers.

## Statistical Analysis

Data were analyzed by SPSS (ver. 17) using chi-square and ANOVA tests. P value < 0.05 considered as a significant level.

## Ethical Issues

All participants were giving written, informed consent before participation and the study was approved by the institutional ethics committee of Shahid Sadoughi University of Medical Science. The protocol of the present study was approved by the ethics committee of Shahid Sadoughi University of Medical Sciences.

## RESULTS

In this study, 116 students were female and 284 students were male. About 60 students were under 20 years, 274 students were between 20 and 25 years and 66 students were above 25 years. 52 students were married and 348 students were single. Thirty-two students were medical students, 52 were dentistry, 4 were pharmacy, 32 were nursing, 4 were midwifery, 28 were radiology, 20 were emergency medicine, 56 were Laboratory medicine, 76 were anesthetic, 24 were Operating room techniques and 72 were Hygiene. Average of 61.6% has degrees of internet addictions. 52.5% of students have low internet addictions and 9.1% of students have moderate internet addiction. There wasn't significant difference between internet addiction and age, sex, marriage and field of the students. Statistical tests showed that there were significant differences between duration of internet use and internet addiction. Students who used internet 2-3 hours and more than 3 hours a day had moderate internet addiction though all students used less than 2 hours a day were normal or had low internet addiction. This study also showed that the internet addiction in student dormitory was more than who lived in personal house. This difference was significant statistically (P value < 0.05). This study showed that Google is the most favorite search motor among these students. Also among the students with moderate internet addiction, there was more common to use different sites. This difference was significant statistically too (P value < 0.05).

## DISCUSSION

Internet addiction is a newly emergent disorder. It has been found to be associated with a variety of psychiatric disorders [13]. In this study, there wasn't significant difference between internet addiction and age, sex, marriage and field of the students. Students who used internet 2-3 hours and more than 3 hours a day had moderate internet addiction though all students used less than 2 hours a day were normal or had low internet addiction.

This study also showed that the internet addiction in student dormitory was more than who lived in personal house. It seems that being in familial gathering and familial receptions can reduce internet usage in unnecessary conditions. In addition they have better conditions for studying at

home. According to this study, Google was the most favorite search motor among the students. In addition, there was more common to use different sites among the students with moderate internet addiction.

In a study by Hawi, the distribution of respondents by their levels of Internet addiction was none 21.8%, mild 39.2%, moderate 34.9%, and severe 4.2% that had significant problems and the more problematic Internet use (PIU) was for entertainment and the less the internet was used for information and research [3]. The latter percentage is lower than that of adolescents in Florence, Italy in 2006, which was 5.4% [14].

Results of Cao and Su study showed that the rate of internet use among the surveyed adolescents was 88%, among which the incidence rate of internet addiction was 2.4% and suggested that internet addiction is not rare among Chinese adolescents. In addition, in their study adolescents with internet addiction possess had different psychological features when compared with those who use the internet less frequently [15]. Shaw and Black reported that prevalence of internet addiction in general US population by random telephone survey was 0.3-0.7% [16]. Results of Weinstein and Lejoyeux study in the United States and Europe indicated that prevalence rate of internet addiction was between 1.5% and 8.2% [6].

Zboralski ET all reported that every fourth pupil was addicted to the Internet. Internet addiction was very common among the youngest users of computers and the Internet, especially those who had no brothers and sisters or came from families with some kind of problems and suggested that because computer and Internet addiction already constitute a real danger, it is worth considering preventive activities to treat this phenomenon. It is also necessary to make the youth and their parents aware of the dangers of uncontrolled Internet use and pay attention to behavior connected with Internet addiction [17].

Results of Chiriță ET all showed that the school students prefer to spend over 3 hours/day with their computers. Results identified aspects of computer addiction such as bought a computer, do not supervise the way it is used, passive presence by parents, and vaguely responsible and lacking involvement by children [17]. Results of Poli and Agrimi showed that 94.19%, 5.01% and 0.79% respondents were normal, moderately and seriously addicted, respectively [4, 14].

Ferraro et al Results revealed that young users are more at-risk subjects for Internet addiction than adults, Moreover, subjects who declared spending much time online obtained IAT scores higher than others in all the IAT subscales. Finally, nightly users are more at-risk subjects for developing an Internet addiction disorder, diminishing their individual quality of life and disabling their time control [5].

The prevalence of Internet addiction is considerable among students of Shahid Sadoughi of Yazd University of medical sciences. It is important for education and supervision about this phenomenon in universities.

## ACKNOWLEDGMENTS

This survey is concluded from a research work that had no financial support and it has presented in research committee and accepted with number code P/17/1221963. We

thank of research unit of Shahid Sadoughi of Yazd University of Medical Sciences because of cooperation in this study.

## CONFLICTS OF INTEREST

Authors declare that there is no conflict of interest.

## FUNDING

This survey is concluded from a research work that had no financial support

## AUTHORS' CONTRIBUTION

This work was carried out in collaboration between all authors. Author Reza Bidaki involved with the patients during study and also involved with the writing of article. Author Hamid Mirhosseini involved with the patients at time of study and wrote the first draft of the manuscript. Author Meysam Hosseini Amiri collected data and read through the manuscript and made corrections. Author Mohammad Asadpoor involved with the writing and revision of the article. Author Mojtaba Babaei Zarch involved with the writing, revision and submission of the article. Fatemeh Arab BaniAsad helped in writing and revision of the article. Sara Mirhosseini involved with writing and revision of the article and made language corrections. All authors read and approved the final manuscript.

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