Prevalence and pattern of internet addiction among medical students, Bengaluru

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ABSTRACT

Background: Currently internet has become an important tool for education, entertainment and communication. Increased internet usage may lead to point of habituation, addiction, adverse academic, mental, physical and social effects. Medical students are also among the vulnerable group on account of time they spend on internet, hence this study was undertaken among medical students. The objective of the study was to estimate the prevalence and pattern of internet addiction among first year medical students.

Methods: A Cross sectional study was conducted among the first year medical students of Rajarajeswari Medical College and Hospital, Bengaluru. The sample size calculated was 125 as per the prevalence of internet addiction among medical students as 58.87% found in the study by Chaudhari et al. A total of 140 students present in the class at the time of data collection, who consented were considered for the study. Semi structured questionnaire with Young’s 8-item questionnaire and 20-item internet addiction scale was administered to the students. The data was analyzed using SPSS version 21.0. Pearson’s chi-square test was applied to know the association between two variables.

Results: Out of 140 study subjects, majority (73.57%) were 18 yrs of age, 62.14% were females. 81 (57.86%) were hostelites. 77 (55%) of students were using internet for 4-6 hrs per day, 80 (57.14%) students have been using internet for more than 5 yrs. The prevalence of internet addiction according to Young’s 8-item questionnaire was 66 (47.14%) out of 140. Out of the 66, most common gadget used was mobile and most common purpose was social networking. The most common pattern of internet addiction according to Young’s 20-item scale was possible addict (49.29%). Internet addiction among hostilites was observed to be more than hostelites, this association was found to be statistically significant.

Conclusions: Internet addiction was found to be substantial among medical students and most common purpose of internet usage was for social networking.

Keywords: Internet addiction, Medical students, Mobile phones, Prevalence

INTRODUCTION

The term Internet Addiction was proposed by Dr. Ivan Goldberg in 1995 for pathological compulsive internet use. Internet addiction commonly refers to an individual’s inability to control his or her use of the internet, which eventually causes one’s marked distress and functional impairment in daily life. Currently internet has become the source of entertainment, education, communication etc. and also for both legal and illegal activities. In the past five years use of social media has increased tremendously more so among the young. Currently (2016), there are 462 million active internet users in India. India stood second on the ranking of
internet users just behind China. In 462 million, 371 million peoples are using mobile internet in India with 262 million in urban and 109 million in rural areas. Internet has brought people from across the world together by enabling various forms of interpersonal communication, notably e-mail, instant messaging, video-conferencing, file sharing and social networking. Younger internet users (i.e. between 18 and 24 yrs old) were more at risk of becoming internet addicts than older users.

Medical students are a particularly vulnerable group on account of the time they spend on the internet. There are limited studies carried out in India on this emerging public health issue. Hence, this study was designed to assess the prevalence and pattern of internet addiction among medical students.

**Objective**

To estimate the prevalence and pattern of internet addiction among first year medical students.

**METHODS**

**Study setting:** RajaRajeswari Medical College and Hospital, Bengaluru.

**Study population:** First year medical students.

**Study design:** Descriptive study.

**Study duration:** Two months (December 2016 to January 2017).

**Study tools**

Pretested, semi-structured Questionnaires and Young’s 8-item questionnaires and 20-item scale for internet addiction.

**Sample size**

\[ n = \frac{4pq}{L^2} \]

\[ p = \text{Prevalence}=5.87\% \text{ (According to study conducted in Maharashtra by Chaudhari, Menon, Saldanha, Tewari and Bhattacharya, 2015).} \]

\[ q = 1-p = 41.13\% \]

\[ L = \text{Allowable error} = 15\% \text{ of } p=8.83 \]

\[ n = \frac{4 \times 58.87 \times 41.13}{(8.83)^2} = 125 \]

**Inclusion criteria**

The students who were present during data collection.

**Exclusion criteria**

Those who are not willing to give consent and students who have not used internet.

**Method of data collection**

Written informed consent was obtained. Data was collected from 140 students, who were available on the day of the study. Semi structured questionnaires was administered to the students with the study variables like socio-demographic profile, questions on gadgets, purpose and duration of internet use, Young’s 8-item questionnaires and Young’s internet addiction scale.

Young’s internet addiction scale consisting of 20-items and based on the response, subjects were classified into--

- Less than average (score 0-19)
- Average online user (score 20-49)
- Possible addict (score 50-79)
- Addict (score 80-100) to internet

**Statistical analysis**

The data was analyzed using SPSS (Statistical Package for Social sciences) version 21.0 and Pearson’s chi-square test was applied to know the association between variables.

**RESULTS**

**Table 1: Sociodemographic profile of the study subjects (n=140).**

<table>
<thead>
<tr>
<th>Sociodemographic profile</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>87 (62)</td>
</tr>
<tr>
<td>Male</td>
<td>53 (38)</td>
</tr>
<tr>
<td>Age in years</td>
<td></td>
</tr>
<tr>
<td>18 yrs</td>
<td>103 (74)</td>
</tr>
<tr>
<td>19 yrs</td>
<td>37 (26)</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>Hindu</td>
<td>115 (82)</td>
</tr>
<tr>
<td>Muslim</td>
<td>15 (11)</td>
</tr>
<tr>
<td>Christian</td>
<td>10 (07)</td>
</tr>
<tr>
<td>Place of stay</td>
<td></td>
</tr>
<tr>
<td>Hostel</td>
<td>81 (58)</td>
</tr>
<tr>
<td>Home</td>
<td>59 (42)</td>
</tr>
</tbody>
</table>

With respect to the socio-demographic factors, majority (73.57%) were 18 yrs of age, 62.14% were females, 82% were hindu by religion and 57.86% were hostelites.

All 140 students were using internet. In that 66 (47.14%) students were addicted to internet (Figure 1).
Among internet addicted students, the pattern of internet addiction was possible addict (45.45%).

Among internet addicted students the most common gadget used to access internet was mobile (63) followed by laptop (40) and least was desktop (9) (Figure 2).

The most common purpose of internet usage was social networking (65) followed by education (53) and least was online games (26) among the internet addicted students (Figure 3).

Out of 66 internet addicted students, majority (50%) of students were using internet for 4-6 hours and 3% of students were using for 10-12 hours per day (Figure 4).

Out of 66 internet addicted students, majority (37%) of students have been using internet for more than 5 years and 7% of students have been using less than 2 years (Figure 5).

Internet addiction among localites (52%) was observed to be more than hostelites (48%), this association was found to be statistically significant (p is <0.05) (Table 3).
In present study, it was observed that there is no association between gender and internet addiction whereas similar findings observed in a study by Setty et al.\textsuperscript{1}

**CONCLUSION**

The Prevalence of Internet Addiction was 47.14%. The most common pattern of internet addiction was possible addict(45.45%). The most common gadget used was mobile and most common purpose was social networking.

**Recommendations**

The internet addiction among students should be given more attention and a comprehensive program for students should be prepared to increase awareness of the internet addiction among students, to detect students at risk before it becomes problematic.

**Limitation**

The study was carried out only among first year medical students, hence caution needs to be applied before generalizing the results to entire population.

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**REFERENCES**


