



A CROSS SECTIONAL STUDY TO ASSESS INTERNET ADDICTION AMONG MEDICAL STUDENTS AT GOVERNMENT MEDICAL COLLEGE, AMRITSAR

Dr. Sanjeev Mahajan

Professor and Head, Department of Community Medicine, Government Medical College, Amritsar.

Dr. Hanish Sharma

Senior Resident, Department of Paediatrics, Government Medical College, Amritsar.

Dr. Richa Verma*

Senior Resident, Department of Community Medicine, Government Medical College, Amritsar. *Corresponding Author

ABSTRACT

Introduction: Internet is one the greatest blessings of science for the mankind after computers. It has upgraded the social, emotional and cognitive aspects of common man. But sadly, its overuse has come into picture, leading to a life which is totally dependent upon it like an addiction. **Methodology:** A descriptive cross sectional study was done on the students of MBBS phase 3(1). A predesigned questionnaire was used. The scale used in the study was Internet Addiction Test (IAT) which is a based upon the 5-point Likert scale and the maximum score is 100. **Results:** Almost all the students were using smartphone as device for assessing internet. Approximately two third of respondents used the internet for 1 to 3 hours daily. As per the IAT, 81.6% students were moderate Internet addicts. **Conclusion:** Internet can be used for the betterment of the society as well as can cause serious damage if used by unsupervised minds. Therefore young minds need to be motivated to refrain from becoming internet addicts.

KEYWORDS : internet, screen, medical

INTRODUCTION

Internet is considered as one of the greatest inventions of mankind. It is used for education, entertainment, social networking, information sharing and what not. In the field of medicine and healthcare, it helps research and learning access to medical and online databases, managing patients in remote areas and academic purposes. [1] But the inventors would not have thought that someday, people will become addicted to it. The term "internet addiction" was put forward in 1995 by Dr. Ivan Goldberg for pathological compulsive use of internet while excessive internet use was associated to pathological gambling by Young. [2] It is referred to as disarray characterized by preoccupation with internet for long periods of time. [3]

According to World Health Organization (WHO), excessive Internet use has not been considered as a disorder. However, the diagnosis of gaming disorder has been included in the International Classification of Diseases ICD-11. [4] Various studies have shown the prevalence of Internet addiction to lie in the range of 1% to 14% among the general population of world. [5] Almost 26 published surveys in different countries across the globe suggest that more than 50% of teens felt themselves to be addicted to mobiles. [6] In the neighboring country Nepal, out of 130 medical students, 40% were mildly addicted while 41.5% and 3.07% of students were moderately and severely addicted to internet, respectively. [7] India had 504 million active internet users in the year 2020. Out of it, 433 million are more than 12 years old, while 71 million are in the age of 5-11 years, who have access to internet on devices of their family members. [8] In North Eastern India, a cross sectional study reported that 44.8% of medical students were at risk of developing internet addiction. [9] Many surveys have also found that young individuals are more vulnerable to become internet addicts than old individuals. [10]

Though students sometimes use internet for feeling relaxed from their hectic studies but too much internet plays havoc in their lives. It can cause physical discomforts as well such as Carpal tunnel syndrome, dry eyes or strained vision, backaches, neck aches, severe headaches or even sleep disturbances.

Along with the physical and mental impact, this addiction has emotional, social and behavioral impacts too. The person uses internet to escape from struggles of practical life. He/she lies to family members or others to conceal the extent of involvement with the internet. In addition, obsessive compulsive disorder symptoms, hostility/aggression, quarrel with parents are also associated with it. There are feelings of restlessness, moodiness, depression or irritability when attempting to cut down the use of internet. [11]

Considering the enormous use of internet among adolescents and particularly among medical students, this study aims to identify internet use pattern in this subset of population which will ultimately

help in formulation of guidelines in order to restrict the use of internet among the budding doctors.

AIMS AND OBJECTIVES

1. To assess the utilization of internet by the participants.
2. To assess the prevalence of internet addiction among the participants.
3. To increase the awareness of the participants regarding internet addiction.

METHODOLOGY

Study Setting – MBBS students phase 3 part 1

Study Period - 2 months (1st December 2022 to 31st January 2023)

Type Of Study - descriptive cross sectional study

Study Population - all the students of MBBS phase 3 part 1

Exclusion Criteria-

1. Students who were not willing to participate in the study
2. Students who did not submit their responses after more than two reminders

Ethical Consideration-

The study proceeded after obtaining approval from the Institutional Ethical Committee. Aims and objectives of the study were explained, followed by obtaining a written informed consent from the participant. All the relevant information was kept confidential.

Data Collection Tool-

A predesigned, pretested, semi structured questionnaire containing details pertaining to various areas like socio-demographic profile of the students, availability and utilization of internet, etc was used.

Scale Used - Internet Addiction Test As Explained Below:

This questionnaire consists of 20 statements. After reading each statement carefully, based upon the 5-point Likert scale, most suitable response is selected (0, 1, 2, 3, 4 or 5) The maximum score is 100 points. Higher the score, higher is the severity of the problem.

0 to 30 points - a normal level of Internet usage

31 to 49 points - mild level of Internet addiction

50 to 79 points - moderate level of internet addiction

80 to 100 points - a severe dependence upon the Internet.

Data analysis- The data, thus collected, was compiled using Microsoft

Excel and analyzed. The tables and figure have been used to represent the data wherever appropriate. Frequencies and proportion have been calculated for categorical variables.

RESULTS

Table 1: Distribution Of Students According To Usage Of Internet Based Gadgets (N= 240)

| Gadgets | Number | Percentage |
|---------------|--------|------------|
| Smartphone | 168 | 99.4 |
| Laptop | 117 | 69.2 |
| Tablet | 107 | 63.3 |
| Desktop | 56 | 33.1 |
| Gaming device | 18 | 10.7 |
| Television | 7 | 4.12 |

*Multiple responses were allowed

As table 1 shows, 99.4% of the students were using smartphone, followed by laptop and tablet (69.2% and 63.3% respectively) as source of internet. As per a study done in China in 2020, smartphones or tablets were the primary electronic devices used by the adolescents followed by IPTV(Internet Protocol Television), computers and other devices. (12)

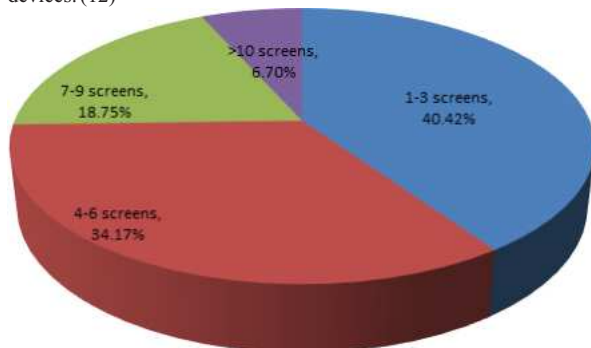


Figure 1: Distribution of students according to total number of screens in the family

According to figure 1, 97% of the students had 1 to 3 screens in their family while 82% of the students had 4 to 6 screens in their families.

Table 2: Distribution Of Students According To No. Of Hours Spent On The Internet Per Day

| Hours spent on internet | No. of students | Percentage |
|-------------------------|-----------------|------------|
| <1 hr | 5 | 2.1% |
| 1-3 hrs | 159 | 66.2% |
| 4-6hrs | 54 | 22.5% |
| >6 hrs | 22 | 9.2% |
| Total | 240 | 100% |

According to table 3, it can be seen that approximately two third of total sample population uses the internet for time ranging between 1 to 3 hours on a daily basis. According to a study done on undergraduates in Kolkata, severe users of Internet spent 3-4 hour per day and as a result, they were not able to perform their duties properly such as concentrating on academics and ultimately developed social isolation. (13) According to a study done in Ethiopia, 91.5% of the respondents used internet for less than five hours per day. (14) Both of these studies are in almost in concordance to the present study.

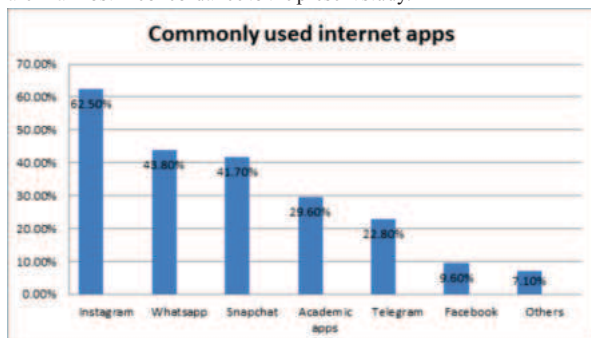


Figure 2: Distribution Of Students According To Commonly Used Apps On The Internet (N=240)

*Multiple responses were allowed

As the figure 2 shows, most children use apps like Instagram, Snapchat and WhatsApp (62.5%, 43.8% and 41.7% respectively). As per a study done in Bangladesh, social apps were used by 54.4% of the participants. (15) The main reason why young people are at an increased risk of internet addiction is assumed that they spend lot of their time on online social networking applications like Twitter, Facebook, telegram, etc. (16)

Table 3: Distribution Of Students According To Activities Done On Smart Phone (N=240)

| Activities on smart phone | No. of students | Percentage |
|---------------------------------|-----------------|------------|
| Listening music | 155 | 64.5 % |
| Watching movies | 123 | 51.3 % |
| Gaming | 70 | 29.2 % |
| Banking | 66 | 27.5 % |
| Blogging, food, travel, fashion | 12 | 5 % |
| Pornography | 11 | 4.5 % |
| Teleconsultation | 10 | 4.2 % |
| Dating | 5 | 2.1 % |
| Others | 1 | 0.4 % |

*Multiple answers were allowed

According to the above table, almost two- third students (64.5%) used smartphone for listening music while half of them (51.25%) used it for watching movies. Some authors have suggested that more focus should be put upon the specific activities on the internet that could be potentially addictive because people become addicted to the actual behavior they engage in when online rather than the medium. (17) A study done on undergraduates and post graduates in Wardha, Maharashtra in 2015 showed that education (46.8%) and social networking(20.8%)were the main reasons for using internet. (18) So, it depends upon the user how the internet could help them relax or connect to their family.

Table 4: Distribution Of Students According To Internet Fasting (N=240)

| Internet fasting | No. of students | Percentage |
|------------------|-----------------|------------|
| Frequently | 34 | 14.2 % |
| Rarely | 144 | 60% |
| Never | 62 | 25.8% |
| Total | 240 | 100% |

With digital fasting, one can disconnect from the internet for suitable time. The reason for digital fasting is very simple. Just as food enters the body, all the information consumed through the screens goes into the brain, overloading the mind with data. The goal of internet fasting is to limit this information intake in order to find focus, mental peace and a sense of presence that's lost when one is always on the screen. According to the table 4, 34 (14.2%) students frequently go for internet fasting.

Table 5: Distribution Of Students According To Role Of Internet In Coping Up With Exam Stress (N=240)

| Role of internet in coping up with exam stress | No. of students | Percentage |
|--|-----------------|------------|
| Always | 40 | 16.7% |
| Sometimes | 162 | 67.5% |
| Never | 38 | 15.8% |
| Total | 240 | 100% |

As the above table shows, majority of the students (67.5%) feel that sometimes internet helps them in coping up with exam stress. In a study done by Gupta D and Prabhu S in Maharashtra in 2020, 34% of the respondents stated that internet does not help them when they are feeling low while 7% of the respondents' mood got uplifted when they are online. (19) This study differs from the present study as almost one third of the students in the Maharashtrian study, tend to stay outside in the nature as compared to online, the fact that got clear on further questioning.

Table 6: Distribution Of Students According To Internet Addiction Test (IAT)

| Based on scores of IAT | No. of students | Percentage |
|--------------------------|-----------------|------------|
| Normal Internet users | 26 | 10.8% |
| Moderate Internet Addict | 196 | 81.6% |

| | | |
|------------------------|-----|------|
| Severe Internet Addict | 18 | 7.5% |
| Total | 240 | 100% |

According to the above table, majority of the students (81.6%) are moderate Internet addicts. As per Kumar M, 39.5% of the undergraduates of Kolkata were severe internet addicts followed by 31.5% of moderate users while 29% of the normal internet users. (13) According to a study done among undergraduate university students in Ethiopia, 55.6% of the participants were mildly addicted. (14) A longitudinal study of Chinese high school students had suggested that risk to develop depressive symptoms increases 2.5 times in individuals with moderate to severe risk of Internet addiction as compared to their internet addiction free counterparts. (16)

During the conduction of the study, discussions were also held with the students regarding their usage of internet. Students were asked to check if their bodies showed any sign related to excessive internet use. Some students complaining of headache or blurred vision got their eye sight checked.

Hence, in today's smart world, internet is very crucial. If used properly, it could be one of the biggest blessings of science. Nevertheless, internet addiction poses a serious threat to the young minds. In lieu of innumerable benedictions, it can turn out to be precarious unless students are frequently motivated and guidelines framed for the young users.

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