Original Research Article

A HOSPITAL BASED PROSPECTIVE STUDY ON PREVALENCE OF INTERNET ADDICTION IN PSYCHIATRIC OUTDOOR PATIENT IN WESTERN RAJASTHAN

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A B S T R A C T

Background: Internet addiction has become an important issue in young population who are at risk of the adverse effects of internet addiction due to their high levels of internet use for social networking, gaming, streaming, and other online activities. The study's objectives were to ascertain the prevalence of Internet addiction, evaluate people's levels of stress, anxiety, and depression, and establish a relationship between the degree of internet addiction and depression.

Materials and Methods: This hospital based prospective study done on individual of ages 18 and 45 years of both genders regularly using internet at Government Medical college & hospital, Barmer, Rajasthan, India during six months period. A semi-structured, pre-tested, self-administered questionnaire was used to collect data. It consisted of three sections. The chi-square test was used to determine the Degrees of association between the outcome variable and independent variables. Results with p values of <0.05 were considered to be statistically significant.

Results: A total of 160 individuals were approached for the study. Complete information was received from 100 individuals. The participants' mean (SD) age was 30.6±10.2years. Fifty-two percent (n = 52) were women. The mean (SD) age of initiation of internet use among participants was 16.7±3.8years. The mean (SD) daily screen time was 8.9±3.26 hours. The prevalence of Internet addiction was 32%. Prevalence of Depression, Anxiety and Stress in the study population was 30%, 55% and 12% respectively because of internet addiction. Statistically significant shows a correlation between IA and scores of stress, depression, and anxiety. IA was found to be significantly correlated with stress (r = 0.726, P < 0.01), depression (r = 0.586, P < 0.01), and anxiety (r = 0.626, P < 0.01).

Conclusion: Internet addiction also seems to be associated with increasing prevalence of depression, anxiety and stress. In present era, life without internet is difficult but not impossible. If people use internet with caution it can serve as a boon to mankind. If it is misused it may be a tool of disaster.

Keywords: Internet Addiction, Screen Time, Depression, Anxiety, Stress.

INTRODUCTION

The internet has become essential part of everyday life all over the world and its use has increased significantly among young people, not only in India but also worldwide in the last decade. The internet allows people to establish social connections that cannot be achieved easily in modern urban life, to express their thoughts and feelings freely without restraint and to exaggerate aspects that the individual wants to feature.[1,2]

In 1996, Dr. Ivan Goldberg coined the term "Internet addiction" to describe pathological obsessive Internet use.[3]

Internet addiction is generally defined as an uncontrollable desire for excessive use of the internet, devaluation of time spent without connecting to the internet, intense nervousness and aggression in the case of deprivation and progressive deterioration of social and family life.[4]

Due to the extensive use of the internet, there are now 5.66 billion internet users worldwide, or 67.9% of the world's population.[5] With 700 million users, India is the world's second-largest internet market. Its share of the global internet market has grown exponentially, from 4 percent in 2007 to 47 percent now.[6,7]

The entire state of Rajasthan is expected to have a population of 8.31 crore (83.06 million) by early 2026, growing at a rate of 1.06%. The desert districts of Jodhpur, Barmer, and Jaisalmer, which are characteristic of the western area, have a high rate of population growth (e.g., Barmer at 32.5% per 2011 census). According to previous studies, Barmer has demonstrated a poor level of internet adoption in some regions, with data showing as low as 0.6% internet usage in some rural sectors.

Due to their extensive usage of the internet for social networking, gaming, streaming, and other online activities, young people are particularly vulnerable to the negative impacts of internet addiction. A balance between online and offline activity is necessary to prevent the detrimental effects of IAD.[8]

If used judiciously internet can have positive impact on academic performance, job performance and career advancement, develop new relationships and used for entertainment with friends and family. Since young people are the future of society, the nation, and the entire world because they will be the leaders, innovators, and workers, it is crucial to focus on the issue of internet addiction in this age group.

According to Young's research, internet users develop an addiction to specific online programs.[9] It is stated that those who lack confidence and social skills use the internet to build virtual worlds because it allows them to remain anonymous. It was once thought that men were more likely to become addicted to the internet, but it has since been established that personality types and the particular applications that people use on the internet can cause internet addiction, so anyone who uses the internet excessively runs the risk of becoming addicted.[10]

The exponential growth and use of the internet over the past ten years has greatly influenced psychological study, which focuses on understanding how the internet affects an individual's interpersonal behavior and communication.[11]

For the purpose of prevention, therapy, and focused intervention for this kind of addiction, it can be helpful to understand the elements that contribute to the development of internet addiction. The aim of this study to assess the prevalence of Internet addiction in psychiatric outdoor patient in western Rajasthan.

MATERIALS AND METHODS

This hospital based prospective study done on individual of ages 18 and 45 years of both genders regularly using internet at Government Medical college & hospital, Barmer, Rajasthan, India during six months period.

A semi-structured, pre-tested, self-administered questionnaire was used to collect data. It consisted of three sections:

Section A: Information on sociodemographic characteristics and internet usage patterns.

Section B: Young's test (internet addiction test). It is used to assess the presence of degrees of IA. It is a 20-items questionnaire with reported Cronbach's alpha for internal consistency of 0.889.[12] It has been validated in various countries, including India.[13-15] The responses were recorded on a 5-point Likert scale. The total score was categorized as 0–30 as no IA, 31–49 as mild IA, 50–79 as moderate IA, and 80–100 as severe impairment. The presence of moderate or severe IA was taken as having IA in this study. The total score was also presented as mean values and standard deviation (SD) and analyzed for correlation. Section C: Depression, anxiety, and stress scale (DASS 21). It is a 21-item scale with seven items each to screen for depression, anxiety, and stress. It has internal consistency with Cronbach's alpha of 0.94 and has been validated in various studies.[16] It has also been used in India.[13] The response to each question varies from "Did not apply to me at all" to "Applied to me very much, or most of the time," the scores derived from each category are multiplied by two to arrive at the final scores. All these mental health variables, namely, depression, anxiety, and stress, are classified into normal, mild, moderate, severe, and severe categories based on their standard score cutoffs.

Statistical analysis

IBM SPSS version 23 statistical package software was used for statistical analysis. Descriptive statistics like frequencies and proportions were calculated. The chi-square test was used to determine the Degrees of association between the outcome variable and independent variables. Results with p values of <0.05 were considered to be statistically significant.

RESULTS

A total of 160 individuals were approached for the study. Complete information was received from 100 individuals. The participants' mean (SD) age was 30.6±10.2 years. Fifty-two percent (n = 52) were women. The mean (SD) age of initiation of internet use among participants was 16.7±3.8 years. The mean (SD) daily screen time was 8.9±3.26 hours [Table 1]. The prevalence of IA was 32%. Most participants (20%) had mild IA, 10% had moderate IA, and 2% had severe IA. The prevalence of stress was 12% in the study sample. About 5% of participants had mild stress, 4% had moderate, and 3% had severe stress.

The prevalence of depression was 30% in the study sample. About 6% had severe depression, and 4% had highly severe depression. The majority of anxiety was found to be 55%. About 10% had severe anxiety and 11% had extremely severe anxiety [Table 2].

Our study shows a correlation between IA and scores of stress, depression, and anxiety. IA was found to be significantly correlated with stress (r = 0.726, P < 0.01), depression (r = 0.583, P < 0.01), and anxiety (r = 0.626, P < 0.01) [Table 3].

Table 1: Distribution of variables related to socio-demography and internet usage (n = 100)

Variables		Number of individuals	Percentage
Age (years) (Mean ± SD)		30.6 ± 10.2	
3.Gender	Male	48	48%
	Female	52	52%
Age of Initiation of internet use (yrs)		16.7 ± 3.8	
Screen time (per day)		8.9 ± 3.26	

Table 2: Prevalence of Internet addiction, stress, depression, and anxiety (n = 100)

Variables		Number of individuals	Percentage
Internet addiction	No	68	68%
	Mild	20	20%
	Moderate	10	10%
	Severe	2	2%
Stress	Normal	88	88%
	Mild	5	5%
	Moderate	4	4%
	Severe	3	3%
Depression	Normal	70	70%
	Mild	8	8%
	Moderate	12	12%
	Severe	6	6%
	Extremely severe	4	4%
Anxiety	Normal	45	45%
	Mild	12	12%
	Moderate	22	22%
	Severe	10	10%
	Extremely severe	11	11%

Table 3: Correlation between IA score and scores of stress, anxiety, and depression

Variables	Internet addiction	
	R	P-value
Stress	0.726	<0.01*
Depression	0.583	<0.01*
Anxiety	0.626	<0.01*

DISCUSSION

IAD may be defined as uncontrolled prolonged use of internet. IAD has a detrimental effect on a person's mental health and cognitive functioning, which might have an influence on their daily life. IAD can have a number of effects, including poorer academic performance, decreased productivity at work, mood swings, a reduction in family time that affects relationships with others, withdrawal symptoms like anxiety and anger when not using the internet, silence that means ignoring everything else and making the internet the most important thing in life, and relapse of addictive behavior even after a period of abstinence.[17]

The prevalence of IA was 32% in the current study. Similarly, Kumar et al,[18] found 58%, and Krishnamurthy et al,[19] found a 43% prevalence of IA in their cross-sectional studies in Haryana and Bengaluru, respectively. Saikia et al,[13] found an 80.7% prevalence of IA among urban adolescents. Gupta et al,[14] found a lower majority, that is, 25.3% of IA among university students. Different prevalence rates of internet addiction varying in relation to sociodemographic and internet-use related variables is reported all around the world.

However, excessive internet use can cause physical and mental health issues among users 32% of the participants in this study were addicted, with 10% having moderate addiction and 2% having severe addiction. 53.8% of participants in a study by Vandana et al. had a moderate internet addiction, while 7.7% had a severe one, which was conflict with our result.[20] Of the 100 participants in the current study, 48% were men and 52% were women. In a Bangladeshi research, women made up 45.6% of the population while men made up 54.4%. According to a Bangladeshi study, men were more likely than women to be addicted to the internet (31.58% vs. 21.74%), which is consistent with earlier research.[21,22] It could be because men are more likely than women to be excited about learning new things or investigating novel innovations, or because they are more drawn to addictive items like online gaming, pornography, and cybersex.

The current study found a strong positive correlation between IA and stress. This was consistent with the findings of other studies.[14,23-25] Coping mechanism

of avoidant style may lead to excessive internet use to escape the stress, thus leading to IA. IA was found to be positively correlated with depression. This is consistent with the findings of studies done in Delhi and Mumbai.[14,26] Several studies outside India have also found an association between IA and depression.[25,27] Anonymity and absence of physical presence make online communication easier than real-world communication. This might be the reason for depressives to use more internet. A strong positive correlation was also found with anxiety. Similar findings were also reported from Delhi and Mumbai.14,26 and also from outside India.[25,27]

Limitations: Data collection was based on self-reporting, which is usually prone to recall bias is a limitation of this study. Not consideration of psychological factors influencing Internet addiction was another limitation of this study.

CONCLUSION

Internet addiction also seems to be associated with increasing prevalence of depression, anxiety and stress. Nowadays, living without the internet is challenging, but not impossible. The internet can benefit humanity if individuals utilize it responsibly. It might be a disastrous tool if it is used improperly.

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