



A STUDY ON THE PREVALENCE OF PROBLEMATIC INTERNET USE AND ITS EFFECTS ON QUALITY OF LIFE AMONG ADOLESCENTS

Nursing

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ABSTRACT

Background: Tremendous use of internet and technology in the present time throughout the world influences our all walks of life and it causes serious adverse effects on our quality of life especially among adolescents and thereby Indian adolescents who are our valuable assets might be at high risk of having the major health problem due to Problematic Internet Use. **Objective:** The objective of this research study was to assess the prevalence of problematic internet use and its influence on quality of life among Indian adolescents. **Methods & Materials:** A cross-sectional study sample of 100 adolescents from rural & urban areas of Namakkal District by convenience sampling method after obtaining Institutional Ethics Committee approval and permission from the concerned local authorities. Samples were assessed with a specially constructed semi-structured proforma and Internet Addiction Test (Young, 1998) which was self-administered. Dukes Health Profile was used to study the quality of life of the adolescents. **Results:** Out of 100 adolescents who were part of this study 54 (54%) were average internet users, 32(32%) were moderate Problematic Internet Users and 14 (14%) were severe Problematic Internet Users. In our study, out of 100 adolescents (total sample size), females were 50(50%) and rest of 50(50%) were males. According to their educational status 40% belongs to science stream, 31% to commerce and 29% to arts. Most of the samples in the category of severe Problematic Internet Users were male adolescents (36%) and they had significant association for anxiety, depression and poor mental health variables. **Discussion:** Prevalence of Problematic Internet Use had significant relationship with male gender, living in nuclear family, residing in urban area, more time on online relationship in social media, having single parent and watching porn movies on the Internet at $p < 0.001$ level.

KEYWORDS

Prevalence, Problematic Internet Use, Quality of Life, Adolescents

INTRODUCTION

Tremendous use of internet and technology in the present time throughout the world influences our all walks of life including education, business, research and politics and has affected almost everyone directly and indirectly. The eminent psychologist Young became the first to publish a detailed case report of problematic Internet use. Her patient was spending up to 60 hours per week online. She reported feeling excited in front of the computer, and depressed. She described having an addiction to the internet affects the health of that individual and the society to a great extent. Moreover her patient was ignoring household chores, her family members and end up with socially withdrawn. (Young KS, 1996)

Internet in India 2017 report says that there shall be 500 million internet users in India in the year 2018, out of that 60% shall be adolescents. (Internet and Mobile Association of India, 2018) The total number of internet users in the country is projected to grow to 666.4 million by the year 2023. While internet plays a pivotal role in world of opportunities, there has been a substantial amount of research evidence conclude that the health related problems and social issues associated with problematic use of internet. (Balhara YP et al., 2018) Internet addiction leads to negative consequences on mental health. A meta-analysis comprising 1641 patients suffering from Internet addiction and 11210 healthy controls found that Internet addiction was significantly associated with alcohol abuse, attention deficit and hyperactivity, depression, and anxiety. (Ho RC, Zhang MW IA et al.) Internet addiction may be associated with other forms of addiction including smoking and alcohol dependence.

Need of the Study

Quality of life (QoL) of adolescents shall be more at risk as they are more exposed to virtual world due to the easy access, needs and demands of the day to day current technological life. A recent meta-analysis studied the prevalence of problematic internet use among adolescents reported a pooled prevalence of 22%, with a wide range of prevalence between 0.2% and 66% across the studies. (Sanjeev D et al., 2016).

OBJECTIVE

The objective of this research study was to assess the prevalence of problematic internet use and its influence on quality of life among Indian adolescents.

METHODS & MATERIALS

Non experimental descriptive correlational design was adopted for this

study. The cross-sectional survey was conducted in selected areas in Namakkal District. Non probability convenience sampling technique was used to collect data from 97 adolescents aged 15-20 years having access to the internet from the past 6 months. Those who are having any kind of health problems were excluded from the sampling. After obtaining informed consent from the samples the semi-structured proforma along with the scales were distributed with due instructions. The study was conducted after obtaining the approval from our Institution of Ethics Committee and permission was sought from the concerned authorities of all the rural panchayat boards and urban municipal boards in the selected areas.

TOOLS:

The study questionnaire consisted of three parts:

SECTION I: Semi-structured questionnaire to assess demographic variables like gender, educational status, birth order, religion, type of family, occupation of the parents, area of residence, duration of internet usage per day, the devices used for accessing internet, usual purpose of using internet like educational purpose, entertainment, chatting in social media, watching porn movies, gambling, gaming and the predominant time of day for internet.

SECTION II: The Internet Addiction Test (IAT; Young, 1998) is a 20-item 5-point Likert scale that measures the severity of self-reported compulsive use of the internet. Total internet addiction scores are calculated, with possible scores for the sum of 20 items ranging from 20 to 100. (Internal consistency, with an alpha coefficient of 0.91)

According to Young's criteria, total IAT scores 20-39 represent average users with complete control of their internet use, scores 40-69 represent moderate problematic internet users and 70-100 represent severe problematic internet users with significant problems caused by their internet use.

SECTION III: The Duke Health Profile was used to assess the quality of life. Tool reliability was established by Cronbach's alpha and test-retest method. It is a 17-item generic questionnaire instrument designed to measure self-reported Quality of Life quantitatively. It can be administered by the respondents themselves or by another person. The administration time is less than 5 min.

There are 11 scales with maximum score for each scale being 100 and minimum being 0. Six scales which measures the physical health, mental health, social health, general health, perceived health, and

self-esteem. Five scales which measures anxiety, depression, anxiety-depression, pain disability.

DATA ANALYSIS:

The data were analysed by descriptive statistics like mean, median, frequency, standard deviation and percentage and inferential statistics like Chi-square, Kruskal Wallis test were also used in this study.

RESULTS

Out of 100 adolescents, females were 50(50%) and 50(50%) were males. Regarding educational status 40% belongs to science stream, 31% to commerce and 29% to arts.

Out of 100 samples 54 (54%) were average internet users, 32(32%) were moderate Problematic Internet Users and 14 (14%) were severe Problematic Internet Users. The mean age of adolescents was 17.25 with standard deviation of 0.65.

Regarding the demographic variables of the adolescents aged between 15-20, like duration of internet usage per day, educational status, type of family especially single parent nuclear family, family income and area of residence were shown significant association with severe Problematic Internet Use at $p < 0.001$ level.

Majority of the samples used the internet mostly in the evening and nights as compared to other users in the day time. Among severe Problematic Internet Users most of them were using internet for more than 5 hours per day and they were in the group of arts stream of educational status. They had the poor mental health score and also had high anxiety, depression and anxiety-depression score. The quality of life variables were better for average internet users than that of moderate Problematic Internet Users and severe Problematic Internet Users. The study conducted by Mohammadkhani P et al. (2016) that there is a significant positive relationship between the variables of Internet addiction and psychiatric disorder like anxiety, depression and somatization disorders.

Most of the samples in the category of severe Problematic Internet Users were male adolescents (36%) and they were having the significant levels of scores for anxiety, depression and poor mental health variables. Disability, perceived health variables and self-esteem variables were not significant for all kind of internet users. (Table-1)

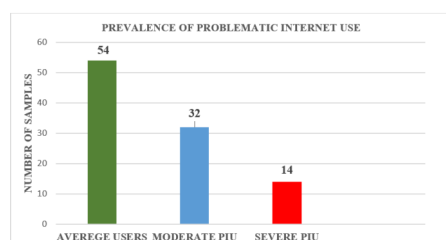
TABLE-1: Problematic Internet Use And Its Association With Quality Of Life Among Adolescents

Duke health profile – Quality of life Findings				Kruskal Wallis Test		
Quality of life variables	Average internet Users (n=54)	Moderate PIU (n=32)	Severe PIU (n=14)	Chi-square	p value	Remarks
Physical	75.00	70.00	40.00	40.236	8.31E-11	S*
Mental	65.00	70.00	50.00	19.112	1.56E-05	S*
Social	78.00	80.00	50.00	3.541	0.121	NS
General	25.00	20.00	16.00	31.112	2.43E-08	S*
Perceived health	52.00	48.00	45.00	3.301	0.0804	NS
Self-esteem	82.00	68.00	57.00	2.731	0.121	NS
Anxiety	65.00	66.00	70.00	30.922	2.98E-07	S*
Depression	60.00	60.00	40.00	34.963	5.64E-09	S*
Anxiety-depression	60.00	64.00	57.00	32.219	1.29E-07	S*
Pain	40.00	50.00	0.00	13.124	0.0029	S*
Disability	70.00	60.00	60.00	2.110	0.421	NS

S*-Significant at $p < 0.001$ level

NS-Not significant

Figure-1: Prevalence Of Problematic Internet Use Among Adolescents
N=100



Foot note: PIU- Problematic Internet Use

DISCUSSION

Internet Addiction Test shows out of 100 samples 54 (54%) were average internet users, 32(32%) were moderate Problematic Internet Users and 14 (14%) were severe Problematic Internet Users. According to their area of residence 64% were residing in urban place and 36% were living in rural areas.

Problematic Internet Use was associated with male gender, living in nuclear family, residing in urban area, more time on online relationship in social media, having single parent and watching porn movies on the Internet. It was also significantly associated with depression, anxiety symptoms, sleep deprivation, poor socialization.

Many research studies substantiate the relationship with the Problematic Internet Use and the psycho-social health problems. However demographic variables like age, religion, birth order, occupation of the parents and the predominant time of using internet were not significantly associated with Problematic Internet Use.

CONCLUSION

Problematic Internet Use among the adolescent population in developing countries like India has been given more focus and it is the need of hour to take community based cultural intervention to overcome the adverse health effects of Problematic Internet Use. So we strongly recommend the concerned authority to conduct longitudinal research in this area and to explore the confounding factors associated with it and we have to protect the highly precious human resource of future India from this burning social and public health issue.

CONFLICT OF INTEREST: There is no conflict of interest in our study.

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