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RESEARCH ARTICLE

A CROSS-SECTIONAL STUDY ON FACTORS INFLUENCING & EFFECT OF INTERNET ADDICTION AMONG ADOLESCENTS, URBAN MAHABUBNAGAR, TELANGANA

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Abstract

Introduction: Internet addiction is when a person has a compulsive need to spend a great deal of time on the internet to the point where other areas of life are allowed to suffer.²The vulnerability of adolescence might result in some addictive behaviors and the internet is one among them.⁴, so it is important to recognize the factors influencing and effect of internet addiction among adolescents.

Methodology: A Cross-sectional study was conducted in the Urban field practicing area of Government Medical College, Mahbubnagar among 150 students studying in 8th, 9th, 10th standards, Intermediate and Degree. Data was collected using pre-tested semi structured questionnaire, and analyzed using MS Excel.

Results: Among the study participants, easy accessibility to internet is the most common factor influencing internet addiction followed by having own electronic gadget, having own social media account. Among many effects of Internet addiction, sleep disturbance is most significant followed by drop in academic performance.

Conclusion: Present study conclude that majority of the study population are addicted to internet which is found to have a powerful impact on adolescents' physical and mental health. Potential factors influencing Internet addiction are easy access, having own social media account.

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Introduction:-

Adolescence is a phase of life between childhood and adulthood from age 10-19 years¹. Internet addiction is when a person has a compulsive need to spend a great deal of time on the internet to the point where other areas of life are allowed to suffer.²The vulnerability of adolescence might result in some addictive behaviors and the internet is one among them.⁴There has been an explosive growth of internet use in the last decade, so it is important to recognize the factors influencing and impact of internet addiction among adolescents.

Internet is a windfall and has undoubtedly helped to bring the world closer. It has been an enormous method for students to communicate and improve their knowledge by transforming the pedagogic landscape. Nevertheless, the excessive and disruptive use of Internet by individuals especially in the last decade has led to the emergence of the concept of Internet addiction.¹⁰ Lower age of initiation of internet use was found to be associated with internet addiction. Researchers have mentioned that early exposure to internet activities can increase risk of internet addiction.¹⁵

Studies conducted in South Asian countries have reported alarming prevalence rates of internet usage among adolescents.¹⁶ Adolescents are usually considered as risk groups. They have a natural affinity towards the internet and their conspicuous internet literacy has been linked to internet addiction, encouragement given from the university staff to use different internet applications for educational activities, increased internet accessibility, social anxiety or shyness in face-to-face situations. Transition from high school to college life with associated stress and anxiety, long periods of UN-structured time and freedom from parental control also contribute to the problem. However excessive use of internet has also been found to be significantly associated with some psychiatric disorders such as anxiety, stress and depression¹⁷. It would be interesting to know the levels of internet addiction and the factors influencing Internet addiction and their effects so in this context present study was planned to conduct on adolescents.

Objectives:-

1. To identify the factors influencing Internet addiction in adolescents.
2. To determine the effects of Internet addiction on adolescent health.

Methodology:-

1. **Study Design:** Cross-sectional study.
2. **Study setting:** Urban field practicing area of Government Medical College, Mahabubnagar.
3. **Study population:** Students of 8th, 9th, 10th standards, Intermediate and Degree in an urban area, Mahabubnagar.
4. **Sample size:** Taking prevalence as 10.2% from the Study (4) with 95% confidence interval and the margin error of 5%, Sample size is around 150.
5. **Ethical considerations:** Assent is taken from responsible guardian/parent of children from 10-17yrs and others verbal consent is taken before beginning of the study, IEC approval is taken for the study.
6. **Inclusion criteria:** Students in the age group of 10-19 years, willing to participate were included.
7. **Study tools:** Data was collected by interviewing students using predesigned semi structured questionnaire.
8. **Analysis:** Data was entered and analyzed by using MS Excel.

Results:-

Table no 1: - Socio-demographic factors of participants.

Socio-demographic factors	Distribution among study population	Percentage
Age	10-11 yrs	5 (4%)
	12-13 yrs	21 (14.1%)
	14-15 yrs	91 (60.9%)
	16-17 yrs	33 (22%)
	Total	150(100%)
Religion	Hindu	129(86.1%)
	Muslim	12(8.3%)
	Christian	9(5.6%)
	Others	-
	Total	150(100%)
Educational Status	High School	96 (64.2%)
	Intermediate	41 (27.7%)
	Undergraduate	13 (8.1%)
	Total	150(100%)
Father's educational status	Illiterate	8 (5.6%)
	Primary School	7 (5.2%)
	High School	47 (31.9%)
	Graduate	58 (38.9%)
	Postgraduate	30 (19.4%)
	Total	150(100%)
Mother's educational status	Illiterate	27(18.1%)
	Primary school	27 (18.1%)
	Secondary school	38 (25%)
	Graduate	40 (26.4%)

	Postgraduate	18 (12.5%)
	Total	150 (100%)
Father's occupation	Business	60 (40%)
	Government employee	30 (20%)
	Agriculture	24 (16%)
	Engineer	9 (6%)
	Others	27 (18%)
	Total	150 (100%)
Mother's occupation	Housewife	60(40%)
	Business	21 (14%)
	Teacher	36 (24%)
	Doctor	3 (2%)
	Others	30 (20%)
	Total	150(100%)
Parents marital status	Married	134(88.9%)
	Divorced	3 (2%)
	Single parent	9 (6%)
	Prefer not to say	4 (3.1%)
	Total	150(100%)
Family Type	Nuclear family	112 (75%)
	Joint family	30 (19.4%)
	3 generation family	4 (2.8%)
	Others	4 (2.8%)
	Total	150(100%)
Per capita income	8220 & above (upper)	76 (49.3%)
	4110-8219 (upper middle)	44 (29.9%)
	2465-4109 (middle)	15 (10.4%)
	1230-2464 (lower middle)	13 (9%)
	<1230 (lower)	2 (1.4%)
	Total	150(100%)

Most of the study participants belongs to the age group of **14-15 years** i.e.,60.9% while the least (4%) to 10-11 years, about 86% belongs to Hindu religion and nearly 64% of the study participants are of higher secondary school. Regarding parents' educational status, about 38% fathers and 26% mothers studied till graduation. Among study participants ,40% of their father's occupation do business and 40% of their mother's occupation are housewives. Family is of **nuclear type** belonging to **upper class of Socio-economic status** with per capita income of 8220 and above.

Table no 2: - Distribution of factors influencing internet addiction among study participants.

FACTORS INFLUENCING INTERNET ADDICTION	DISTRIBUTION	PERCENTAGE
No of electronic gadgets	2 or less	53 (34.9%)
	3 or more	97 (65.1%)
	TOTAL	150(100%)
Do you have electric gadget on your own	YES	121 (80.6%)
	NO	29 (19.4%)
	TOTAL	150(100%)
Duration of screen exposure	1-2 HRS	24 (15.1%)
	2-3 HRS	26 (17.8%)

	3-4 HRS	36 (24.2%)
	4 OR MORE HRS	64 (42.9%)
	TOTAL	150(100%)
Internet access	YES	138 (92.4%)
	NO	12 (7.6%)
	TOTAL	150(100%)
Having own social media account	YES	134 (89.3%)
	NO	16 (10.7%)
	TOTAL	150 (100%)

The inference from the above table is that **easy accessibility** to the internet (92%) is the most common factor influencing internet addiction followed by **having own social media account** (89%) and **having own electronic gadget** (80%) and the **availability of the number of electric gadgets** (65%).

Table no 3: - Effect of internet addiction among study participants.

EFFECT OF INTERNET ADDICTION	DISTRIBUTION	PERCENTAGE
Experiencing problems in academics	YES	95 (62.9%)
	NO	55 (37.1%)
	TOTAL	150 (100%)
Interpersonal relationships with friends and family	Best	26 (16.7%)
	Good	112 (75%)
	Bad	12 (8.3%)
	TOTAL	150 (100%)
Sleep getting affected due to internet usage	Yes	112 (74.4%)
	No	38 (25.6%)
	TOTAL	150 (100%)
Irritable when attempting to cut down or stop internet usage	Yes	100 (67%)
	No	50 (33%)
	TOTAL	150 (100%)
Usage of internet as a way to escape from problems or to relieve negative mood	YES	103 (68.1%)
	NO	47 (31.9%)
	TOTAL	150 (100%)
Physical symptoms eye strain headache back pain as a result of internet usage	YES	110 (73.8%)
	NO	40 (26.2%)
	TOTAL	150 (100%)
Feeling anxious or depressed when unable to access the internet or use devices	YES	82 (54.8%)
	NO	68 (45.3%)
	TOTAL	150 (100%)
Repeated unsuccessful efforts to control, cutback or stop your internet usage	YES	88 (58.94%)
	NO	62 (41.6%)
	TOTAL	150 (100%)

The effect of Internet addiction leads to many physical, mental and psychological symptoms. Among that **sleep disturbance** is most affected i.e.,74% followed by **experiencing physical symptoms like eyestrain, headache, back pain** etc., (73%) and **drop in academic performance** nearly 70%. Nearly 68% of the study participants use internet as a way to escape from problems or to relieve negative mood and 67% get irritated when attempting to cut down or stop internet usage. Majority experienced repeated unsuccessful efforts to control, cutback or stop internet usage (58%) and nearly 54% feels anxious or depressed when unable to access the internet or use devices.

Discussion:-

Indian research studies have indicated high vulnerability of internet addiction among students in India ¹⁷ and have also shown an increase in prevalence of internet addiction that is around 19.2% amongst adolescents in a developing country ¹¹. This motivated us to find the associated factors related to internet addiction to ensure better understanding of this rising issue.

Novelty-seeking is significantly high in adolescents with addiction. Adolescents with high novelty-seeking tend to engage in curious and exploratory activities. The addictive elements may satisfy their search for stimulation and sensation-seeking through interactive services leading to higher internet usage ¹². This may lead the adolescent to engage in a wide range of online activities rather than engaging in tasks requiring sustained mental effort. Lack of inhibitory control may interfere with self-regulation of internet usage ¹³.

Results further indicate that there is an increase in internet usage in adolescents with unhealthy family functioning. According to research, the more stress people endure in life, the higher the probability of internet addiction¹⁴. In an Indian context, family often serves as a secure base for the individual in his interaction with the environment in order to reduce stress and thus, it can be expected that better family function is accompanied by decreased internet usage. So, the current study revealed that many of the study Participants had chosen internet usage to escape from problems or to relieve negative moods with the similar comparison made by Tarun kumar et al.,¹⁸

Current study revealed that 74.4% are affected with sleep due to internet usage which is in contrast with Jiewen yang et al.,¹⁹ study in 2018 suggesting sleep disturbance with internet addiction with a prevalence of 39.1%. Around 92 % had an easy access to internet in the present study which is in line with a Study done by Dr. Karma Tenzin et al ²⁰ reported that over 70% of them access the internet after school hours considering easy accessibility is the common risk factor

Adolescents with attention problems tend to have poor self-control along with restlessness. In our study Internet addiction is affecting academic performance in 62% of study population which is in accordance with study done by Javaeed et al., 35.5% had poor academic performance ²¹.

Conclusion:-

Present study conclude that majority of the study population are addicted to internet. Potential factors influencing Internet addiction are easy access, having own social media account and presence of own gadgets. In majority participants, Internet addiction is affecting quality of sleep, physical health, academic performance, and personal relationships. The use of the internet has been found to have a powerful impact on adolescents' physical and mental health which in turn may affect their social life and relationship with the family.

Recommendations:-

Encourage offline activities like promoting extracurricular activities, hobbies and sports. Internet filtering and parental controls like limiting screen time for young adults. School based intervention - integrate internet addiction awareness and prevention programs into school curriculum. Create tech free zones to foster face to face interactions and family bonding without digital distractions. Offer Mental health support in schools to address underlined emotional issues that may contribute to Internet addiction. Parental involvement - educate parent support internet addiction and it's impact, encourage parents to monitor their child's screen time. Education and awareness -Raise awareness about the potential risks and consequences of excessive internet use.

Conflicts Of Interest:

None

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