



AN ASSESSMENT OF DEVELOPMENT OF OBESITY IN RELATION TO INTERNET ADDICTION DISORDER AMONG MEDICAL STUDENTS

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ABSTRACT

Background: India is a country where 270 million people are below poverty line, yet 30 million of men and women are overweight. Younger generation is falling prey to addictive behaviour to devices & internet addiction has become a major health issue.

Objective: This Cross- Sectional study intends to estimate the prevalence of Obesity and Internet Addiction Disorder among Medical Students of Heritage Institute of Medical Sciences & Research, Varanasi.

Materials and Methods: A sample of 100 medical students, selected by Convenience Sampling. Prevalence of Obesity was judged by measurement of BMI and waist circumference. Young's 20-item Internet Addiction test (IAT), was administered to find out prevalence of Internet addiction among Medicos.

Results: This study revealed that 31% students were either overweight or obese, while 85% were addicted to the Internet either mildly, moderately or severely. 80% of the overweight Medicos were also found to be addicted to the Internet. Obesity patterns showed a higher female predisposition (61%) among the medicos identified as obese.

Conclusion: The results highlight that not only obesity is a burning problem among Medical students but also Internet addiction and dependence is also very high among them.

KEYWORDS : Over-weight & Obesity, Internet Addiction

Introduction;

The initiation of computers and the Internet has led to a series of vivid changes and developments in the ways of generating, storing and sharing knowledge. Too much of computers and the Internet creates physical, mental and social problems. Although it is not recognized as a standard definition, Internet addiction is defined as experiencing physical, mental and social problems because of Internet and computer overuse. Internet addiction has a negative impact on workplace relations, interaction with friends, academic life and family life. Internet addicts spend most of their life in front of the computer passing time with e-mails, chatting, discussion forums and online games. In a sense, we can say that Internet addicts move their social lives into the Internet environment. Today, problematic Internet use and Internet addiction appear to be social issues that should be addressed without delay. In this regard, students, adolescents and young adults constitute the largest target group. [1-5] India is now the 3rd most obese country after US and China.

Adolescents are more vulnerable to Internet addiction than adults, and the social performance, psychology, and lifestyle habits of Internet addicts can be affected by this addiction [6]. Numerous cross-sectional studies have shown that Internet addiction has an adverse effect on several lifestyle-related factors in adolescents; it can result in irregular dietary habits, extended periods of time spent on the Internet [7], physical inactivity, short duration of sleep [8], and increased use of alcohol and tobacco [9,10]. Some studies have reported that the change in lifestyle-related factors caused by heavy Internet use could have an adverse impact on the growth and development of Internet addicts [7,8].

It has been found that there exists an association between overweight babies becoming overweight adults and prevalence of diabetes, cardiovascular diseases, colon cancer, and geriatric problems leading to 3.9% of years of life lost and 3.8% of disability adjusted life years worldwide. [11]

In modern day life the internet is a widely used tool known to foster addictive behaviour & threatens to develop into a major public health issue in the near future. College students are especially vulnerable to developing dependence on the Internet, more than most other segments of the society. [12]

Numerous studies have showed associations between Internet addiction and mental health problems, such as depression and psychiatric symptoms, among adolescents. However, information on the effects of Internet addiction and its relation with obesity of adolescents is limited, justifying the need of such studies.

Materials and Methods:

It was a cross-sectional study carried between the period from 17th to 23rd July 2018 at Heritage Institute of Medical Sciences & Research, (HIMS & R), Varanasi.

Main objective of the study is to find out the prevalence of obesity and internet addiction along with association between obesity & internet addiction amongst Medical Students to suggest proper corrective measures and create awareness among the obese and the internet addict.

The sample was chosen from the undergraduates of First Year M.B.B.S at HIMS&R by Convenience Sampling. Study includes 100 students both male and female. Inclusion criteria was Undergraduate students of First Year M.B.B.S course willing to participate. Exclusion criteria was students not willing to participate. Oral questionnaire was designed and interview technique was used to collect data. Internet Addiction Test (IAT) developed by Dr. Kimberly Young was chosen and used. IAT is reliable and valid measure of addictive use of internet. [13] It consists of 20 items that measures mild, moderate and severe level of internet addiction. Body mass index and waist circumference of each student was taken to calculate obesity. SPSS 20.0 was used to calculate data on MS Excel-2010 Sheet. Chi square test was applied.

Results and Discussion:

Among 100 participants, 31 students were found to be overweight (including the obese). Amongst the obese 61% were female and 39% were male. Internet Addiction Test (IAT) indicated that 15 students were not addicted, while 67 were mildly, 16 were moderately and 2 were severely addicted.

22% were consuming chocolates, cold drinks or ice creams on every second or third day followed by 31% weekly. Consumption of tea or coffee by 65% respondents on daily basis. 23% were taking meals in canteens of hotels on daily basis followed by 22% weekly. 11% were taking non-vegetarian meals on daily basis followed by 13% on every second day and 19% weekly. Watching Television or movies while having meals was practiced by 20% of students regularly, followed by 19% on every second day. 17% respondents were skipping breakfast daily, 33% every second or third day and 20% weekly. Major meals were skipped by 8% students daily, 18% on every second or third day 21% weekly. Post prandial sweets were commonly consumed by 70% students. Fondness for fast food was found amongst 76% while 46% students were compelled to eat fast food.

41% of the students examined were suffering from chronic constipation and 32% from chronic headache. Backache problems in 20% while 26% complained about mood swings and among 25%

students, fatigue was a general complaint.

Chronic illnesses noticed in 10% students. Frustration was high in 23% while 12% had insomnia. 49% wanted to change their current life style. Alcohol consumption was prevalent in 23%, while 19% were regular smokers.

50% students used to do physical activities like yoga, gym and sports. Amongst them 65% were involved in sports, 60% in gym, 45% in yoga 32% in walking. 84% used to sleep for 8 hours daily.

Amongst the 31 overweight and obese students, onset of obesity in 8 started after joining MBBS course.

08 female medicos had waist circumference more than 87cms while only 2 males had more than 102cms. 25 of the 31 students were found to be mildly, moderately or severely addicted to the internet. The association between obesity and internet addiction was found to be significant by chi square test, with p value<0.05.

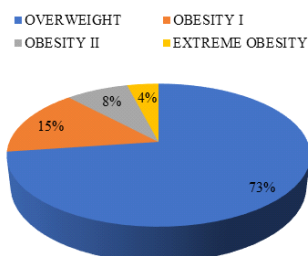


Figure 1 - Distribution of Students with BMI above normal range

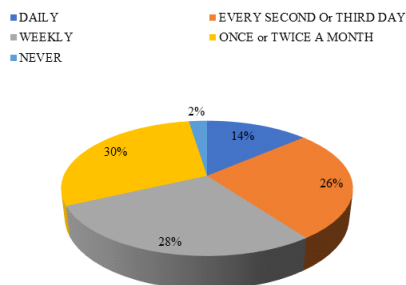


Figure 2: CONSUMPTION OF JUNK FOOD

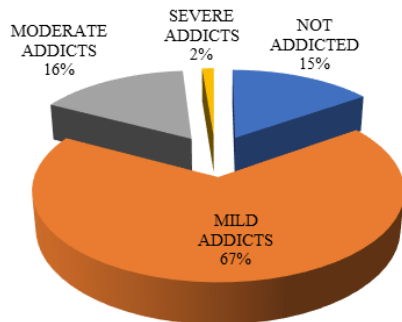


Figure 3: INTERNET ADDICTION TEST Young's Score

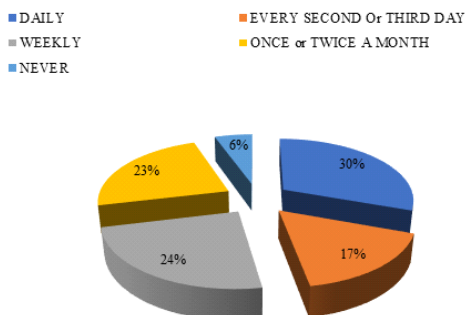


Figure 4: Consumption of ready to eat food

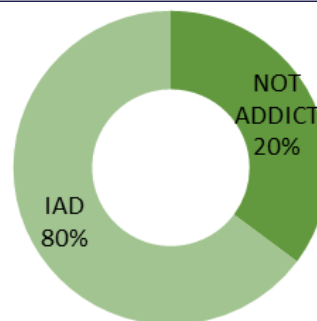


Fig 5: Association between Obesity and Internet Addiction Disorder

Conclusions & Recommendations

A significant association was observed between Obesity & Internet Addiction. However, other aspects of lifestyle like stress, over-eating, irregular sleep patterns, alcohol were common factors observed among obese individuals. Most of the students are using the Internet for Studies or surfing for study materials, but clearly in excess, which falls under addiction.

Diversion of attention is needed as an intervention for motivating them to healthy lifestyle or eating habits. Students should be encouraged also to continue sports, yoga, physical exercise & to lead a healthy lifestyle. College should appoint Mentors from the Faculty available and allot 15 or 20 students per Mentor, these seniors should guide the young students how to handle the pressure of pursuing M.B.B.S course. Stress, emotional disturbances, junk eating and addiction should all be checked and monitored. Good work culture should be developed to promote a healthy atmosphere in the college. Food provided in the college canteen should be of adequate standard, providing all the necessary nutrients to the students.

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