"THE IMPACT OF OVER-THE-TOP (OTT) AND SOCIAL MEDIA PLATFORM USAGE ON ANXIETY AND DEPRESSION AMONG ADOLESCENTS AND YOUNG ADULTS IN INDORE CITY: A STUDY OF KNOWLEDGE, ATTITUDES, AND PRACTICES (KAP)", INDORE, MADHYA PRADESH

Dr. Bohare Chhaya*	MBBS, MD, Senior Resident, Departments of Community Medicine, L.N. Medical College, Bhopal, MP *Corresponding Author
Dr Bansod Amrit	MBBS, MD, DM, Assistant Professor, Departments of Neurology, Super Speciality Hospital and Govt Medical College, Nagpur, Maharastra
Dr. Yesikar Veena	MBBS, MD, Professor, Department of Community Medicine, MGM Medical College, Indore, MP

ABSTRACT
Introduction: In the digital age, the proliferation of Over-the-Top (OTT) platforms and social media has reshaped the way adolescents and young adults interact with media and each other. While these platforms offer unprecedented access to information and social connectivity, their impact on mental health, particularly among younger populations, has become a subject of increasing concern. **Objective:** study to assess and learn more about the relationship between excessive screen time and social media and how it impacts people's mental health. to determine whether there is a trend in the way that people with anxiety and depression utilise OTT platforms and social media. to determine if a certain usage behaviour on social media and over-the-top content can be a sign of poor mental health. of adolescents and young adults during the pandemic. In one of the districts of MP, 259 adolescents and young adults were selected using the systematic random sampling method. An online survey was conducted using an online survey questionnaire to collect the information. and study by using SPSS 25. **Result:** The correlations between screen time (both general and social media-specific) and mental health scores are positive but generally weak. This suggests that while there is a trend of higher screen time being associated with higher levels of depression and anxiety, the strength of this relationship is not very strong. **Conclusion:** Findings of our study indicate that the study concludes that there is a need for a greater understanding of the possible dangers of extended usage of digital media A statistical study showed a favourable relationship between the participants' greater levels of anxiety and depression and their increasing use of social media and over-the-top (OTT) platforms

INTRODUCTION

In December 2019, a pneumonia outbreak of unknown origin, called coronavirus disease 2019 (COVID-19), was discovered in Wuhan, China. Later, the International Committee on Taxonomy of Viruses (ICTV) determined that the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) is the cause of COVID-19[1,2]. The WHO declared COVID-19 a pandemic on March 11, 2020[3], as it rapidly spread across the globe, including India, which has the second-highest number of confirmed cases, with 4.2 million cases. Maharashtra, Andhra Pradesh, and Tamil Nadu are the worst-hit states, contributing 21.6%, 11.8%, and 11% of total cases, respectively. The Indian government declared a nationwide lockdown in March 2020, but prolonged lockdowns negatively impacted the economy. On June 1, the government announced a phase-wise uplift, easing restrictions while maintaining lockdown for containment zones.[4] The WHO estimates that the number of COVID-19 deaths in India is around 4.7 million, which is the highest in the world. However, the Indian government disagrees, claiming that the methodology is defective. The official number of coronavirus-linked fatalities in India is over 500,000. However, it is estimated that there were 481,000 COVID-19 deaths between January 1, 2020, and December 31, 2021, while the WHO estimates the number to be ten times higher[5].

The global pandemic of COVID-19 severely disrupted medical education and training in 2020[6]. Due to national lockdowns and social segregation laws, medical students' training has been significantly interrupted [7]. Medical students experienced exam cancellations and delayed placements, and there were delays in applying for postgraduate studies or residence programs, among other training stages [8,9]. Moreover, the pandemic has likely affected medical students' physical and mental health, exposing them to the virus and disrupting their training [10]. The two most important aspects of undergraduate medical education, involvement with patients and bedside clinical training, have suffered due to the lack of non-COVID cases for the students to study and the availability of personal protective equipment (PPE) kits [11]. This situation has been in some teaching hospitals dedicated to COVID-19 cases.[12,13]

Medical students and healthcare workers are at the forefront of the fight against the COVID-19 pandemic, and it poses a serious public health risk. Raising awareness among medical students has become necessary due to their direct or indirect involvement in the COVID-19 pandemic and other pandemics [14]. Therefore, health workers, governments, and the public must cooperate globally to prevent the spread of the virus[15].

During the lockdown, technology has played a vital role in education. Online learning has become the go-to solution, with communication primarily conducted through web-based live video conferencing platforms like WebEx, Skype, Zoom, and Microsoft Teams, along with teaching platforms such as Moodle and Google Classrooms. However, to ensure the success of online education, it is crucial to address disparities in access to learning resources, technology, communication tools, and the ability to comprehend information from sources like computers and mobile phones[16,17].

Therefore, we surveyed Indore undergraduate medical college students to learn how they evaluated the COVID-19 pandemic's overall impact on their education as medical students, including how it affected their clinical responsibilities, teaching methods, and other training experiences. An assessment of the adaptation forced by the pandemic would offer essential information to help design future technology-enhanced or hybrid forms of medical education.

OBJECTIVES

1. To Identify Correlation Between Digital Media

Consumption and Mental Health:
2. To describe the socio-demographic profile of Adolescent and youth digital media affected.

MATERIALS AND METHODS

A KAP study evaluated the degree of familiarity with OTT and social media platforms [13]. Examine the views on social media use and over-the-top content. Examine the usage of social media and OTT techniques. Examine the occurrence of anxiety and sadness within the intended age range. Determine relationships between OTT and social media use and mental health transversal research. Sample: Indore City residents between the ages of 13 and 25. Random sampling that is stratified. Calculate the right sample size with statistical techniques. Create a systematic questionnaire that addresses social media and over-the-top (OTT) knowledge, attitudes, and habits in addition to questions on anxiety and depression when evaluating people for anxiety and depression, use standardised measures. To get qualitative insights, particularly on attitudes and experiences, conduct interviews. Focus Group Discussions (FGDs): Arrange FGDs to investigate attitudes and actions about using social media and OTT. The use of social media and OTT are independent variables. Dependent Variables: Social media and OTT behaviours, attitudes, and knowledge of Depression and anxiety levels compile a summary of the demographic traits using descriptive statistics. Explain how knowledge, attitudes, and behaviours are distributed. .. Deductive Statistics: Using a correlation analysis to find links between variables. [14].

Types of studies: Knowledge, Attitude and Practice study.

Study Population: Individuals in the age group of 13 to 25 years old. (Adolescent and young population)

Study Settings: Indore City.

Study Duration: October 2022 to March 2023 - 6 months (24 weeks)

Study Tools: pre-design questionnaire

Sample size: 259 students

Data collection

An online survey was conducted using an online survey questionnaire to collect the information. A structural questionnaire link using 'Google Forms' was sent to students through WhatsApp. Participants were provided full consent before participation in the online survey. The data was extracted from Google Forms and analyzed using MS Excel to compare the outcomes.

Inclusion Criteria

- Individuals have a screen time of at least 5 hours /day on social media and OTT platforms.
- Individuals who have given consent for the study.

Exclusion Criteria

- Individuals having a daily screen time of less than 5 hours.
- Individuals who haven't given consent for the study

Statistical Analysis

The data was initially entered into Microsoft Excel from the customised proforma for analysis. Online software and Excel were used to calculate the p values. Frequency distribution and cross-tabulation were used to prepare the tables. correlation coefficient test was applied to find the association between variables. Categorical variables were compared by chi-square test. Quantitative variables were expressed as the mean and standard deviation. A p-value of <0.05 is considered as significant. The final data was presented in the form of tables and graphs.

RESULTS:-

The study was conducted amongst adolescents and young populations in Indore, India. A total of 259 responses were taken as valid after excluding those with missing values or incomplete information.

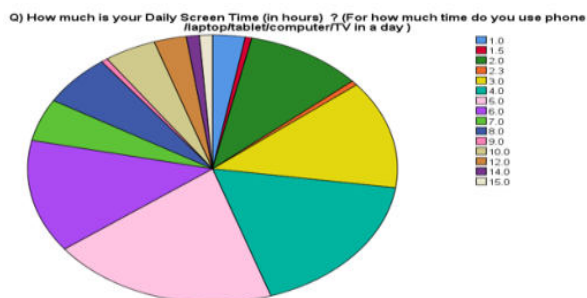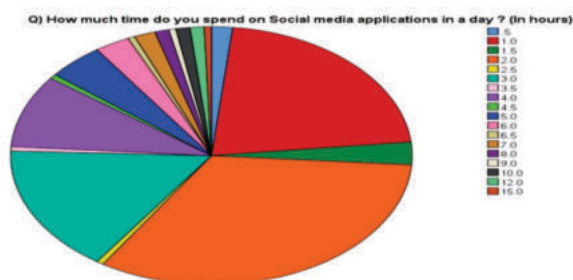**Table 1: Age-wise distribution according to gender (13-25)**

Age (in years)	Female		Male		Total	
	No.	%	No.	%	No.	%
13–17 years	67	47.5%	30	25.4%	97	37.5%
18–20 years	73	51.8%	87	73.7%	160	61.8%
>20 years	1	0.7%	1	0.8%	2	0.8%
Total	141	100%	118	100%	259	100%

Chi square value = 13.402, df = 2, p value = 0.001, Significant

Distribution of participants between anxiety score and gender

Anxiety Score	Female		Male		Total	
	No.	%	No.	%	No.	%
Mild anxiety	75	53.2%	51	43.2%	126	48.8%
Minimal anxiety	45	31.9%	46	39.0%	91	35.1%
Moderate anxiety	15	10.6%	13	11.0%	28	10.8%
Severe anxiety	6	4.3%	8	6.8%	14	5.4%
Total	141	100%	118	100%	259	100%

Chi square value = 2.992, df = 3, p value = 0.492, Not Significant

Q) How much time do you spend on Social media applications in a day ? (In hours)

Q) How much is your Daily Screen Time (in hours) ? (For how much time do you use phone /laptop/tablet/computer/TV in a day)

1. Daily Screen Time and Mental Health Scores:
Depression Score:
There is a positive correlation ($r=0.169$) between daily screen time and depression score, suggesting that higher screen time is mildly associated with higher depression scores.

- **Anxiety Score:** A similar positive correlation ($r=0.210$) is observed with anxiety scores, indicating that increased screen time is also mildly associated with higher anxiety levels.

2. Social Media Time and Mental Health Scores:
- **Depression Score:** The correlation between social media time and depression score is positive but weak ($r=0.110$), implying a slight association.
- **Anxiety Score:** The correlation is again positive but very weak ($r=0.098$), suggesting a minimal association between social media time and anxiety levels.

3. Correlation between Depression and Anxiety Scores:

- There is a strong positive correlation (r=0.705r=0.705) between depression and anxiety scores, indicating that individuals who score high in one tend to score high in the other.

Interpretation:
- The correlations between screen time (both general and social media-specific) and mental health scores are positive but generally weak. This suggests that while there is a trend of higher screen time being associated with higher levels of depression and anxiety, the strength of this relationship is not very strong.
- The strongest correlation is found between depression and anxiety scores, indicating a close relationship between these two aspects of mental health.

DISCUSSION:
It is also investigated how these usage patterns relate to anxiety and sadness. Let's dissect this study's interpretation and conversation. Determine if the respondents are well aware of the advantages of over-the-top (OTT) and social media platforms, including information sharing, connection, and instructional material Assess the knowledge of possible adverse effects, such as addiction, disinformation, and cyberbullying [15] Examine the opinions of the quantity and frequency of OTT and social media use. Find out if the respondents think utilising these platforms improves their amusement, knowledge, or social life. Determine whether they have any misgivings or worries regarding their own use or the potential harm to their mental health. Examine the real amount of time spent on social media and OTT services. Analyse the ingested information, including news, entertainment, and instructional materials. Examine how people interact with one another and with content on different sites. Use statistical techniques (regression analysis, correlation coefficients) to ascertain the connection between OTT/social media use and mental health [16]. Examine the OTT and social media habits of those who score higher on anxiety and depression to see any trends. Talk about any positive associations that are discovered, focusing on the possible causes of elevated anxiety and despair. Examine any unfavourable associations while highlighting social media and OTT characteristics that may offer protection against sadness and anxiety [17]. Take into account additional factors that might affect the connection, such as family support, academic pressure, or socioeconomic position. Talk about the ramifications for the relevant age group's local regulations or guidelines. Stress that further investigation is required to prove causality as opposed to merely correlation Finally, a thorough analysis and interpretation of the study should not only draw attention to the results but also offer insightful suggestions for further investigation and useful actions [18]

CONCLUSION:
The study's conclusions point to a number of important observations: Within the age category, the majority of participants showed high levels of social media and OTT platform participation This illustrates how ubiquitous digital media is in the life of young people in Indore City In general, respondents had favourable opinions of social media and over-the-top (OTT) platforms, viewing them as valuable resources for social interaction, knowledge, and amusement These platforms were seen by many participants as useful resources for maintaining relationships with peers and expressing oneself Concerns regarding the possible detrimental effects of excessive screen time on mental health, including anxiety and depression, were voiced by a sizable number of respondents The study concludes that there is a need for greater understanding of the possible dangers of extended usage of digital media A statistical study showed a favourable relationship between the participants' greater levels of anxiety and depression and their increasing use of

social media and over-the-top (OTT) platforms Although correlation does not indicate causation, these results point to a possible relationship that needs more research It is advised to implement educational initiatives and interventions to increase public knowledge of the benefits of responsible digital media use for mental health Promoting a healthy balance between online and offline activities and encouraging appropriate online behaviors may be crucial tactics in reducing any potential harmful consequences To safeguard the mental health of the younger generation, policymakers should think about creating rules for screen time limitations and content that is acceptable for the target age group Working together, parents, mental health providers, and educational institutions may help address the problems caused by excessive digital media use in a comprehensive way In conclusion, even if social media and OTT platforms have many advantages, there is a need to use them responsibly and sensibly, particularly for Indore City's 13 to 25-year-old age group, in order to reduce any possible threats to mental health.

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