



Planning of use of social and entertainment media and associated fear of addiction to it during initial phase of COVID-19 lockdown

Abstract

Background: The coronavirus disease 2019 (COVID-19) pandemic has drastically affected millions of lives globally. Amidst the measures of lockdown imposed to curb its spread, an increasing use of various media and social media can be expected, that could lead to problematic pattern of use. **Aim:** We aim to study how people plan to use various media, activities during initial phase of lockdown, and their fear of excessive use of smartphone and other electronic media. **Methods:** The sample was drawn from physicians, paramedics, and faculties of colleges, marketing professionals, and employees from judicial system and students of various streams in Assam. The subjects were emailed the questionnaires along with a consent form. Data were analysed by Statistical Package for Social Sciences (SPSS) version 24 and results were presented in terms of frequencies and percentages. **Results:** Use of social media was preferred by 76.1% of the respondents followed television (53.8%) and radio (21.1%). 8.5% and 6.1% respondents planned of using alcohol and tobacco respectively. 57.1% of the responses were 'others' group consisting of heterogeneous activities. 55.5% respondents expressed the fear of excessive use of smartphone or other electronic media during the lockdown period, which was higher among 20–29-year-olds, males, students, and medical professionals. **Conclusion:** Thus, social media was the most planned activity by people during initial phase of lockdown. Fear of excessive use smartphone or other electronic media was seen. Further studies in this regard could help to prevent occurrence of problematic pattern of smartphone or other electronic media use as a consequence of lockdown due to COVID 19 pandemic.

Keywords: Smartphone, risk factors, behaviour

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INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic has infected 1636 individuals and resulted in 38 deaths in India as of 1st April, 2020.[1] On 25th March, 2020, Government of India announced 21 days' total lockdown.[2] Lockdown may effect on psychological health of the population. Pandemic and lockdown may interact in complex ways resulting in fear, phobia, and anxiety amongst people. Lockdown in pandemic may behave much like natural disasters like earthquakes, flood, and storms in respect of psychological issues. Those affected may suffer from loneliness, anger, depression, post-traumatic stress disorder.[3]

Use of social media as a mode of communication to loved ones while maintaining the social distancing, use of television (TV), radio as only modes of entertainment have been the trend of new normal life amidst these days. A rising trend of being glued to various media was seen whether for keeping abreast about

COVID-19 status, online classes, work from home, or to pass time. If not used judiciously it might lead to problematic pattern of use in due course of time.[4] During the time of this pandemic, various media can act as a double-edged sword. Whereas on one hand, it can be utilised to disseminate awareness, and effectively battle the pandemic, on the other hand, it can lead to many mental illnesses and social evils if not utilised judiciously.[5-7] We want to study how people plan to use various media, activities during initial phase of lockdown and also their fear of excessive use of smartphone/electronic media.

METHODOLOGY

The study was conducted in the state of Assam. As the entire country was in lockdown data, collection was done through an online survey. Three hundred contacts were selected randomly from contacts of four researchers. Then we emailed the questionnaires along with a consent form mentioning

the purpose of the study. A self-reporting questionnaire was designed specifically for this study that contained a section on the sociodemographic details of the subjects as well as questions to shed light on the activities that the respondents planning to engage in while being confined at home due to lockdown. These activities included the use of TV, radio, and social media along with the details of the likely use of alcohol and tobacco/smoking was also taken.

Subjects rated their planning of activities. Furthermore, the fear of getting into the habit of excessive smartphone/electronic media use was also rated. Two hundred and fifty-five study subjects participated in the study. Approval from Institutional Ethics Committee was obtained to conduct the study vide letter no. AMC/EC/1064 dated 06/04/2020. The data obtained were analysed by using Statistical Package for Social Sciences (SPSS) version 24 and results were presented in terms of frequencies and percentages. Statistical significance was tested by chi-square test or Fischer's exact test and significance level was fixed at 5%.

RESULTS

Of the 300 subjects, 255 responded the questionnaires. After rejecting eight incomplete responses, final statistical analysis was carried out for 247 subjects.

Most of the respondents were from age group 20-29 to age group 40-49 years. Of the respondents, 56.3% were males and 43.7% were females. Majority of the respondents were married (61.9%). Only 20.2% of the study population comprised of joint family and rest 79.7% population comprised of other than joint family like nuclear family (57.1 %), hostel (12.1%), others (10.5%). Medical professionals comprised of 23.1%, non-medical care professionals 51%, students 8.9%, and others 17%. Non-medical care professionals comprised of faculties of higher educational institute, sales and marketing professionals, and employees of judicial system.

The respondents were asked about the activities they plan to be engaged in during the period of lockdown. Table 1 shows that various social media use was planned by 76.1% of the respondents followed by TV (53.8%) and radio (21.1%). Another 8.5% and 6.1% subjects are planning to use alcohol and tobacco respectively. And 'others' comprising of heterogeneous group of activities comprises 57.1% responses. 55.5% has expressed the fear of getting into the habit of excessive use of smartphone or other electronic media following their engagement into these during the lockdown period.

Table 2 shows the fear of developing the habit of excessive use of smartphone or other electronic media along with sociodemographic variables. None of the sociodemographic variables reached statistical significance, i.e., $p < 0.05$. However, it is seen that 20-29 years age group has the highest fear of excessive use of mobile phone/electronic media. Gender-wise males have shown more percentage (59%) of them having fear of excessive mobile phone/electronic media use. 68.2% students and 59.6% medical professionals have expressed the fear of excessive mobile phone/electronic media use. Married persons (54.2%) have less fear of excessive mobile phone/electronic media use than unmarried persons (61.2%). Joint family has (46.0%) less fear of excessive mobile/electronic media use than

Table 1: Frequency of planned activities during lockdown

Activities	Never (frequency in %)	Yes (frequency in %)	Total (frequency in %)
Television (TV)	114 (46.2)	133 (53.8)	247 (100)
Radio	195 (78.9)	52 (21.1)	247 (100)
Social media	59 (23.9)	188 (76.1)	247 (100)
Drinking alcohol	226 (91.5)	21 (8.5)	247 (100)
Tobacco/smoking	232 (93.9)	15 (6.1)	247 (100)
Other activities (swimming, music, reading, etc.)	106 (42.9)	141 (57.1)	247 (100)

#Figures in the brackets are the percentages

Table 2: Sociodemographic variables and fear of developing the habit of excessive use of smartphone and other electronic media

Variables	Never	Yes	p-value
Age in years			
20-29	27 (34.6)	51 (65.4)	0.157
30-39	42 (48.8)	44 (51.2)	
40-49	27 (45)	33 (55)	
50-59	11 (57.9)	8 (42.1)	
≥60	3 (75)	1 (25)	
Gender			
Male	57 (41)	82 (59)	0.206
Female	53 (49.1)	55 (50.9)	
Education			
Medical	23 (40.4)	34 (59.6)	0.469
Non-medical	87 (45.8)	103 (54.2)	
Occupation			
Medical Professionals	23 (40.4)	34 (59.6)	0.302
Service other than medical	57 (45.2)	69 (54.8)	
Students	7 (31.8)	15 (68.2)	
Others	23 (54.8)	19 (45.2)	
Marital status			
Married	70 (45.8)	83 (54.2)	0.069
Never married	33 (38.8)	52 (61.2)	
Others	7 (77.8)	2 (22.2)	
Family type currently living in			
Joint family	27 (54)	23 (46)	0.083
Nuclear family	66 (46.8)	75 (53.2)	
Hostel	9 (30)	21 (70)	
Others	8 (30.8)	18 (69.2)	

#Figures in the brackets are the percentages

nuclear family (53.2%). Hostel boarders has shown highest (70.0%) fear of excessive smartphone/electronic media use.

DISCUSSION

During the lockdown imposed by Government of India all non-essential services, malls, restaurants, gymnasiums were

closed. School, colleges, offices were closed and students and people were advised to learn and to work respectively from home. In this background we framed our questions to know the people's choice of activities and use of various media. Our study has revealed highest use of social media at 76.1% followed by TV at 53.8% and radio at 21.1%. In a study conducted during severe acute respiratory syndrome (SARS) among undergraduate students, preference of mass media was: 89% used the Internet, 88% TV, 77% radio, 56% newspapers, and 28%, magazines.[8] A high social media use was understandable because of very nature of humans to get connected to one another. It may allay the stress,[9] depression[10] of COVID-19 pandemic as previous study during SARS[11,12] has shown that having good social support system is negatively associated with depression. Another study during Middle East respiratory syndrome (MERS) has shown that no social networking activities (email, text, and internet) are a risk factor of anxiety even after four to six months after release from isolation.[13] TV has been another popular media with over half the respondent responding in favour. TV provides both entertainment and news which can be utilised by the people for engagement and getting updated of the pandemic situation at the same time. Traditional media like radio use at 21.1% was far below the use in metro areas.[14] It may be due to poor Frequency Modulation (FM) penetration in this part of country or a preference towards social media.

The planned use of alcohol was at 8.5% is a cause of concern. The National Mental Health Survey of India in the state of Assam in 2015-16 shows overall prevalence of alcohol dependence and harmful use to be 3.05%.[15] It was to be noted that as all the liquor shops were closed there might be a rise in illicit liquor and its attendant consequences in imposing during lockdown. Tobacco use at 6.1% was lower if we compare the prevalence of tobacco dependence in Assam at 25.79%.[15] According to a 1998-99 model, prevalence of smoking and chewable tobacco in Assam was six to 46 %.[16] It may be presumed that as COVID-19 specially destroy the respiratory epithelium, thereby increases chances of morbidity and mortality, people might be aware of this and using less tobacco as a precautionary measures.

However, the data also revealed that in a huge 57.1% of respondents planned activities were 'others.' This comes second after the social media uses. This category includes various responses like exercising, gardening, reading, painting, cooking, music, singing, etc. This finding demonstrates a positive aspect of the on-going pandemic. Further studies may be planned in this field for evaluating the positive consequences of the on-going COVID-19 pandemic.

As can be seen from the results, 55.5% of the total respondents have expressed fear that they might get into habit of excessive mobile phone/electronic media use. On further analysis according to sociodemographic variables, it is seen that age less than 50 years have more of this fear, 65.4% in 20-29 years, 51.2% in 30-39 years, and 55% in 40-49 years. It gradually decreases after 50. However, it did not reach statistical significance (p-value=0.157). Social media can be utilised by the government and other reliable organisations to generate awareness on the prevention and management

of COVID-19. News from unreliable sources could result in information overload, unnecessary panic as well as propagation of racist and xenophobic attitudes and behaviour among the masses.[5,6] Excessive use of social media during this pandemic has also been seen to be related to psychological symptoms of anxiety, depression, and elevated stress.[7]

In a study conducted among students of pre-university colleges of urban Bengaluru, 74.5% students were social media users and 27.4% had social media addiction. Prevalence of social media addiction among social media user was 36.9%.[17] Another Indian study has found 40.93% Indians above age 18 years is addicted to Nomo phobia.[18] They also found that person who belongs to 26 to 35 years age group are more Nomo phobic (52.693%) as compared to others.[18] So we may expect an upsurge of excessive smartphone/electronic media use post COVID -19 lockdown which necessitate systemic evaluation of this phenomenon to formulate appropriate strategies to mitigate the problem.

More than 50% of both sexes have expressed this fear but it did not reach statistical significance (p-value=0.206). In our study we have found that 59.6% of the medical professionals had fear of excessive smartphone/electronic media use. The facts that the novel nature of COVID-19 requires a medical professional to not only remain updated about COVID-19 status but at the same time accustom oneself with various guidelines, protocols through webinars etc. At 54.8%, non-medical professionals too had shown an increasing fear of excessive smartphone/electronic media use. 68.2% students responded that they fear they might get into excessive mobile/electronic media use. But statistically occupation was not significant (p-value=0.302). Using social media, watching TV, surfing the net, and psychoactive substance use may be used to reduce stress, anxiety, and depression. However, these potentially addictive behaviours can lead to reduced engagement in usual social interactions and other activities of daily living. During the COVID-19 pandemic, these behaviours may increase considerably and may develop into habits which are difficult to control.[19-21]

One important finding of our study was that unmarried person (61.2%) expressed more fear of excessive mobile/electronic media use than married person (54.2%). But it does not reach statistical significance (p-value=0.069). Our observation is that having a partner to talk to and share with may give some immunity to the fear. We did not find any study in this regard, which in a further study may shade light about the interactions that come into play. Lastly, hostel boarders at 70.0% expressing the fear of excessive mobile/electronic media use makes them the most vulnerable group. Traditional family set-up like joint family scores less in this regard with only 46.0% compared to 53.2% of nuclear family (p-value=0.083).

The COVID-19 pandemic has shaken the human psyche like anything. Add to this, lockdown has influenced the human behaviour and psychology as well. During this unprecedented time as mental health specialists we can utilise different types of interventions to alleviate the grave psychological impact of the COVID-19 pandemic. An existentialist approach could help to see these critical times as means of self-development. Cognitive behaviour therapy could help to reduce the effect of information overload on psychological

wellbeing of a person. Moreover, other strategies like helping others, self-care, techniques for relaxing, etc. can also be useful in reducing the emotional burden of this pandemic.[22]

Limitations

It was a web-based study through email where there was no face-to-face interview. The study population was a small one. The time duration was only during the initial phase of the pandemic. Moreover, baseline information about mobile phone/electronic media use was not taken into account. Persons less than 18 years of age are vulnerable population for social media abuse and addiction, yet they were excluded owing to the study utilising the convenience method of sampling. Small study population may have resulted in the result not reaching statistical significance. Moreover, the information from the non-responders was missed, one of the common drawbacks of samples drawn by online methods.[23] Due to specific compositions of the study population it may not be generalised to general population.

Conclusions

Thus, social media use was found to be the most preferred activity of the respondents during the lockdown followed by TV and radio. A fear of excessive use of smartphone and other electronic media was observed, which was greater among hostel boarders, students, unmarried persons, medical professionals, males, 20–29-year-olds, and persons living in nuclear families. Further studies in this regard could help to understand the various habits and ways of coping utilised by people during the lockdown as well as prevent occurrence of excessive use of smartphone and other electronic and social media as a consequence of the COVID-19 pandemic. The findings of the present study may help formulating plan by Government and Health authorities in case of any further Lockdown.

AUTHOR CONTRIBUTIONS

MA: Concepts, clinical studies, manuscript preparation, guarantor; **DB:** Design, data analysis, manuscript review, guarantor; **SG:** Definition of intellectual content, data acquisition, manuscript preparation, guarantor; **HS:** Design, statistical analysis, manuscript review, guarantor; **SD:** Definition of intellectual content, data analysis, manuscript editing, guarantor.

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