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Assessment of internet addiction during COVID 19 pandemic in India, 2022

Thin Mon Kyaw*
Department of Community Medicine, Faculty of Medicine, University of Cyberjaya, Malaysia.
Dr Thin Mon Kyaw
ORCID:0000-0003-1548-1727, Tel: +60182252711
Corresponding Author email: dr.sofi8655@gmail.com

Soe Moe
Department of Community Medicine, Faculty of Medicine, Manipal University College Malaysia MUCM, Malaysia.

Mya Sanda Khaing
Department of Community Medicine, Faculty of Medicine, University of Cyberjaya, Malaysia.

Myat Thida Win
Department of Internal Medicine, Faculty of Medicine, University of Cyberjaya, Malaysia.

Ye Wint Kyaw
Department of Pathology, Faculty of Medicine, SEGi University, Malaysia.

Sathiya Perumal
Department of Community Medicine, Faculty of Medicine, University of Cyberjaya, Malaysia.

Dasari Kiranmai
Department of Community Medicine, Faculty of Medicine, University of Cyberjaya, Malaysia.

Kaviya Surya Praksh
Department of Community Medicine, Faculty of Medicine, University of Cyberjaya, Malaysia.

Shanthosh Kumar
Department of Community Medicine, Faculty of Medicine, University of Cyberjaya, Malaysia.

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***Abstract*---**Introduction: The effect of COVID-19-related changes (such as disturbance of face-to-face human association, breakdown of propensities, vulnerability almost long-term, money related frailty, and depression) on people's mental well-being. The enormous utilize of the Web can be a double-edged sword: on the one hand, get to to innovation has cultivated people's well-being and has encouraged the get to to social back; on the other hand, it may have turned into tricky utilize, particularly with respect to compulsive utilize and cognitive distraction. Methods: A sample of 311 was calculated by using the Raosoft software. Descriptive analysis, univariate analysis and multivariate analysis were carried out. Binary logistic regression and multiple logistic regression were used for analysis to access the associated factors with internet addiction. Results: The majority of respondents 323(61.5%) belonged to the normal level of internet addiction, which was followed by Moderate level of internet addiction by 113(21.5%) respondents. 8(1.5%) respondents were severely addicted to internet. Conclusion: During COVID 19 pandemic, the prevalence of psychological problems such as Internet Addiction increased especially among young adults. Therefore, national policy should be refined to reduce the stressful lifestyle in order to reduce the impact of internet addiction especially for young adults in India.

***Keywords*---**COVID-19, Internet addiction, Internet addiction among adults aged 18 and above, India.

Introduction

Globally, the COVID-19 flare-up presented self-isolation and social removing all inclusive, with the result of an expanded web utilization [2] A few researchers have emphasized the potential effect of COVID-19-related changes such as disturbance of human association, breakdown of propensities, vulnerability almost long-term, money related frailty, and depression on people's mental well-being. [3] In this situation, the enormous utilize of the Web can be a double-edged sword: on the one hand, get to to innovation has cultivated people's well-being and has encouraged the get to to social back; on the other hand, it may have turned into tricky utilize, particularly with respect to compulsive utilize and cognitive distraction.[4] Among college students, the internet addiction of higher rates with 11.8%, 8.8%, and 8% have been observed and the lower rates in adolescence which was 0.7 %. [1]

Furthermore, 24.6% of young people had tricky Web utilize or Internet addiction disorder in India during 2020.[5] The Indian Board of Medical Research (ICMR) financed a study of 2,755 individuals from Bengaluru aged 18 to 65 years old and revealed that 1.3% of the individuals were dependent to the Web, 4.1% to portable phones, 3.5% to social networking sites, 4% to online shopping, 2% to online explicit entertainment, and 1.2% to betting [6]

Therefore, this research aims to access the status of internet addiction and to identify the associated factors related to the internet addiction among adults'

population in India by conducting a brief review of the literature about the different factors involved in fostering of obstructing people's well-being in the time of Covid-19. We would like to conduct this study in India to have more conclusive finding to support our hypotheses.

Method

Data

To assess the status of internet addiction, a cross-sectional study was done among adults 18 years and above during Covid 19 pandemic in India using Internet Addiction Test. The target population was Indian citizens who were residing in India during the time of the survey and those who are 18 years old and above and also use electronic devices to access the internet. Between 10 November 2021 and 25 November 2021, an online survey was distributed to individual participants through social media platforms such as Facebook, Instagram, Twitter, Email and WhatsApp etc. for quality control and sincerity of respondents. Participants were given informed consent prior to enrolment of the survey. A sample size estimation of 311 was calculated by using the Raosoft (sample size calculator) with the population size of 1.39 billion adults of the age 18 and above in India as per 2019 [7].

Data collection

A structured questionnaire was distributed via online was used to obtain information which included two sections. Section A included participants' socio-demographics including age; gender; residency; marital status; occupational status; family income and educational status; section B included the type of activities they would have used on the internet. Internet Addiction Test (IAT) was used in this study to measure the levels of internet addiction. It comprised 20 questions and participants were asked to select a score on each question from the survey, which scores as "0" for "Not Applicable"; "1" for "Rarely'; "2" for"Occassionally","3" for "frequently" ; "4" for " Often" and "5" for "Always" . The scores were summed up and categorized into different categories whereby score 0 to 30 points was considered to reflect a normal level of Internet usage, scores from 31 to 49 was considered the presence of a mild level of Internet addiction; 50 to 79 would be considered moderate level; and scores of 80 to 100 was considered severe dependence upon the Internet. [9]

In order to assess the validity of the questionnaire, a pilot test was performed among the respondents. Cronbach's alpha test of internal consistency was used to assess the reliability. Since the overall Cronbach alpha value was 0.82 and Cronbach's Alpha Based on Standardized Items was 0.85, the questionnaires used in this study were valid and reliable which was higher than the accepted value for internal consistency of 0.70.

Statistical analysis:

The data collected from the participants were analyzed using Statistical Package for Social Sciences-version 26. Descriptive analysis, univariate analysis and multivariate analysis were carried out. Binary logistic regression and 'multiple logistic regression' MLogR (backward method) based on the previous literatures were used to analyse the factors associated significantly with internet addiction. We deemed a p-value of less than 0.05 as statistically significant. Data were presented as the crude and adjusted odds ratio (OR) with the 95% confidence interval (CI) and their corresponding p values. $p<0.05$ were considered as statistically significant.[11]

Ethical Approval

All the participants were provided with informed consent prior to commencement of the study and the participations were voluntarily. The ethical approval was acquired from the Centre of Research and Development, Asia metropolitan University (No. HEC25022022FOM0002), which is in accordance to the Declaration of Helsinki.

Results

Table 1 shows the Socio-demographic Characteristics of the Respondents Variables of COVID-19 pandemic. Results show about 93% of the individuals were aged between 18 to 39 years old 492 (93.7%). More than 77% of the individuals were females 406 (77.3%) and the rest were males 111 (21.1%). About 73% of the individuals completed their bachelor degree 388 (73.9%) and more than half of them have completed post secondary education 78 (14.9) or have completed secondary education. Employment status almost 368 (70%) of the individuals were students and 102 (19.4%) individuals were employed full time or part time. The individuals with monthly income of 5001-1500 were 178 (33.9) and the family earning above 35000 were 130 (24.8). The individuals living in rural areas were 281 (53.5%) and while living in urban areas were 244 (46.5%).

Table 2 shows that the majority of respondents 323(61.5%) belonged to the Normal level of internet addiction, which was followed by Moderate level of internet addiction by 113(21.5%) respondents. 8(1.5%) respondents were severely addicted to internet. According to chi square chart shows out of 525 participants there were significant variables influencing the internet addiction (IA)were age, gender, marital status, educational status, employment status, family monthly income levels, Residence. In the assessment of Internet addiction sociodemographic variable such as Age($P<0.05$)is significantly associated most of the young adult respondents were Normal-315(64.0%) and 93(18.9%) respondents were Moderate 77 (15.7%) respondents were mild 7 (1.4%) were mild compared to the middle aged and old adults the result indicated that young adults were found Internet addicted respectively ,among the middle adult participants 7(25.9%)were Normal and 15(55.6%) were moderate , among the old adult participants 1(16.7%) were normal and 5(83.3%) were moderate. The variable of gender ($P<0.05$) is significantly associated.The proportion of internet addiction was found high

among the female respondents 283(69.7%)were Normal and 79(19.5%) were moderate comparatively higher than male respondents 38(4.2%).In the marital status ($p<0.05$) significantly associated .The Internet addiction was found high among the single respondents 286(67.6%)which was Normal than moderate 63(14.9%) the married respondents 27(47.7%) were Normal and 20(35.1%) were moderate than single respondents ,widowed respondents 0(0.0%)and divorced respondents 0(0.0%).

In educational status the ($P<0.05$) which is significantly associated.Majority of the tertiary degree respondents were Normal 280(72.7%) and 53(13.7%) were moderate compared to post secondary education respondents 29(37.2%) were Normal and 26(33.3%) were Moderate. In Employment status level the ($P<0.05$) which is significantly associated.The proportion of Internet addiction among employment status level Normal student respondents were 266(72.3%) and 52(14.1%) were Moderate comparatively higher than full time employed respondents. In Family monthly income level the ($P<0.05$) which is significantly associated.Internet addiction was found comparatively high in high family income.In residence level the ($P<0.05$) which is significantly associated The respondents belong to rural areas 186(66.2%) were Normal and 48(17.1%) were Moderate comparatively higher than urban areas 137 (56.1%).people spends more activities in online the ($P<0.05$) also significantly associated.Online classes/work form home Participants was 62(65.3%) and Other 87(75.0%) these are the activities mostly spend by participants in their time.. There is significant association found between IA and sociodemographic variables such as Age($P<0.05$)gender ($p<0.05$)) marital status ($P<0.05$)Educational status ($P<0.05$)) employment status($P<0.05$)Family income level ($P<0.05$)and Residence ($P<0.05$)

According to table-4, the significant variables influencing the internet addiction (IA) were age, gender, marital status, and family income.These variables have been used to find out their risk and confidence interval. The result indicated that the chance of IA among middle aged adult respondents have 0.57 high risk of IA, but age was found as significant risk factor to IA. The risk of IA was found 0.64 times higher among male with 95% CI (0.12-3.33) as compared to female respondents. The divorced respondents were found with 1.0 times higher risk of IA with 95% CI (0.00-0.00) as compared to unmarried respondents. The respondents of no formal educated people were found 4188268111.09 times higher risk of IA with 95%CI (0.00-~) as compared to formal educated people. The respondents of Retired people were found with 765224925.56 times high risk of IA with 95%CI (0.000-0.00) as compared to employed people. IA was found comparatively high in high family income groups 1.56 times of IA people with 95%CI (0.74-3.29). There is significant association found in IA such as age($p<0.05$). Gender($p<0.05$) marital status ($p<0.05$) Employment status ($p<0.05$) educational status($P<0.05$) Family income ($p<0.05$) Residence ($p<0.05$).

Table 5 shows that the p values of the variables post secondary education by low family monthly income(0.050), post secondary education by lower middle family monthly income(0.049), lower family income by participants living in rural(0.032) were statistically significant. Post secondary education by low family monthly income had 14.58 times higher risk of getting addicted to internet compared to no formal education by upper family monthly income group with 95%CI and

confidence interval of (0.73-292.74) with a p value of 0.050. Post secondary education by lower middle family monthly income has 9.9 times higher risk of internet addiction compared to no formal education by upper middle family monthly income with 95% CI and confidence interval of (0.00-1.46) with a p value of 0.049 which is statically significant. Lower family monthly income by participants living in rural area had 88 times higher risk of internet addiction compared to upper family monthly income by participants living in urban area with 95% CI of (0.02-0.84) with a p value of 0.032.

The Sensitivity of this study was 47.0 meant that this rule allowed to correctly classify 95/202 (47%) of the adult participants where the predicted internet addiction was observed. Furthermore, Specificity of the study was 86.7. It shown that this rule allowed to correctly classify 280/323 (86.7%) of the adult participants where the predicted internet addiction was not observed. According to Hosmer and Lameshow [12]test, p value was 0.150. Therefore, in our model, since p-value is more than 0.05 (not significant), the model fitted well. In this study, we concluded that 11.7% of internet addiction was explained by the significant independent variables stated in Table 5 based on the Cox & Snell R Square value (0.117) in MlogR. Omnibus tests of model coefficients gave a Chi-square of 65.21 on 4 df, significant beyond 0.001. Therefore, adding young adults (18-39 yrs), female, post-secondary, primary and post-secondary education, students, lower and lower-middle family monthly income, those living in rural areas and interactions (Post-secondary education (2) by Low Family Monthly Income (In RS) (1), Post-secondary education (2) by Lower Middle Family Monthly Income (In RS) (4), Lower Family Monthly Income (In RS) (1) by participants living in rural areas (1)) significantly increased the ability to predict internet addictions among adults in India. Therefore, adding these variables including interaction into the model improves the model.

According to ROC curve as shown in figure.1 the model discriminated 66.7% (95%CI:61.8-71.7) of the predicted of having internet addiction. We also checked influential outlier using Cook's influential statistics which cut off point was 1.0. In our data, none was more than 1.0 therefore, there was no influential outlier.

Discussion

The Internet, particularly online games, can increase a person's sense of energy and autonomy, as well as their self-esteem. [11,12] Future researches were needed to see if extending online consultations, especially during an outbreak, significantly reduces melancholy and stress in young adults while also preventing the development of IA. [13] The present study was conducted to assess the Internet Addiction (IA) among people living in India during the period of Lockdown due to COVID-19. An online survey was done with the help of some volunteers living in these clusters. The result of the present study indicated that the majority of the respondents using the internet were from the young adult age group. The IA was found comparatively higher among youth (64.0%). [13] And there was a significant association (p=0.01) between the age of the respondents and IA in our study. The present findings are similar to the previous studies conducted by Jafari et al [13]., (2014) in Iran, Hasan et al [142] 2020 in Bangladesh, Kwon et al., 2020[15], and Lee et al. (2001)[16] in South Korea. We could see that in the table 5 the variables such

as the post-secondary education by low family monthly income(0.050), post-secondary education by lower middle family monthly income(0.049), lower family income by participants living in rural(0.032) were statistically significant.

The proportion of Internet users belong to female was high and IA was also found among them compared to male respondents. In this study, we found that there were significant associations between age group and IA. The risk of IA was found approximately 3 times higher) among respondents belongs to other variables but Age type of the respondents was a significant risk factor of IA. These findings are similar to a previous study (Kwon et al., 2020).[17] The IA was found high among respondents belong to rural areas compared to urban areas in our study. However, according to previous literature, Internet addiction was significantly associated with the residency of the participants. [15] In contrast to the present findings, a study conducted in Poland had reported that IA has a significant association with residential area (Pawlowska et al., 2015).[18]The proportion of IA was found comparatively higher among the respondents having education up graduation. There was no significant association found between academic qualification and IA in the present study. In contrast to the present findings from Jain et al., (2020) in India found that IA has a significant association with the educational qualification of the respondents. [19] In our study, we found that participants with lower family monthly income (In RS) who were living in rural areas had 0.12 times less likely to develop internet addiction compared to those whose family monthly income were higher and who lived in urban area with adjusted odds ratio of 0.12 (95% CI: 0.02-0.84) and p value of 0.032. These findings are similar to the findings of previous studies conducted in Jhansi, Uttar Pradesh (Arya et al., 2018), and Korea (Kwon et al., 2020). [20,21]The findings of the present study indicated that half of the total respondents were found with a normal level of IA. There was about one-fifth of the respondents were found moderate and severe levels of IA in the present study. These findings are correspondence to the previous studies conducted in Palestine (Alhajjar, 2014), Iran (Ataee et al.,2014) and India (Arya et al., 2018 and Sushma et al., 2018).[22-25]Post secondary education by low family monthly income had 14.58 times higher risk of getting addicted to internet compared to no formal education by upper family monthly income group with 95%CI and confidence interval of (0.73-292.74) with a p value of 0.050. Post-secondary education by lower middle family monthly income has 9.9 times higher risk of internet addiction compared to no formal education by upper middle family monthly income with 95% CI and confidence interval of (0.00-1.46) with a p value of 0.049 which is statically significant. Lower family monthly income by participants living in rural area had 88 times higher risk of internet addiction compared to upper family monthly income by participants living in urban area with 95% CI of (0.02-0.84) with a p value of 0.032. From table 3 shows the significant variables influencing on the internet addiction (IA) among age, gender, marital status, educational status, employment status ,family monthly income levels ,Residence. Out of 525 young adults, the assessment of Internet addiction was mostly on the young adults and the young adults respondents were Normal-315(64.0%) and 93(18.9%) respondents were Moderate. This result too indicated that the middle young adults were also found addicted to the internet respectively, the middle adult participants of 7(25.9%) were Normal and 15(55.6%) were moderate. The result of the old adult participants status; 1(16.7%) was normal and 5(83.3%) were moderate.

Comparatively the proportion of internet addiction was found high among the female respondents; 283(69.7%) were Normal and 79(19.5%) were moderate. The female gender is remarkably higher respondents than male respondents. Among male respondents, 38(4.2%) were Normal, 41(6.9%) - mild, 29(26.1%) - moderate. Comparision made among the marital status, the internet addiction was found high among the single respondents. Among single respondents 286(67.6%) were Normal and 63(14.9%) were Moderate. Out of married respondents 27(47.7%) were Normal and 20(35.1%) were moderate. The outcome of study on educational status showed that the majority were from tertiary respondents, among them 280(72.7%) were Normal and 53(13.7%) were moderate, compared to post secondary education respondents, they're; 29(37.2%) were Normal and 26(33.3%) were Moderate. The proportion of Internet addiction among employment status level shows that Normal student respondents were 266(72.3%) and 52(14.1%) were Moderate, comparatively higher than full time employed respondents. The Internet addiction was found comparatively high in high family income levels. The respondents belong to rural areas were 186(66.2%) and they were Normal and 48(17.1%) were Moderate comparatively higher than urban areas 137 (56.1%). Most of the respondents spend time on others 87(75.0%) which was normal and 0(0.0%) were Moderate.so the ($p<0.05$) is significant associated to age , gender, marital status , employment status ,educational status and Residence.

Limitations

The study's approach and design were constructed to minimize limitations, however, the survey was done months after vaccines were administered in Malaysia, so we only kept the responses of those who we believed were fully aware of their responses [27]. Furthermore, since questionnaire was administered in English only and it might have an impact in pooling more responses for those who had limitation in English language.

Conclusion

The results of this study emphasize that the Internet addiction may increase in stressful situations, especially in India and international crises such as the blockade by COVID 19. About half of the respondents in this study had mild Internet Addiction and the other hand had one-fifth of the respondents with moderate and severe Internet Addiction. There was a significant association between Internet Addiction and sociodemographic variables such as age, gender, marriage status, occupation, and family type among adults in India. Therefore, the national policy should be refined to reduce the stressful lifestyle in order to reduce the impact of internet addiction especially among adults' population in India.

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Conflict Of Interest

There is no conflict of interest.

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Appendices

Table No. 1 Socio-demographic Characteristics of the Respondents Variables (N=525)

Variables	Frequency(n)	%
Age		
young adults (18-39)	492	93.7
middle aged adults (40-59)	27	5.1
old adults (60-99)	6	1.1
Gender		
Female	406	77.3
Male	111	21.1
Other	8	1.5
Marital Status		
Divorced	24	4.6
Married	57	10.9
Other	11	17.5
Single	423	98.1
Widowed	10	1.9
Educational status		
No formal education	5	1.0
Post-secondary (Pre-university, matriculation, A-level, Diploma, Foundation)	78	14.9
Primary	12	2.3

Secondary	42	8.0
Tertiary (bachelor, degree, master, PHD)	388	73.9
Employment status		
Employed (full-time	102	19.4
Employed (part-time)	17	3.2
Retired	10	1.9
Student	368	70.1
Unemployed/homemaker	28	5.3
Family Monthly Income (In RS)		
0-5000	122	23.2
15001-25000	57	10.9
25001-35000	38	7.2
5001-15000	178	33.9
Above 35000	130	24.8
Residence		
Rural	281	53.5
Urban	244	46.5

Table.2 Levels of internet addiction among adult participants in India (N=525)

Level of Internet Addiction	Frequency (n)	Percentage (%)
Normal	323	61.5
Mild	81	15.4
Moderate	113	21.5
Severe	8	1.5

Table.3 Levels of internet addictions among sociodemographic characteristics of the adult participants in India using Chi-Square test (N=525)

Variable		Levels of Internet Addiction				x^2 (df)	p-value
		Normal n(%)	Mild n(%)	Moderate n(%)	Severe n(%)		
Age							
	Young Adults	315 (64.0%)	77 (15.7%)	93(18.9%)	7 (1.4%)	36.69 (6)	**0.001***
	Middle adults	7 (25.9%)	4 (14.8%)	15 (55.6%)	1(16.7%)		
	Old adults	1 (16.7%)	0 (0.0%)	5 (83.3%)	0(0.0%)		
Gender							
	Female	283 (69.7%)	39 (9.6%)	79 (19.5%)	5(1.2%)	71.33(6)	**0.001***
	Male	38 (4.2%)	41 (6.9%)	29(26.1%)	3(2.7%)		
Marital status						127.38(12)	**0.001***
	Divorced	0 (0.0%)	3(12.5%)	21(87.5%)	0(0.0%)		
	Married	27(47.4%)	6(10.5%)	20(35.1%)	4(7.0%)		
	Other	10(90.9%)	0(0.0%)	1(9.1%)	0(0.0%)		
	Single	286(67.6%)	71(16.8%)	63(14.9%)	3(0.7%)		
	Widowed	0(0.0%)	1(10.0%)	8(80.0%)	1(10.0%)		

Educational status					97.10(12)	**0.001***
No formal education	0 (0.0%)	1(20.0%)	4(80.0%)	0(0.0%)		
Post secondary	29(37.2%)	21(26.9%)	26(33.3%)	2(2.6%)		
Primary	1(8.3%)	3(25.0%)	7(58.3%)	1(8.3%)		
Secondary	13(31.0%)	5(11.9%)	23(54.8%)	1(2.4%)		
Tertiary degree (bachelor,masters,PHD)	280(72.2%)	51(31.1%)	53(13.7%)	4(1.0%)		
Employment status level					114.21(12)	**0.001***
Employed (full time)	43 (42.2%)	26(25.5%)	29(28.4%)	4(3.4%)		
Employed (part-time)	5 (29.4%)	2(11.8%)	8(47.1%)	2(11.8%)		
Retired	0(0.0%)	0(0.0%)	9(90.0%)	1(10.0%)		
Student	266(72.3%)	50(13.6%)	52(14.1%)	0(0.0%)		
Unemployed/ homemaker	9(32.1%)	3(10.7%)	15(53.6%)	1(3.6%)		
Family Monthly Income Levels					60.16(12)	**0.001***
0-5000	93(72.3%)	9(7.4%)	19(15.6%)	1(0.8%)		
5001-15000	127(71.3%)	29(16.3%)	21(11.8%)	1(0.6%)		
15001- 25000	27(47.4%)	10(17.5%)	19(33.3%)	1(1.8%)		
25001-35000	14(36.8%)	4(10.5%)	19(50.0%)	1(2.6%)		
Above 35000	62(47.7%)	29(22.3%)	35(26.95%)	4(3.1%)		

Residence					10.43(3)	**0.015**
Rural	186(66.2%)	45(16.0%)	48(17.1%)	2(0.7%)		
Urban	137(56.1%)	36(14.8%)	65(26.6%)	6(2.5%)		
In which of the following activities do you spend most of your time					59.58(18)	**0.001***
For explicit entertainment	10(32.3%)	4(12.9%)	17(54.8%)	0(0.0%)		
Gambling	6(46.2%)	2(15.4%)	3(23.1%)	2(15.4%)		
Online classes/work from home	62(65.3%)	15(15.8%)	17(17.9%)	1(1.1%)		
Online Shopping	14(66.7%)	3(14.3%)	4(19.0%)	0(0.0%)		
Other	87(75.0%)	11(9.5%)	18(15.5%)	0(0.0%)		
Social media usage- applications such as instagram whatsapp facebook YouTube etc.	14(58.0%)	39(16.9%)	53(22.9%)	5(2.2%)		
Web surfing- for information	10(55.6%)	7(38.9%)	1(5.6%)	0(0.0%)		

Table. 4 Association of Internet addiction with sociodemographic characteristics among adult participants in India using Simple Logistic Regression (SLogR) (N=525)

Variable		B	Wald (df)	Crude OR (95% CI)	p-value
Age					
	Young adults (18-39)	-2.19	3.95 (1)	0.11(0.01-0.97)	**0.047**
	Middle adults (40-59)	-0.56	0.23 (1)	0.57(0.06-5.78)	0.635
	Older adults (≥60) ref				
Gender					
	Male	-0.45	0.28(1)	0.64(0.12-3.33)	0.596
	Female	-1.93	5.50(1)	0.15(0.03-0.73)	**0.019**
	Other ref				
Marital Status					
	Divorced	0.00	0.00 (1)	1.0 (0.00-0.00)	1.000
	Married	-21.09	0.00 (1)	0.00 (0.00-0.00)	0.999
	Other	-23.51	0.00 (1)	0.00 (0.00-0.00)	0.999
	Single	-21.94	0.0 (1)	0.00 (0.00-0.00)	0.999
	Widowed ref				
Educational Status					
	No formal education	22.16	0.00 (1)	4188268111.09 (0.00 - ~)	0.990
	Post-secondary education	1.47	32.22 (1)	4.38 (2.63- 7.29)	**0.001***
	Primary education	3.35	10.17 (1)	28.52 (3.638- 223.56)	**0.001**
	Secondary education	1.75	24.79 (1)	5.78 (2.89- 11.54)	**0.001***
	Tertiary education ref				

Employment status					
	Employed	-.36	.64 (1)	0.70 (0 .29-1.68)	0.43
	Retired	20.46	0.00 (1)	765224925.56 (0.00-0.00)	0.99
	Student	-1.71	16.41 (1)	0.18 (0.08-0.42)	**0.001***
	Unemployed ^ref				
Family Monthly Income (In RS)					
	0-5000	-1.26	20.79 (1)	0.28 (0.17-0.49)	**0.001***
	5001-15000	-1.01	17.31 (1)	0.37 (0.23-0.59)	**0.001***
	Lower middle income (15001-25000)	0.01	0.01 (1)	1.01(0.54-1.89)	0.967
	Upper middle income (25001-35000)	0.45	1.39 (1)	1.56 (0.74-3.29)	1.563
	High income (above 35000) ^ref				
Residence					
	Rural	-0.43	5.54 (1)	0.65 (0.46-0.93)	**0.019**
	Urban ^ref				
Which of the following activities do you spend most of your time?					
	For explicit entertainment	0.97	2.50 (1)	2.63 (0.79- 8.684)	0.114
	Gambling	0.38	0.27 (1)	1.46 (0.35- 6.11)	0.606
	Online classes/work form home	-0.41	0.61 (1)	0.67 (0.24- 1.85)	0.434
	Online shopping	-0.47	0.50 (1)	0.63 (0.17- 2.29)	0.478
	Other	-0.89	2.83 (1)	0.42 (0.15- 1.16)	0.093
	Social media usage applications (Instagram, Facebook, YouTube etc.)	-0.10	0.04 (1)	0.91 (0.34- 2.38)	0.839
	Web surfing for information ^ref				

Table.5 Association of Internet addiction with sociodemographic characteristics among adult participants in India using Multiple Logistic Regression (MLogR) (N=525)

Variable	B	Wald (df)	Adjusted OR (95% CI)	p-value
Post-secondary education (2) by Low Family Monthly Income (In RS) (1)	2.68	3.07 (1)	14.58 (0.73-292.74)	**0.050**
Post-secondary education (2) by Lower Middle Family Monthly Income (In RS) (4)	-4.84	3.31 (1)	0.01 (0.00-1.46)	**0.049**
Lower Family Monthly Income (In RS) (1) by participants living in rural areas (1)	-2.13	4.58 (1)	0.12 (0.02-0.84)	**0.032**

Figure.1 Area Under the Curve

Area Under the Curve

Test Result Variable(s): Predicted probability

Area	Std. Error[a]	Asymptotic Sig.[b]	Asymptotic 95% Confidence Interval	
			Lower Bound	Upper Bound
.667	.025	.000	.618	.717

The test result variable(s): Predicted probability has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.

a. Under the nonparametric assumption

b. Null hypothesis: true area = 0.5