Prevalence of Nomophobia in students due to COVID-19 pandemic in Pakistan

Umar Shahzad, Hufsa Shahzad, Naveed Anwer, Maham Afridi, Yousef S. Khader, Fatima Abdul Mnan, Samar Akhtar, Hashaam Akhtar

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Umar Shahzad[1] MSc; Hufsa Shahzad[2] MBBS; Naveed Anwer[3] MPhil; Maham Afridi[4] MPhil; Yousef S. Khader[5]; Fatima Abdul Mnan[6]; Samar Akhtar[6]; Hashaam Akhtar[7]

[1]PMAS, University of Arid Agriculture Rawalpindi PK
[2]Rawalpindi Medical University Rawalpindi PK
[3]Saulat Institute Of Pharmaceutical Sciences, Quaid-E-Azam University Islamabad PK
[4]Department Of Biotechnology, Quaid I Azam University Islamabad PK
[5]Professor Of Epidemiology, Medical Education And Biostatistics Department Of Community Medicine, Public Health And Family Medicine/ Faculty Of Medicine Jordan University Of Science & Technology Irbid JO
[6]Yusra Institute of Pharmaceutical Sciences, Yusra Medical and Dental Collage Zaraj Housing Society, Opposite DHA Phase 2 Gate III, Main G.T. Road Islamabad PK
[7]Yusra Institute of Pharmaceutical Sciences, Yusra Medical and Dental Collage Islamabad PK

Corresponding Author:
Hashaam Akhtar
Yusra Institute of Pharmaceutical Sciences, Yusra Medical and Dental Collage
Zaraj Housing Society, Opposite DHA Phase 2 Gate III, Main G.T. Road
Islamabad
PK

Abstract

Background: COVID-19 Lockdown has limited the non-essential movement of people. Consequently, the effects of lockdown had a remarkable impact on everyday life, including health, social sector, economic decline, supply chain sectors and education sector. Just because the social distancing is in ascend, people are looking up new ways to connect and Smart Phones are the most convenient, accessible, and cost-effective way to stay connected during this pandemic. People have become significantly dependent on their smart phones during COVID-19 pandemic that allow to work from home and stay connected with the world. Smartphone addiction is known as nomophobia (NMP) which is a fear of not using smart phone.

Objective: This nondrug addiction is as dangerous as drug addiction. It produces behavioral modifications in everyday habits and actions. Much research is available on nomophobia, to the best of author's knowledge, there is no literature available on the prevalence of NMP during COVID-19 lockdown

Methods: It was a descriptive cross-sectional study. Subjects fulfilling the selection criteria were enrolled in the study through public sector universities of Islamabad and Rawalpindi. Non- Probability convenient sampling technique was used to select 580 students of both genders from 18 to 24 years of age. 18 Students who were corona positive or having any known psychiatric disorder were excluded from the study. A cross sectional survey was conducted online by via Google form. Validated Nomophobia Questionnaire (NMP-Q) was utilized. A self-reported questionnaire regarding demographic data and information regarding use of smart phone. It is the most widely used measurement instrument, proposed by Yildrim and Correia, anyone can use it for noncommercial research and educational projects. NMP-Q includes 20 Likert scale items rated from 1 strongly disagree to 7 strongly agree. The lowest score on the NMP-Q is 20 and 140 is the highest. 20 represent absent of nomophobia, 21 – 59 mild level, 60 – 99 moderate level and 100 – 140 severe nomophobia. Google forms automatically analyzed the collected data.

Results: A total of 580 subjects 290 (50%) were male and 290 (50%) were female. Mean age was 21 ± 2.3 years. Out of 580 subjects 460(79.31%) were nomophobic. Subject who had severe nomophobia were 19%, moderate nomophobia 58% and mild nomophobia 23%. Subject reported that they could not stay away from their smart phones and keep their phones with them even at bedtime. 226 (38.9%) subjects never turned their phone off. 253 (43.6%) subjects carry a power bank with them so they may not run out of battery. Out of 290 female students 199 (68.6%) were nomophobic and out of 290 male subjects 261 (90%) were nomophobic. So, nomophobia was more prevalent in male. Most frequent reason for using smart phone was social networking (WhatsApp, Facebook, twitter, Instagram, tiktok, snapchat) 91% and playing games 73%.

Conclusions: High prevalence of nomophobia was found. Due to COVID -19 lockdown students have straight off become

dependent on smart phones that allow them to work and learn from home and take online classes. Smart phone is only source of entertainment for them so there is a huge percentage of a student having moderate nomophobia. So time of using smart phones should be regularized in order to avoid serious harmful effects due to prolong use.

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1. Umar Shahzad (PMAS, University of Arid Agriculture) (umrshahzad.eco@gmail.com, 92-313-5454361) https://orcid.org/0000-0003-3786-071X
2. Hufsa Shahzad (lecturer, AHS, Rawalpindi Medical University) (hufsa_shahzad@hotmail.com, 92-334-5405691). https://orcid.org/0000-0002-8786-9336
3. Naveed Anwer (Saulat Institute of Pharmaceutical Sciences, Quaid-e-Azam University) (Naveed_di@yahoo.com)
4. Maham Afridi, M.phil, Department of biotechnology, Quaid i Azam university Islamabad, Pakistan, maham.afridi@gmail.com, https://orcid.org/0000-0002-1750-9829
5. Yousef S. Khader, (Professor of Epidemiology, Medical Education and Biostatistics Department of Community Medicine, Public Health and Family Medicine/ Faculty of Medicine
   Jordan University of Science & Technology, Irbid 22110, Jordan. yskhader@just.edu.jo, ORCID: 0000-0002-7830-6857
6. Fatima Abdul Mnan (Student, Yusra Institute of Pharmaceutical Sciences Islamabad, Pakistan fatimabutt73586@gmail.com,
7. Samar Akhtar, Ph.D, (Professor, Yusra Institute of Pharmaceutical Sciences, Yusra Medical and Dental Collage, Zaraj Housing Society, Opposite DHA Phase 2 Gate III, Main G.T. Road, Islamabad, 44000, Pakistan) (drsamarakhtar@gmail.com) https://orcid.org/0000-0001-8341-672X
8. Hashaam Akhtar Ph.D, Post-doc (Associate Professor, Yusra Institute of Pharmaceutical Sciences, Yusra Medical and Dental Collage, Zaraj Housing Society, Opposite DHA Phase 2 Gate III, Main G.T. Road, Islamabad, 44000, Pakistan) (Hashaamakhtar@gmail.com) (+92-321-5272489) https://orcid.org/0000-0003-1913-831X

PREVALENCE OF NOMOPHOBIA IN STUDENTS DUE TO COVID-19 PANDEMIC IN PAKISTAN

ABSTRACT

BACKGROUND: COVID-19 Lockdown has limited the non-essential movement of people. Consequently, the effects of lockdown had a remarkable impact on everyday life, including health, social sector, economic decline, supply chain sectors and education sector. Just because the social distancing is in ascend, people are looking up new ways to connect and Smart Phones are the most convenient, accessible, and cost-effective way to stay connected during this pandemic. People have become significantly dependent on their smart phones during COVID-19 pandemic that allow to work from home and stay connected with the world. Smartphone addiction is known as nomophobia (NMP) which is a fear of not using smart phone. This nondrug addiction is as dangerous as drug addiction. It produces behavioral modifications in everyday habits and actions. Much research is available on nomophobia, to the best of author's knowledge, there is no literature available on the prevalence of NMP during COVID-19 lockdown.

METHODS: It was a descriptive cross-sectional study. Subjects fulfilling the selection criteria were enrolled in the study through public sector universities of Islamabad and Rawalpindi. Non- Probability convenient sampling technique was used to select 580 students of both genders from 18 to 24 years of age. 18 Students who were corona positive or having any known psychiatric disorder were excluded from the study. A cross sectional survey was conducted online by via Google form. Validated Nomophobia Questionnaire (NMP-Q) was utilized. A self-reported questionnaire regarding demographic data and information regarding use of smart phone. It is the most widely used measurement instrument, proposed by Yildrim and Correia, anyone can use it for noncommercial research and educational projects. NMP-Q includes 20 Likert scale items rated from 1 strongly disagree to 7 strongly agree. The lowest score on the NMP-Q is 20 and 140 is the highest. 20 represent absent of nomophobia, 21 – 59 mild level, 60 – 99 moderate level and 100 – 140 severe nomophobia. Google forms automatically analyzed the collected data.

RESULT: A total of 580 subjects 290 (50%) were male and 290 (50%) were female. Mean age was 21 ± 2.3 years. Out of 580 subjects 460(79.31%) were nomophobic. Subject who had severe nomophobia were 19%, moderate nomophobia 58% and mild nomophobia 23%. Subject reported that they could not stay away from their smart phones and keep their phones with them even at bedtime. 226 (38.9%) subjects never turned their phone off. 253 (43.6%) subjects carry a power bank with them so they may not run out of battery. Out of 290 female students 199 (68.6%) were nomophobic and out of 290 male subjects 261 (90%) were nomophobic. So, nomophobia was more prevalent in male. Most frequent reason for using smart phone was social networking (WhatsApp, Facebook, twitter, Instagram, tiktok, snapchat) 91% and playing games 73%.

CONCLUSION: High prevalence of nomophobia was found. Due to COVID -19 lockdown students have straight off become dependent on smart phones that allow them to work and learn from home and take online classes. Smart phone is only source of entertainment for them so there is a huge percentage of a student having moderate nomophobia. So time of using smart phones should be regularized in order to avoid serious harmful effects due to prolong use.

KEYWORDS: COVID-19, nomophobia, corona virus, lockdown, smart phones, pandemic.

Introduction

Coronavirus disease (COVID-19), which is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was first identified in December 2019 in Wuhan in China. To mitigate the risk of direct transmission of the novel corona virus during COVID-19 pandemic, various national governments have introduced extensive and smart 'lockdown' measures such social distancing, shielding and quarantine of high-risk individuals [4,5].

The non-essential movement of people has been limited by COVID-19 Lockdown while essential services are allowed to continue working in an attempt to control the spread of corona virus outbreak. Consequently, the effects of lockdown have a significant impact on daily life including health, social sector, economic, supply chain sectors and education sector. With the increasing social distancing, people are looking up to new ways to stay connected with friends and family, mostly through Smart Phones. With nearly all public gatherings called off, people are looking for entertainment on streaming services like Netflix, YouTube, and looking to connect with one another on social media outlets like Facebook, WhatsApp, and Instagram. Moreover, people have become dependent on smart phones that allow them to continue work from home[6].

Smartphones have influenced almost all the areas such as business, health, social life, education, and banking[7]. Nomophobia refers to discomfort, anxiety, nervousness, or anguish caused by being out of contact with a mobile phone[8,9].

Much research are available on nomophobia among students and other groups before COVID-19. It is not clear how this condition is affected by COVID-19 and its preventive measures. Therefore, this study aimed to estimate the prevalence of Nomophobia during COVID-19 lockdown in Pakistan.

Methods

Study design

A descriptive cross-sectional study was conducted among various students from nine (09) universities within the federal capital and Punjab aged 18 to 24 years. Subjects fulfilling the selection criteria mentioned on the questionnaires were enrolled in the study through public sector universities of Islamabad and Rawalpindi. Convenient sampling technique was used to select 580 students of both genders. 18 Students who were corona positive or having any known psychiatric disorder were excluded from the study.

Inclusion criteria:

- University student
- 18-24 years
- Having a smartphone

Exclusion Criteria:

- Suffering from Corona Virus
- having any known psychiatric\psychological problem.
- Taking antipsychotic or anti-depressant medications.

Questionnaire

An online questionnaire was developed using Google form. A part of the questionnaire collected data on demographic characteristics and the use of smart phone. A validated Nomophobia Questionnaire (NMP-Q) was used to assess nomophobia. It is the most widely used measurement instrument proposed by Yildrim and Correia. NMP-Q included 20 Likert scale items rated from 1 strongly disagree to 7 strongly agree. The lowest score on the NMP-Q is 20 and 140 is the highest. A score of 20 represent absent of nomophobia, 21 – 59 mild level, 60 – 99 moderate level and 100 – 140 severe nomophobia. The researcher observed all ethical considerations including taking consent of students, their psychological health, and their comfort level.

Statistical analysis

Data were analyzed using SPSS (IBM SPSS version 24). Data were described using means and percentages. Chi-square was used to test for the differences in proportions between males and females. A p-value of less than 0.05 was considered statistically significant.

RESULT:

A total of 580 subjects (290 (50%) males and 290 (50%) females). The mean (SD) of their age was 21.1 (1.8) with no significant difference between males and females. The majority of males (92.4%) and females (91.4%) had one smart phone and the rest had two smart phones. Two thirds of males (65.9%) and one third of females (38.6%) used to carry a power bank with them to avoid run out of battery.

Overall, 90.0% of males and 68.6% of females had nomophobia (p<0.001). Of all males, 26.9% had mild nomophobia, 49.3% had moderate nomophobia, and 13.8% had sever nomophobia. Of all females, 9.3% had mild nomophobia, 41.7% had moderate nomophobia, and 17.6%% had sever nomophobia (Figure 1).

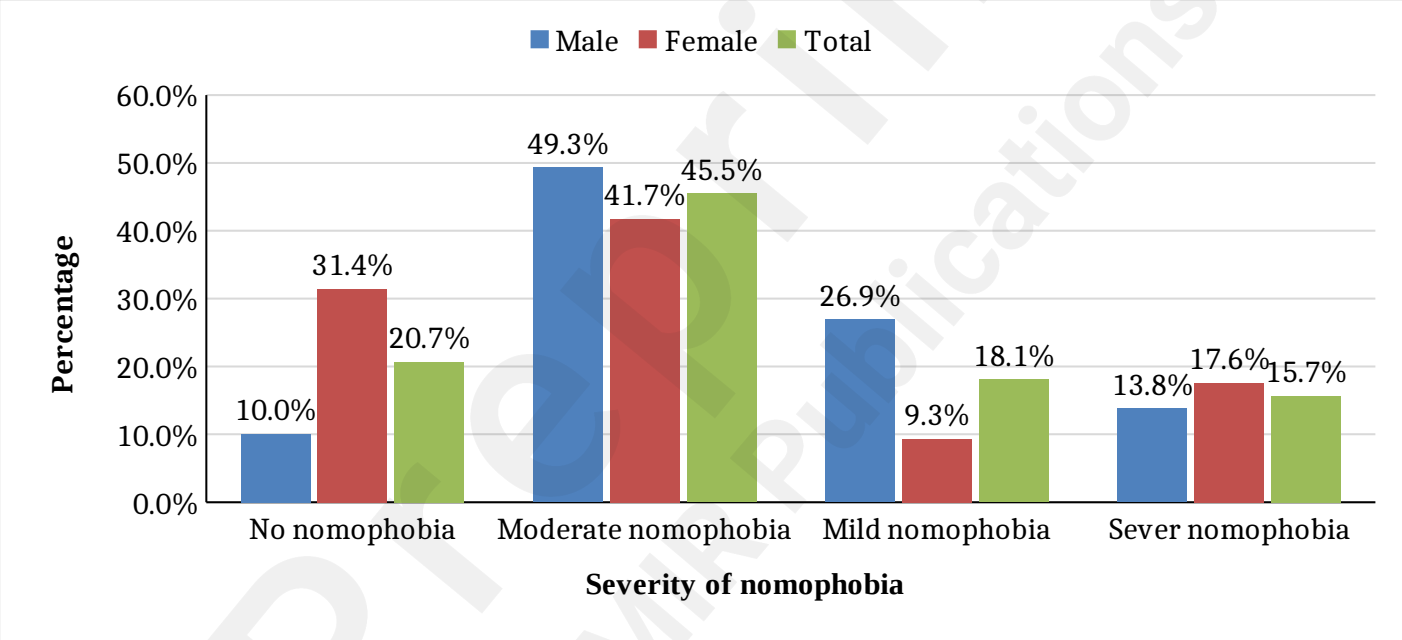

Table 1 shows the reasons for using the smart phones. The most frequent reason for using smart phone among males (86.9%) and females (58.6%) was social networking. Males were significantly more likely to use the smart phone than females for common reasons except calling family, where females were more likely to report using it for calling families.

Table 1. The reasons for using the smart phones.

	Gender	Total	P-

	Male		Female				value
	n	%	n	%	N	%	
Social networking	252	86.9	170	58.6	422	72.8	<0.001
Playing games	213	73.4	125	43.1	338	58.3	<0.001
Academic purposes	155	53.4	117	40.3	272	46.9	<0.001
Taking pictures	182	62.8	129	44.5	311	53.6	<0.001
Listening music	167	57.6	117	40.3	284	49.0	<0.001
Watching dramas/movies	148	51.0	117	40.3	265	45.7	<0.001
Texting	139	47.9	89	30.7	228	39.3	<0.001
Calling friends	148	51.0	113	39.0	261	45.0	<0.001
Calling family	46	15.9	83	28.6	129	22.2	<0.001

DISCUSSION:

Most countries of the world are adapting lockdown measures to control the spread of novel corona virus. During COVID 19 lockdown Smart phones is facilitating our daily life by providing different services that are entertaining, convenient and user friendly.[13]

In the present study the prevalence of nomophobia is 79% while the prevalence of nomophobia was 73% according to a study done in India in 2017.[14] the prevalence is a bit less as compared to present study it may be because this study was done before covid 19 lock down as students have to go to universities and they have less time to use mobile phones.

The present study showed that males are more likely to be nomophobic than female similar results were found in a study done in Pakistan in 2017[15] and a study done by farooqui et[16] and also by pooja et al.[17]

According to the present study majority students had moderate level nomophobia similar results are shown in different studies.[18]

In the present study the prevalence of severe nomophobia is 19% while prevalence of severe nomophobia was 23.5% in a study done in early 2019[19]. The difference may be attributed to cultural

differences.

Different studies done in india[20,] Turkey[21] and Spain[22] found a significant risk of nomophobia in students whose purpose of maximum use of smart phones was social networking, also reported that social networking is the most common reason of using mobile among students.

There are pros and cons of use of smart phone but as excess of everything is bad. Our health care delivery system is struggling to control the rise of corona virus affectees hence less attention has been paid to maladaptive use of smart phones during this pandemic. It is recommended that it is a need of time to counsel the students and their parents about smart phone dependency.

CONCLUSION:

High prevalence of nomophobia was found. Due to COVID -19 lockdown students have straight off become dependent on smart phones that allow them to work and learn from home and take online classes. Smart phone is only source of entertainment for them so there is a huge percentage of a student having moderate nomophobia. So time of using smart phones should be regularized in order to avoid serious harmful effects due to prolong use.

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Supplementary Files

Figures

The distribution pattern of nomophobia among males and females.