

The Role of Social Media in COVID-19 to Exacerbate Anxiety and Depression among Pakistani community

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^{1,2,6} Conception of study

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Abstract

Introduction: The purpose of the worldwide lockdown was to impede the spread of this virus via social distancing. WHO reported anxiety, stress, fear, which have affected people's psychology across the globe due to loneliness. The surge of information regarding COVID-19 on social media (myths and beliefs) played a major role for communities' psychology.

Materials and Methods: A cross sectional study was done with sample size of 800. The sampling technique was convenient. Questionnaire shared through social media platforms. Statistical analysis was done through SPSS version 21 and responses were taken as frequencies, percentages and chi-square test.

Results: There was a significant association between highly educated people and social media usage with p-value 0.000.

Conclusion: COVID-19 information available over social media was used by everyone and considered as authentic. Therefore, control measures and legislation should be applied on them.

Keywords: Social media; COVID-19, Attitude.

Introduction

In December 2019, 54 cases of viral pneumonia infection were reported in Wuhan, China. The novel virus of the Corona viridae family was termed as COVID-19 by WHO [(1)]. Cases have since increased and multiplied in over 196 countries around the globe.

A global pandemic was declared by WHO on 11th March, 2020 [(2)]. Both under developing and developed countries were greatly affected amidst the pandemic lockdown as prescribed by the WHO. The purpose of the worldwide lockdown was to impede the spread of this virus via social distancing[(3)] . It primarily affected the labor class and lower factions (the daily wagers) in Pakistan economically due to which a proper lockdown couldn't be established which increased the spread of the disease throughout the country [(4)].

Since Pakistan is a developing nation itself, the government failed to provide enough financial help for the daily wagers. The widespread of fear and panic across the globe resulted into the hunger for information as people started to rely more on available information via online platforms [(5)] . While some platforms provided with the accurate and reliable information, a lot of others failed to do so sometimes intentionally falsifying information hence adding to the panic and chaos worldwide [(6)] .

To counter this, WHO created a myth busters web page to address the concerns of worried people and provide them with authentic information about the ongoing situation of COVID-19 outbreak in every country [(7)] . Social media affected the mental health of all the individuals including the ones fighting it, the ones who have successfully beaten it, those who lived in constant fear and those who lost friends or families. Common symptoms like anxiety, stress, fear etc. continue to plague the masses very harshly [(8)]. WHO detected these symptoms which have affected people psychologically across the globe due to loneliness, substance abuse, depression and constant fear. [(9)] The surge of information regarding COVID-19 on social media (myths and facts) has certainly played a major psychological role for communities all over the world. News via online web pages like Twitter,

Facebook, Instagram was easily accessible to masses[(10)].

Pakistani communities in rural and urban areas responded differently according to their customs and beliefs and some of them developed severe forms of anxiety or depression[(11)]. To date there were no such information that explains the impact of social-media information on public health [(12)]. Therefore, this study was conducted to identify the exacerbating' role played by social media in COVID-19 pandemic period in generating myths causing anxiety and depression among Pakistani community.

Materials and Methods

Cross sectional study design was used and the study was conducted online, so target audience was not geographically limited. They belonged to various residing areas of the country.

Sample size chosen was 800 and convenient sampling was used in the process of sampling. The study duration was from NOV 2020 to JAN 2021.

A pre validated structured questionnaire was used. [(14)]. which was divided in to two areas, each area was aimed at collecting the information relevant to the demographic details of the participants and use of social media platforms keeping ensured the anonymity and confidentiality of participants.

Questionnaire was posted on various social media platforms which included Facebook groups, WhatsApp groups and Twitter groups.

SPSS version 21 was used for the analysis of data. The data gave frequencies, percentages which were further subjected to Chi-square test.

Results

Age and gender were cross-tabulated with the questions and their responses to analyze the association using Chi-square test and p-value less than 0.05 was considered statistically significant. Below are the significant responses associated with age of respondent, see Table 1.

Table 1: Association of age with social media myths and beliefs causing anxiety and depression (N=800)

Questions	Response in favor	Chi square test		P-value
		value	df	
1.Do you regularly use social media platform	96.5%	124.165	58	.000
2.Which social media platform do you use most often	99.8%	24828.990	11774	.000
3.Do you think social media platform convey right information	91.0%	113.813	116	.540
4.Do Social Media Platforms play a role as Facilitator of Valid Information	94.1%	1007.492	406	.000
5.Do you share any information from Social Media Platforms with your friends and family, being assured that you are sharing the right and authentic content	92.5%	774.158	232	.000
6.Did any kind of myths /fallacies come to your observation on social media platform	99.9%	1994.591	16066	1.000
7.Have you come across any facts or other details regarding COVID-19 Pandemic which you later found out to be wrong	99.8%	24213.703	7656	.000
8.Did you believe in any method of prevention of COVID-19 other than the Social Distancing, Face-masks on the Social Media Platform	99.6%	12394.503	4640	.000
9.Has the massive influx of information from Social Media Platforms made you more Serious or Casual about COVID-19 Pandemic	92.5%	388.018	232	.000
10.Has information regarding COVID-19 Pandemic on Social Media Platforms triggered stress and anxiety in your life	94.1%	1208.353	406	.000
11.Did you suffer from any symptoms of Anxiety and Depression before COVID-19 Pandemic	91.1%	632.950	174	.000
12.has Pandemic worsened your (anxiety and depression) condition	89.8%	599.236	174	.000
13.Have you ever become more concerned or worried about your health after reading posts on Social Media Platform in COVID-19 Pandemic	92.7%	998.801	290	.000
14.Does news of COVID-19 Pandemic on Social Media Platforms make you feel more anxious and worried in the current situation	99.4%	4775.237	3422	.000
15.Are you able to distinguish the reliable and unreliable information delivered on Social Media Platforms	92.4%	1129.172	290	.000
16.Has information on Social Media Platforms in COVID-19 Pandemic motivated you POSITIVELY to combat the situation	88.6%	963.640	174	.000
17.Do you feel down, depressed or hopeless for several days	94.5%	1618.470	464	.000
18.Do you feel Trouble falling or staying asleep, or sleeping too much	96.5%	2045.130	754	.000
19.Gave you been experience Feeling tired or having little energy all the time	94.4%	1449.362	464	.000
20.Have you had a Poor appetite or overeating	95.1%	1928.922	522	.000
21.Have you had a Feeling bad about yourself - or that you are a failure or have let yourself or your family down	95.3%	1426.843	522	.000
22.Have you find Trouble concentrating on things, such as reading the newspaper or watching television	95.8%	2480.861	580	.000
23.Being so fidgety or restless that you have been moving around a lot more than usual	95.4%	1530.848	522	.000
24.Thoughts that you would be better off dead, or of hurting yourself in some way	94.9%	851.441	348	.000
25.Have you experience difficulty to have these problems made it for you to do work, take care of things at home, or get along with other people	95.4%	1648.107	580	.000

Discussion

This study significantly contributed in the role of COVID19 on mental health and it was recorded that our research agreed to the previous researches that it

did affect the people and their lives in terms of reporting difficulty in work from home [(15)]. A wave of anxiety and depression was seen more in graduates than any other group in the respondents. Participants reported anxiety and depression during this wave of pandemic. [(16)] . The females were recorded agreeing

to it rather strongly. This study also identified that whether males use social media more than females, however the results were largely skewed because of larger number of female participants. On the other hand, the association was a correct one, agreeing to the fact that there is a link between gender and social media usage [(11)],[(17)].

It was recorded that graduate level responders agreed to having difficulty in performing daily tasks and hence being most affected age group (17-25) by COVID-19 pandemic. And p-value of 0.000 proved the association of education with effect on mental health as a statistically significant one [(18)].

The results also indicated that people believed the influx of information on social media regarding COVID 19 was reliable and used it as a platform to keep them updated about the pandemic [(19)]. This study was also provided a new insight on this relationship of social media and influx of reliable information. It was beyond the scope of this study to assess how and what information was perceived as being the correct one and how to ensure the authenticity of any news available online [(20)]. However, despite all the limitations, this study has set grounds to initiate a thorough investigation on the relationship of information influx and the mental health of masses [(16)],[(17)], [(22)] which will become a matter of great importance as we step into the future world of information and technology.

Conclusion

COVID-19 information available over social media was used by everyone and considered as authentic. Therefore, control measures and legislation should be applied on them.

References

- World Health Organization. Preparedness, prevention and control of coronavirus disease (COVID-19) for refugees and migrants in non-camp settings. 2020;(April):1–6. WHO reference number: WHO/2019-nCoV/Refugees_Migrants/2020.1
- Rodríguez-Rey R, Garrido-Hernansaiz H, Collado S. Psychological Impact and Associated Factors During the Initial Stage of the Coronavirus (COVID-19) Pandemic Among the General Population in Spain. *Front Psychol.* 2020;11(June). <https://doi.org/10.3389/fpsyg.2020.01540>
- Copur M, Copur S. COVID-19 Pandemic and mental health concerns: What should we expect? *Klin Psikiyat Derg.* 2020;23(13):95–8. <https://orcid.org/0000-0001-9218-0296>
- Shaukat R. Social Media Role in Relation with Covid -19 in Pakistan: A scientific and Spiritual Corpus Based Analysis. *Glob Sci J.* 2020;(April).
- Varshney M, Parel JT, Raizada N, Sarin SK. Initial psychological impact of COVID-19 and its correlates in Indian Community: An online (FEEL-COVID) survey. *PLoS One [Internet].* 2020;15(5):1–10. Available from: <http://dx.doi.org/10.1371/journal.pone.0233874> <https://doi.org/10.1371/journal.pone.0233874>
- Philip B V. Escalating Suicide Rates Among School Children During COVID-19 Pandemic and Lockdown Period: An Alarming Psychosocial Issue. *Indian J Psychol Med [Internet].* 2021;43(1):93–4. Available from: <https://doi.org/10.1177/0253717620982514>
- Schäfer SK, Sopp MR, Schanz CG, Staginnus M, Göritz AS, Michael T. Impact of COVID-19 on Public Mental Health and the Buffering Effect of a Sense of Coherence. *Psychother Psychosom.* 2020;89(6):386–92. <https://doi.org/10.1159/000510752>
- Singh AK, Agrawal B, Sharma A, Sharma P. COVID-19: Assessment of knowledge and awareness in Indian society. *J Public Aff.* 2020;20(4). <https://doi.org/10.1002/pa.2354>
- Ali MY, Bhatt i R. COVID-19 (Coronavirus) Pandemic: Information Sources Channels for the Public Health Awareness. *Asia-Pacific J Public Heal.* 2020;32(4):168–9. <https://doi.org/10.1177/1010539520927261>
- Rampal L, Seng LB. Coronavirus disease (COVID-19) pandemic. *Med J Malaysia.* 2020;75(2):95–7.
- Depoux A, Martin S, Karafillakis E, Preet R, Wilder-Smith A, Larson H. The pandemic of social media panic travels faster than the COVID-19 outbreak. *J Travel Med.* 2020;27(3):1–2. <https://doi.org/10.1093/jtm/taaa031>
- Fleming N. Coronavirus misinformation, and how scientists can help to fight it. *Nature.* 2020;583(7814):155–6. DOI: 10.1038/d41586-020-01834-3
- Yan X, Wang J, Yao J, Estill J, Wu S, Lu J, et al. A cross-sectional study of the epidemic situation on COVID-19 in Gansu Province, China – a big data analysis of the national health information platform. *BMC Infect Dis.* 2021;21(1):1–7. <https://doi.org/10.1186/s12879-020-05743-8>
- National Institute of Environmental Health Sciences. COVID-19 OBSSR Research Tools. *Natl Inst Environ Heal Sci [Internet].* 2020; Available from: https://www.nlm.nih.gov/dr2/COVID-19_BSSR_Research_Tools.pdf
- Marcenes W. The impact of the covid-19 pandemic on dentistry. *Community Dent Health.* 2020;37(4):239–41. doi:10.1922/CDH_Dec20editorialMarcenes03
- Tanaka T, Okamoto S. Increase in suicide following an initial decline during the COVID-19 pandemic in Japan. *Nat Hum Behav [Internet].* 2021;5(2):229–38. Available from: doi.org/10.1038/s41562-020-01042-z
- Gao J, Zheng P, Jia Y, Chen H, Mao Y, Chen S, et al. Mental health problems and social media exposure during COVID-19 outbreak. *PLoS One [Internet].* 2020;15(4):1–10. Available from: <http://doi.org/10.1371/journal.pone.0231924>
- Halperin SJ, Henderson MN, Prenner S, Grauer JN. Prevalence of Anxiety and Depression Among Medical Students During the Covid-19 Pandemic: A Cross-Sectional Study. *J Med Educ Curric Dev.* 2021;8:2382120521991150. <https://doi.org/10.1177/2382120521991150>
- Mannan A, Mehedi HMH, Chy NUHA, Qayum MO, Akter F, Rob MA, et al. A multi-centre, cross-sectional study on coronavirus disease 2019 in Bangladesh: clinical epidemiology and short-term outcomes in recovered individuals. *New Microbes New Infect [Internet].* 2021;40:100838. Available from: <https://doi.org/10.1016/j.nmni.2021.100838>

20. Helliwell JA, Bolton WS, Burke JR, Tiernan JP, Jayne DG, Chapman SJ. Global academic response to COVID-19: Cross-sectional study. *Learn Publ.* 2020;33(4):385–93. <https://doi.org/10.1002/leap.1317>
21. Javed B, Sarwer A, Soto EB, Mashwani Z ur R. The coronavirus (COVID-19) pandemic's impact on mental health. *Int J Health Plann Manage.* 2020;35(5):993–6. <https://doi.org/10.1002/hpm.3008>
22. Dsouza DD, Quadros S, Hyderabadwala ZJ, Mamun MA. Aggregated COVID-19 suicide incidences in India: Fear of COVID-19 infection is the prominent causative factor. *Psychiatry Res.* 2020;290:0–2. <https://doi.org/10.1016/j.psychres.2020.113145>