

# Impact of COVID 19 on Mental Health: A Qualitative Enquiry

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## ABSTRACT

The World Health Organization classified the CoViD-19 outbreak as a global public health emergency on January 30, 2020. The virus has directly impacted millions of people's physical health and it is also thought to represent a serious threat to mental health on a global scale. This study seeks to summarize the growing body of research on the acute psychological reactions during the early CoViD-19 pandemic among the general public, healthcare professionals, and clinical populations. A novel psychological crisis intervention paradigm is required to adequately address the pressing psychological issues that CoViD-19 pandemic victims are experiencing. Online mental health services have gained popularity in India and are strongly encouraged in other nations due to the advice to reduce face-to-face interaction. This qualitative study is based on sentiment analysis of the interview conducted among the patients and doctors at Lok Nayak hospital. From the study conducted it was found that like every other studies, mental health of the patients and doctors were affected but somehow mental health of doctors was affected more than the patients.

**Keywords:** CoViD-19, Pandemic, Mental Health, Psychological Impact

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## Introduction

Year 2020, will always be remembered for the pandemic which has affected almost every nation of the world. The cause behind this pandemic was SARS-coV-2 which was first identified in a seafood market of Wuhan city of China (paudal, 2020). After first inception in china in December 2019 started spreading rapidly in all over the world and was declared pandemic by WHO in March 2020 had a huge negative effect on the healthcare of the workers. This virus can transmit easily from one person to another, thus the whole world got affected so soon from this virus. Asian countries like India, where this virus got spread at a higher rate in overcrowded places like Dharavi in Mumbai (Chaudhary, 2020). The only possible solution to stop this virus from spreading is to restrict all those activities through which people can contact each other until any vaccination is developed. Thus, lockdown was announced in India and almost every physical businesses and trades were shut down. The sudden shutting of all trade and business, a lot of people had to lose their jobs and compelled to do jobs from their home. This all situation had created stress and mental illness among people. But real and more stress, anxiety and depression was faced by the patients of Covid-19, doctors, and health workers as they were directly dealing with the covid virus. Our study is aiming to do sentiment analysis of the interviews of patients and doctors for understanding their mental state. The analysis is based on the interview in which few questions were asked from the doctors &

patients and their responses are then studied by seeing the negative positive and neutral sense.

## Review of Literature

There are various studies has been done on measuring and reviewing the mental health of the general people, doctors, patients, cops etc. and all the papers has focused that due to pandemic, a global shutdown was announced due to which almost whole the world suffered and caused depression, stress and mental illness. A study had been done on the mental health of the general public along with the health workers and the patients from various research papers, articles and any other authentic information available. They found that anxiety, depression, PTSS, psychological stress were found at a very high rate approx to 50% in the mental health of the general population of various countries. Also concluded that covid 19 was associated with psychological distress with significant and high levels. Not only the general public of the nation suffered but the social and health workers who were directly associated with the covid patients (Xiong et al, 2020).

An experiment in the form of research study has been done (Cullen et al, 2020) on the mental health of the public as well who are directly associated with social and health sectors. They told that preexisting mental illness existed there before the Corona outbreak and a sudden increase in mental illness like anxiety and depression was observed in the general public health as well as in the health

and social workers who were providing medical services. And also some suggestions are given to minimize the impact of covid on mental health. Along the social word, the business world also suffered a massive shutdown globally. The impact of covid 19 on various sectors of Nepal had been reported. As the government of Nepal had announced the lockdown in the whole country, most of the sectors were shut down and faced heavy losses. Also, found that due to shut down of various businesses, people became unemployed and affected them mentally and it was recommended that the government should work more on the vaccine so that routine working of society can be restored. A study has been done on the basis of survey conducted in the two phases of the corona (Kritika Poudel & Pramod Subedi, 2020).

A longitudinal study was conducted on the mental health of the public in China. They had done two surveys on the mental health of the general public. One survey was conducted in the initial outbreak of covid 19 and other was done after one week. And it was found that there was not an overall significant rise in the stress, anxiety, depression in those two surveys. The stress level that existed during the starting of the covid outbreak will increase with time but not that significantly. Thus, suggestions were given that the government should ensure proper commodity availability and right information without creating panic among the general public (Wang et al, 2020). A research assessed the levels of mental health outcomes in Italy for a period of 3- 4 weeks and found that around 7.3% of Italy's population suffered from the adjustment disorder, 21.8% from high perceived stress, 17.3% for depression and 37% from PTSS. Thus, it was concluded that a very mental health issues rose among the general people of Italy due to the outbreak of covid 19. It was also concluded that lack of work as well as people had to be quarantined made, people suffer more and caused adverse mental health issues (Rossi et al, 2020).

A research also studied the outcomes of covid 19 on the mental health of migrant workers in India. Due to the announcement of sudden lockdown all over the world, the anxiety levels among the workers/labors went up and due to unawareness about the situation of the pandemic and lack of work, they were forced walk hundreds of kilometers on their foot with almost no food and shelter. Incidents like these also created a situation of panic among other public as govt. was almost helpless and unprepared for such conditions. Thus, attention was drawn towards the mental health of the migrant people affected by covid 19 (Chaudhary, 2020). A study investigated the quick impact of the covid 19 on the mental health of the Chinese people who were aged more than 18 years. They found that out of 263 respondents 53% people were able to get help from friends and family and 47% people were terrified and helpless in the pandemic. So they have concluded that around 57-78% people were receiving the support from friends and family and an increase in shared feelings within family members. Thus, a mild stressful impact of covid pandemic was observed (Zhang, 2020).

Various researchers reviewed the factors which were causing the mental illness of the surgeons and doctors who were trying to do their best to take care of the patients. Thus attention was drawn towards that factor causing stress and suggestions to tackle them were also given, so that the psychological impact of pandemic on the mental health of surgeons can be kept in check (Balasubramanian et al, 2020).

One study measured the mental impact of pandemic on the widespread population in Saudi Arabia. They conducted a survey and found that 23.6% reported moderate to severe psychological impact, 28.3% reported moderate to severe depression anxiety and depression symptoms. And the respondents who had followed the

prevention measure like social distancing, sanitization etc. demonstrated less mental illness like anxiety, depression and stress. Thus, conclusion was drawn that during the covid 19 pandemic, around 25% respondents were affected adversely from the outbreak (Alkhamees et al, 2020).

A survey has been conducted by KFF during the covid-19 pandemic shows the negative mental health effects on the people of the United States. There is a drastic increase in depression, anxiety, suicidal tendencies, alcoholism and substance abuse in people between age of 18 to 64 and most of them were female. Due to the isolation and losing job, people were like everyone for themselves and somehow it affected the mental state of public adversely. Parents were worried about their children as they were concerned about their children lacking socially and emotionally. The frontline workers were getting more and more stressed due to the lower nurse-to-patient ratio because the health services of country was not ready to tackle such level of pandemic (Panchal et al, 2020).

In the same pattern, many surveys were conducted among the various hospitals in Asia to retrieve the information about the psychological issue or negative effect of covid-19 on doctor and frontline workers. The studies have shown that FLW between 26 and 40 are more likely to be diagnosed of various mental health issues like depression and anxiety. Many health coping strategies implemented by the Chinese government and regular screening has been started for coping stress, depression and anxiety in doctors and health care workers (Hermesmeyer et al, 2020).

The adamant rise in covid-19 cases during March and April 2020 had a great unassertive impact on the mental health of the people of Australia. Regarding this many online examinations have been conducted by the Macquarie University human research committee. A comparison has been done between the period of bush fire incident and the rise of covid cases during the pandemic. The virus has affected the lifestyle of the majority of people. There was a significant increase in anxiety and depression among people due to various reasons like how and where to access covid-19 test, how to manage financial insecurities and how to adjust in isolation and to keep distance from friends and family. The examination taken by Mindspot has helped to carefully monitor the psychological effect of Covid-19 to provide better service (Titova et al, 2020).

Due to Covid-19 Pandemic stay at home orders have been implemented to curb the virus but this social isolation resulted in stress and vicious effect on mental health associated with sleep disruption and compulsive eating therefore covid-19 has the potential to cause dangerous disease such as obesity. A survey has been conducted under the surveillance of the institutional review board at Pennington Bio- Medical research centre between April 3 2020 to May 3 2020 including adults 18 year of age and older. The survey shows that among 7753 individuals who were in the first Covid-19 quarantine, 1/3 of participants have normal weight (32.2%), overweight (32.1%) and obesity (34.0%). Also due to concern for their own physical health the anxiety significantly increased 14% compared to before the pandemic. The covid-19 pandemic is not only limited to the virus spread it also instigated many other diseases such as obesity. One of the major health consequences which the government should look into is also physical health problems associated to mental health issues due to covid 19 (Flanagan et al, 2020).

In the time period of Covid-19 Pandemic many medical and health consequences came into limelight of the government and the authority whereas the mental effect of this global pandemic is still limited to countable number of studies and surveys, since the SARS

-Cov epidemic (2000-2003) was associated with psychiatric complication. It is a matter of grave concern. A study has been conducted to measure any psychiatric symptom on the people diagnosed covid-19 and also the people already having psychiatric disorder and the frontline workers both health care and non- health Care. The study shows that 49 individuals who took part in the survey out of which 2 were covid-19 patients and 2 had some past psychiatric disorder and rest were frontline workers and general public. There are symptoms of depression and post infection anxiety and symptoms have got worse for the psychiatric patient as well. Research evaluates that covid-19 has a great negative effect on the mental health of the both the infected person and the non-infected person and different government programs should be needed during this pandemic and preventing measures (Vindegaard et al, 2020).

**Methodology**

The aim of this study is to do understand up to what extent and in what way the stress caused by covid has affected the mental health of respondents. As it was a qualitative study, it was to study the nature of phenomena and is especially appropriate for answering questions of why something is observed, assessing complex multi-component interventions, and focusing on intervention improvement. Sentiment analysis of the interview data of doctors and patients was done to determine and categorize opinion about the impact of covid on their mental health. An attempt is made to understand the mental condition of patients and doctors during quarantine and treatment of covid patients respectively. The data was collected from Lok Nayak Hospital and was further processed accordingly.

**Data Collection**

For achieving the objective, we have used the Nvivo software for getting the desired actionable data. Nvivo is a software program used for qualitative and mixed-methods research. The interview data was processed and coded using the software and then sentiment analysis was done. We have removed a few stop words which were not so relevant in analysis in our judgment. Coding was done using Nvivo and inter coder reliability was also checked.

**Sample Selection**

The sample size denotes the number of elements selected for the study. Several rules of thumb, as stated in the literature were reviewed and analyzed to finalize the sample size of the study. Depending upon the nature of the work to be carried out, convenience sampling method was used for collecting the information from respondents (sample).

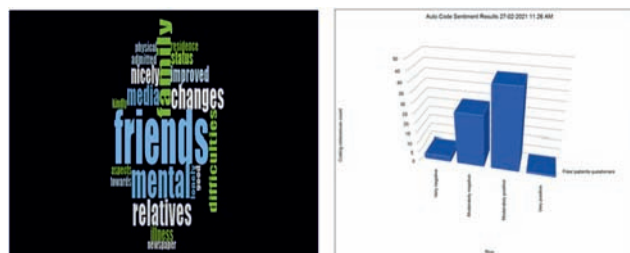
**Discussion and Findings**

As we have the data of both patients and the doctors separately, thus it shows the sentiments from their perspective also. Firstly, we have analyzed the top 20 words which were mostly used by the patients and then their sentiments were analysed. After that the same steps were followed for the doctors.

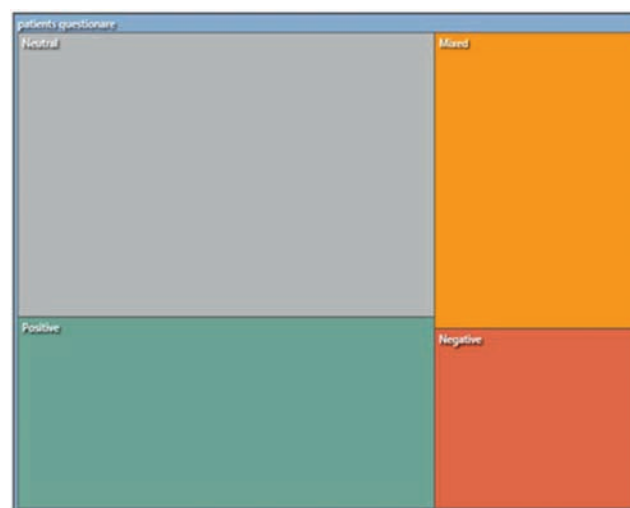
**Patients**

It has been observed from the output provided by the Nvivo software that patients had used friends, mental, relatives, family, nicely, media as most frequently words out of top 20 most frequent words in their interviews. Thus, we can see that patients during their quarantine/treatment period missed their friends, family, relatives the most. No words related to business or work related

activities were used. Hence, results are showing that patients were feeling the need of their belonging people during this tough time and thus, overall their mental health is not so worse in our data.



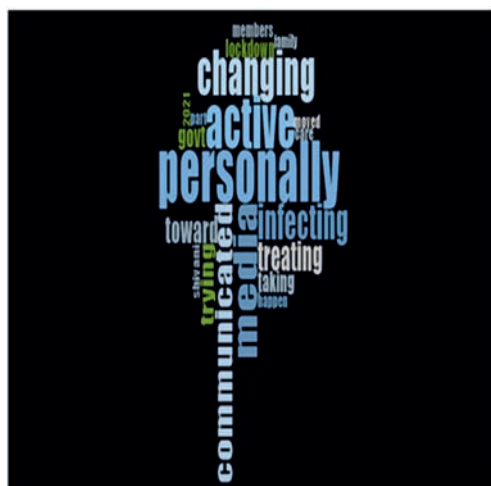
This figure is showing the sentiments of the patients as how much they had used positive or negative words during this interview. As if we see the above bar chart, we can say that most of the patients were positive in such adverse conditions. Although negative words were also used, but patients had tried to remain positive despite the tough times that they were facing.



**Doctors**

While analysing the doctors interview, the concerns of doctors are completely different to the patients. They had used words more frequently like active, media, personally, infecting, communicating, government, treating ,active etc. the word family is kept at least priority by the doctors. From that word cloud, we can say that doctors were more attentive towards their duties irrespective to their friends and family and relatives.

Doctors	Very negative	Moderately negative	Moderately positive	Very positive
Doctor A	2	3	1	1
Doctor B	0	7	4	1
Doctor C	3	1	2	1
Doctor D	0	1	1	0
Doctor E	1	1	1	2
Doctor F	3	1	2	0
Total	9	14	11	5



From the above table, we can see that overall the doctors had used more negative words than positive. As the stress level of doctors was high as they were treating a virus whose vaccine was still not developed. And they also have their own families as well. Doctors had told that the continuous negativity spread by the media about the corona virus had also enhanced their stress and tension.

## Conclusion

After analysis the interview text of both patients and the doctors, we have concluded that media and family words had secured positions among the most 20 frequently used words. But the priorities of words are different to doctors and the patients. Patients had used the words friends, family and their belongingness and tried to be positive in such hard times.



Through this, we can say that they were satisfied and happy with the service and support of the doctors while facing this pandemic. While doctors has used words like media, communication, infection, treating and government. It means doctors were more in panic than the patients as their full concentration on tackling and minimizing the impact of the covid virus. And it was obvious as they were treating such an illness whose cure is still not in existence. Although doctors had used the word family but the frequency was low in those top 20 words. Thus, while analyzing the sentiments, we can see that the bend of doctors' sentiment was moderately negative, while the patients' sentiment was moderately positive. From the sentiments results, we can say the mental health of the doctors was more affected by the covid pandemic as compared to the patients of the corona virus.

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<b>Ethics:</b>	There is no ethical violation as it is based on voluntary anonymous interviews
<b>Funding:</b>	No external funding
<b>Guarantor:</b>	Dr. Ajay Bahl will act as guarantor of this article on behalf of all co-authors.

## References

- Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M. W., Gill, H., & Phan, L. (2020). Journal of Affective Disorders Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, 277(August), 55–64. <https://doi.org/10.1016/j.jad.2020.08.001>.
- Harrison, P. (2020). Nurses' mental health in the COVID-19 pandemic. *Gastrointestinal Nursing*, 18(8), 74. <https://doi.org/10.12968/gasn.2020.18.8.74>.
- Poudel, K. (2020). Impact of COVID-19 pandemic on socioeconomic and mental health aspects in Nepal. <https://doi.org/10.1177/0020764020942247>.
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., & McIntyre, R. S. (2020). Brain , Behavior , and Immunity A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. *Brain Behavior and Immunity*, 87(April), 40–48. <https://doi.org/10.1016/j.bbi.2020.04.028>.
- Rossi, R., Soggi, V., Talevi, D., Mensi, S., Niolu, C., Pacitti, F., Marco, A. Di, Rossi, A., Siracusano, A., & Lorenzo, G. Di. (2020). COVID-19 Pandemic and Lockdown Measures Impact on Mental Health Among the General Population in Italy. 11(August), 7–12. <https://doi.org/10.3389/fpsy.2020.00790>.
- Choudhary, R. (2020). Jo ur na l P of. *Asian Journal of Psychiatry*, 102254. <https://doi.org/10.1016/j.ajp.2020.102254>.
- Zhang, Y. (2020). Impact of the COVID-19 Pandemic on Mental Health and Quality of Life among Local Residents in Liaoning Province , China/: A Cross-Sectional Study.
- Mrcs, A. B. (2020). Impact of COVID-19 on the mental health of surgeons and coping strategies. May, 1–7. <https://doi.org/10.1002/hed.26291>.
- Alkamees, A. A., Alrashed, S. A., Alzunaydi, A. A., Almohimeed, A. S., & Aljohani, M. S. (2020). The psychological impact of COVID-19 pandemic on the general population of Saudi Arabia. *Comprehensive Psychiatry*, 102, 152192. <https://doi.org/10.1016/j.comppsy.2020.152192>.
- A. K., Basch, C. H., Sullivan, M., & Davi, N. K. (2020). The impact of the COVID-19 epidemic on mental health of undergraduate students in New Jersey, cross-sectional study. 1–16. <https://doi.org/10.1371/journal.pone.0239696>.
- Panchal, N. (2020). The Implications of COVID-19 for Mental Health and Substance Use.
- Hermesmeier, K., Miyagawa, K., Kelley, S. T., Hall, A. S., & Axthelm, M. K. (1997). Reactivity-Based Coronary Vasospasm Independent of Atherosclerosis in Rhesus Monkeys. 29(3), 671–680. [https://doi.org/10.1016/S0735-1097\(96\)00524-4](https://doi.org/10.1016/S0735-1097(96)00524-4).
- Asian Journal of Psychiatry. 51(April), 2018–2021. <https://doi.org/10.1016/j.ajp.2020.102119>.
- Vindegard, N., & Benros, M. E. (2020). Brain , Behavior , and Immunity COVID-19 pandemic and mental health consequences/: Systematic review of the current evidence. *Brain Behavior and Immunity*, May, 1–12. <https://doi.org/10.1016/j.bbi.2020.05.048>.
- Horizon, D., Ike, H., City, N. Y., Yorkers, N., Sars, T., & Uk, M. H. (2020). The Mental Health Consequences of COVID-19 and Physical Distancing The Need for Prevention and Early Intervention. 02118. <https://doi.org/10.1002/da.20838>.
- Holmes, E. A., Connor, R. C. O., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., Ballard, C., Christensen, H., Silver, R. C., Everall, I., Ford, T., John, A., Kabir, T., King, K., Madan, I., Michie, S., Przybylski, A. K., Shafran, R., Sweeney, A., Bullmore, E. (2020). Position Paper Multidisciplinary research priorities for the COVID-19 pandemic/: a call for action for mental health science. *The Lancet Psychiatry*, 0366(20), 1–14. [https://doi.org/10.1016/S2215-0366\(20\)30168-1](https://doi.org/10.1016/S2215-0366(20)30168-1).
- The impact of COVID-19 stay-at-home orders on health behaviors in adults. (n.d.). 0–2. <https://doi.org/10.1002/oby.23066>.
- Titov, N., Staples, L., Kayrouz, R., Cross, S., Karin, E., & Ryan, K. (2020). Rapid report: Early demand , profiles and concerns of mental health users during the coronavirus (COVID-19) pandemic. *Internet Interventions*, 21(April), 100327. <https://doi.org/10.1016/j.invent.2020.100327>.

