A study on knowledge, attitudes, and mental health status of patients and health care workers of ophthalmology during COVID-19 post-lockdown phase at a tertiary hospital

Dear Editor,

The coronavirus disease 2019 (COVID-19) pandemic has created havoc in society affecting both the physical and mental health of the public. The first phase of the pandemic witnessed a lot of uncertainties both socially and in the health system. A nationwide lockdown was imposed on March 24, 2020, to prevent the spread of the highly contagious COVID-19 infection; however, by the time the lockdown restrictions eased, the total cases had increased to 585,792 as of June 30, 2020.[1] The use of masks, hand sanitization, and social distancing was made compulsory by the government to prevent the spread of the disease. Still, certain myths that spread in social media added to the confusion and created fear and anxiety in the minds of the public. The health care workers (HCWs) being the frontline workers were more exposed to getting infected early, which led to various degrees of mental disorders. In India, awareness, knowledge, and attitude of the public influence the community’s spread of the disease. This study evaluated the knowledge, attitude, and mental status concerning the COVID-19 pandemic among HCWs and the general public.

A cross-sectional, offline, questionnaire-based study was conducted from July to November 2020. Demographic data and awareness about the disease among the HCWs and the general public were noted. Patient Health Questionnaire–9 (PHQ-9) was used to assess the psychological impact among the participants. A total of 240 participants (135 males and 105 females) were included, with a median age of 41 years among the patients and 27.5 years among HCWs, respectively. Although patients were aware of most aspects of the disease, only 55% knew that a virus caused it. About 67% of patients realized the importance of social distancing in the hospital; however, 69% also felt that it increased the waiting time for consultation. Sudden loss of vision was the most common ocular emergency as responded by 134 (67.0%). Health care services could not be assessed by 105 (52.5%) due to the nonavailability of transportation facilities. The patients were triaged before starting the examination in 31 (77.5%), but only 22 (55%) were cooperative enough to wait. A total of 26 (65%) HCWs reported difficulty evaluating patients using slit lamp and face shields due to fogging. Sterilization of instruments within 2 hours was done by HCWs in 19 cases (47.5%).

![Figure 1: Distribution of severity of depression as per PHQ-9 score among participants.](image)

| Table 1: Table showing the factors associated with depression among patients |
|-----------------|-----------------|
| Variable                         | No Depression (n=66) | Depression (n=134) | OR  | P  | 95% CI |
| Occupation                       |                 |                  |
| Self-employed (reference)        | 13 (19.7)       | 28 (20.9)        | 0.01|    |        |
| Salaried                         | 25 (37.9)       | 32 (23.9)        | 1.93| 0.387| 0.44‐8.49 |
| Others                           | 28 (42.4)       | 74 (55.2)        | 5.04| 0.025| 1.22‐20.82 |
| Practicing preventive measures on regular basis | 0.002 | |
| Always (reference)               | 58 (87.9)       | 76 (56.75)       | 0.01| 1.44‐19.18 |
| Sometimes                        | 8 (12.1)        | 53 (39.5)        | 5.25| 0.01  |
| Never                            | 0               | 4 (3)            |    |    |
| Can’t say                        | 0               | 1 (0.75)         |    |    |
| Want to be admitted knowing that hospital treats COVID-19 suspects | 0.003 | |
| Only in emergency (reference)    | 26 (39.4)       | 82 (61.2)        |    |    |
| Always                           | 7 (10.6)        | 23 (17.2)        | 0.53| 0.401| 0.12‐2.32 |
| No                               | 15 (22.7)       | 22 (16.4)        | 0.49| 0.328| 0.12‐2.02 |
| Can’t say                        | 18 (27.3)       | 7 (5.2)          | 0.07| 0.003| 0.01‐0.39 |

OR=Odds ratio, CI=Confidence interval, COVID-19=Coronavirus disease
Twenty-one (52.5%) HCWs agreed that telemedicine was a feasible option for patient care during the lockdown. The mean PHQ-9 score was 5.98 ± 3.49 in patients and 9.50 ± 4.77 in HCWs. Furthermore, HCWs were found to be more depressed than patients, and the association was statistically significant ($\chi^2 = 12.93, P = 0.001$) [Fig. 1]. This study reported an association between the PHQ-9 category and the socioeconomic status among patients with a considerable difference between various socioeconomic status groups ($\chi^2 = 25.847, P = 0.001$). Table 1 summarizes the factors associated with depression in patients.

By the end of lockdown, 90.5% of the public were aware of the contagious nature of the disease in our study, compared with the findings of Pandey et al. during the lockdown. Only 52.5% of the public were aware of the asymptomatic nature of COVID-19, whereas only 20.5% could state symptoms other than fever, cough, and respiratory distress. More than 80% of the public was unaware that it could also affect the eyes. The importance of correct information by media is a necessity during the pandemic. Our study showed that 52.5% of HCWs suffered from moderate to severe depression in comparison with only 17% in the patient group. Rehman et al. also found that HCWs suffered moderate anxiety and mild depression levels, whereas the general public had only mild levels of anxiety and no depression. Mohindra et al. reported that the poor mental health among the HCWs was due to working in high-risk COVID-19 units, fear of isolation, putting family members in danger, household problems, and medical insurance. Awareness among the public and supportive measures for HCWs adopted by the government have been instrumental in controlling the spread. Therefore, a holistic approach is needed when tackling pandemics of such magnitude, failing which HCWs might suffer from unnecessary mental strain.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

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