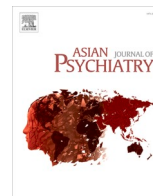




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Letter to the Editor

**Suicide cases among nurses in India due to COVID-19 and possible prevention strategies***Dear Editor*

The government of India announced lockdown on 24th March 2020 to restrict the spread of the COVID-19 and extended lockdown twice and finally lifted it on 17th May 2020. This helped to reduce the number of COVID-19 cases (Mishra et al., 2020). However, few states such as Maharashtra and Tamilnadu have extended the lockdown in cities such as Mumbai and Chennai as the number of COVID-19 cases spiked in these cities. The number of COVID-19 case in India is 719,664 as on 8th July 2020 (Government, 2020) and India has reached 3rd position in highest number of COVID-19 cases in the world. The increase in COVID-19 cases and lockdown affected the economy and resulted in higher unemployment. The increase in COVID-19 cases, food inflation, restriction in travel etc. has created panic among the people. The social distancing, travel restrictions and self-isolation affected all the sectors. The factories, colleges and schools were closed due to lockdown and manufacturing activities came to standstill. Hence, the socio-economic conditions of the people were affected. The panic buying of food products have created demand for food products and food inflation increased significantly. The global outbreak of COVID-19 affected the world economy and socio-economic condition of people (Nicola et al., 2020). The recession increases death rates due to deterioration in mental health, poverty, suicides etc. The recession may force the government in austerity drive to reduce debt, reduction in income which is received in the form of taxes etc.

The COVID-19 pathogenic virus is highly transmittable and emerged from China and spread all over the world. It is believed that it has originated from bat and spread to human. The vaccine or anti-viral drug for COVID-19 is not available till today. It is reported that COVID-19 virus spreads when patient sneeze, cough, breath, and talk. The respiratory droplets contain virus that are airborne. It also spreads by touching COVID-19 patient or the surfaces that the patient has touched. The social distancing, hand wash, wearing mask and personal protection equipment (PPE) etc will reduce the contracting of virus. It is reported that the droplets exhaled by COVID-19 infected person can travel few meters and it will be dangerous in indoor environments. The COVID-19 virus is air borne and remains stable for few days.

The COVID-19 is a respiratory disease and is declared by world health organization as pandemic. The common symptoms are fever, cough, breathing problem, fatigue, diarrhea, headache etc. The complications faced by the COVID-19 patients are cardiac injury, acute respiratory distress syndrome, bacterial infection etc. This pandemic causes several health problems like, suicides, depression, domestic abuse, anxiety, stress, insomnia and fear (Tandon, 2020). The long-term impacts of this pandemic are psychological disorder, stigma, long lasting health issues, etc.

In India, suicide is second major cause of death related to non-coronavirus deaths during lockdown and internet data reveals that

suicide term was mostly searched during second and third lockdowns. It is also reported that the COVID-19 patients' commits suicide due to various reasons. Even government officer who tested positive for COVID-19 commit suicide with the fear that his family members may be contracting COVID-19 virus from him.

It is reported that a nurse who was treating COVID-19 patients committed suicide due to extreme stress and mental disturbance (Jagran, 2020). A 22-year-old nurse who contracted COVID-19 has attempted suicide and her condition was critical (National Herald, 2020). It is reported that 3 nurses and 31 doctors have died due to COVID-19 in India. About 480 health workers of Delhi's hospital have tested positive which includes 38 nurses, 19 doctors, 14 laboratory technicians, 75 hospital attendants and 54 sanitation staff (NDTV, 2020). A 58-year old nurse at Chennai's hospital and a 45-year-old health worker died due to COVID-19 and it was alleged that he was not given leave. The nurses working in Delhi and Mumbai complained that they were not given PPE kits and they also had transportation issues and lack of accommodation. The junior nurses and staff were not given PPE and forced to attend suspected COVID-19 cases with surgical mask. Also these nurses made to travel in ambulance without maintaining social distancing. Even doctors of few hospitals in India reiterated their demand for PPE. It is also reported that the insurance cover provided to doctors and nurses may not include COVID-19 as COVID-19 related clause are not included by insurance companies. In few hospitals', nurses were asked to reuse PPE and they were informed that their hospital is not a designated COVID-19 hospital. These issues increase the stress among the nurses and few commits suicide.

The following suggestions may be implemented to overcome this issue

- 1 The nurses who are attending COVID-19 patients should be provided with early psychiatric interventions and it should be continuous at regular interval.
- 2 The COVID-19 virus is air borne and hence hospital's indoor environments should have adequate ventilation and control system to reduce the spread of virus among nurses. Also this practice will boost up confidence among the nurses.
- 3 The nurses from lower income families are vulnerable to anxiety and depression as they are the sole breadwinner in their family. If these nurses contracted COVID-19, then the hospitals may shift them to designated COVID-19 hospitals and salary may be stopped. Also they have fear about continuation of job as the hospital management may not be interested to take them back immediately. The colleagues may hesitate to interact with them as they fear that they may get contracted the COVID-19. These situations make the nurses depressed, causes social stigma and force them to take extreme steps. Hence it is necessary to provide paid holiday to the nurses who were contracted

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COVID-19 and regular counseling should be provided. The family members of nurses also should be given counseling which in turn helps the nurses, as these nurses interact at regular intervals with their family members.

- 4 The nurses who are above 50 years of age should not be given any work related to COVID-19. Also, if any of the nurses has chronic health issues, diabetic, etc, they should not be given any work related to COVID-19, as they have lot of fear and anxiety.
- 5 A regular counseling and incentives may be given to nurses who are attending COVID-19 work which motivate them to do the work. Also, the family members of the nurses should be updated about the safety precautions taken by the hospital and PPT kits provided. A 32-year-old nurse from Kerala who was cured from COVID-19 has joined her duty. This type of case study should be discussed with nurses during their regular counseling.
- 6 If any nurse develops any symptoms related to COVID-19, then she or he should be advised to go for self-quarantine till the results comes. Proper counseling should be given so that the nurses may overcome their depression, loneliness etc. The present COVID-19 kits available in India takes minimum 8 h to provide the results and hence deployment of rapid COVID-19 testing kits for the nurses will speed-up the testing and early medication can be given to them.

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Declaration of Competing Interest

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