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## Social and psychological effects of Coronavirus Disease (COVID-19)

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**Key words:** COVID-19, Coronavirus, Quarantine, Isolation, Psychological problems.

**Citation:** M. Bothou, P. Tsikouras, G. Iatrakis, G. Tsatsaris, N. Platanisiotis, E. Chatzigianni, X. Anthoulaki, A. Bothou. Social and psychological effects of Coronavirus Disease (COVID-19). *Rev. Clin. Pharmacol. Pharmacokinet.*, Int. Ed. 2020, 34,3, 117-120.

<https://doi.org/10.5281/zenodo.10049939>

Accepted: 30 June 2020

Republished: 28 October 2023

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**Summary:** The current transmission of Coronavirus Disease (COVID-19) has raised multiple concerns across all over the world. Until now, no effective treatment has been established for COVID-19 and this virus may also affect young people or people who do not belong to a vulnerable group. This is a source of great anxiety for all people and results in more psychological problems. This article focuses on the social and psychological effects of COVID-19 and underlines some possible solutions.

### INTRODUCTION

Between December 2019 and March 2020, the pandemic of the Coronavirus Disease 2019 (COVID-19) being spread among most countries and has raised multiple concerns across all over the world (1). This Coronavirus was also known as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV-2) (2). The first case of COVID-19 infection was reported in Wuhan (Hubei Province), China in December 2019 (3-4) and the natural host of COVID-19 might be the bats (5). Because the significant threat to global health, World Health Organization (WHO) has declared this outbreak as a "public health emergency of international concern" on January 2020 (6). COVID-19 has an incubation period between 1 to 14 days and mostly ranges from 3 to 7 days (7), with a mean incubation period of 5.2 days (4).

Cytokine storms occur when the immune system gets stuck trying to fight the disease, approximately between 7-10 days of the infection. The most common symptoms are the following: high fever, tiredness, dry cough, headache, nasal congestion, sore throat, gastrointestinal symptoms (nausea, vomiting and diarrhea), myalgia and arthralgia. Moreover, other symptoms as ageusia (taste loss) and anosmia occur. In more severe cases, it turns to pneumonia with high risk of respiratory failure (8-9).

Some of the most important risk factors for the development into severe to critical cases include advanced age (with median age 55 years) (5), and coexistence of some chronic diseases such as hypertension, cardiovascular disease and diabetes (7). However, even through coronavirus affects all people, there are fewer cases of young people who fell severely ill and died as a result. Moreover, pregnant women, children and people who do not belong to a vulnerable group will also be affected by COVID-19 (10). This is a source of great anxiety for all people and has as a result more psychological problems. On the other hand, stress, isolation and loneliness may have an impact on the immune system, and people may be more vulnerable to diseases such as COVID-19. Some of the classical measures for the protection of public health include isolation, community containment, social distancing and quarantine (4).

#### PHARMACEUTICAL THERAPY OF COVID-19

At the time of writing, there is no specific antiviral treatment for COVID-19 and the current treatment options based on previous experience in treating influenza, Ebola, MERS, SARS and other viral infections.

The most common drugs that used in clinical practice for the therapy of COVID-19 are the following: oseltamivir, paramivir, zanamivir, ganciclovir, acyclovir, ribavirin, interferon (11), remdesivir, lopinavir/ritonavir and chloroquine/hydrochloroquine seem to be more effective. Furthermore, Interleukin-6 (IL-6) inhibitors may ameliorate severe damage to lung tissue in patients with serious COVID-19 infection. However, the safety and efficacy of all these drugs needs to be assessed by further clinical trials (2, 12). Due to possible harms and a higher risk of mortality, corticosteroids are not recommended for routine treatment unless indicated for other reasons (6).

#### QUARANTINE AND ITS SOCIAL-PSYCHOLOGICAL IMPACT

The restriction of movement of those people who have potentially been exposed to a contagious disease to assess if they become unwell, so reducing the risk of them infecting others it is also well known as quarantine (13-14).

The word quarantine was first used in Venice, Italy in 1127 with regards to leprosy and also was widely used in response to the Black Death (15). Recently, quarantine has been used in the COVID-19 epidemic.

This condition differs from isolation, which is the separation of people with proven contagious disease from people not sick; however, the two words: quarantine and isolation are used to mean the same situation (16). Quarantine is a key uncomfortable experience to the people who undergo it. Particularly, the separation from close relatives beloved, the feeling of loss of freedom and the boredom can create unpleasant consequences for the mental health of people (14).

#### ANXIETY FACTORS DURING OUTBREAK OF COVID-19 OR QUARANTINE AND POSSIBLE SOLUTIONS

•**High rate of transmission disease-Fear of infection:** According to the available data, it is known that COVID-19 is associated with high rate of transmission. This has as a result fear and worry of infection to the people for their own health and for other family members. Specifically, people worried more if they experienced any physical symptoms similar to those of COVID-19 and this reflects to psychological outcomes despite these symptoms are also present in a simple flu (17). Interestingly, two opposite phenomena were observed: overprotection for some people and indifference. One possible solution could be the correct and enough information by the media and the health staffs.

•**Duration of quarantine:** Most studies concluded that the longer duration of quarantine was related with poorer mental health and especially with post-traumatic stress symptoms. Moreover, more post-traumatic stress occurred to the people who quarantined for >10 days in contrast to those quarantined for less than 10 days (18). The effect on people will be minimized by restricting the length of quarantine to what is scientifically reasonable (14).

•**Boredom and frustration:** Reduced social and physical contact with others and generally loss of usual routine shown to cause boredom, frustration and sometimes a generally sense of isolation from

the rest of the world (19). This condition is more visible in Mediterranean countries as Greece, with “warmer” relationships. For this reason, people should be advised to improve their communication with the others with the usage of new technologies such as mobile phones and internet. Furthermore, a telephone support line, staffed by social workers could be effective for those with symptoms such as frustration and depression (14).

•**Economic impacts-Fear of financial loss:** Financial loss could be a major problem during quarantine. People may be unable to work and this effect appears to be long lasting. Financial loss often creates socioeconomic distress and could cause symptoms of psychological disorders (20-21). Moreover, among those people who are still employed, prolonged teleworking may affect their mental health because of long-term isolation, lack of workplace interaction and absence to face to face live isolation (3).

•**Other symptoms:** Generally, everyone reacts differently during an infectious disease outbreak (such as COVID-19) and except all the aforementioned symptoms, other symptoms can include: changing in sleep (insomnia and hypersomnia), changing in eating patterns (anorexia or bulimia), increased alcohol and/or tobacco uptake or other drugs. Curiously, people who may respond better to stress during a crisis include: advanced age and chronic diseases people that may be at higher risk for severe illness of COVID-19, children, pregnant women and health care providers such as physicians, nurses, midwives, physiotherapists etc (22-23).

## CONCLUSION

The current focus on the transmission of COVID-19 it is also linked to the physical, social and mental health globally. Community psychological interventions and support should be encouraged to reduce anxiety and depressive symptoms in order to pass through the difficult phase of the epidemia.

**Conflicts of Interest:** The author declares no conflicts of interest regarding the publication of this paper.

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