



## Air Pollution Increases the Risk of Transmission and Replication and Production of Mutant Forms of COVID-19

**Hamidreza Famitafreshi and Morteza Karimian\***

Physiology Department, Tehran University of Medical Sciences, Tehran, Iran

\***Corresponding Author:** Morteza Karimian, Physiology Department, Tehran University of Medical Sciences, Tehran, Iran.

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Air pollution is a dangerous condition to health that adversely affects human societies especially in industrialized countries [1]. However, there are some conditions that air pollution has an addictive effect on the pre-existing condition. Nowadays the COVID-19 pandemic has compressed human societies, it is necessary to minimize the addictive factors such as air pollution to decrease the risk of transmission, replication, and may be mutation since air pollution is stressful to living creatures.

Recent studies have been well highlighted the adverse effect of air pollution on the COVID-19 pandemic [2]. Microparticles can act as vehicles that carry the viruses. Due to gravity, particles smaller than 10 µm stays a long time in the atmosphere than larger particles. These microparticles act as a surface for virus replication and also as vehicles that travel a distance way to other areas. In this sense air pollution should be controlled. Especially this situation becomes more complex when these particles carry the mutant form of the virus. It should be noted that air microparticles vary in different forms and sizes [3]. However, it has been well documented that air pollution is toxic to DNA that may cause mutation in viruses that accelerate the emergence of mutant virus.

These days COVID-19 has caused a great burden to societies and it should be kept in mind this situation may become worse in the future in various ways especially with the emergence of a mutant form of the virus that would be difficult to control. In some areas that winding is not usual that mostly surrounded by mountains this situation becomes worse and air pollution must be controlled [4]. This situation will be more dangerous in industrialized areas and less in rural places. The generation of smaller microparticles may be more important than larger ones and processes that cause the generation of more microparticles may be of more topic of consideration.

### Conflict of Interest

None to declare.

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