



Coronavirus Reaffirmed the Need to Preserve Evidence



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Running Title: Coronavirus Reaffirmed the Need to Preserve Evidence

Since the beginning of the crisis of coronavirus outbreak, numerous opinions about the virus and coronavirus disease 2019 (COVID-19) have been expressed without relying on scientific evidence, especially through the media that had an abysmal impact on human society. However, the long-established system of medical science postulates the utilization of current best evidence in decision-making [1].

Due to the urgent need to find a solution to the pandemic, all possible ways of prevention and treatment have been considered by researchers and decision-makers, and because of the possibilities of problems in the proposed prevention methods and developing the disease after the current outbreak like other viruses [2], it is still essential to find efficient therapies for the disease. From the beginning of the pandemic, and especially after the failure of initially proposed drugs for its treatment, the hypothesis of the use of alternative medicine was raised. The advantages of traditional medicine, complementary and alternative medicine, and pharmacognosy include potential effectiveness and safety, cost-effectiveness, and social acceptance [3]. However, investigating their effectiveness and safety in

accordance with the multidisciplinary scientific system of the process for the development and discovery of drugs and ethical issues is necessitous [4, 5].

Previously, the discovery of drugs was coincidental or through the identification of the active ingredients of traditional therapies. Nowadays, the development of a drug typically involves the steps of understanding the pathophysiology of the disease, selecting a molecule or compound that acts on the targeted gene or protein affecting the disease, conducting studies on computational models, cells, and animals, clinical trials on healthy volunteers, clinical trials on a small number of patients, large and pivotal trials on a sufficient number of patients, licensing approval, and post-approval studies. In this scientific process, the effectiveness and safety of drugs are measured with the least bias [4]. Therefore, the mechanism of action of the medicine or obtaining a statistically significant difference compared with the placebo resulting from phase II clinical trials cannot prove effectiveness; for example, using hydroxychloroquine for the treatment of COVID-19 [6] and any alternative medicine should pass this long-established scientific process.

The validity of any non-scientific opinion will be scientifically proven, or any evidence that leads to the rejection

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tion of an opinion will be rejected automatically. It is a science-centric feature indicating that although biases may affect this process, overall, the errors and intentions in interpretations will be reduced, thus, science corrects both opinions and itself.

Ethical Considerations

Compliance with ethical guidelines

There were no ethical considerations to be considered in this research.

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Conflict of interest

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