Editorial

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The Requisiteness for not Sacrificing Medical Biotechnology in the Coronavirus Era

The coronavirus storm, first reported more than a year ago, has overshadowed all societies' parts and become a challenge to all of the world's health systems [1]. Extremely high contagiousness, significant mortality rates, and the lack of a definitive cure have prioritized overcoming this outbreak. In this regard, studies related to coronavirus and especially its clinical studies, became a priority for researchers and decision-makers at the request of governments and the people, as well as by the logic. The superiority of an emergency is not a wrong decision. Still, the problem arose when other research areas were neglected, and their budgets were reduced by decision-makers, resulting in damage to the research and researchers in other fields [2,3]. The clinical studies currently being conducted on coronavirus disease 2019 (COVID-19) are due to previous studies in the basic sciences that have provided the background. Obviously, without scientists' tasks over the years and the allocation of research funds to the fields of genetics, biochemistry, immunology, *etc.*, studies and advances would not be possible today [4,5].

Medical biotechnology is a type of applied science that produces or creates products that improve human health, mainly through genetic engineering and tissue culture, using biological systems or living organisms [5,6]. However, this area of science can also be harmful through studies' unintended consequences, the production of products without genetic diversity, and deliberate biological manipulation. In medical biotechnology, using basic sciences such as biochemistry, biology, and genetics, and by modifying cells or cell subsets, the prevention of diseases-including the production of vaccines-and the treatment of diseases, especially by creating novel agents, are studied [6-10]. It should be noted that the background of these lofty goals has been years of basic science studies, many of which have not reached a positive conclusion or have been rejected by more recent research. Even they more often lead to more questions instead of answers [4].

In other words, the passing of many years and spending on scientific and research projects has enabled human beings today to create advanced products for fighting pathogens and improving society's health. The development of insulin, the production of advanced monoclonal antibodies, and vaccines' production against an RNA virus are some of the notable novel products [6,7].

Since the beginning of the coronavirus outbreak, many ways have been suggested to prevent and treat the disease. Today, after more than a year and the reported deaths of nearly two million people from COVID-19, the highest hopes for overcoming the disorder are with the proposed vaccines [1,11]. Science achieves patients' treatment through basic studies [4], so the right decision is a decision that, while meeting the need, does not disrupt the long-established science and research system. We can see that the time and money spent in the past is helping all sections of society today with the production of the coronavirus vaccine, and if those studies had not been done in the past for whatever reason, today we were a few steps behind. Likewise, suppose today, for any reason, even the allocation of all time and budget to the emergency situation, the pace of progress in this area slows down. In that case, it may have detrimental effects on all society in the future.

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Shahin Akhondzadeh, Ph.D., FBPhS.
Psychiatric Research Center, Roozbeh Hospital,
Tehran University of Medical Sciences, Tehran, Iran

Ahmad Shamabadi, M.D.
Psychiatric Research Center, Roozbeh Hospital
Tehran University of Medical Sciences, Tehran, Iran