

## Research Article

# COVID-19 Pandemic and Role of Pharmacists

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**Abstract:** Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV). It was first identified in December 2019 in Wuhan, Hubei, China, and has resulted in an ongoing pandemic. The first confirmed case has been traced back to 17 November 2019 in Hubei. The World Health Organization (WHO) declared the COVID-19 outbreak a public health emergency of international concern on 30 January 2020 and a pandemic on 11 March 2020. COVID-19 has challenged our health systems, straining and overwhelming healthcare facilities including hospital and community pharmacies. During the last decades, pharmacy has shifted to being services-based and patient-centered. The COVID-19 outbreak has discovered new opportunities for pharmacists. Indeed, pharmacists are playing a key role during the COVID-19 pandemic. The next paragraph will briefly overview the role of pharmacists during COVID-19 pandemic.

**Key words:** Patient, Pharmacists, COVID-19, Treatment, Health, Pandemic, Medicine

### 1. INTRODUCTION

Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV). Some common complications are pneumonia, viral sepsis, acute respiratory distress syndrome, kidney failure, cytokine release syndrome etc. The virus is primarily spread between people during close contact, most often via small droplets produced by coughing, sneezing, and talking. There are no vaccines nor specific antiviral treatments for COVID-19. Management involves the treatment of symptoms, supportive care, isolation, and experimental measures. There are a significant number of studies under way into potential treatments for COVID-19. And some progress has been made in the search for effective medicines. There are several drugs that may be work. Firstly Antiviral drugs that directly affect the coronavirus's ability to thrive

inside the body. Secondly, Drugs that can calm the immune system - patients become seriously ill when their immune system overreacts and starts causing collateral damage to the body. Finally, Antibodies, either from survivors' blood or made in a lab, that can attack the virus. Convalescent plasma has been used successfully to treat many types of infectious disease. Also it has shown some initial effects in the treatment of COVID19. The mean incubation period for COVID-19 is approximately 5 (2-7) days [4,8]. Although only approximately 25% of infected patients have comorbidities, 60% to 90% of hospitalized infected patients have comorbidities [1,2,13]. COVID-19 disease has lower case fatality rates when compared to SARS and MERS, which are other serious diseases caused by coronaviruses. Yet COVID-19 is much more infectious, as SARS-CoV-2 spreads much more easily among humans and leads to higher case numbers overall[11]. While millions of people are in their homes in order to decrease the risk of transmission of the infection,

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health workers are on the frontline against COVID-19. A health care profession called pharmacists can play key role during this pandemic, acting directly with the community. Pharmacists are continuing to care for patients with chronic diseases. They are providing pharmaceutical care to COVID-19 patients. Moreover, they may provide reliable information for preventing, detecting, treating and managing coronavirus infections [5,7]. As the development of efficient and safe vaccination will require months, quick alternative treatments are sought.

## 2. PHARMACISTS – YOUR PARTNER IN HEALTH

Who is a pharmacist?—Pharmacists are specialists in medicine and they understand their composition, chemical and physical properties, manufacture, uses, side effects and interaction with food and other medicine. Who is a partner?—According to Oxford Advanced Learner’s Dictionary, a partner is a person that you are doing an activity with. Pharmacists are quite interested in working with you as your health partner in order for you to experience a healthy life. So a pharmacist as your health partner will advise you on how and when to take your medicine, how to reduce side effects, how to avoid drug-drug interaction etc. A good relation with your pharmacist will enhance your health status. Initially, the role was essentially “product-based”, “patient-facing” and mainly consisted in dispensing prescribed therapies, in the last decades it has shifted towards being “services-based”, “patient-centered”. Now a days services offered by the pharmacist is gradually expanding towards not strictly pharmaceutical areas, with the delivering of a range of non-pharmacological services, such as patient advice and counseling [12]. Several drivers of evolution have facilitated and contributed to this transition [6,15] Fig. 1.

## 3. THE ROLE OF PHARMACISTS DURING THE COVID-19 CRISIS

- Pharmacists educate clients about personal and environmental hygiene and good safety practices by combating misinformation concerning COVID-19
- During this pandemic pharmacists are serving as an information hub, provide clients with updated, high-quality information about COVID-19
- They ensure a stable supply of alcohol-based hand sanitizers and other personal protective equipment. Alcohol based hand sanitizers are very powerful weapon to fight against virus
- Pharmacists are working to ensure a stable supply, storage, distribution and prescription of drugs during this pandemic
- They are ensuring medicines to vulnerable groups and chronically ill patients to combat COVID-19
- Pharmacists can take part into the design and implementation of clinical trials for the discovery of new vaccine
- Pharmacists can help to management of potential COVID-19 cases
- They can be an instrumental part of immunization campaigns
- They can double-check drug dispensing, take care of the appropriate storage of pharmaceuticals, as well as they can ensure good clinical practices during COVID-19 crisis
- Pharmacists are also helping in studies and researches against COVID-19

Therefore, it is very clear to us that Pharmacists can offer their expertise to combat COVID-19. Globally, during the COVID-19 pandemic, pharmacists have played an essential

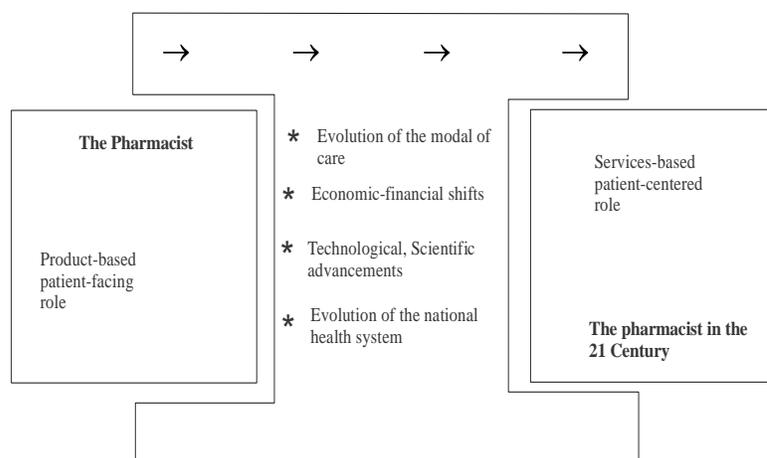


Fig. 1. Drivers of Evolution

role[3,9,10,14]. One of the fundamental roles of pharmacists is to ensure the availability and timely provision of the safest and most effective therapy. So in this role pharmacists plan for detection and mitigate drug shortages during COVID19 pandemic. Pharmacists must support the health care team and infection preventionists to combat COVID-19 and they are trusted and accessible resource for the public. During this pandemic pharmacist must work actively, identify effective therapeutic alternative. Looking forward, Pharmacists should be leveraged in vaccine development and clinical trial. When the vaccine is available, pharmacists will be considered one of the frontline health workers.

#### 4. CONCLUSION

In the fight against COVID19, our shield is the health care system and our soldiers, healthcare professionals, which undoubtedly include pharmacists. When a man is seriously ill or involved in an accident or going through chronic pains like cancer, he does not care about food, shelter, clothes or sex, what matters most to him at that moment of time is good health. Nothing more nothing else. The lifeline of the health sector is medicine; without drugs and other pharmaceutical, nutraceutical and beauty products our world will not have reached this age of advancement growth and development. In this light we can not refuse the immense contributions of pharmacists and pharmacy profession to our world. The COVID-19 outbreak has propelled new changes: community and hospital pharmacists have, indeed, stepped in new roles and have played a key role during the COVID-19 pandemic, mitigating its devastating outcomes. Moreover a reasonable number of studies that described the role of the pharmacists during the COVID-19 pandemic were found. These professionals are committed to ensuring that the population have access to health services and to minimize the adverse impact of the pandemic. Given the seriousness of the coronavirus outbreaks, health professionals with expertise in public health are essential. We salute all pharmacists across the world for their selfless services to humanity. They should be addressed as such and given recognition they deserve.

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