

# The Impact of Covid-19 on Pharmacy Services

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**Abstract: Background:** The pharmacy profession played a critical part in the frontline healthcare response to COVID-19. Community Pharmacies are often the initial point of contact for credible information and guidance for many people with Covid-19-related questions or health concerns.

**Methods:** Pharmacist's and the pharmacy workforce can play an important role in preventing the spread of coronavirus Covid-19 by create an emergency plan and workflow, conduct thorough staff training and improve patient education.

**Results:** Pharmacists provide reassurance to the general public so that individuals can safeguard themselves and others based on strong scientific facts and sensible action.

**Conclusions:** pharmacies play an important role not only in ensuring access to medicines and medical devices, but also in public health, such as informing the public about preventative measures, advising about behavioural precautions, and risk assessment, early detection, and referral of individuals suspected of being infected.

**Keywords:** Covid-19, The impact of Covid-19 on pharmacy services, Coronavirus, pharmacists role in pandemic, pharmacists and Covid-19.

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## 1. INTRODUCTION

A novel coronavirus (2019-nCoV) was discovered in cases of severe respiratory disease in Wuhan, Hubei Province, China, in December 2019, resulting in a rapid epidemic and pandemic of infection in 203 places worldwide. [1] The World Health Organization classified the new Coronavirus Disease 2019 (COVID-19) caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) a pandemic on March 11, 2020.[2]

The Centres for Disease Control and Prevention (CDC) has issued specific recommendations for the continued operation of community pharmacies, including social distancing, methods to reduce contact with objects handled by patients, and encouraging the use of alternative prescription delivery methods such as home delivery and drive through to limit direct patient contact in the pharmacy.[3]

COVID-19 had infected over 28 million people globally as of September 11, 2020, resulting in over 900,000 deaths. High rates of infection and death have been documented globally in numerous European nations, including Italy, France, and the

United Kingdom, which have some of the highest mortality rates in the world. Ambulatory Care pharmacy services affected. The pharmacy profession played a critical part in the frontline healthcare response to COVID-19. Community Pharmacies are often the initial point of contact for credible information and guidance for many people with Covid-19-related questions or health concerns.[4]

## 2. LITERATURE REVIEW

Because COVID-19 can be spread by droplets and touch, any parts of the hospital or pharmacy that have been contaminated with the virus should be disinfected. Previous research on SARS CoV and MERS-CoV suggests that SARS-CoV-2 is sensitive to UVC and heat (56°C for 30 minutes). SARS-CoV-2 might also be efficiently inactivated by the following disinfectants: ether, 75% ethanol, chlorine-containing disinfectants, peracetic acid, and chloroform. SARS-CoV-2 could not be efficiently inactivated by chlorhexidine.[5]

Fever, cough, trouble breathing, weariness, and headache are the most typical symptoms of COVID-19 infection. The majority of symptomatic people will experience just minor symptoms. Some patients, however, may develop catastrophic illnesses such as pneumonia, acute respiratory distress syndrome, multi-organ failure, and even death. There are currently no known therapeutic treatments for COVID-19, and much work is being directed towards the development of a safe vaccine. As a result, the public must follow measures to reduce SARS-CoV-2 transmission, such as social isolation, mask use, and careful hand cleanliness.[6]

Clinical pharmacist's created a rational drug use manual for frontline medical personnel to apply treatment of COVID-19, including usage and dosage, solvents, precautions, adverse drug reactions, and dose adjustment for special populations, such as pregnant women, children, elderly patients, dialysis patients, and ECMO patients, to assist clinicians in better understanding and prescribing the drugs on the medication list. [7]



**Figure (1): Pharmacists role towards patient in pandemic Covid-19**

Pharmacists, as healthcare professionals, can play an important role during the pandemic by engaging directly with the community, continuing to care for patients with chronic diseases, working in hospital pharmacies, and providing pharmaceutical treatment to COVID-19 patients. Furthermore, they may give trustworthy data for preventing, detecting, treating, and controlling coronavirus infections. As a result, various obstacles have surfaced, and Pharmacies are employing novel techniques to tackle them.[8]

Pharmacists can not only engage in clinical trials, but also create a database of real-world clinical drug research based on medical records/big data to analyse the safety and effectiveness of medicine therapy in patients with various forms of Covid-19.

According to a previous study , 23.2% of COVID-19 patients have problems. Clinical chemists must play a vital role in medication reconciliation and develop and implement medication therapy management (MTM) for patients with chronic diseases based on the characteristics of the affected population's comorbidities in order to improve medication compliance, accuracy, and cure rates.[9]

On March 19, 2020, the International Pharmaceutical Federation (FIP) issued a guideline outlining the required coronavirus information for pharmacists and the pharmacy workforce, recognising the pharmacists' roles in the control of the COVID-19 outbreak. [10]

### 3. METHODS

The role of Pharmacists in progress Covid-19 routines:

1. Create an emergency plan and workflow.
2. Conduct thorough staff training
3. Focus on pharmacists' health
4. Protect pharmacy workers
5. Strengthen pharmacists' infection monitoring
6. Maintain proper cleaning and disinfection management
7. Improve patient management
8. Improve patient education
9. Improve infection exposure management
10. Improve medical waste management. [11]

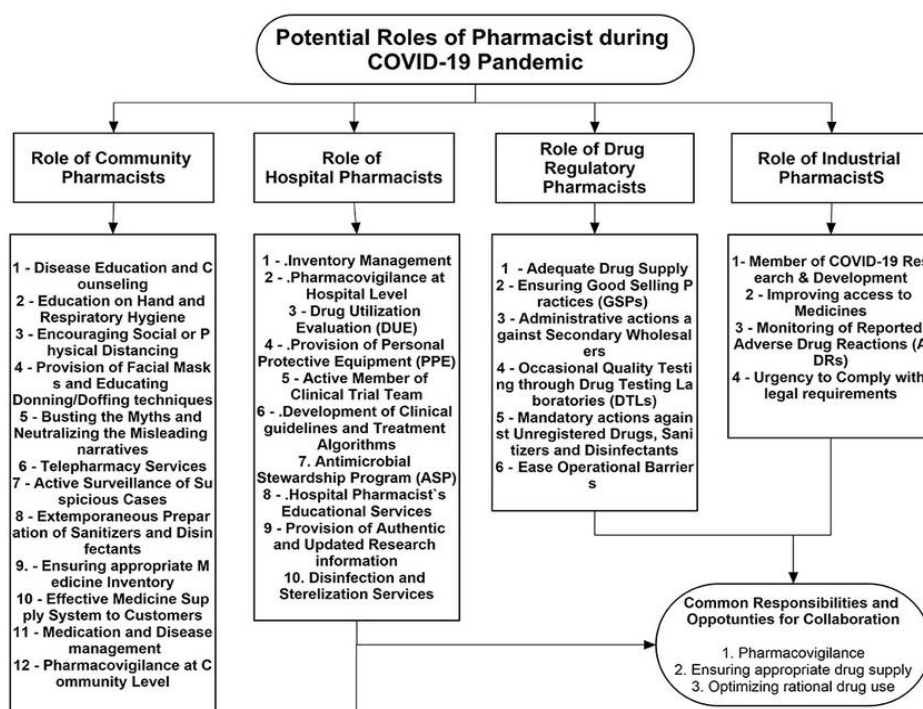


Figure (2): pharmacists role during the COVID-19 pandemic.

Pharmacists and the pharmacy workforce can play an important role in preventing the spread of coronavirus Covid-19 by:

Understanding the nature of the disease, how it is transmitted, how to prevent it from spreading further; Knowing how to access their national level information sources regarding the COVID-19 strategies (including the closest referral centre for COVID-19), by keeping that information up to date; and Informing, advising, and educating the public.

Pharmacy activities and services:

1. Point-of-care tests (measurement of blood pressure, cholesterol, and glycemia), pregnancy tests, or the administration of vaccines and injectables (wherever authorised), as well as any other services that require direct contact with a patient, should use additional protective measures, such as a mask and gloves.[12]

#### **4. RESULTS**

As active members of the healthcare team, pharmacists play a vital role. Pharmacists are being included into pandemic planning and response on a global scale. Not only do they play a significant function in clinical settings, but they can also play an important role in the community by making pharmaceutical items available and increasing public health awareness.

Pharmacists provide reassurance to the general public so that individuals can safeguard themselves and others based on strong scientific facts and sensible action.

Pharmacies should appoint a pharmacist to oversee the acquisition, storage, and delivery of critical medicines, as well as the adjustment of inventory as needed to ensure clinical practise supply.

The list includes antiviral medications, antibacterial drugs, antipyretics, analgesics, and, in hospitals, corticosteroids and a variety of additional medications. Medical device supply (including thermometers, masks, and, in hospitals, other protective equipment items such as respirators, gloves, and goggles) should be adequate.[13]

In all situations, pharmacists and the pharmacy personnel must protect themselves from infection by maintaining a safe distance from patients and members of the public and periodically sanitising any surfaces that they may touch.

Because infection can develop in asymptomatic or pre-symptomatic individuals, ALL customers and patients entering the pharmacy should exercise caution.

Pharmacists should assess the risk and intervene/advise based on an individual's symptoms and recent history of travels and/or interaction with verified or suspected Covid-19 cases.[14]

#### **5. DISCUSSION**

There is no doubt that chemists should be included as frontline healthcare professionals in pandemic plans due to the importance of their role in establishing and augmenting communication with other healthcare professionals, as well as roles in patient education and essential medicine supply. [15]

National pharmacy organisations should explicitly identify and clarify pharmacists' roles, as well as fight for legislation and regulations that support pharmacy practise during pandemics. According to the findings of this study, most pharmacists, whether working or still in school, agree that tertiary pharmacy education providers and pharmacy professional bodies play an important role in educating pharmacists to deal with epidemics/pandemics such as the current coronavirus pandemic. [16]

#### **6. CONCLUSIONS**

Because of their accessibility and vast geographical spread in most countries, community pharmacies are frequently the public's first point of contact with the health care system - including during disease outbreaks and pandemics. As a result, pharmacies play an important role not only in ensuring access to medicines and medical devices, but also in public health, such as informing the public about preventative measures, advising about behavioural precautions, and risk assessment, early detection, and referral of individuals suspected of being infected.[17]

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