

# The Galen

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Theme: The Active Role of Pharmacists in Combating COVID-19



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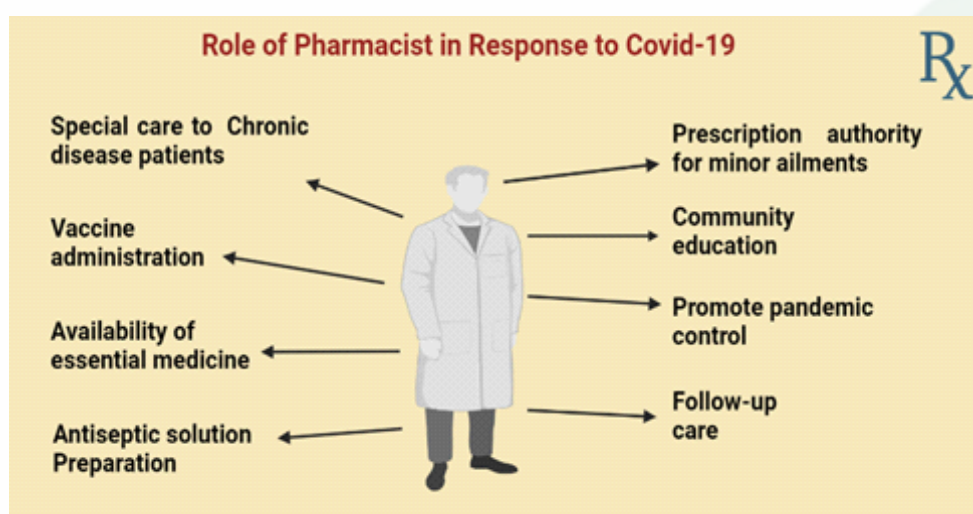
**Article 1:****ACTIVE ROLE OF PHARMACIST IN COVID-19****Author Name: Dr. Balak Das Kurmi****Institute Address :** ISF College of Pharmacy, GT Road, Moga-142001, Punjab. INDIA**Email:** bdkurmi@gmail.com; balakdaskurmi@isfcp.org

The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) initially surfaced in Wuhan (China) in December 2019, and it is now known as the Coronavirus Disease 2019 (COVID-19). The word corona means crown and refers to the appearance that coronaviruses get from the spike proteins sticking out of them. These spike proteins are important to the biology of this virus. The spike protein is part of the virus that attaches to a human cell to infect it, allowing it to replicate inside of the cell and spread to other cells. The World Health Organization (WHO) proclaimed COVID-19 a pandemic on March 11th, 2020. As per the latest reports of WHO, worldwide, over 4.5 million new cases and 32,000 fatalities were reported in the last 28 days (6 February to 5 March 2023), a 58% and 65% drop from the previous 28 days, respectively. Around 759 million confirmed cases and over 6.8 million fatalities had been reported as of March 5, 2023. Presently, the COVID-19 pandemic is a significant issue for global public health. The most typical signs of COVID-19 infection include fever, coughing, breathing problems, exhaustion, and headaches. Most persons with symptoms will only have minor symptoms. Certain patients, however, could develop life-threatening conditions like pneumonia, acute respiratory distress syndrome, multi-organ failure, or even pass away. There are numerous efforts being made to develop a secure vaccine because there are now no proven viable treatments for COVID-19. In order to reduce the spread of SARS-CoV-2, the general public must adhere to suggestions such as social isolation, mask use, and stringent hand cleanliness. Health professionals are fighting COVID-19 on the front lines while millions of people are staying at home to reduce the risk of infection transmission. These experts are dedicated to ensuring that the populace has access to healthcare services and to reducing the pandemic's negative effects. Health experts with knowledge in public health are crucial given the severity of the coronavirus outbreaks. During the pandemic, pharmacists can play a crucial role as healthcare providers by engaging directly with the community, continuing to care for patients with chronic illnesses, working in hospital pharmacies, and providing COVID-19 patients with pharmaceutical care. Health professionals are fighting COVID-19 on the front lines while millions of people are staying at home to reduce the risk of infection transmission. These experts are dedicated to ensuring that the populace has access to healthcare services and to reducing the pandemic's negative effects. Health experts with knowledge in public health are crucial given the severity of the coronavirus outbreaks. During the pandemic, pharmacists can play a crucial role as healthcare providers by engaging directly with the community,

continuing to care for patients with chronic illnesses, working in hospital pharmacies, and providing COVID-19 patients with pharmaceutical care.

### Role of Pharmacist in Covid-19

Pharmacists are responsible for checking and dispensing medication compounding pharmacy medicines if they are unavailable from other sources such as suppliers or manufacturers. They also provide health advice based on an analysis of symptoms reported by clients. pharmacist, working in collaboration with other health care providers, undertake responsibility for patient outcomes with respect to their drug therapy. The principal task of the modern pharmacist is to identify, resolve and prevent drug-related problems all are shown in Fig. 1



**Fig. 1 Special Recommendations in Expanding the Role of Pharmacists in Response to Covid-19 Pandemic**

### Community pharmacist amid COVID

The most approachable healthcare practitioner has always been the pharmacist, and this is especially true in the COVID-19 era. Community pharmacies stayed accessible to the public despite harsher lockout regulations, while other professionals closed their doors to patients. Community pharmacists play a crucial role in bridging the gaps that are made worse by the increased demand on the system and restricted access to healthcare providers since they are highly regarded healthcare clinicians. Community pharmacies in low- to middle-income nations give patients who can't afford doctor visits the benefit of free medical advice. Staff at the pharmacy kept up with direct patient treatment despite the initial lack of personal protective equipment. Pharmacies provide free medicine delivery, inform



patients about telehealth services, evaluate patients who need to renew their chronic medication, provide consultations for minor conditions, dispel myths regarding COVID-19 therapies, and support COVID-19 screening. Responsibilities of Frontline Community Pharmacists amid COVID-19:

- Chronic medication renewal
- Accessible HCPs
- Clarify Misconceptions
- Telehealth services
- Screen patients for covid-19
- Monitor and manage chronic conditions
- Minor ailment consultations

### **Hospital Pharmacist amid COVID**

Community pharmacies in low- to middle-income nations give patients who can't afford doctor visits the benefit of free medical advice. Staff at the pharmacy kept up with direct patient treatment despite the initial lack of personal protective equipment. Pharmacies provide free medicine delivery, inform patients about telehealth services, evaluate patients who need to renew their chronic medication, provide consultations for minor conditions, dispel myths regarding COVID-19 therapies, and support COVID-19 screening. Hospital pharmacists have been involved in creating regional treatment regimens that reuse antivirals as part of antimicrobial stewardship initiatives, as well as monitoring the usage of antibiotics in situations of bacterial co-infections in COVID-19 patients. Also, pharmacists can assist COVID-19 test findings interpretation, research novel pharmacological therapies or uses, and advise colleagues on medication management. Although there is currently no treatment for COVID-19, clinical trials are evaluating prospective treatment options such hydroxy-chloroquine, methylprednisolone, and remdesivir. Hospital pharmacists can help with the enrolment of infected patients for these types of studies. The key roles of frontline hospital pharmacists:

- Manage drug shortage
- Develop treatment protocols
- Medications expert
- Covid-19 medication management
- Antimicrobial stewardship accreditation

## **The future role of pharmacist amid COVID**

Future vaccine research and clinical trials should make use of pharmacists' knowledge of medications. When the COVID-19 vaccine is released, pharmacists will be one of the front-line healthcare providers who should be allowed to provide vaccinations. Pharmacists will need to play a key role in providing COVID-19 vaccines in order to quickly achieve population-wide coverage given the prior success of community pharmacists with improving annual seasonal influenza uptake and their accessibility. Furthermore, screening and testing patients for COVID-19 are both crucial interventions to flatten the curve. Pharmacists in Alberta are screening patients daily and referring them to the nearest testing facilities. While American pharmacists may order and administer FDA-approved tests. Increasing the accessibility of testing is imperative if countries wish to escape lockdowns.

### **Acknowledgment:**

The credit goes to my PG students Mr. Yash Sharma and Ms. Lakshmi Kumari for the collection of relevant information.

**Article 2:****NEVER TOO LATE: The Right Time to Acknowledge Pharmacists' Role in Successful Control of the COVID-19 Pandemic****Author Name: Dr. Mahesh D. Patil,****Institute Address:** Center of Innovative and Applied Bioprocessing,  
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The active role played by pharmacists during the COVID-19 pandemic enabled them to get recognized as first responders in the healthcare system of India and the globe. An enormous number of registered pharmacists have sacrificed their lives during the pandemic and they continue to do so in the line of their duties of preventing the recurrence of the pandemic. This write-up summarizes the pivotal role played by pharmacists during the pandemic. Furthermore, a diverse array of roles of pharmacists played post-pandemic era in further prevention and controlling the relapse and emergence of yet another wave of the pandemic are discussed.

**Role of Pharmacists during the COVID-19 Pandemic****A. Providing Essential Drug Information and Ensuring Drug Supply:**

Pharmacists played a central role in the critical development of the clinical treatment protocols and in providing the drug information and supply thereof. Doctors have acknowledged the professional advantages of pharmacists and their role in complementing clinicians to determine the safety and rationality of the dosage schedule [1]

**B. Fighting Antibiotic Resistance:** Hospital pharmacists have played a crucial role in keeping a check on the use of antibiotics in COVID-19-positive patients who also harbored bacterial and fungal infections [2].

**C. Mobile Clinical Pharmacy:** The pharmacists provided important non-prescription medicines/nutritional supplements and/or safety gear that helped reduce visits of non-emergency patients to the hospitals, which ultimately helped reduce the burden on hospitals [3].

**D. Vaccine Distribution:** Pharmacies and pharmacists functioned as a point of local distribution for Covishield™ and Covaxin™ and provided logistical support for the well-executed drive of more than 2.2 billion vaccinations in India.

## Role of Pharmacists after the COVID-19 Pandemic

**A. Controlling Resurgence of another Wave of COVID-19:** The vigilance provided by pharmacists will be of utmost importance in preventing the resurgence of COVID-19.

**B. Application of Artificial Intelligence (AI) to Provide Logistical Support:** Pharmacists can utilize novel technologies such as artificial intelligence to develop platforms that depict the nearby health centers, dedicated COVID wards, emergency numbers thereof and ambulance services, counseling and care providers, etc [4].

**C. Tele-Medicine and Tele-Health Services:** Registered pharmacists can set up online platforms to educate/advise COVID-19-positive patients regarding drug-food interactions, drug-drug interactions, and adverse-drug reactions. These platforms can also serve in providing advice regarding over-the-counter drugs and nutraceuticals/health supplements to patients who do not warrant immediate attention, ultimately reducing the burden on doctors and hospitals [5].

**D. Providing Aid in Vaccination Process:** Since new vaccines have been approved specifically for children, pharmacists can provide aid and logistical support for the vaccination drive for the children.

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**Article 3:****PHARMACISTS: A FRONTLINE WARRIORS IN  
COMBATING COVID-19****Author Name: Ms. S. S. SHINDE\*, Mr. A. S. PATIL****Institute Name with Email:** Ashokrao Mane Institute of Pharmaceutical Sciences and Research. Save, Kolhapur, Maharashtra**E-mail :** India, shitalshinde1795@gmail.com

The Hubei Province of China's City of Wuhan reported the first case of a novel coronavirus pneumonia that was later known as COVID-19. As the disease spread throughout the city and the province, an epidemic outbreak occurred on a national level. The World Health Organization (WHO) declared the outbreak a global public health emergency. The outbreak was referred to as a global pandemic because it affected numerous countries and spread to many of them. COVID-19 is a novel beta coronavirus that is primarily transmitted from human to human through close contact and respiratory droplets. The COVID-19 virus causes symptoms like fever, coughing, and shortness of breath, according to the Centers for Disease Control and Prevention (CDC). This article emphasizes the role of pharmacists in the COVID-19 pandemic as lockdowns are occurring around the world and national-level pharmacy professionals are serving in frontline roles.

**A. The COVID-19 Crisis and the Community Services Provided by Pharmacists**

Pharmacists and other medical professionals are stepping up to help manage and prevent the spread of COVID-19. The following are just a few ways that pharmacists working in various practice areas are leading the fight against this pandemic.

**1. Hospital Pharmacists**

Hospital pharmacists play a crucial role in overseeing patients' medication regimens while they are being treated for COVID-19. Additionally, they assist in the treatment of patients who have underlying chronic illnesses like diabetes, cancer, heart failure, and lung disease that may increase their susceptibility to the virus.

**2. Community Pharmacists**

Community pharmacists interact with people daily and provided advice for staying healthy, educating the public, and preventing the spread of COVID-19. They are the most approachable members of any healthcare team.

**3. Infectious Disease Pharmacists**

Infectious disease pharmacists, who work as members of hospital-based teams, are promoting the appropriate use of antibiotics and antiviral drugs to treat patients who have COVID-19 or are more likely to contract it.

#### **4. Industry Pharmacists**

Industry pharmacists perform a range of tasks, including drug development and delivery. Industry pharmacists are playing an active role in conducting the clinical trials of a new coronavirus vaccine.

#### **5. Compounding Pharmacists**

Compounding pharmacists provide patients with personalized medication based on their preferences. Some compounding pharmacies have started making hand sanitizers.

### **B. Strategies Pharmacists are Using to Stop the Spread of COVID-19**

As listed above, pharmacists in every practice area are playing a big role in preventing the COVID-19 pandemic from spreading further. The following are the ways they're stepping up,

#### **1. Public Education**

Pharmacists across the country, particularly those who interact with the public on a daily basis, are in a unique position to educate the public about COVID-19 and how it spreads.

#### **2. Serving as Role Models**

Every day, many pharmacists interact with patients. Pharmacists can demonstrate to the general public that they take the threat of COVID-19 seriously by serving as role models for healthy, preventative behavior such as regular hand washing and wearing gloves.

#### **3. Sharing Reliable Resources**

Pharmacists have provided reliable and accurate information about the coronavirus to their patients and the general public, educating them on telehealth services, performing minor ailment consultations, and dispelling myths about COVID-19 treatments.

#### **4. Free Home Delivery of Medicines**

Pharmacies are delivering medications to patients free of cost, assessing patients who need to renew chronic medications.

Pharmacists all over the world play a crucial role in ensuring that the public is safe, healthy, and informed during this uncertain time. Pharmacists work on the front lines; should be addressed as such and acknowledged. They have earned it. We are so appreciative of pharmacists and aspiring pharmacists. "Indeed, you save lives!"

**Article 4:****Role of Pharmacists in World- COVID19 a Game Changer****Author Name:** Rupal Dubey\***Institute Name with Email :** School of Pharmacy and Research, People's University, Bhopal, [rupaldubey03@gmail.com](mailto:rupaldubey03@gmail.com)

**Introduction:** COVID-19 has certainly been a game changer for the role of pharmacists in the world. Pharmacists have always been essential healthcare professionals, but the pandemic has highlighted their importance even more. During the pandemic, pharmacists have been on the front lines, ensuring that patients receive the medications and healthcare supplies they need while also helping to prevent the spread of COVID-19. They have played a critical role in administering COVID-19 tests and vaccines, and have also been involved in the development of new treatments for the virus.

In many countries, pharmacists have been given expanded roles and responsibilities during the pandemic, such as being able to prescribe medication and provide telehealth services. They have also played a key role in educating the public about COVID-19 prevention and management.

**Roles & Responsibilities of Pharmacist around the world during COVID-19**

The pandemic has also highlighted the need for pharmacists to be recognized as key members of the healthcare team, and to be given the resources and support they need to do their jobs effectively. As the world continues to navigate the challenges of COVID-19 and beyond, pharmacists will undoubtedly continue to play a crucial role in healthcare delivery and public health.

**Here are some examples of the roles and responsibilities that pharmacists have taken on during the COVID-19 pandemic:**

**a. Administering COVID-19 tests and vaccines:** Pharmacists have been instrumental in administering COVID-19 tests and vaccines. They have been setting up vaccination clinics, working in mass vaccination centres, and providing vaccinations in community pharmacies.

**b. Providing patient care:** Pharmacists have been providing direct patient care, answering questions about COVID-19 symptoms and management, and recommending over-the-counter treatments for mild symptoms.

**c. Medication management:** With hospitals overwhelmed and many people being treated at home, pharmacists have been ensuring that patients receive the medications they need to manage COVID-19 symptoms and other conditions.

**d. Telehealth services:** In many countries, pharmacists have been given the authority to provide telehealth services, allowing patients to consult with pharmacists from the comfort of their own homes.

**e. Public education:** Pharmacists have been playing a key role in educating the public about COVID-19 prevention and management. They have been distributing educational materials, providing advice on social distancing and personal protective equipment, and answering questions from the public.

Here are some remarkable examples of the work done by pharmacists from different parts of world during the COVID-19 pandemic:

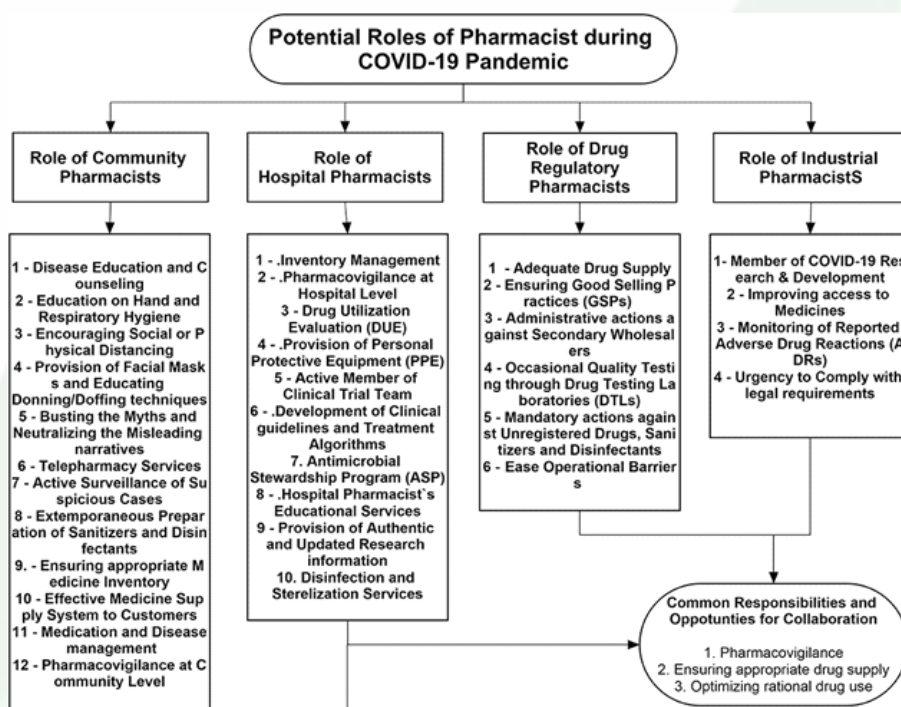
**i.** In the UK, community pharmacists have been delivering medicine to vulnerable and elderly patients who are shielding during the pandemic. They have also been providing consultations and advice over the phone and video calls.

**ii.** In Australia, pharmacists have been working in COVID-19 testing centers and administering vaccines to priority groups.

**iii.** In the US, pharmacists have been providing COVID-19 testing and vaccinations at drive-thru clinics, and also offering home delivery of medications.

**iv.** In Canada, pharmacists have been providing virtual consultations to help patients manage chronic conditions and providing medications through curbside pickup.

Overall, pharmacists have been playing an essential role in the global response to the COVID-19 pandemic, and their contributions have been invaluable. They have demonstrated their ability to adapt to new challenges and to provide high-quality care to patients, even in the most difficult circumstances.



**Fig. Potential Role of Pharmacist during COVID 19 Pandemic**



## Contribution of Indian Pharmacy Scientist

It is important to highlight the remarkable work done by Indian scientist from pharmaceutical field in period of COVID-19. Indian pharmacy scientists have made significant contributions to the fight against COVID-19. Here are some examples of their excellent contribution which was recognised by different countries of world:

**i. Development of Covaxin:** Covaxin is an indigenous COVID-19 vaccine developed by Bharat Biotech, an Indian pharmaceutical company, in collaboration with the Indian Council of Medical Research (ICMR). The vaccine has been found to be effective against several variants of the virus and has been granted emergency use authorization in India and several other countries.

**ii. Development of 2-DG drug:** 2-DG is an anti-COVID-19 drug developed by the Institute of Nuclear Medicine and Allied Sciences (INMAS), a DRDO laboratory in India. The drug has been found to be effective in reducing oxygen dependence and hastening recovery time in COVID-19 patients.

**iii. Testing and analysis of drugs:** Indian pharmacy scientists have been involved in testing and analyzing various drugs and treatments for COVID-19. They have conducted clinical trials and research studies to evaluate the efficacy of drugs such as hydroxychloroquine, remdesivir, and tocilizumab, and have provided valuable insights into their use in COVID-19 management.

**iv. Contribution to global research:** Indian pharmacy scientists have also made significant contributions to the global research effort on COVID-19. They have collaborated with scientists and researchers from other countries to share data and insights, and have contributed to the development of new treatments and therapies.

Overall, the work of Indian pharmacy scientists has been instrumental in the fight against COVID-19. Their contributions have helped to develop effective treatments and vaccines, and have provided valuable insights into the management of the pandemic.

Apart from Indian Pharmacy Scientist, Indian Pharmacist also worked remarkably. Discussing some examples of the contribution of Indian pharmacists to the world during the COVID-19 pandemic:

- **Manufacturing and distribution of essential medicines:** India is known as the 'pharmacy of the world' due to its significant contribution to global pharmaceuticals. During the COVID-19 pandemic, Indian pharmaceutical companies have been producing and supplying essential medicines such as hydroxychloroquine, remdesivir, and tocilizumab, which are used to treat COVID-19 patients.
- **Setting up vaccination centres:** Indian pharmacists have been playing a crucial role in the vaccination drive. They have been setting up vaccination centers, conducting vaccination drives in collaboration with government authorities, and administering vaccines to people across the country.

- Telepharmacy services: Indian pharmacists have been providing telepharmacy services, allowing patients to consult with pharmacists from the safety of their homes. This has been especially helpful for people who are unable to visit pharmacies due to lockdowns and travel restrictions.
- Donation of medicines: Indian pharmaceutical companies and pharmacists have been donating medicines, personal protective equipment (PPE), and other medical supplies to countries in need during the pandemic.
- Spreading awareness: Indian pharmacists have been actively involved in spreading awareness about COVID-19 prevention and management. They have been conducting webinars, providing information through social media, and distributing educational materials to the public.
- Production of oxygen concentrators: In response to the oxygen shortage during the second wave of COVID-19 in India, some Indian pharmacists and pharmaceutical companies started producing portable oxygen concentrators to help COVID-19 patients with respiratory distress.

Overall, Indian pharmacists have been making significant contributions to the global fight against COVID-19. They have demonstrated their dedication and commitment to patient care and public health, and have played a vital role in the pandemic response.

In conclusion, the COVID-19 pandemic has been a game changer for the role of pharmacists in the world. Pharmacists have been on the front lines of the pandemic response, providing essential healthcare services and ensuring that patients receive the medications and supplies they need. The pandemic has highlighted the importance of pharmacists in the healthcare system, and has led to expanded roles and responsibilities for pharmacists in many countries.

Pharmacists have demonstrated their ability to adapt to new challenges and to provide high-quality care to patients, even in the most difficult circumstances. Their contributions to the pandemic response have been invaluable, and their dedication and commitment to patient care and public health are commendable.

Moreover, the redefined role of pharmacists during the pandemic has also led to an increase in job opportunities for pharmacists worldwide. With the growing demand for healthcare services, the role of pharmacists in the healthcare system is expected to continue to expand in the future.

Overall, the COVID-19 pandemic has redefined the role of pharmacists in the world and has highlighted their importance in the healthcare system. The contributions of pharmacists during the pandemic have been remarkable, and their role in the healthcare system is likely to continue to grow in the coming years.

### **Acknowledgement**

The completion of this understanding could not have been possible without the scientific atmosphere of School of Pharmacy & Research (SOP&R), People's University, Bhopal (M.P) and the support of Principal Dr. Bhaskar Kumar Gupta. I would like to express my deep appreciation and indebtedness to my family members who in one way or another shared their support, either morally and physically. Above all, to the great Almighty, the author of knowledge and wisdom for his countless love.

**Article 5:**

## Community Pharmacists: The health care professionals serving as frontline COVID-19 warriors

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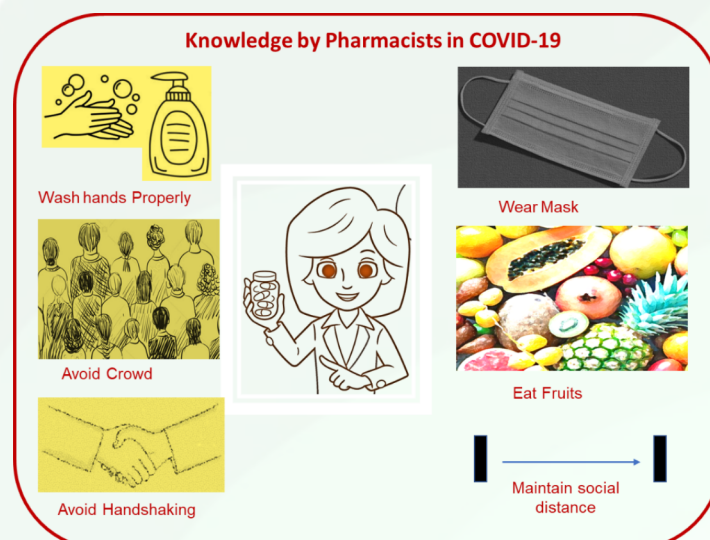
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The COVID-19 epidemic has devastated the whole world. It had an unprecedented impact on the world resulting in numerous fatalities and significant losses. The fight against the virus has been led by the healthcare sector, where doctors, nurses, and other medical experts have devoted countless hours in treating patients and discovering novel remedies. However, pharmacists have been among the front-line healthcare professionals, working nonstop to deliver vital services to patients and communities'.

In a number of ways, the role of pharmacists has been crucial in the battle against COVID-19. Pharmacists have labored to make sure that these drugs are always available and that patients get them quickly .

Additionally, as public health advocates, pharmacists have performed the most significant roles in COVID-19. Pharmacists were actively involved in providing information to the public about the COVID-19 pandemic and its therapies which is one of the most critical responsibilities that pharmacists have had during the COVID-19 pandemic. They have been disseminating knowledge about the virus, how it spreads, how to prevent it, and how to treat it. Pharmacists have clarified concerns regarding the efficacy and safety of vaccinations, described how to use medications properly, and assisted patients in controlling their symptoms through a variety of platforms like social media and community outreach programmes. They have encouraged patients to get immunized and have given instructions to patients about hand hygiene, a healthy diet, social distancing, and the usage of masks.



Pharmacists have contributed in making and distribution of COVID-19 vaccinations in addition to ensure the availability of medications. To make sure that vaccines are available to the general public, they have been collaborating with governmental organisations and healthcare professionals. Pharmacists have been actively involved in the vaccinations drives-through vaccination facilities, and other places, making the procedure easier and more open to patients .

During the pandemic, telemedicine services have grown more crucial, and pharmacists have been leveraging telehealth technology to offer patients necessary services. Through telehealth platforms, they have been able to provide patients with medication therapy management, counselling, and advice, making it simpler for patients to receive these services from the security and comfort of their homes .

Despite these difficulties, pharmacists have risen to the occasion and given patients and healthcare systems a vital help. However, the epidemic has also presented substantial difficulties for pharmacists. Still, they put more hours in handling a greater number of prescriptions. They frequently work in high-stress conditions and have had to adjust the shifting rules and protocols. Numerous medals and honors have been given to pharmacists in appreciation of their significant accomplishments' .

In conclusion, pharmacists have been actively participated in the effort to combat COVID-19 through a variety of methods. Public awareness campaigns, patient screening and triage, vaccinations, medicine delivery, and telehealth services have all been carried out by them. Their commitment and knowledge have been crucial to the success of the pandemic response, and they continue to offer helpful assistance as the world works through the pandemic's enduring difficulties. They have made a substantial contribution to the fight against COVID-19, and they will continue to be indispensable in the post-pandemic era.

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**Article 6:****Unforgettable Efforts of Pharmacist In COVID-19****Author Name:** Dr. Prabhat Kumar Jain**Institute Address :** Director, Scan Research Laboratories, Bhopal (M.P.)**Email:** scanlab1096@gmail.com

Pharmacists are essential in the fight to stop the COVID-19 epidemic from spreading as it continues to infect millions of people globally. Pharmacists are in a unique position to assist patients with managing their prescriptions, educate them on disease prevention, and recognise and reduce virus-related risks. To fight the effects of COVID-19, pharmacists are used in a variety of ways in the United States. They are advising patients who may have been exposed to the virus, administering immunizations, and dispersing personal protective equipment (PPE). In addition, pharmacists offer guidance on the use of pharmaceuticals, such as over-the-counter medicines and nutritional supplements, to patients with COVID-19 and other chronic illnesses. Items can be found as needed. In addition to assisting patients, pharmacists are actively participating in supply chain management to make sure that medications and other essential supplies are always on hand. Pharmacists contribute to preventing pharmaceutical errors and ensuring that prescriptions are administered correctly and securely. Last but not least, pharmacists are a crucial part of the effort to stop COVID-19 from spreading. They are assisting in educating people about the value of wearing masks, keeping a distance from others, and other preventative steps. Additionally, pharmacists support patients by keeping an eye out for symptoms and, if necessary, referring them to the right medical treatment. Pharmacists are actively contributing to the effort to combat COVID-19 and are thereby helping to protect people's safety and wellbeing.

"Pharmacists: Our Community's Frontline in the Fight against COVID-19"

**Article 7:****The Pharmacists as a COVID-19 worrier****Author Name:** Amir Sohail M.Pharma ( Pharmaceuticals )**Institute Address:** Sagar Institute of Pharmacy and Technology (SIPTec)**Email:** drxamirsohail@gmail.com

**Introduction:-** The Pharmacist provides a broad spectrum of services in covid and played an active role in supply stocked medicines in hospitals in pandemic and also may providing the information for those drugs. Pharmacists are experts that provide knowledge and supervision on drugs and deal big role in the handling, planning, prevention, safety and promotion of pharmaceutical products and enhancement of health outcomes during this Covid-19 crisis is an infectious disease that causes shortness of breath, fever, cough, fatigue etc. it all started in Wuhan, China in December 2019 and slowly spread to many countries today. They played main role alongside along with other healthcare providers as front-liner during this Covid-19 pandemic in healthcare facilities. Roles pharmacist playing is creating public awareness, managing outpatient, management of supply chain, establishing Drive-thru pharmacy and managing community dispensaries during this pandemic.

**Pharmacist at the frontline** – They have health care professional licensed to engage in pharmacy with duties including dispensing prescription drug, monitoring drug interaction administering vaccine in covid-19 period they are very hard & difficult for all pharmacist to work in community pharmacy, hospital pharmacy, pharmaceutical industries, government service including defence, railways, Academic and Research.

**The hospitals are the hotspot of infection and transmission of covid-19** – The pharmacists should ensure that they have minimum contact with the patients. In order to carry out this, they can themselves implement various strategies and develop a system of working in shifts. They have also infected and change his shifts with rotation to ensure safety.

**Clinical Pharmacist** - clinical pharmacists played an invaluable and often unrecognized role in managing the health system's response to the COVID-19 pandemic. The work of clinical pharmacists to manage and mitigate drug shortages allowed clinicians to continue to provide the highest level of care throughout the health system. The education and acquisition assistance in off-label, investigational, and compassionate use medications expedited therapy in the most critical cases. The skills and knowledge of clinical pharmacists allowed for rapid development and dissemination of critical drug information. Importantly, algorithm development prevented medication therapy errors by clinicians practicing in

unfamiliar settings. Incorporating a clinical pharmacist in the preparations and management of any crisis is a crucial step in preparing for future disasters, epidemics, or pandemics such as COVID-19

**Importance of Pharmacist** -The pandemic has catalysed the development of novel coronavirus vaccines across the Pharmaceutical and biopharmaceutical industry, and other research organisations, and institutions throughout the world. So, in this time journey of crisis, Pharma is the only sector remains to the student with the availability of employment in the industry and research section and there is the shortage of workforce in the Pharma sector. The time has come when the world realizes the importance of Pharmacy as a subject and pharmacist as an integral part for human survival.

**Role of Pharmaceutical Researchers** - the hope for the treatment of coronavirus infection have been started from the results of antiviral medicines like Remdesivir. Hence USFDA approved it for the treatment of SARS-CoV- 2 virus. The researchers from pharmaceutical academic institutes as well as from pharmaceutical industries are contributing to develop the vaccine and remedies for the coronavirus. The pharmaceutical researchers contributed from identification of viral structure to the development of viable drug delivery system for coronavirus. The efforts of pharmacy field in the development of vaccines for SARS-CoV- 2 virus are remarkable.

**Conclusion** :- The covid-19 spread across the globe has presented a serious public health challenge across different countries the disease is complicated by the lack of an approved antiviral remedy even with the presence of the approved vaccine. This indicates a need for pharmacist to be more actively involved in case management through events driven and evidence-based practice. This factor increased the active role of the community and hospital pharmacists in combating covid-19 .

Pharmacy is a health profession based on the chemical, biological and medical sciences. It is concerned with the design, evaluation, production, and uses of medicine and the provision of medicine related information to the public. Pharmacy is a blend of theory and practice so the job opportunities are wide spread offering diversity. The global pharmaceutical manufacturing market size was estimated at USD 486.62 billion in 2021 and is expected to reach USD 957.59 billion in 2028. The field of Pharmacy has always been an ever thriving, dynamic, diverse and growing age old profession.

Being employed in the field of Pharmacy is not just about dispensing medicine in a corner Pharmacy or working as a scientist in a research laboratory. There are so many opportunities that can provide Pharmacy graduates with a exciting and

rewarding employment. It offers a wide area of employment across the world. A Pharmacist can go for the Hospital Pharmacy, Community Pharmacy, Retail Pharmacy, Industrial Pharmacy, Veterinary Pharmacy, Social or Administrative Pharmacy, Pharmacy Journalism, the Academia, Pharmacovigilance. Pharmacist can earn good salaries and the hours are often very flexible. Thus, Pharmacy is a promising career and after completing a professional degree in this field numerous options opened up. This advancement in the role of Pharmacist calls to be the part of broader healthcare team, working for better healthcare system providing lots of employments opportunities across the India.



## About Sagar Group and SIPTec

Sagar group came into existence in the year 1983 under the visionary leadership of Chairman Shri Sudhir Kumar Agrawal. Over the years, it has now transformed into one of the largest corporate house and business conglomerate of Central India. In its journey of over three decades, the group has successfully ventured in the field of education, real estate, production and manufacturing to employ 5000+ people and impact lives of more than two lakh people every day. **Sagar Group** has been felicitated with IBC24 Excellence Award 2017 for its contribution to Madhya Pradesh's Industrial Development and Incredible Societal Development. **Agrawal Builders** have established its presence as one of the leading Real Estate giants with over 40 years of rich experience in building state-of-art residential projects. **Sagar Manufacturers Pvt Ltd** has pledged to use the best fibers to produce superior quality yarns with the world-class production technology. In a short span of time the company has achieved an installed capacity of 2,00,000 spindles and exporting its products to over 20+ countries. **Sagar Nutriments Pvt Ltd** is **Sagar Group's** recent venture in food processing premium quality basmati rice.

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Sagar Institute of Pharmacy and Technology (SIPTec) is the premier institution known for its high standards in teaching and research in pharmaceutical sciences. SIPTec was established in 2008. The Institute is also registered under **CCSEA**. Today, within a short span of 15 years, the institute has gained a reputation of being one of the **top Pharmacy Colleges in MP** that provides total pharmaceutical education comprising B.Pharm. and M.Pharm. (Pharmaceutics & Pharmaceutical Chemistry).

## Media coverage of recent conferences by this magazine

Best Wishes from

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A Pharmacy Magazine  
<https://thegalen.siptec.ac.in>

To

**SIPTec, Gandhi Nagar, Bhopal**  
For Organizing  
**One Day National Seminar**  
Sponsored by  
**MP Council of Science and Technology, Bhopal**  
On  
**Impact of Covid 19 on Mental Health and Quality of Life**  
**28<sup>th</sup> April 2023**

Last date of registration: 26<sup>th</sup> April, 2023

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Best Wishes from

# The Galen

A Pharmacy Magazine  
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To

**ISF College of Pharmacy, Moga, Punjab**  
For Organizing  
**One Day National Seminar**  
In Blend Mode (Offline/Online)  
Sponsored by  
**IQAC-ISFCP**  
On  
**Importance of Pharmacovigilance in Healthcare System**  
**10<sup>th</sup> May 2023**

Link for registration: <https://forms.gle/2o3ProOjNAaIB23A>

Registration is free

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## Winner of 3rd Edition

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A Pharmacy Magazine  
<https://thegalen.siptec.ac.in>  
 Theme: "The Active Role of Pharmacists in Combating Covid-19"

Editorial committee selected following articles for 1<sup>st</sup> and 2<sup>nd</sup> position

Rank	Name	Institute	Title	Prize (INR)
1 <sup>st</sup>	Dr. Balak Das Kurmi Associate Professor	ISF College of Pharmacy, GT Road, Moga	Active Role of Pharmacist in Covid-19	2100
2 <sup>nd</sup>	Dr. Mahesh D. Patil Young Scientist	Center of Innovative and Applied Bioprocessing, S.A.S. Nagar, Punjab	NEVER TOO LATE: The Right Time To Acknowledge Pharmacists' Role In Successful Control of The COVID-19 Pandemic	1100


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Next Theme:  
**Chimeric Antigen Receptor T Cell:  
An Advanced Cell Therapy for Cancer**

**Deadline for article submissions:  
30 June 2023, 5:00 PM**

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**Theme For 4<sup>th</sup> Edition**  
*“Chimeric Antigen Receptor T Cell: An Advanced Cell Therapy for Cancer”*

**In this Edition 1<sup>st</sup> Rank holder will be awarded as following**

- \* Winner's photo will be displayed on the cover page of Magazine*
- \*The biography of winner will be discussed on the first page of Magazine*

**Last date of submission 30<sup>th</sup> June 2023**

**Hurry up!!**

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