The Strategic Role of Healthcare Professionals in the Battle Against COVID-19: Do We Really Need Help from Community Pharmacists?

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ABSTRACT

Wuhan, the capital of China's Hubei province, was recognised in December 2019 as the centre of an outbreak of an unknown originator of pneumonia. Intense concentrations of illness spread throughout China and, ultimately, globally. Consequently, on 7th January, 2020, Chinese researchers identified a case of severe acute respiratory syndrome coronavirus (*SARS-CoV-2*) in an affected person in Wuhan as the cause. Symptoms of *SARS-CoV-2* vary from mild (fever, dry cough, difficulty in breathing, and pain in muscles) to severe (acute respiratory distress syndrome [ARDS], azotemia or acute renal failure, ventilation associated pneumonia [VAP], and shock from sepsis). In a multidisciplinary team, pharmacists play a strategic role as medical healthcare professionals in restricting the dissemination of *SARS-CoV-2* and can serve as sentinels in their communities to control and counteract this epidemic domestically.

Key Words: SARS-CoV-2, Community pharmacists, Frontline healthcare workers.

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On the front lines, many physicians and other allied healthcare professionals (HCPs) are fighting the SARS-CoV-2 epidemic. The pharmacists are one of the most approachable multidisciplinary HCPs in their community, raising awareness about the disease by sharing information, suggesting preventive measures, and providing counselling. The pharmacists also play a significant role in stopping the spread of SARS-CoV-2 because they provide vital need-based medications and can convince suspected SARS--CoV-2 patients and their families to wear surgical masks. Additionally, the pharmacists must be cautious of and alert to their visitors' history of travel from or to international high-risk countries and their contact with others. 1-6 Pharmacists should instruct people with potential SARS-CoV-2 infection to follow social distancing, abstain from close contact, avoid overcrowded areas, and practice a preventive distance of at least 2 m from others. They should encourage individuals to practice adequate and frequent hand-hygiene and explain techniques that can be used to minimise infection, such as sneezing and coughing into tissue paper, disposing off the tissue paper swiftly, and avoiding touching one's facial tzone (nose, eyes and mouth) pre- and post-washing of hands.³

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Community pharmacist (CP) is the frontline member of healthcare team to respond to queries and suggests over-the-counter (OTC) medications and refers the patients that require clinical care (IV cannulation, IV drug administrations) and hospitalisation time. CP also provides the pharmaceutical care to community during the *SAR-COV-2* pandemic by coordinating with pharmaceutical companies, drug distributors to make sure the availability of demanded medicines. CP educates the community about the prevention of infection and its management, by displaying drafted professional guidances to pharmacists and pharmacies (Table I).

Following announcements in the news about rapid spread of SARS-CoV-2, CPs were forced to confront a severe shortage of hand sanitisers and surgical masks. Soon after the first diagnosed case of SARS-CoV-2, the distribution of numerous disinfectants for instance, isopropyl alcohol, hydrogen peroxide, and chloroxylenol (Dettol) - became limited in the market, and the remaining stocks of such products were hidden by suppliers, who steeply raised the costs. This overwhelming demand and deficit imbalance greatly increased the susceptibility of individuals to disease.8 The community pharmacy is an ideal outlet for securing the stock of the aforementioned products. It is also important for CPs to have a deep understanding of medical masks, as there are numerous types of facial masks available in the market - for instance, surgical face masks, N95, and so on - and an inappropriate selection, unable to prevent the transmission of the virus, would hinder the community's sense of security and protective pathways.

Table I: COVID-19 10-steps guidance for pharmacy teams.

1	Pharmacy display: Need to have standee at the entrance of community pharmacy suggesting if anybody has signs or
	symptoms of novel <i>SARS-CoV-2</i> to call the designated helpline for guidance.
2	Proper hand washing : providing hand sanitizers at the pharmacy counter, enforcing hand washing with or without soap
	frequently for minimum 20 seconds.
3	Self-quarantine: Self-quarantine for a minimum of 14 days or as appropriate according to local guidelines in patients with
	SARS-CoV-2 symptoms including fever and cough
4	Keep distance: Keep a distance of 1-m between patients and yourself while receiving and filling out prescriptions. Consider
	limiting the entrance of patients in order to reduce direct contact.
5	Wearing mask: Always wear a mask while dealing with patients and frequently change masks whenever needed.
6	Handling of prescription: Wear single-use gloves in the pharmacy. Make sure to dispose off your gloves when you deal
	another prescription.
7	Handling mobile phones: Encourage patients to rub or disinfect mobile phones with alcohol swab, before they use it.
8	Handling computers or cash: Disposable gloves should be used while dealing with the cash and it should be disposed off
	appropriately. Handling of cash and medicines should not be done by same person.
9	Area sanitation: All premises in the pharmacy, for instance, telephones, shelving and medicines packaging should be
	disinfected regularly.
10	SARS-CoV-2 Testing: will only be done if: ●Travelled abroad recently ● Travelled to rural or urban city and revealing COVID-19
	symptoms ● Direct contact with someone who has travelled abroad recently ● Anyone showing COVID-19 symptoms: fever,
	persistent cough and shortness of breath.

Home-made masks made from simple materials, which only cover the face but cannot prevent the transmission of bacteria and virus particles, are also available. However, the performance of surgical masks exceeds that of home-made masks with respect to the efficiency of bacterial filtration, penetration resistance, and differential pressure as specified by guidelines of the World Health Organization (WHO). 9-11 The dissemination of SARS-CoV-2 has increased patients' questions regarding masks; in order to fulfill the demand for answers, CPs have become incredibly valuable professionals when recommending rational choices and managing the appropriate inventory of medical face masks for predetermined purposes. Additionally, community pharmacies should set standard costs for surgical masks in order to halt the rising prices. 1.2

As far as the management of the epidemic is concerned, no specific recommended treatment options for *SARS-CoV-2* are available. ^{12,13} The supportive care depends on the clinical symptoms of patients. However, treatments using analgesics, hydration, and oxygen therapy have been suggested, and, in cases where bacterial infections alongside *SARS-CoV-2* are identified, antibiotics are recommended as well. ^{3,4} Some evidence suggests the use of chloroquine phosphate in the treatment of SARS-CoV-2, and trials have revealed promising results regarding its efficacy in managing *SARS-CoV-2* with pneumonia.

Miscommunication occurred during US President Donald Trump's press conference speech on 19th March, 2020, in which he endorsed the promising results of chloroquine phosphate and mistakenly announced that the Food and Drug Administration (FDA) had recommended the medication for SARS-CoV-2 treatment. Many individuals then began to take chloroquine phosphate as a prophylactic agent despite the lack of evidence of its use, resulting in cases of chloroquine toxicity.¹³ In future, CPs should ensure that they are up-to-date in their knowledge of existing

guidelines, resist dispensing chloroquine phosphate or other suspect treatments, and raise awareness of misconceptions.¹³

In summary, CPs as an integral member of HCP team play a strategic role not only as a first responder but also coping with the shortages of essential medicines during the pandemic of *SARS-CoV-2* and providing supportive therapy for minor ailments to minimize the visits to the hospitals and clinics.

CONFLICT OF INTEREST:

The authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

KA: Contributed in idea designing, commentary writing.

MW: Worked as co-supporter of this short communication.

OAQ: Helped in writing and reviewing the short communication.

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