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## FIP's response to the COVID-19 pandemic: Global pharmacy rises to the challenge

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### ABSTRACT

The International Pharmaceutical Federation (FIP), as the global leadership body for pharmacists, pharmaceutical scientists and pharmaceutical educators, coordinated and produced as of January 2020 an international response to the COVID-19 pandemic. FIP's response included professional guidance, a programme of digital events and other resources, as well as advocacy and policy tools to support national pharmacists' associations and academic institutions, as well as individual practitioners, in their response at country level. This article describes the strategy adopted by FIP in collaboration with an international group of experts to support the valuable service that pharmacists and their teams provide to communities throughout the pandemic, and their important contribution to easing the huge strain being placed on health systems around the world.

### 1. COVID-19: the perfect global health storm

In 2019, the World Health Organization (WHO) published a list of ten threats to global health for the next decade.<sup>1</sup> The International Pharmaceutical Federation (FIP) begins this reflection on the COVID-19 pandemic by revisiting some of those threats:

1. The threat of an **influenza pandemic**. At that time, the WHO said that the only thing we did not know was when it would hit and how severe it would be, and that global defences would only be as effective as the weakest link in any country's health emergency preparedness and response system.
2. Another of the major threats included in that list was the emergence of **high-threat pathogens such as Ebola**. At a conference on Preparedness for Public Health Emergencies in December 2018, participants from the public health, animal health, transport and tourism sectors focussed on the growing challenges of tackling outbreaks and health emergencies in urban areas, and they called for the WHO and partners to designate 2019 as a "Year of action on preparedness for health emergencies".
3. **Vaccine hesitancy** – the reluctance or refusal to vaccinate despite the availability of vaccines – was also listed. According to the WHO,

this threatens to reverse progress made in tackling vaccine-preventable diseases.

4. Another of the 2019 threats we wish to highlight is that more than 1.6 billion people (22% of the global population) live in **fragile and vulnerable settings**, where protracted crises and weak health services leave them without access to basic care.
5. Finally, of those global health threats listed just a year ago that we would like to bring to focus is **weak primary health care**. The WHO declared that primary health care is usually the first point of contact people have with their health care system, and ideally should provide comprehensive, affordable, community-based care throughout life. Health systems with strong primary health care are needed to achieve universal health coverage. Yet many countries do not have adequate primary health care facilities.

Little did anyone know in early 2019 that a novel coronavirus would emerge at the end of the year and lead to a pandemic that would kill hundreds of thousands, hold the world at a standstill for months, lead to a global economic crisis and result in millions living without work and in poverty.

This highly contagious virus challenged all our health systems and put a spotlight on many countries' poor preparedness and capacity to respond to a health emergency of this magnitude. It also brought home

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what a world without vaccines might be like. The 22% of the global population who were fragile and vulnerable suddenly became a much higher percentage, if in addition to those with little or no access to health care, we count vulnerable older persons and those with non-communicable diseases.

This coronavirus has shown the consequences of weak primary health care, but it has also demonstrated that community pharmacies are and must be an essential component of public health and primary health care strategies. Pharmacists working not only in the community setting, but also in hospitals, in clinical biology laboratories, in treatment and vaccine research and development, in the pharmaceutical supply chain, in academia and in other settings have been giving the best of their expertise and commitment to service, ensuring continuity of care and access to medicines, medical products and devices, and personal protective equipment, and have provided evidence-based information and counselling to patients and the public, contributing to the control and containment of the pandemic and to the efficiency and resilience of health systems.

## 2. Responding to the pandemic together: FIP's leadership role and strategy

The International Pharmaceutical Federation (FIP) represents over 150 national organisations of pharmacists, pharmaceutical scientists and pharmaceutical educators, and over four million pharmacists worldwide. A key part of the mission of FIP is to advance pharmacy worldwide by sharing best practices and innovation and bringing together practitioners, researchers, educators and pharmacy leaders, which for many years has been based around organising meetings and events.

As with all our profession and member organisations, the pandemic has resulted in a significant re-prioritisation of our projects and plans and deliverables. We have reworked our work plans and changed ways of working resulting in the “digitisation” of our business meetings and daily work. We have had to cancel or postpone our planned congresses and events for 2019, as have so many events organisations globally.

At the same time, in this moment of global health crisis, as our entire profession, FIP has stepped up to play a clear and important role. From the first days of the COVID-19 outbreak, FIP took the swift lead in supporting and enabling the response of the profession to this pandemic in multiple ways. Firstly, we sought to gather global expertise, then to support international solidarity across our profession and, finally, support timely action in nations. The activities we developed have included the provision of evidence-based professional and technical guidance and support to our members and the entire profession, and a leadership role in advocating for the contribution, safety and appropriate recognition of pharmacists, pharmaceutical scientists and pharmaceutical educators.

## 3. Professional and technical guidance for pharmacists and the pharmacy workforce

When the WHO declared the outbreak of the new coronavirus as a **Public Health Emergency of International Concern** on 30 January, FIP immediately set up a taskforce of experts to develop emergency guidelines to support the pharmacy workforce around the world in helping to minimise and control the outbreak and in providing advice and care to patients and communities. The taskforce included experts from different areas of practice (community and hospital pharmacy, military and emergency pharmacy, clinical biology, academia) and different countries and regions.

In just six days, the first guidance was published in the six official United Nations languages on a dedicated webpage in the FIP website ([www.fip.org/coronavirus](http://www.fip.org/coronavirus)). In the following days and weeks, additional translations were added, produced in collaboration with FIP's member organisations and volunteers, and the guidance was updated to reflect the new nomenclature for the virus and the disease: SARS-CoV-2 and

COVID-19.

As the outbreak developed into a pandemic, the taskforce updated this guidance and published new versions on 19 and 26 March, to reflect the rapidly emerging knowledge. The updated guidance document took into account newly available evidence and recommendations, particularly in the following areas:

1. Modes of transmission and incubation period
2. Pharmacy operations and facilities: ensuring safety and continuity of service
3. Preventive measures, including the use of masks, hand washing and social distancing
4. Pharmacy interventions and patient counselling
5. Treatment guidelines and medicines that may need to be stocked
6. Progress in medicines and vaccines development
7. Laboratory testing for COVID-19 in suspected human cases
8. Cleaning and disinfection products and procedures

In addition to the guidance documents, ten summary sheets were produced on key aspects of pharmacy's role to facilitate the use and distribution of the guidance. As of mid-May 2020, FIP's resources were available in 15 languages.

As we moved from developing emergency guidance into longer term support and advice during this unprecedented scenario, specifically in areas regarding tests, treatments, repurposing of existing drugs and vaccine development, FIP then set up a broader group of expert advisors. This Expert Advisory Group is co-chaired by the FIP President and CEO and is supported by members of the FIP core team leading the COVID-19 response programme. The objectives of the FIP COVID-19 Global Expert Advisory Group are:

- To increase FIP's capability and capacity in responding to new and emerging needs of pharmacy workforce;
- To ensure all elements of science and practice and education are reflected in FIP's response;
- To create a longer-term perspective – moving from urgent rapid response, to longer term advice and expertise in selected areas;
- To support FIP's member organisations, individual members and colleagues around the world, and to respond to the COVID-19 global health crisis in solidarity.

Several subgroups have been identified as areas of work FIP needs to deliver, which the EAG can advise and support, including:

1. Therapeutic options and vaccines
2. Diagnostic testing
3. Infection prevention and control
4. Policy development and economic impact
5. Community pharmacy practice and contingency plans
6. Hospital pharmacy practice and contingency plans
7. Supply chain of medicines and medical products
8. Education and workforce development

FIP's expanded programme of work on COVID-19 includes the following elements:

- A) Clinical information and treatment guidelines for COVID-19
- B) Guidelines for pharmacists and the pharmacy workforce
- C) Frequently asked questions and myth busting
- D) COVID-19 Additional resources
- E) Summary guidance sheets (one page each) on the following subjects:
  1. COVID-19 transmission and incubation
  2. Community pharmacy interventions and patient counselling
  3. Pharmacy operations and facilities: ensuring safety for all and continuity of service

4. Community pharmacy procedures
  5. Community pharmacy contingency plans
  6. Patient isolation and referral
  7. Cleaning and disinfection management
  8. Treatment guidelines and medicines to be stocked
  9. Use of masks
  10. Notice to community pharmacy patients and customers
- F) A programme of digital events ‘Responding to the Pandemic Together’, expanding FIP’s usual offer of digital engagement events to a comprehensive plan of two or three events per week, presenting FIP’s own guidance, best practices from around the world, advancements in treatment and vaccine development, effective risk-communication strategies, interventions to improve patient safety and many other topics;
- G) A Position Statement on the association between the use of non-steroidal anti-inflammatory medicines (including ibuprofen), angiotensin converting enzyme inhibitors, angiotensin receptor blockers and corticosteroids, and an increased risk of coronavirus/COVID-19 infection or disease severity;
- H) A Holding Statement on COVID-19 testing strategies, and the use of hydroxychloroquine/chloroquine in the treatment of COVID-19 patients;
- I) A repository of COVID-19-related resources developed by FIP’s member organisations, other health- or pharmacy-related organisations and partners, articles and tools – guided by the principle of international solidarity in sharing quality resources to support response at country level.
- J) An online platform for pharmacists to discuss and exchange queries and experiences and other initiatives.
- K) Work on the campaign #PharmacyHeroes, profiling pharmacists who, in the face of a pandemic, regardless of danger and their own situation, have faced the fight against COVID-19 all over the world, while significantly relieving the healthcare system.
- L) A compilation of resources from the WHO and other organisations, as well as relevant articles that may inspire and inform action at local level.

FIP will continue to update these resources and produce new ones as the knowledge and evidence about this new coronavirus evolves and enables a more efficient and informed response to the pandemic.

#### 4. Initiatives focusing on the impact on pharmaceutical education

Most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of the COVID-19 pandemic. According to UNESCO (The United Nations Educational, Scientific and Cultural Organization), these nationwide closures are impacting almost 70% of the world’s student population. Several other countries have implemented localised closures impacting millions of additional learners. FIP is committed to support the global pharmacy education community to ensure continuity of education in an equitable way, particularly for more vulnerable and disadvantaged communities. In May 2020, FIP launched a rapid-response survey to collate institutional, university level information on the higher education sector’s responsiveness to COVID-19 with a focus on pharmacy education.

The sector has been forced to quickly adapt models of higher education provision in response to the pandemic, with a sudden shift to novel modes of delivery, assessment and learning progression – including new ways of interacting with student populations. The way in which the universities have responded will have long-lasting impacts on the pharmacy higher education sector. Teaching, learning and assessing for regulated competencies by using combinations of remote, online and distanced delivery modes will affect the assurances and standards required by regulators and accrediting bodies. The impact on individual

students will also be considerable and are, as yet, uncharted.

This FIP Survey on Global Pharmaceutical Higher Education Response to COVID-19 is collecting case studies from around the world, with a survey to inform a set of recommendations that we will support our members to deliver. This survey is one of many to follow in coming months which will seek to engage across all areas of our profession, whereas this survey is focused solely on academic institutions.

#### 5. Initiatives by and for young pharmacists and pharmaceutical scientists

The FIP Young Pharmacists Group (FIP YPG) also conducted several activities in response to the COVID-19 pandemic, including: (1) publishing an article on COVID-19 information and awareness for early-career pharmacists; (2) surveying YPG’s members on how they responded to the pandemic; and (3) delivering a webinar on the role of national or regional young pharmacists groups in supporting their members during the pandemic. Below are some key messages of the activities:

##### 5.1. Article on “COVID-19: What you need to know”

In February 2020, the FIP YPG Publications Team sought to gather verified information on the novel coronavirus outbreak and published an article on Medium. Based on the information available and despite the continuously changing statistics, the article gave a detailed look into the virus, how it is transmitted, the current status of the outbreak, the role of the public in controlling the spread of the virus, and shared other reliable sources of information and updates.

##### 5.2. Survey on “How young pharmacists and pharmaceutical scientists around the world are fighting the COVID-19 pandemic”

The FIP YPG surveyed its members from April to May 2020 to assess how young pharmacists and pharmaceutical scientists are responding and adapting to COVID-19. From the survey, it was evident that new and imperative roles were developing for the early-career pharmacy workforce, some of which had to work longer shifts and could not work from home. Particularly, early-career community pharmacists sometimes had to deliver medical supplies when receiving virtual prescriptions from general practitioners. Both hospital and community young pharmacists have had to strictly manage the adequate stock of personal protective equipment (PPE) for healthcare professionals (HCPs) and patients. They have efficiently collaborated with other HCPs via phone calls and virtual meetings. On the other hand, those in non-clinical roles who have been working from home or in new areas facilitated responses to pandemic such as implementing solutions to the supply chain disruptions. Most respondents highlighted a pressing need for investment in healthcare and mass production of essential commodities to fight COVID-19.

##### 5.3. Webinar on “Young pharmacists and scientists at the helm of a pandemic: showcasing innovations and collaborations in the management of COVID-19.”

Later in May, YPG organised a webinar in partnership with National and Regional YPG organisations: The 8th episode of the “Responding to the Pandemic Together” FIP Special Webinar Series on COVID-19. This webinar was a multifaceted discussion that featured young pharmacists and scientists from all around the world speaking on challenges and gaps in the different health organisations that YPG members collaborate with, as well as strategies, resources, and opportunities for collaborative problem-solving during the pandemic. Over 250 individuals were able to benefit from this webinar. Providing an online platform for groups’ learning experiences and campaigns through social media on providing the best evidence were highlighted during the discussion. Collaboration across national/regional YPG organisations were encouraged to

strengthen the support provided to their members during the pandemic.

## 6. FIP's leadership and advocacy role in the COVID-19 pandemic

In addition to guidance and support, FIP has advocated to governments and international organisations for the role, the safety and the appropriate recognition of pharmacists, pharmaceutical scientists and pharmaceutical educators during the pandemic.

After a broad consultation with its member organisations and constituencies, FIP issued a call to action to support pharmacists and pharmacy workers on the COVID-19 frontline. This document lists 23 urgent measures that governments and other stakeholders must put in place in order to ensure the continuity of pharmaceutical care to people around the world and so that pharmacists can play an even greater part in the fight against COVID-19.

This call to action addressed the major issues currently being faced by the pharmacy profession across the globe by demanding, for example, that:

- Pharmacists and pharmacy staff are recognised as key workers;
- Pharmacy staff have access to appropriate protective equipment;
- Pharmacy staff are included in the groups of healthcare and essential workers to be tested for coronavirus/COVID-19;
- Home delivery of medicines and pharmaceutical services to patients who must stay at home is funded;
- Medicines at risk of shortage are identified and mitigation plans put in place;
- Continuing education in infectious disease and emergency response is funded;
- Financial aid is provided to pharmacies in the event of temporary closure for health reasons.

FIP's measures also look ahead, calling for provisions to be made in preparation for future developments, which will be key if we encounter a second wave or a new viral entity in coming months, as well as longer term. These include:

- Authorising and harnessing the network of pharmacies to contribute to mass testing across populations (following the adoption of evidence-based protocols for the usability of rapid point-of-care tests for COVID-19 in appropriate individuals in the community setting).
- Further investment in and development of infrastructure to ensure health systems are ready for mass immunisation when COVID-19 vaccines are available, including updating regulations to enable pharmacists to immunise adults.

In addition to this call to action, FIP joined efforts with its sister organisations for the other healthcare professions in the World Health Professions' Alliance (WHPA), in writing an open letter to G20 Heads of States and Governments, calling on immediate G20 action to secure personal protective equipment for health personnel.

In May 2020, FIP also issued a Statement of Principle<sup>1</sup> on the impact of the COVID-19 pandemic on health equity, and vulnerable patients and populations. FIP recognises that the impact of COVID-19 is closely linked to social determinants and will lead to increased vulnerability across communities, especially where there are underlying and existing problems. Addressing inequities and inequalities is more urgent than ever as the world battles a deadly pandemic. Recognising and identifying the most vulnerable patients and populations to COVID-19 is critical and urgent. It requires particular and specific protective strategies from governments and other stakeholders.

<sup>1</sup> An FIP Statement of Principle is a statement setting out the position of FIP in emergency situations or on a subject that has humanitarian implications internationally but may not be perceived as being directly related to pharmacy.

Pharmacy plays an important role in addressing and alleviating these inequities, and in serving vulnerable patients and populations during this pandemic. In particular, this statement focuses on various vulnerable population groups, such as women and children who suffer from violence during the COVID-19 pandemic; marginalised, displaced and underserved communities such as ethnic minorities, refugees and migrants, and people living in situations of informal economy; people living in countries with fragile and under-resourced health systems, with insufficient health workforce capacity, infrastructure or equipment; patients with underlying conditions including non-communicable diseases, which are in themselves a factor contributing to increased vulnerability to COVID-19; and older adults.

In this statement, FIP and pharmacists across the globe reaffirm their commitment to serve patients and communities in all settings of practice – community, hospital, clinical biology and others – throughout these challenging times of pandemic, and to promote equity in health protection and access to care across all people and especially the most vulnerable groups, leaving no-one behind.

FIP has also taken the initiative to recognise, mourn and pay tribute to those pharmacists and members of the pharmacy workforce who have lost their lives in the frontline of the pandemic response, as they continued to provide health care to their communities and support to health systems around the world. With the *In memoriam* section of our dedicated webpage, FIP wishes to make sure that none of these colleagues are forgotten.

## 7. Responses from frontline pharmacists

As accessible, trusted, and knowledgeable healthcare workers, pharmacists have contributed to pandemic response in a variety of ways. Emerging bodies of literature have shed light on the experiences and actions of frontline pharmacists in the fight against COVID-19.

Pharmacies represent the first point of contact within the health system for many communities, and, as such, pharmacists play an important educational role. Ung notably described pharmacists' role as a public health educator in Macau with regards to local information regarding the pandemic evolution and hand hygiene and infection prevention measures.<sup>2</sup> Furthermore, pharmacists partnered with the government to ensure an optimal supply of face masks and were encouraged to detect symptoms and refer patients when necessary. Okereke and colleagues described similar roles played by community pharmacists in African countries, such as educating populations on safety and infection prevention recommendations as well as answering inquiries regarding investigational treatments.<sup>3</sup> These findings corroborate pharmacists' shared responsibilities in counselling and promoting disease prevention and infection control as first-line health professionals.

In the face of shortages, pharmacists have also been called upon to participate in ensuring adequate supply of health products and medicines. Bahlol and Dewey revealed that, through a questionnaire and interview conducted among Egyptian community pharmacists, the majority of respondents reported high rates of PPE and medicine provision and mask distribution.<sup>4</sup>

Cadogan and Hughes even describe frameworks in the United Kingdom and Canada in which pharmacists ensure the continuity of health services through new professional activities and expanded scope of practice.<sup>5</sup> For example, during a time when routine or elective check-ups with physicians have become unavailable or reduced, formulary and drug scheduling models may be adapted to enable community pharmacists to assess and manage patients for minor ailments. Expanding prescribing roles for pharmacists may also contribute to alleviating the burden on health systems. Allowing pharmacists to test patients for COVID-19 as well as foreseeing the administration of COVID-19 vaccines by pharmacists has also been described.<sup>6</sup>

Pharmacists across the globe continue to play leading roles in the fight against COVID-19. In China, Song and colleagues echo the importance of pharmacists' clinical role during the pandemic and

describe a framework for pharmaceutical care for hospitalized patients with COVID-19 in which recommendations are made regarding multiple themes, such as evidence-based treatment options, management of drug interactions, and therapy monitoring.<sup>7</sup> International collaboration between pharmacists in the United Kingdom and Pakistan have also led to the development of more cohesive, translated guidelines for pharmacy personnel.<sup>8</sup>

Based on available literature, pharmacy teams have taken on novel shared responsibilities in the face of the pandemic as previously encouraged.<sup>9</sup> Nevertheless, with a significant amount of uncertainty, fast-changing policies and recommendations, and common global constraints such as supply shortages and increased burden on health systems, challenges in ensuring optimal pharmacy services and pharmaceutical care have been exposed. For example, ensuring home delivery services and antimalarial drug availability has not been consistently achieved in community pharmacies.<sup>4</sup> Barriers to accessibility and patient-pharmacist communication have also emerged due to physical and social measures taken to prevent infection within pharmacy premises.<sup>10</sup> Instances like these score the importance of the necessary organisational, operational, and human resources to overcome such obstacles as pharmacists continue to respond to the COVID-19 pandemic.

## 8. Conclusion

As the FIP President, Mr Dominique Jordan, said, “the valuable service that pharmacists and their teams provide to communities, and their important contribution to easing the huge strain being placed on health systems during the current COVID-19 pandemic is now clearer than ever. We know that these colleagues are going to great lengths and subjecting themselves to risks in order to ensure continuity of care, particularly to the vulnerable, and to maintain a robust and efficient medicines and medical product supply chain as well as providing much needed advice and services”.

The pandemic has been one of the greatest challenges that the world has collectively experienced since World War II, and it has been a great burden on all health systems, health professions and societies overall.

In all crises, there are also opportunities for professions to step up and deliver. In this case, the COVID-19 pandemic has given pharmacy the chance to demonstrate the value of its contribution to health care teams and health systems. Laws and regulations of the scope of practice of pharmacists have been quickly adapted in many parts of the world to allow pharmacists to deliver services that the profession had been claiming for a long time: from performing repeat dispensing of medicines to patients with chronic conditions, to dispensing medicines at community pharmacies that usually require patients to collect them at hospitals, and from home delivery of medicines supplemented with telepharmacy services, to the administration of vaccines for other respiratory diseases to expanded population groups; and from performing point-of-care screening tests to the expanded authority to mitigate medicines shortages by substituting a medicine in shortage for a suitable alternative.

This crisis has given pharmacy the opportunity to demonstrate that these services are valuable to patients and to health systems and that they are feasible and ready to be implemented in many settings. Our goal

should now be to continue delivering these services to better serve patients and society and to be better prepared to respond to future natural or human-made emergencies – including the next pandemic.

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