

FIP CALL TO ACTION: MOBILISING PHARMACISTS ACROSS OUR COMMUNITIES TO MITIGATE THE IMPACT OF AIR POLLUTION ON HEALTH

The Hague, 7 September 2021

According to the World Health Organization (WHO), air pollution is the greatest environmental risk to health, with nine out of 10 people breathing polluted air every day, which kills 7 million people every year.¹ In 2019, the WHO listed air pollution and climate change as one of the top 10 threats to global health.

The harmful effects of air pollution manifest in lung cancer, stroke, allergy, chronic obstructive pulmonary disease (COPD), asthma and heart disease, among other health problems.² There is an urgent need to address air pollution for its devastating effects on the environment and global warming, but also for the direct threats it poses to the health of individuals and communities.

Pharmacists, particularly those practising in community settings, have clear roles as both medicines' experts and trusted messengers. They can work with other healthcare professionals in synergy within health systems to mitigate the impact of air pollution on people's health and quality of life. Pharmacists are uniquely positioned to triage and manage individuals with respiratory illnesses and symptoms, such as those suffering from asthma, rhinitis or COPD.³ They can improve patient health outcomes through enabling timely diagnosis (e.g. via early screening mechanisms), medicine optimisation and patient education. Pharmacists can also proactively support patients to adopt preventive measures against air pollution, encourage respiratory wellness, and refer patients appropriately.⁴⁻⁶

Expanding pharmacists' knowledge and skill set in air pollution and its negative impact on health can lead to increased public awareness, mitigating short- and long-term impacts of air pollution and, ultimately, improving respiratory health. Recent findings⁷ from an International Pharmaceutical Federation (FIP) survey undertaken in collaboration with The Clean Breathing Institute (TCBI) in 2020 on "Air pollution and respiratory health: Awareness and roles of community pharmacists", which had responses from 62 countries and territories, supported the pharmacist's expanding role and need for associated services. Intelligence from this survey may inform policymaking, advocacy efforts and new service development by pharmacists and pharmacy organisations around the world. In addition, tackling air pollution as a major health threat cannot be achieved without recognising pharmacists' responsibility and pharmacy's position in minimising the adverse effects of pharmaceuticals on the environment. This has been supported by FIP and advocated by a Statement of Policy on "Environmentally sustainable pharmacy practice: Green pharmacy".⁸

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During May and June 2021, FIP organised an expert round table in collaboration with TCBI to identify priority areas related to: professional pharmacy services; education and training required to support community pharmacists with regards to air pollution and respiratory health; opportunities for and barriers to pharmacists' role in air pollution; and key policy drivers and barriers to support of these emerging roles by pharmacists.

Based on this background, **FIP issues this Call to Action: Mobilising pharmacists across our communities to mitigate the impact of air pollution on health**, advocating for a strong and effective integration of community pharmacists in improving respiratory healthcare, both now and in the future. The action points below are not listed in order of importance to allow pharmacists and pharmacy organisations around the world to prioritise and undertake them based on their regional and local priorities.

We call for national, regional and global policies that promote the following:

General actions

- Strong and effective action to limit air pollution, including public health measures to reduce the risks from respiratory, cardiovascular and other diseases that are caused by air pollution.
- Increased recognition of the role of pharmacists in primary health care, and in respiratory care in particular.
- Expanded authority and scope of practice to manage respiratory conditions in the community.
- Increased public awareness of air pollution and pharmacist's role in managing respiratory conditions/symptoms.
- Engagement with patient groups, especially with populations that may be more vulnerable to the effects of air pollution, such as people living with asthma, rhinitis, COPD or other chronic conditions, or living in polluted environments, pregnant women or those who are socially vulnerable (e.g. children and older adults).
- Expanded authority to vaccinate, to prevent several respiratory diseases.

How to act (hands-on services)

- Services identifying and reducing risk factors (e.g., smoking cessation, nasal hygiene technique, inhaler technique optimisation for asthma/COPD patients) and related campaigns focusing on health education and screening.
- Health screening services to identify risk factors (e.g., smoking, allergens and pollutants; vaccine hesitancy, social vulnerability, etc.) through validated equipment and questionnaires (surveys).
- Health education services to increase knowledge about diseases and their treatment, and to develop skills for the correct use of medicines (inhaler and nasal formulations).
- Disease management to improve health outcomes and treatment adherence through clinical follow-up.
- Tools to support pharmacists in identifying and screening respiratory diseases, including more point-of-care tests.
- Appropriate referral protocols to other health professionals and health services.
- Supportive services for people suffering from colds, influenza or sinusitis.
- Key references that enable action: Appropriate guidelines and regulatory policies to support these roles.
- Adequate remuneration models to underpin the sustainability of evidence-based and cost-saving services.



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- Incentives to adopt these services broadly into mainstream practice, such as recognition of this role by health authorities and the public, and advanced training/specialist accreditation.
- Education and training both at undergraduate and continuous professional development (CPD) levels to ensure the necessary knowledge and skills in (but not limited to):
 - Prevention and screening
 - Patient clinical evaluation
 - Differential assessment of respiratory symptoms (in patients without previous diagnoses of chronic respiratory diseases or in those already diagnosed)
 - Clinical reasoning
 - Patient counselling on medicines
 - Communication skills with patients and other health professionals and employers
 - Pharmaceutical care model of practice including patient advice on the selection of non-pharmacological and pharmacological interventions (including non-prescription medicines)
 - Selection and use of devices to measure clinically meaningful cut-offs for indoor/outdoor pollutants, advising on practical interventions to reduce these pollutants and/or their impact on health
 - Health risk advice, including local and real-time risk assessment from air pollution
 - Practical workshops for the development of skills (nasal hygiene, inhalation medicines use technique, peak flow spirometry, use of oximeters, communication with the patient, and skills to provide vaccination services and organise campaigns in line with local regulations)
 - Raising awareness within communities, e.g., through "Pharmacy as a better breathing centre" or similar initiatives.
- Appropriate training methods may include:
 - Webinars
 - Educational videos/ tutorials
 - Specific online training modules
 - Practice guidelines.
- Expanded use of technology for remote consultations and patient care.
- Interprofessional collaboration, supported by shared electronic patient records, policies and guidelines that include the pharmacist at all levels of health care.

We, FIP, commit to leading by example, by:

- Advocating for air pollution reduction as a health measure.
- Raising awareness of the health risks caused by air pollution among pharmacists, other healthcare professionals and patient groups, as well as the public.
- Supporting community pharmacists and their national organisations to provide better respiratory and primary health care services by transforming our pharmacy workforce and strengthening our practice and sciences.
- Transforming and scaling up pharmacy education by ensuring high-quality and fit-for-purpose education and training for primary health care provision, including on respiratory health and the impact of air pollution on health, and to provide the foundation for workforce development, professional and scientific advancement.

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- Improving health services for those already affected by air pollution, ultimately improving health outcomes, disease control, and overall respiratory health and well-being.



The above measures are urgently needed to mobilise pharmacists across our communities to mitigate the impact of air pollution on health.

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