



ROLES OF PHARMACISTS IN DISEASE PREVENTION



FIP showcases the critical role of pharmacists in preventing diseases through the “FIP Disease prevention priority programme.”



1. Point-of-care testing (POCT) and screening

Pharmacists conduct a variety of tests to identify, diagnose, assess, and monitor health conditions, contributing significantly to positive health outcomes, economic savings, and increased efficiency in health systems by reducing the burden on other healthcare sectors.¹

To prevent diseases, pharmacists provide POCT and screening to facilitate early detection, enable timely access to care, and ensure appropriate treatment. These efforts help manage and control the spread of infectious diseases, manage non-communicable conditions, and promote overall health and well-being.¹

Based on FIP’s data, pharmacists can conduct POCT in **22 countries** based on the latest update from 2023.¹



These tests include¹:

Infectious disease testing



Blood glucose and diabetes



Lipid testing



Cardiovascular health indicators



Respiratory function testing



Haematology testing



Examples include¹:



South Africa: Pharmacists participate in an initiative called **PAMART (Pharmacist-Initiated Management of Antiretroviral Therapy)**, which includes conducting kidney screenings and tuberculosis (TB) tests. This programme is currently being used to support HIV pre-exposure and post-exposure prophylaxis, helping to improve patient care and management of HIV treatment.



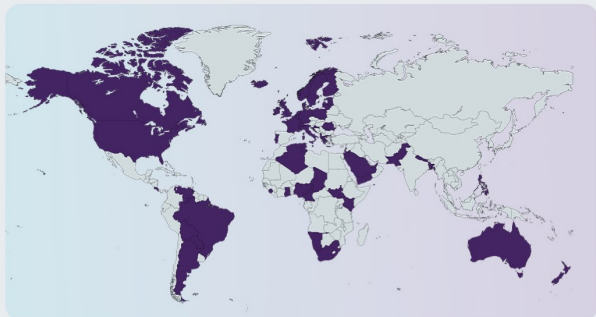
Portugal: Community pharmacies offered SARS-CoV-2 rapid antigen testing services during the COVID-19 pandemic. This service allowed the public to access professional testing conveniently, supporting broader efforts to control the spread of the virus.

2. Vaccine administration and prescribing

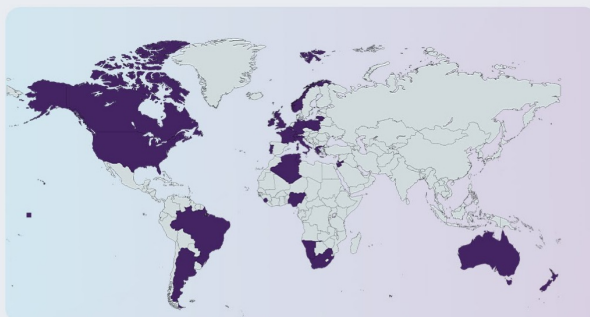
To prevent diseases, pharmacists prescribe and administer vaccines to increase access to immunisation services, ensure timely vaccination, and contribute to herd immunity. This increases vaccine uptake and protects communities from vaccine-preventable diseases.^{2,3}

The number of countries authorising pharmacists to administer vaccines increased to **44** in 2024, marking a 69.23% rise since 2020.^{2,3}

Pharmacy-based vaccination/administration is authorised in **56 countries in 2024**:



Pharmacists can prescribe specific vaccines in **26 countries** (e.g., influenza, COVID-19):



Pharmacists in **Chad, Costa Rica, and Kenya** can prescribe all vaccines, including travel vaccines.



3. Medication management and adherence

To prevent diseases, pharmacists promote medication management and adherence by ensuring that patients take their medications correctly and consistently. This reduces the risk of complications such as drug resistance, and treatment failures and ensures effective care and improved health outcomes.⁴

Pharmacists help guide medication use and promote adherence through various initiatives:⁴



SMS adherence support service: Developed by the Association of Danish Pharmacies designed to send reminders to patients, particularly those taking several medicines at different times over days or weeks.⁴



Medication monitoring and optimisation programme and the telephone counselling service: Utilised by the Royal Dutch Pharmacists Association (KNMP) to improve medication adherence.⁴

4. Providing medication information

To prevent diseases, pharmacists provide medication information that ensures the safe and proper use of medicine and promotes adherence to the prescribed treatment, thereby reducing the risk of infection spread and complications.⁵



Australia: The Advanced Pharmacy Australia established a standard of practice for medicine information services in 2013.⁵



USA: The American Society of Health-System Pharmacists (ASHP) developed guidelines in 2015 to define the pharmacist's role in providing drug information.⁵

The document outlines the following:

1. Key definitions related to different types of medicine information services.
2. A structured approach to delivering medicine information services.
3. The processes and considerations that should be followed to ensure the accurate and effective provision of medicine-related information

Aim of the guideline: To focus on modern practices such as using a systematic approach, ensuring proper documentation, and utilising high-quality drug information resources.

Goal of the guideline: To enable pharmacists to effectively communicate medication information both orally and in writing to patients, caregivers, and other healthcare professionals, ensuring accurate and informed healthcare delivery.

5. Promoting self-care

Disease prevention is also related to the FIP programme on self-care and management of common ailments. To prevent diseases, pharmacists promote self-care⁶ by:

1. Educating patients on self-care, medication use, lifestyle changes, and prevention.
2. Providing personalised health advice to support informed decision-making.
3. Helping patients manage long-term conditions through follow-ups and coaching.
4. Ensuring access to self-care tools and resources for effective health management.
5. Working with other healthcare professionals to create comprehensive self-care plans.

Country examples from literature



Cyprus: Pharmacists implemented a mobile health intervention using motivational interviewing techniques to enhance self-management in patients with type 2 diabetes.⁷

What did the programme involve?

Online communication, tracking of blood glucose levels, and patient education.

What was the feedback from the participants?

Improvements in their self-care activities, such as regular blood sugar monitoring and adopting healthier eating habits.



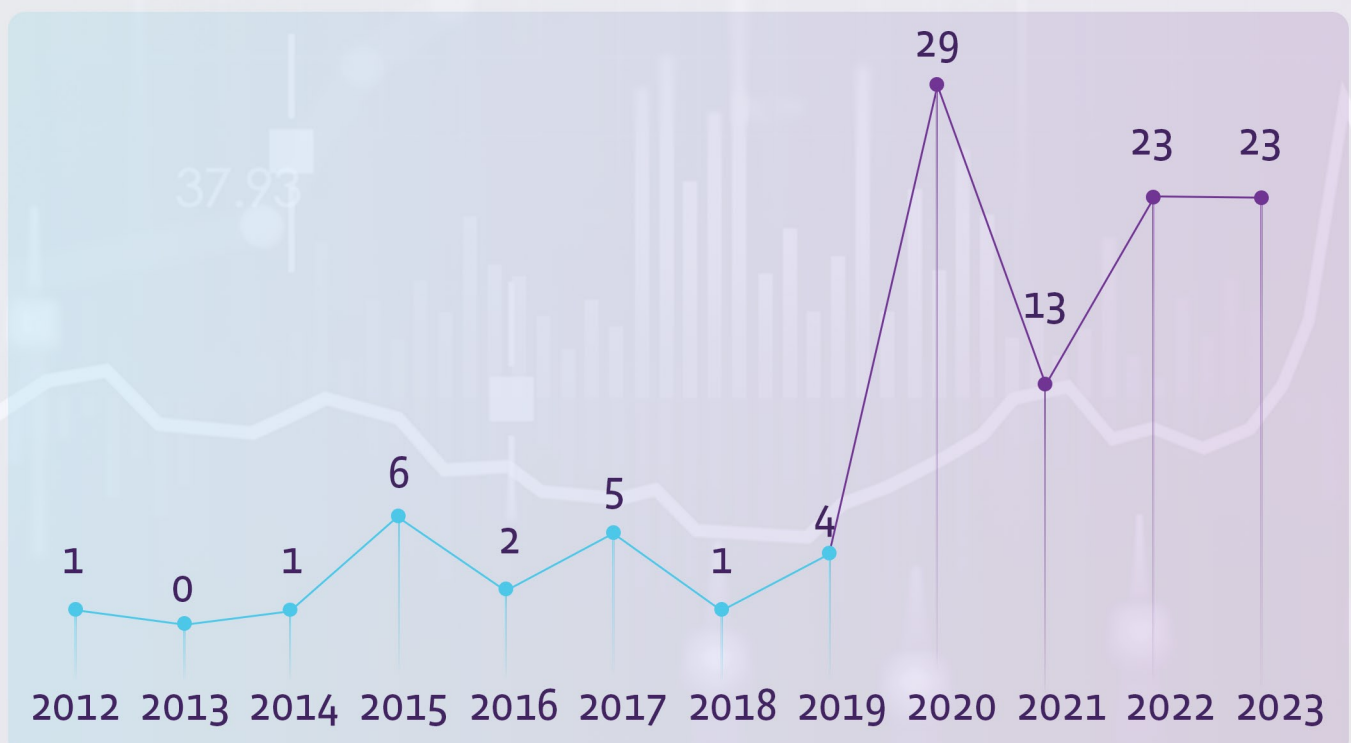
Egypt: During the peak of the COVID-19 pandemic, pharmacists actively supported patients with self-care interventions for both acute and long-term conditions.⁸

What did the intervention involve?

1. Essential counseling on the proper use of medicines and devices for sexual health.
2. Free consultations through social media platforms, ensuring accessible healthcare guidance during the pandemic.

PUBLICATIONS AND OUTPUTS RELATED TO DISEASE PREVENTION

FIP has produced 114 publications and outputs related to disease prevention from 2012 to 2023. There are fluctuations over time with notable peaks in 2020, 2022, and 2023. The sharp increase in 2020, followed by sustained output through 2022 and 2023, reflects FIP's proactive response to the COVID-19 pandemic and its aftermath.



REFERENCES

1. International Pharmaceutical Federation (FIP). Pharmacy-based point-of-care testing: A global intelligence report. The Hague: International Pharmaceutical Federation; 2023. Available from: <https://www.fip.org/file/5656>
2. International Pharmaceutical Federation (FIP). Leveraging pharmacy to deliver life-course vaccination: An FIP global intelligence report. The Hague: International Pharmaceutical Federation; 2024. Available from: <https://www.fip.org/file/5851>
3. International Pharmaceutical Federation [Internet]. Vaccination; 2024 2009 [cited 2024 Oct. 11] Available from: <https://prevention.fip.org/vaccination/#1>
4. International Pharmaceutical Federation (FIP). Focus on mental health: The contribution of the pharmacist. The Hague: International Pharmaceutical Federation; 2015. Available from: <https://www.fip.org/file/1363>
5. International Pharmaceutical Federation (FIP). Medicines information: Strategic development. The Hague: International Pharmaceutical Federation; 2017. Available from: <https://www.fip.org/file/93>
6. International Pharmaceutical Federation (FIP). Empowering self-care. A handbook for pharmacists. The Hague: International Pharmaceutical Federation; 2022. Available from: <https://www.fip.org/file/5111>
7. Pavlidou A, Smith F, Whittlesea C. Development and feasibility study of a community pharmacy intervention to support self-management of patients with type 2 diabetes, in Cyprus. *Int J Pharm Pract.* 2023;31(Suppl_2)-ii43. doi:10.1093/ijpp/riado74.052.
8. El Bizri L, Jarrar LG, Ali WKA, et al. The role of community pharmacists in increasing access and use of self-care interventions for sexual and reproductive health in the Eastern Mediterranean Region: examples from Egypt, Jordan, Lebanon and Somalia. *Health Res Policy Syst.* 2021;19(Suppl 1):49. doi:10.1186/s12961-021-00695-0