PHARMACISTS, COMMUNITY AND HOSPITAL PHARMACIES AND CLINICAL LABORATORIES REACTING TO COVID-19 – INFORMATION AND CONTINGENCY PLANS

Portuguese Pharmacists are ready to respond to the outbreak of COVID-19.

Considering the outbreak of the new Coronavirus, the ANF and the Portuguese Pharmaceutical Society have been producing several documents and instruments to update the pharmacies and pharmacists, delivering counselling on the way to act when facing a potential case of infection, and ultimately, promoting a contingency plan for pharmacy team’s, that are being continuously updated according with the evolution of the pandemic. Direct lines of communication were streamlined with pharmacists in order to help a suitable response to the outbreak.

1. Support in Patient Communication

One of the first actions taken by the ANF, dated January 27th, was to inform pharmacies of the way they could support patients, by providing information regarding prevention and update on the outbreak status. In a communication delivered by the ANF’s Medicine Information Centre (CEDIME), one can find a brief explanation of the disease and the way it spreads, and how the pharmacist should act. At the time these were the main guidelines:

- To tranquilize patients regarding the current situation.
- To inform patients who may travel to the affected areas:
  - Avoid the contact with persons that may present signs of respiratory infection.
  - Avoid the contact with animals.
  - Cook your eggs and meat properly.
  - Wash your hands frequently.
  - Cover your nose and mouth when sneezing or coughing, with a tissue or your arm.
  - Any travellers from China, who present any symptoms, should seek medical advice.

In this first document, the contacts and websites of the main health entities were made available.

In the follow-up of this first document, on the 30th of January, CEDIME shared an update on the status of the outbreak. In this updated document, pharmacists were advised that in the case of identifying possible cases of infection, they should contact the available emergency number.

The Portuguese Pharmaceutical Society, through its project “Healthy Generation” (which is a health promotion and education project, targeted to children) organized a digital campaign to debunk myths around COVID-19, as well as preventive actions for the general public. The campaign materials can be found here and here. They focus on raising awareness on correct hand hygiene and actions to be taken in everyday life.
Also, on the 30th of January, the Portuguese Pharmaceutical Society informed all community pharmacist with directives and guidance over the new coronavirus. In this communication the Portuguese Pharmaceutical Society shared the most important action lines that pharmacists should adopt when facing a potential infected patient.

Additional documents to inform patients were shared with pharmacies. These documents offered very simple and understandable instructions on the best way to implement prevention practices and the steps to be taken in case of suspected infection (iSaúde Leaflet). Part of this documents materialised in leaflets design by the Health General-Directorate (DGS), that should be posted in Pharmacies’ facilities, regarding preventive actions.

Another piece of information was shared with pharmacies, on the 31st of January, regarding the WHO announcement of a Global Public Health emergency. In this communication, CEDIME shared a flow chart concerning pharmacy intervention when coming across a potential case of infection. This flow chart pictured all the possible cases of patients with or without symptoms and with or without a travelling record to affected countries or contact with infected persons. Overall, pharmacists were encouraged to transmit a sense of tranquillity, reinforce preventive measures and offer to the patient the iSaúde leaflet.

Also, on this piece of information, there were made available several Q&A’s, based on WHO information, concerning the virus, so that pharmacists could share them with patients:

- Is there any medicine capable of treating this virus?
- Can pets spread the virus?
- Are antibiotics effective?
- Preventive measures
- Protect others
- Does the virus only infect elderly people?
- Wash your hands
- DGS’ recommendations

In the aftermath of this information, the ANF organized three information sessions to clarify any doubts that any pharmacy could have. These sessions happened on the 13th of February in Porto and Coimbra, and on the 20th of February in Lisbon.

As the outbreak evolved, the ANF made available a new document around preventive measures, that pharmacies could use to inform patients. This document included a new leaflet featured detailed information regarding hands hygiene and the best technique to do it, both with water and soap and antiseptic solutions. Finally, the ANF also made available a presentation for schools to distribute to children, regarding the preventive measures they should take.

In a more recent information, regarding the use of face masks, pharmacies were advised if any citizen requires them in the pharmacy, the use should be recommended for symptomatic patients only, with the exemption of care givers and people with added diseases.
One of the most recent decisions of the Medicines National Authority (Infarmed), in order to assure the appropriate pharmaceutical coverage, namely in locations where other pharmacies have been closed, made possible that open pharmacies can deliver medicines at home when this delivery is in the same municipality. Pharmacies that are available to perform this service, and are not yet registered for that effect, may do so with the competent authority. In the case of home delivery, community pharmacies can collaborate with hospitals in delivering necessary medicines.

Additionally, one of the latest ANF’s advices, regarding patient communication, focused on:

**Advise Against:**

- Successive visits to the pharmacy. Ask patients to order, in advance, the necessary medicines and to space out their visits to the pharmacy.
- Long stays in the pharmacy.

**Advise to:**

- Elderly patients or patients with co-morbidity to ask a family member to go to the pharmacy instead of them.

More recently, the ANF developed several videos to be played at pharmacies, with the goal of informing patients over the preventive and security measures they must engage in when performing several tasks in the daily basis or when they must go to a pharmacy:

- Are you going to leave your house?
- Do you need to go outside?
- Are you in quarantine an don’t live alone?
- Are you going to the pharmacy? Know the precautions.
- Precautions to be taken when you’re inside the pharmacy.
- Protect yourself from the coronavirus

2. Technical Support

The ANF also informed the pharmacy over the best way to produce an alcohol-based hands hygiene product in the pharmacy, due to restrictions on the ability to purchase such products on the market:

- **isopropyl alcohol** (1 L): 751,5ml of isopropyl alcohol, 41,7ml of hydrogen peroxide, 14,5ml of glycerin and 1000ml of purified water
- **ethyl alcohol** (100ml): 833,3ml of ethanol, 41,7ml of hydrogen peroxide, 14,5ml of glycerin and 1000ml of purified water

Concerning the preparation of antiseptic solutions for hands hygiene, the ANF made available an excel sheet to help calculate the price of the produced solutions.
Another important piece of information developed by CEDIME was the guide on the way to act on the pharmacy. This document featured all the necessary information to be applied by pharmacies in the training and capacitation of their teams, regarding technical-scientific information, epidemiological information, preventive measures, the way to proceed when facing a suspect case of infection and available materials as DGS’ and iSaúde flow-charts and informative leaflets. The way the pharmacy should act was divides into 3 different levels:

- **Level 1** – Reduced probability of infection: Pharmacy should inform the patient and tranquilize him.
- **Level 2** – Some risk of infection: Pharmacy should inform the patient, tranquilize them and reinforce preventive measures. Also, it should make the patient more vigilant of any symptoms that may arise in the next 14 days. Finally, it should deliver the iSaúde informative leaflet.
- **Level 3** – High probability of infection: Pharmacy should tranquilize the patient, invite the patient to the patient room and call the available emergency number, and isolate the patient until the emergency medical team can get to the location.

The ANF also informed pharmacies on the way to anticipate any adjustments necessary to the pharmacy team, and to always have protection materials available and continuously disinfecting strategic areas, as dispensing areas and payment terminals. This disinfection procedure should be done using effective substances against SARS-CoV2:

- Ether;
- Ethanol 75%;
- Disinfectants containing:
  - Chlorine;
  - Peracetic acid;
  - Chloroform.

Pharmacies should also follow the advices of the DGS, where one should clean all the surfaces with any common detergent, followed by a disinfection with a solution containing, alcohol at 70º or 1.000 ppm of chlorine.

The ANF, in partnership with the Portuguese Pharmaceutical Society, also decided to publish a series of checklists regarding several aspects to be aware in the pharmacy:

- **Weekly checklist for preventive measures**;
- **Isolation checklist**;
- **Post-suspected case checklist**.

From the technical point of view, The ANF’s CEDIME also shared a list of answers to FAQ’s regarding general prevention procedures, suspect cases, technical/scientific questions concerning masks and
disinfectants, as well as other questions. CEDIME has also opened a phone line to answer any doubts regarding the COVID-19.

A new Help Desk (Gabinete de Apoio ao Farmacêutico), created to support pharmacists, was created on March 10th. This Help Desk was created by the Portuguese Pharmaceutical Society in partnership with all sectorial Associations – National Association of Pharmacies, Portuguese Association of Hospital Pharmacists, Portuguese Association of Pharmacies, Portuguese Association of Full-Service Pharmaceutical Distributors, Portuguese Association of Clinical Analysts, Portuguese Speaking Countries Pharmacists’ Association, Patients Organisation and Portuguese Pharmaceutical Students Association.

The Speciality Board of Community Pharmacy, the Speciality Board of Hospital Pharmacy and the Speciality Board of Clinical Analysis and Human Genetics, key areas of pharmaceutical assistance, play an important role, in liaison with the areas of practice. These Speciality Boards were responsible for, in liaison with the proper sectorial associations, issue the contingency plans for each practice area.

On a communication to all Pharmacists, stakeholders and citizens, the President of the Pharmaceutical Society urged at a compromise that should be met on the responsible use of medicines, namely on the correct management of stocks, this avoiding possible shortages down the line. This communication also called for a coordination of efforts to continue to allow the regular access to medicines throughout the whole territory.

In the scope of this Help Desk, a new free Help Line (LAF – Linha de Apoio ao Farmacêutico) was created in order to support pharmacists. All support is given by pharmacists with specific training on this subject. Between 9h and 19h the support line answers professional technical and scientific questions of community pharmacists. After 19h, the attention goes to the support of hospital pharmacists and clinical analysts. This Help Line begun its work on March 16th and answered to 154 questions on its first day. A week later, over 1.200 calls had been taken, with a majority (77%) of questions being asked by Community Pharmacists, followed by Hospital Pharmacists and Pharmacists working in Clinical Analysis.

It was also created a Volunteers Database, composed of pharmacists and last years’ Pharmacy students, aiming at reinforcing and providing technical support to Pharmacists. The helping volunteers are already working closely with both the Hospital Pharmacy Teams and the Pharmacists Help Line.

The Portuguese Pharmaceutical Society in partnership with other associations from the sector, organized a web-conference with the title “COVID-19 | The truth of facts” that promoted the debate about COVID-19 and the consequences to the articulation between health professionals.

Later, together with the Medical Society and the Nursing Society, the Portuguese Pharmaceutical Society created a Donations Platform, where companies, institutions or citizens can donate materials, PPE, or goods to these Healthcare Professionals. Donations vary as e.g. available rooms for healthcare professionals to rest close to hospitals (or to be quarantined and don’t put their families at risk), meals (delivered by restaurants), Personal Protective Equipment (Masks, Gloves, gowns), and other goods.
Finally, after the state of emergency has been declared by the government, a new Decree was published by the government detailing the measures to be followed by individual citizens and companies. For pharmacies, the biggest impact resulted from the possibility of a civil requisition from the health authority’s or the government, imposing the need of pharmacies to keep working. The pharmacies stock is essential in the combat against the COVID-19 and it might be requested by the government or public entities. As an example, public authorities may request the access to pharmacies’ health equipment or even face masks. Also, the government decree states that the most vulnerable citizens, health professionals, security forces, military personnel and social security services have priority when accessing pharmacies services.

3. Pharmacies contingency plans

3.1. ANF’s Measures

On February the 26th, the ANF informed all the pharmacies that it had activated a contingency plan, to support pharmacies regarding the outbreak. This plan was developed in collaboration with the DGS and the medicines authority (Infarmed), in order to determine the collaboration needed between pharmacies and the NHS, as well as protection measures to pharmacies’ teams.

As part of the contingency plan, on March 3rd, the ANF reinforced information, through two videos of health entities (WHO and DGS), regarding ways of transmission and preventive measures.

More recently, on March 4th, ANF released a more specific and detailed contingency plan for the pharmacies. In this document, all pharmacies can find the way pharmacies should act when coming across suspected cases of infection (as detailed before), and internal procedures to be adopted in the case of anyone in the pharmacy may be affected by this virus.

Regarding the first set of actions, for increase prevention:

- Any member of the pharmacy’s team should report, as quickly as possible, the situation to the Technical Direction of the pharmacy.
- Any member of the pharmacy’s team should report, as quickly as possible, to the Technical Direction of the pharmacy if it had travelled to any affected area or if it had any contact with a confirmed case.

In case of any member of the pharmacy team presents any symptoms, and can be considered as a suspect case, the pharmacy should follow these instructions:

- Isolate the worker in a comfortable environment, in a pre-set area;
- When isolated, the worker should put on a surgical mask and have access to an alcoholic solution for hand washing;
- Call the emergency number available;
- Limit the number of people in contact with the suspect case, until otherwise information;
- Keep a registration of all people who might have been in contact with the worker in the pharmacy and that entered in the isolation room while the situation is not resolved;
- Wait for the confirmation (or exclusion) of the suspect case and follow the instructions of the health authority over the procedures to adopt;
- If the suspected case is confirmed, the isolation area should remain closed until the validation of decontamination by the local health authority, the proceedings regarding active vigilance of close contacts should be initiated and all the indications of the health authority should be followed.

The pharmacy should also keep a registration regarding the responsible for each area and tasks, as well as a backup person for these tasks, in the case of any worker needs to be in isolation for 14 days. All the tasks and areas should be classified as priorities (or not) for the activity of the pharmacy.

Recently, the ANF shared with pharmacies several new preventive and security measures to be adopted by pharmacies:

**At the counter:**
- Keep at the counter only the necessary and indispensable objects;
- Wipe and clean the counter between each service;
- Have an alcohol-based solution at hand, to disinfect your hands between each service;

**Social distancing:**
- Establish a safe distance when attending a patient;
- Incentive patients to keep a safe pace in waiting lines;
- If viable, try to establish a waiting area for your patients, with seats and chairs.

In addition, the ANF has recently updated its contingency plan, also shared by the Portuguese Pharmaceutical Society in the Resources Hub (Portal).

### 3.2. Portuguese Pharmaceutical Society Measures

On February 26th, the Portuguese Pharmaceutical Society created a portal where the Society shares all the information regarding COVID-19 with pharmacists. As so, on March 5th pharmacists received new guidelines to deal with the consequences of the COVID-19. A set of recommendations were shared with all pharmacists in daily newsletters, overlooking the global pandemic and specific actions to implement.
3.3. National Authority of Medicines and Health Products Measures

The National Authority of Medicines and Health Products (Infarmed) measures were focused between three different communications:

Technical Information to Pharmacies

In this document the Infarmed established very specific activity rules for pharmacies in this time of pandemic. Regarding the Technical Responsibility of the pharmacy, if it can't be assured by the Technical Director or by a Pharmacist, then it can be assured by a pharmacist that may not belong to the staff of the pharmacy. On the topic of the pharmacy working hours, in case a Pharmacy can’t assure the compliance with the approved schedule, by motives of staff unavailability regarding COVID-19, then preferably the new schedule must be announced previously (or done a posteriori via an online platform). The new schedule must be fixated inside and outside the pharmacy, in a way that’s visible. The new schedule needs to assure the daily function of the pharmacy and the local pharmaceutical coverage. Also, in order to assure the pharmaceutical coverage and services to communities where there is only one pharmacy in a 2km radios, the competent authority recommends that patients are served through a small window in the door, used for overnight service. In the case that such conditions can’t be applied, patients shouldn’t enter the pharmacy and pharmacists must use individual protective gear.

Pharmacies are allowed to dispense medicines through the window, every time that need is identified, as a way to maintain service.

In order to avoid the concentration of patients inside the pharmacy, they might be asked to remain outside the pharmacy after picking up their ticket and wait for their turn outside.

Regarding the supply of medicines to the pharmacies, it should be done, preferably, without the entrance of anyone outside the pharmacy staff. Additionally, medicines conditioning cases must be cleaned and disinfected, before their transfer to the pharmacy facilities.

In order to assure the appropriate pharmaceutical coverage, namely in locations where other pharmacies have been closed, open pharmacies can deliver medicines at home when this delivery takes place in the same municipality. In the case of home delivery, the responsible for the delivery must avoid any direct contact with the patient and his personal objects.

In the case of home delivery, community pharmacies can collaborate with hospitals in delivering necessary medicines.

If the pharmacy can’t maintain its activities, due to short staff, and has no other professionals available to replace unavailable staff, the pharmacy can communicate to the competent authority the need for temporary closure.
Medicines stock management

For now, medicines supply is not compromised, but it is vital to adopt preventive measures that assures medicine access to all citizens, discouraging the excessive acquisition of medicines that don’t correspond to real needs.

In the same way, the call for the concept of health citizenship must be reinforced, so that everyone, no matter the role or position, actively assumes the framing rules of living in society, allegiance, engagement, giving and receiving in their relationship with others.

With all of this in mind, the Infarmed, after hearing all the stakeholders involved in the medicine supply chain and with the goal of preventing any problems with the long-term availability of medicines, shared the following suggestions:

For non-prescription medicines, pharmacies and other locations, must adequate the quantity of medicines they dispense to patients, having into consideration the symptoms, posology and forecast of therapeutic time.

In the case of prescription only medicines, pharmacies shouldn’t dispense excessive quantities of the same active substance simultaneously, guiding the patient in the acquisition of medicines, taking into consideration, in one hand, the therapeutic indications of the medicine and non-interruption of treatment, and on the other, the assurance of satisfaction of patients’ needs.

Therefore, manufacturers, distributors and wholesalers should guarantee an appropriate management of their stocks and apply a rigorous criterion of distribution.

In this framework, the Infarmed asked for a steady commitment with the guarantee that medicines will continue to be available for all citizens that may need them, and thereby assuring an equitable distribution.

Actions to be taken by pharmacies

In a more recent publication, both the Infarmed and the DGS gave several advices for the pharmacy activity.

When it comes to dispensing medicines to chronic patients, as an exceptional measure regarding the outbreak of COVID-19, the pharmacy’s technical director or the pharmacists designated by him, must dispense the necessary medicines to the chronic patient even if the patient can’t present the prescription. This dispensing service is limited to a quantity that can’t exceed three months’ worth of medicines for each patient, and it must be registered in a way that facilitates its traceability. When it comes to the patient, it needs to make proof of his chronic condition and of an old medical prescription for that same medicine.
Regarding the theme of therapeutic substitution, in case the prescribed medicine, and its therapeutic alternatives, are not available for immediate dispensing or their acquisition in due time is not possible, then the prescribing physician must be reached and inform what is the correct substitution to apply.

The pharmacist may still have the option of selecting between listed therapeutic solutions present on a list (not yet available) formulated by the Infarmed in cooperation with the Portuguese Pharmaceutical Society and the Portuguese Medical Society. This substitution must be made in direct articulation with the assistant physician who will send, in the aftermath, the necessary electronic prescription.

Finally, on the theme of hospital medicines’ dispensing, as a general rule this activity will be maintained as it is or altered according to what is less disruptive for the patient. The quantity a hospital pharmacist might dispense can increase according with epidemiological, social and social criteria. In circumstances where the hospital pharmacist considers that the patient doesn’t have the conditions to pick up the medicines from the hospital, or when the pandemic conditions would not allow it, the hospital pharmacist must contact the Pharmacist Help Line and, in cooperation with the community pharmacist, facilitate dispensing of the necessary medicines through the community pharmacy. A possibility is to use the pharmaceutical distributors in the supply chain.

This referral system through the Help Line is a simple and efficient process, where delivering timings and quantities are agreed between the pharmaceutical sector stakeholders. All the traceability records are developed according with current data protection legislation.

In conclusion, all these documents are available to the pharmacies and pharmacists, either for patient and general population information or for the internal use of pharmacies teams. According with the evolution of the outbreak, the mentioned documents will be progressively updated.

4. Hospital Pharmacy

The Portuguese Pharmaceutical Society, through the Speciality Board of Hospital Pharmacy, and the Portuguese Association of Hospital Pharmacists have been carefully monitoring the developments of the COVID-19 outbreak and reacting upon this crisis. In order to help pharmacists in their daily mission, a set of actions took place. A dedicated website was developed (https://www.ordemfarmaceuticos.pt/pt/campanhas/coronavirus/), with the goal to maintain up-to-date information on this matter. The Pharmacists’ Help Desk that was created in a joint effort between all Sectoral and Professional Associations and the Pharmaceutical Society, in order to provide further reliable information on COVID-19 has providing further guidance on the Hospital Pharmacy. The helpline that was created, designed to answer pharmacists’ technical questions and support them in the fight of this outbreak frequently answers questions from Hospital Pharmacists.

A Contingency Plans for Hospital Pharmacy was developed and published, for the Hospital Pharmacy Services, issued by the Speciality Board of Hospital Pharmacy of the Portuguese Pharmaceutical Society.
Society. The Portuguese Association of Hospital Pharmacists also issued a document with Frequently Asked Questions, information on prevention and Recommendations.

A set of Recommendations, Guidelines and Standards issued by the Directorate-General for Health (health authority in Portugal) are of direct impact on Hospital Pharmacists and Hospital Pharmacies, namely:

- National Plan of Preparation and Response to COVID-19
- Non-invasive care delivery kit
- Information on Suspicious case approach
- Portuguese Society of Intensive Care Recommendations on handling COVID-19 patients in intensive medicine
- Ministerial Order 3219/2020 – Immediate Acquisition, by all hospitals, of medicines, medical devices, Personal Protective Equipment, to reinforce stocks in 20% of capacity (10th March)
- Standard 002/2020 – Infection with the new Coronavirus (2019-nCoV) (25th January, updated 10th February)
- Standard 02A/2020 – New Coronavirus disease: new definition of suspicious case (25th January, updated 9th March)
- Standard 03/2020 – New Coronavirus Infection Prevention and Control (30th January)
- Standard 006/2020 – Prevention, control and surveillance procedures in companies (26th February)
- Standard 007/2020 – New Coronavirus infection (SARS-CoV-2) – COVID-19 – Mass events (10th March)
- Standard 010/2020 – Measures on isolation and quarantine (16th March)
- Standard 011/2020 – Measures on prevention of transmission in health care (17th March)
- Information 006/2020 – Recommendations for public events and mass events (28th February)
- Informative Note – Absence of evidence COVID-19 Ibuprofen – INFARMED (15th March)

Currently a major point of concern is the dispensing of medicines who are dispensed at hospital level to chronic patients. Due to the fact that hospital visits should be avoided at any cost, as the risk of infection is high and because hospital capacity is now being redirected to support a proper response to COVID-19, the flow of outpatients who were otherwise directed to the hospital pharmacy to pick-up their chronic medication is being altered. Hospital Pharmacies are currently designing schemes to allow either dispensing through a community pharmacy of the patients’ choice, or through home delivery. The referral from the Hospital Pharmacy is done through the Pharmacist’s Help Line, which, in contact with the Community Pharmacy, organizes the correct dispensing of these medicines.
5. Clinical Analysis Laboratories

The Portuguese Pharmaceutical Society issued a set of specific recommendations for the Clinical Analysis Laboratories, on how to deal with COVID-19. The document was developed by the Speciality Board on Clinical Analysis and Human Genetics and was approved by the sectoral associations on this practice area. The document covers general recommendations (definitions on case and suspected case, rules of social behaviour, etc) but also specific recommendations for pharmacists working in the Clinical Analysis area, comprising procedures on sample handling, information to patients and alerts.

Further specific questions (gathered via e-mail of by the Pharmacists Help Line) are redirected to the Board of Specialists, which provides further technical responses. Insofar the private Clinical Laboratories are testing for coronavirus upon medical prescription.

Also, the general recommendations issued for pharmacists in all practice areas should be followed (available in the Portuguese Pharmaceutical Society website).