

# Counseling a patient presenting gastrointestinal symptoms in the circumstances of a limited range of available medication – social aspects

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## ABSTRACT

*The health and illness concepts have a major significance for both the patient and the healthcare specialists. Therefore, the role of the pharmacist is an extremely important one and, during the pandemic times, the relationship between the pharmacist and the patient has further expanded. The healthcare specialist should personalise the medical treatment plan for each individual patient, in order to obtain maximum efficiency with the lowest possible risk. Approximately 20% of all patients infected with SARS-CoV-2 present gastrointestinal symptoms, such as loss of appetite, nausea, vomiting or generalized abdominal pain. Any treatment recommendation made by the pharmacist should take into consideration general aspects regarding the intensity and the localization of the pain, as well as any chronic or acute treatment that the patient may undergo, all relevant medical history and the immediate prognosis of the disease.*

**Keywords:** patient, pharmacist, gastrointestinal symptoms, social aspects

## INTRODUCTION

The concepts of health and illness can only be defined by looking at the human being as a whole, as a biological, social and mental entity. These concepts have many meanings and significations, depending on which social class, human group or population we are referring to. From a medical perspective, the concept of health is regarded as a state of tissue integrity by a pathologist, as a lack of symptoms by a clinician and as a state of wellbeing by the actual patient [6]. This above-mentioned state of wellbeing

is the feeling the patient is getting as he or she is leaving the pharmacy or the doctor's office, or at least this should be happening in an ideal world. The role of the pharmacist in the medical treatment chain is a major one, especially during the pandemic times that we are passing, as now more than ever the pharmacist and the patient share a special connection [8]. The patient is expecting to be listened to, understood, to be guided into confessing his problems and finding answers to all of his questions and worries, thus leaving the pharmacy in a com-

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plete state of mental comfort [7]. In order to achieve this state of mental and psychological comfort, an important part depends on the trusting relationship between the patient and the pharmacist. Even if the medication was recommended correctly, if the patient doesn't know how to take the drugs, doesn't understand the disease or doesn't feel understood and encouraged, the full potential of the medical treatment won't probably be achieved.

## THE SOCIAL ROLE OF THE PHARMACIST

For each individual patient, the therapeutic plan should be personalised, in order to assure the best possible efficiency of the treatment, also having in mind that, most of the times, the healthcare provider should take into consideration the economic aspects as well.

In the present times, a great number of patients come directly to the pharmacy with gastrointestinal symptoms, and the pharmacist should always evaluate the patient's present state and choose between the suitable drugs which can be administered in order to relieve the pain. Current estimations show that approximately 20% of the patients infected with SARS-CoV-2 present only gastrointestinal symptoms, a few examples being loss of appetite, nausea, vomiting or generalized abdominal pain [1].

Any treatment recommendation made by the pharmacist should take into consideration general aspects regarding the intensity and the localization of the pain, as well as any chronic or acute treatment that the patient may undergo, all relevant medical history and the immediate prognosis of the disease. In the same time, the pharmacist should pay attention to any anamnestic information which may indicate the presence of a hypersensitivity state or any predisposition to drug-associated adverse reactions. Also, the pharmacist should be aware of any possible drug interactions between the recommended treatment and the regular medication that the patient uses for any associated chronic conditions (hypertension, diabetes, cardiovascular diseases) and should state clearly the timing for drug administration, as well as any side effects which may occur and the criterion for ceasing the treatment [2]. These conditions for stopping the treatment could be, on one hand, related to obtaining the desired clinical effect (complete healing or any relief of the symptoms), or, on the other hand, related to the occurrence of important side effects [4].

We are now passing a difficult and unusual period of time, full of challenges and unfamiliar events for both the patients and the pharmacists. Although accessing various information may be very easy for some patients, there are quite a few of them for whom this is close to impossible. We are talking about the vast majority of the elderly patients, for whom the implementation of the medical check-up via phone call, followed by the electronic prescription sent via e-mail, and the limited access to laboratory exams or hospital admission only had negative effects. Moreover, the above presented issues resulted in the patient going directly to the pharmacy, in order to ask the pharmacist for advice regarding the medication, interpreting various laboratory tests, printing the medical prescription or any other aspects related to the health state. All these new aspects of the pharmacy profession caused a substantial rise in the social role of the pharmacist, a fact which is unfortunately unacknowledged by the respective national authorities.

## THE ROLE OF THE PHARMACIST IN COUNSELING AND COMMUNICATION

The role of the pharmacist is extremely important, this being the first or the last encounter of the patient before establishing a correct diagnosis. In order to assure an accurate counseling, the pharmacist asks open questions regarding the specific symptoms, listens and empathizes with the patient, all in order to discover the emotional context, the history of the present illness, any relevant past medical history, in the same time looking for any nonverbal clues. In the very few available minutes, the pharmacist should make a plan in order to treat the patient's dyspeptic symptoms [8]. Considering the fact that the number of drugs which can be sold without a medical prescription is continuously rising, the pharmacist should be aware of all the available information regarding the treatment recommendation. In case the patient requires a long-term treatment, this medication should be prescribed by a doctor. Beside the treatment recommended for dyspepsia, which is a condition characterized by abdominal pain, bloating, early satiety, belching, flatulence, and nausea, the pharmacist can also recommend supportive medication, like probiotics, prebiotics, digestive enzymes supplements, laxatives, antiemetic, prokinetic, antidiarrheal, choleric and cholecystokinetic, or antispastic drugs, all of these in order to relieve the discomfort caused by the gastrointestinal symptoms [2].

For the patients suffering from inflammatory bowel diseases (Chron's disease or ulcerative colitis), there is a limited range of available medication. However, the pharmacist can intervene with associated recommendations, which can enhance the success rate of the treatment prescribed by the doctor. For example, in the case of Chron's disease, the common recommendations include a low-fiber diet, frequent meals of a reduced volume, and avoiding consuming fresh fruits and vegetables, seeds, concentrated sugars, coffee, and alcohol beverages. Moreover, the pharmacist can advise the patient to pinpoint the specific types of food which cause the aggravation of the symptoms and, thus, to avoid eating those [1]. Moreover, the pharmacist can recommend various nutritional supplements (folates, vitamins: B12, A, D, K and minerals: magnesium, zinc, calcium), knowing the fact that inflammatory bowel diseases can lead to major nutritional deficiencies [2].

The pharmacist should recognize those situations in which the heartburn, dyspepsia or any other symptom of the gastroesophageal reflux disease go beyond a certain severity level, which require a medical consult. One of these situations is represented by heartburn lasting for more than three months, or symptoms remaining for more than two weeks, after following the adequate treatment with proton-pump inhibitor drugs or H2 antagonists for two weeks. Moreover, if the symptoms occur for the first time in case of patients over 50 years, then they should be referred to a family doctor. In case of counseling a patient with dyspepsia, heartburn or any other gastroesophageal symptoms, the pharmacist should also include some advice regarding the timing of drug administration, together with the recommendation to take the medication before or after the meal, depending on the case [5]. Having dinner two or three hours before bedtime can lead to alleviating the symptoms. In the case of a gastroesophageal reflux, the patient should avoid any activities which require bending over and should embrace a sleeping position with the head positioned 15 cm higher than the legs, which may relieve the nocturnal symptoms. Various changes in the lifestyle, although may seem insignificant, represent a very important matter in the case of gastroesophageal diseases [1].

Frequently, patients may be subjective when describing their symptoms, which makes identifying the specific symptom a very difficult task for the pharmacist, thus making it more complicated to recommend the adequate treatment.

The therapeutic guidelines recommend administering proton-pump inhibitor drugs, as first-choice treatment in gastroesophageal reflux disease, erosive or non-erosive esophagitis, dyspepsia and peptic ulcer. Although these are considered safe drugs, sometimes a prescription exaggeration occurs, the pharmacist having to signal the high risk of adverse effects to the patient's doctor. This kind of situation happens when the treatment is extended for a longer period of time, the recommended dose is too high or the patient presents other associated conditions [2].

Moreover, in order to follow an adequate short term treatment plan, which includes proton-pump inhibitor drugs, H2 antagonists and over-the-counter drugs and aims to relieve the gastroesophageal symptoms, the pharmacist should also consider the following aspects [6]:

- H2 antagonists are efficient in single-dose when aiming to control the gastric acidity and to prevent and attenuate the heartburn episodes, but their efficiency decreases with prolonged use, this being an aspect which should be explained to the patient;
- simethicone can be used in the short-term treatment of dyspepsia, in association with aluminium hydroxide and magnesium oxide, or with sodium alginate, calcium bicarbonate and calcium carbonate; however, there must be taken into consideration that calcium carbonate is contraindicated in hypercalcemia and renal failure, aluminium hydroxide leads to constipation and magnesium oxide has laxative effects;
- some drugs, like iron-based products, tetracycline antibiotics, corticosteroids, theophylline or non-steroidal anti-inflammatory drugs, can worsen some preexisting gastrointestinal conditions; if using the above-mentioned drugs is associated with other chronic conditions in an elderly patient, the aggravation can be very serious.

Beside recommending a therapeutic plan which aims to relieve the gastrointestinal symptoms, the pharmacist should also advise the patient to constantly monitor his health state, and to contact the doctor at the first signs of unusual findings, like bleeding, laryngitis, hoarse voice, loss of weight, nausea, vomiting or chest pain suggesting a cardiac origin (pain that radiates to the left shoulder and arm).

When recommending a treatment plan, the pharmacist should take into consideration both the presented

symptoms and the financial ability of the patient to initiate and sustain the treatment. Sometimes, because of financial reasons, the patient can't afford the whole treatment based on using original drugs, which makes impossible the healing or avoiding the aggravation of the condition. This is why it is absolutely mandatory to have in the treatment options not only the original drugs, but also the generic drugs, which are more accessible from the financial point of view. Last but not least, another important aspect for a successful counseling is establishing educative strategies, adapted to the schooling level of the patient, which should assure the understanding of the provided medical information and the following success of the treatment.

## THE ROLE OF THE PHARMACIST DURING PANDEMIC TIMES

Even from the discovery of the first case of SARS-CoV-2 infection, the pharmacists from Romania, together with their colleagues from all around the world, have stood in the first line in fighting this pandemic, making available for the patients their knowledge and availability. Although they have stood and continue to stay in the first line in the fight against the new coronavirus, when referring to the people in the first line, pharmacists are often left in the background [3]. During the pandemic times, community pharmacists are the most accessible healthcare specialists available for the patients, providing medical and pharmaceutical services, even though facing a major risk of infection, both for them and for their families. Pharmacists have delivered various services, have sold the necessary treatments, have educated the patients regarding the personal hygiene methods which aim to limit the SARS-CoV-2 infection, have evaluated those suffering from chronic conditions, considering the limited access to specialized healthcare providers, and have offered counseling regarding the recommended treatment plans or the national and European available treatment protocols, thus contributing to the screening program of the population [9]. Moreover, both the community and the hospital pharmacists have joined the other

healthcare specialists in the continuous effort to provide the appropriate quantity of drugs, considering the major difficulties encountered regarding various therapies [11].

## DIFFICULTIES IN DRUG SUPPLY DURING PANDEMIC TIMES

The coronavirus pandemic has revealed some significant difficulties regarding the supply process for some essential drugs and the impact that such a pandemic can have on the drug supply chain, both in Romania and around the world. The shortage noticed in the case of several drugs is mainly caused by the increase in the amount of drugs necessary for treating the hospitalized patients. Other aspects are represented by the personal stockpiles constituted by the citizens, introducing various protective measures inside and outside of the European Union, establishing various prohibitions regarding drug exportation and national stockpiles constitution, as well as the interdiction of transportation between countries. This is why the European Commission, together with the European Medicines Agency, are constantly monitoring, evaluating and identifying the specific drugs that are missing from the pharmaceutical market, taking the necessary corrective measures [11].

## CONCLUSIONS

In order to fully address the patients' necessities, both doctors and pharmacists should follow a continuous informing and improvement process regarding the available pharmaceutical products, as well as their efficient and correct use. In order to ensure some high-quality pharmaceutical services, the pharmacist should firstly identify and evaluate the real needs of the patient, but should also offer counseling and information regarding the condition he was diagnosed with, the treatment plan and any required lifestyle changes. All the above-mentioned aspects aim to increase both the patient's treatment compliance and the chances for an improved health state.

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