

# Caring for the hypertensive patients during COVID-19 pandemic. The outpatient clinic manager perspective – reconfiguring the service during the pandemic

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#### Abstract

The administrative management of a clinic during the pandemic was not the easiest job to do, taking into account that we had to consider the patient's needs, the doctors' concerns and always balancing decisions from a financial point of view, making everything sustainable for the post-pandemic period. Telemedicine was a solution for our patients, but it was implemented too fast, without much certainty for our doctors (particularly from a legal point of view – are doctors exempted from the legal responsibility for tele-prescriptions taken in a wrong manner by the patient?) and considering the fact no person can rely on telemedicine legislation after the COVID-19 pandemic (currently the legislation is only available until June or September for some medical services). Telemonitoring could be the solution for a pandemic in case of hypertensive patients, but there are too many devices that do not comply yet with the needs of medical staff and which are not able to provide results, as accurate as a traditional BP Holter monitoring. We are confident that by the end of 2020, patients with hypertension will be monitored with better, faster, cheaper and easier to use devices. Everyone learned their lessons during this pandemic, from our medical staff (who is more open to proactively reach their patients) to our patients (more attentive to their healthcare status) and the administrative departments of private clinics (to reach their full potential with as efficient as possible resources use).

Keywords: Private clinic, Hypertension Clinic During Covid, Covid-19 and Hypertension, Emerald Medical Center, Centrul Medical Emerald

## Before the pandemic

At least 65% of our patients have at least one cardiovascular disease with more than 45% being hy-

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pertensive. Running an ambulatory medical centre focusing on cardiovascular and neurological diseases represents a big challenge in Romania, since the first level of primary care (family doctors) cannot be considered a reliable filter for these patients, in most cases, in our country. In our medical centre around 10 cardiologists, together with 3 neurologists, 3 radiologists, an internal medicine doctor and a diabetologist/endocrinologist work together in multidisciplinary teams in all our cases in order

to offer premium medical service with a patient centred approach and, as much as possible, an onestop-shop for each patient.

In terms of treating hypertension, having some designated hyperspecialized cardiologists with experience in resistant hypertension, our standard approach regarding these hypertensive patients included as main weapons BP Holter monitors, together with consultations by our specialists. Although we have started since 2019 to test some new devices for long term monitoring, some of them with FDA/CE mark, while others have been in their trial periods (watches, bracelets, rings, patches), we were still in the situation when a patient diagnosed with hypertension in Romania was still counting on multiple follow-ups with the cardiologists, if and because the treatment for hypertension needed adjustments.

## The panic

By the end of February, the wave of new information was overwhelming both from media, our partner-doctors from other countries and our patients. From the perspective of a private clinic management, everything happened very fast and quite differently if compared with Romanian public hospitals. At that moment, we organized very quickly a board meeting with all our staff, from our medical manager to all our nurses and receptionists and configured a multiple steps plan, designing different measures for different scenarios. It was the moment when, after listening to the news and finding out that most of the hospitals and other clinics are closing their doors for the non-covid-19 patients, we have decided that we, as a team, should remain opened for our patients, no matter what.

The challenges appeared one by one, as the pandemic was approaching Romania, from organizing our teams to the most difficult one: obtaining protection materials (sanitizer, disinfectants, gloves, masks). While the government, NGOs and volunteers raised big amounts of money and managed to bring a lot of these materials in Romania, all of the efforts were concentrated on public hospitals. To make things even worse for the private medical clinics, there were some law restrictions in order to prioritize the materials for the COVID-19 hospitals, blocking some imports from other EU countries and so on.

The pressure for our administrative team in obtaining these materials was huge and we managed to obtain new orders weekly, having an increase of more than 400% in the usage of these materials. Following our compliance and quality management department advice, in March we started disseminating a questionnaire to the people coming to our

clinic from different countries and we used a general checklist of symptoms, followed by telephone confirmations including COVID-19 related questions.

# Coping with the crisis

By mid-March, the landscape was a little bit more familiar for our team and we have continued to treat patients as per the usual volumes, but with an extra eye on safety measures. After some public press conferences from our Ministry of Health, advising people to stay at home and go out only for emergencies, the real panic started. A huge wave of cancelations, followed by an increase of calls from patients returning from red-zone countries asking for medical help made us rethink if the right thing to do for our patients and staff is to continue to come day by day to the medical centre. The question was if really being there for our patients was the best solution, since the cardio/neuro spectrum of diseases was, suddenly, considered not a priority.

A lot of things happened very fast, from a law allowing doctors to practice telemedicine for a certain period of time (a field which was not regulated under Romanian law before) to the wave of fake news and uncertainty on possible risks associated to some drugs taken by cardiovascular patients, obliged us to rapidly change the ways of dealing with our patients. Of course, during all these days, the first plan in place included the following: the online questionnaire, confirmation on the phone with questions about traveling abroad and possible symptoms, triage at the clinic entrance, measuring temperature, giving masks and gloves to each patient and distancing appointments with a space for cleaning the whole appointment room after each patient.

As we soon found out after the first weeks of the pandemic, this could not be a sustainable model, both financially and mentally for our business and staff. The expenses sky rocked while the number of patients coming to the clinic was around 15% of our regular numbers. Certainly, there was a need for our doctors to be there for our patients, but clearly not in the traditional way, as before the pandemic [1].

# Telemedicine

Our hypertensive patients currently under monitoring in our medical centre postponed their usual follow-ups, following international guidelines and advice from their families. As the fear of unknown

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increased, there was a need of a simpler solution in order to monitor our patients without taking them out of their homes.

At that moment, we, as a team, decided to reach all of our existing patients and, at the same time, open a special line for patients that need medical advice from our medical team. Using social media and contact information from our database, we aimed to call each patient at least once per month and not by our supporting staff, but by our doctors, who used their available time deriving from annulled consultations and cancelled scientific congresses.

The impact of these +500 hours of calls was remarkable. Not only the advice about their BP control and general advice about the pandemic were important for our patients, but most of them needed to hear from a doctor what should they do given this big wave of fake news and the fact that many of them were separated from their families and coped with undiagnosed anxiety, stress and, very often, loneliness.

During April, there was new information released in the media about some specific treatments for hypertension (ACEI/ARB) which increased the insecurity, some patients decided to stop their treatments until being able to reach their doctor [2, 3]. Some of our patients needed long term monitoring and we were able to do that by delivering BP ambulatory Holter devices by e-mail, that were shipped back after 24 hours to our doctors in order to check if some changes are needed in their treatments.

These pro-active calls during the pandemic for sure, if not saved a lot of lives, managed at least to prolong the lives of some of our patients, that were lonely, in distress and most importantly, uninformed. Being able to reach by phone your doctor is not a common thing in Romania and this Covid-19 situation changed that in an organized and healthy way. It was easier for doctors to consult their colleagues on some cases, having the patient medical records online and by the end of April, it was also possible to send prescriptions online (again, for the first time the Romanian legislation permitted that). This allowed eliminating visits to the family doctor-cardiologist and going directly to the drugstore with the mobile phone and the online prescription.

#### Limits

Even if the percentage of patients that were reached by phone by our doctors was close to 95%, there was still an important 5% that was not reachable during the pandemic by phone (wrong number in the databases, low signal areas etc). Moreover, only less than 30% of our patients were technically able to access videocalls or our mobile applications, most of them not being able to meet their younger members of the family due to social distancing. There were clear signs of better and faster response from our medical team when the patient was able to be seen during a video consultation compared to simple phone calls, managing even to take some orthostatic hypertension measurements during videocalls, under the guidelines of our medical team.

Analysing data, since most of our patients are over 60 years old and women, the profile was not quite compatible with the COVID-19 standard profile of deaths, in Romania 65% of deaths being men. Still, in Romania, 45.6% of patients that were reported dead by Covid-19 had previous cardiovascular diagnostics [4].

Taking into consideration that, in Romania, 1/8 infected persons was part of the medical staff, we can conclude that the extra measures taken by our clinic were both relevant and fast implemented, resulting in a non-COVID-19 clinic until current time, with no patient or doctor infected. Our medical staff was weekly tested and we managed to keep the environment safe for everybody. Our biggest fear was that our medical centre will become, from a medical centre supposed to bring health to people, a place where people could get infected without knowing.

### **Conclusions**

The administrative management of a clinic during the pandemic was not the easiest job to do, taking into account that we had to consider the patient's needs, the doctors' concerns and always balancing decisions from a financial point of view, making everything sustainable for the post-pandemic period.

Telemedicine was a solution for our patients, but it was implemented too fast, without much certainty for our doctors (particularly from a legal point of view – are doctors exempted from the legal responsibility for tele-prescriptions taken in a wrong manner by the patient?) and considering the fact no person can rely on telemedicine legislation after the COVID-19 pandemic (currently the legislation is only available until June or September for some medical services).

Telemonitoring could be the solution for a pandemic in case of hypertensive patients, but there are too many devices that do not comply yet with the needs of medical staff and which are not able to provide results, as accurate as a traditional BP Holter monitoring. We are confident that by the end of 2020, patients with hypertension will be monitored with better, faster, cheaper and easier to use devices.

Everyone learned their lessons during this pandemic, from our medical staff (who is more open

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to proactively reach their patients) to our patients (more attentive to their healthcare status) and the administrative departments of private clinics (to reach their full potential with as efficient as possible resources use).

# **Conflict of Interest**

The author confirms that there are no conflicts of interest.

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