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Medical and Pharmaceutical Assistance in a Basic Health Unit in the Municipality of Mountain/ES during the Covid-19 Pandemic

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***Keywords*— Pharmaceutical care, Pandemic, COVID-19, primary care.**

***Abstract*—** *This study aimed to understand the role of pharmaceutical assistance in a basic health unit in Montanha/ES within the scope of the COVID-19 pandemic. The research was developed through an exploratory research, qualitative and descriptive in nature, having as a sample professionals working in Pharmaceutical Assistance (FA) in a Basic Health Unit in Mountain/ES. The results indicated that participants felt that providing care during the pandemic was challenging but rewarding. It was necessary to develop new skills related to PA, primary care and health care. Other skills mentioned by participants include remote communication, time management, resilience and the ability to work under pressure. It is concluded that pharmacists have adapted their existing functions and implemented innovations to existing work practices in order to face the challenges presented by COVID-19. Thus, it is clear that they faced the pandemic to the best of their abilities to ensure that Pharmaceutical Assistance services were uninterrupted as much as possible in times of critical need. misinformation during the COVID-19 pandemic, including the development of reliable and reliable pandemic-specific information resources for the general public.*

I. INTRODUCTION

COVID-19 is caused by the Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-2) and has been recognized as a global pandemic. Since the first case was reported in Wuhan province, China, in December 2019, the virus has spread rapidly around the world, with a devastating impact on virtually every aspect of daily life (FREITAS; NAPIMOGA; DONALISIO, 2020).

As written by Palácio and Takenami (2020) in September 2020, COVID-19 had already infected more than 28 million people worldwide and resulted in more than 900,000 deaths. High infection and death rates have been reported globally in many European countries, having experienced some of the highest mortality rates in the world, including Italy, France and the UK.

In Brazil, health services across the country were severely affected by COVID-19, where access to hospitals and primary care was restricted (eg non-urgent elective surgeries, routine health checks and medication analyses) to ensure that adequate resources were available to deal with patients with COVID-19.

For many individuals with questions or health concerns related to COVID-19, pharmacists can be the first point of contact for reliable information and advice through pharmaceutical assistance (FA). In this sense, this study *starts* from the following question: *what is the role*

played by pharmaceutical assistance during the COVID-19 pandemic?

The hypothesis is that as health professionals, pharmacists can play a fundamental role during the pandemic, acting directly with the community, continuing to care for patients with chronic diseases and providing pharmaceutical assistance to patients in COVID-19. In addition, they can provide reliable information to prevent, detect, treat and control coronavirus infections. As a result, several challenges have emerged and innovative strategies are being adopted by pharmacists to overcome them.

To answer the question, this study aimed to understand the role of pharmaceutical assistance in a basic health unit in Montanha/ES within the scope of the COVID-19 pandemic. Specifically, the research also aimed at (i) knowing the attributions of pharmaceutical assistance, as well as the challenges and possibilities of its performance in confronting COVID-19; (ii) explore how PA services have adapted, responded to the pandemic and; (iii) reflect on the process of transformation of the pharmaceutical profession in a scenario of changes caused by the pandemic.

The research is justified in the fact that pharmacy is a very dynamic profession and the role of the pharmacist is improving with the expansion of the scope of services and the introduction of new subspecialties over time. Moving from drug dispensers to results-oriented, patient-focused care providers; pharmacists will have more responsibility and commitment to improve their knowledge and practices.

It is also relevant as it seeks to ensure evidence-based responses to future public health crises. This will help identify and share good practices, determine barriers and enablers to service delivery, as well as any lessons that can be incorporated into pharmacist training. In this context, it is expected that through the development of this study, the academic community, as well as society, will be able to understand that PA can contribute to the demands of health care during the pandemic.

II. THEORETICAL FRAMEWORK

2.1 THE WORLDWIDE PANDEMIC OF COVID-19

The new coronavirus was termed as severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2, 2019-nCoV) because of its high homology (~80%) with SARS-CoV. zoonotic associated with the seafood market in Wuhan, China. It was later recognized that person-to-person transmission played an important role in the subsequent outbreak (SILVA *et al*, 2021).

In December 2019, the disease caused by this virus was called COVID-19 and a pandemic was declared by the World Health Organization (WHO). Since then, it has impacted a large number of people around the world, being reported in approximately 200 countries and territories (PALÁCIO E TAKENAMI, 2020).

As written by Fernandes (2020), the SARS-CoV-2 virus mainly affects the respiratory system, although other organ systems are also involved. Symptoms related to lower respiratory tract infection, including fever, headache, dry cough, and dyspnoea, were reported in the initial case series from Wuhan, China.

Furthermore, according to Silva *et al*, (2020) some patients can progress to serious diseases, such as pneumonia, acute respiratory distress syndrome, multiple organ dysfunction and even death. It is widely recognized that the respiratory symptoms of COVID-19 are extremely heterogeneous. A growing number of patients with serious illnesses continued to succumb around the world. Epidemiological studies have shown that mortality is higher in the elderly population and the incidence is much lower in children.

There are no proven effective treatments against COVID-19 and widespread efforts are being devoted to developing a safe vaccine. Thus, the population must follow recommendations to reduce the transmission of SARS-CoV-2, including social distancing, use of masks and strict hand hygiene (BEZEERA *et al*, 2020).

While millions of people are in their homes to reduce the risk of transmitting the infection, health professionals are on the front line against COVID-19. These professionals are committed to ensuring that the population has access to health services and to minimizing the adverse impacts of the pandemic (MEDEIROS, 2020).

Following public health measures to suppress the spread of the virus (eg social distancing, use of face masks), restrictions have now been eased to some extent in many countries (FERNANDES, 2020). However, according to Daumas *et al*, (2020) an additional challenge for health services is to deal with the lack of information, as well as guidance without scientific evidence.

For Ferreira and Andricopulo (2021, p. 13)

> The search for simple solutions without scientific proof seems to have no limits. Without confirmed efficacy, a "covid-19 kit" containing azithromycin, ivermectin and chloroquine or hydroxychloroquine has been

> distributed in some states for the prevention or treatment of people with early symptoms of the disease.

Current medical management is largely favorable, with no targeted therapy available. Several drugs, including lopinavir-ritonavir, remdesivir, hydroxychloroquine and azithromycin, have been tested in clinical trials, but none of them has proven to be definitive therapy yet (MELO *et al*, 2021).

2.2 THE RELATIONSHIP OF PRIMARY CARE AND PHARMACEUTICAL ASSISTANCE

With regard to primary care, the Brazilian model uses 'mannealing', a process of assigning patients to a primary health care team, as a central strategy for providing quality care (GIOVANELLA, 2018).

In the study by Pereira and Barcellos (2004), it is described that every individual within the Family Health Center (PSF) is assigned to a Family Health Strategy (ESF) team, which is responsible for providing services to up to 1,000 families. located in a specific geographic area. This geographic method helped to avoid gaps in population coverage and overlap between ESFs. Continuity of care is also achieved, as each ESF serves each patient over time.

Family health teams include a physician, nurse, and four to six community health workers to address needs that range from community to facility and from prevention and surveillance to medical treatment. In coordination with the ESF's basic clinical team, separate primary health care support teams provide additional care to populations (ESCOREL *et al* , 2007). These support teams may include nutritionists, social workers, psychologists, obstetricians and gynecologists and pharmacists.

The Family Health Program, with the ESFs at its heart, is widely considered a successful and cost-effective reform. This multidisciplinary ESF model improved accessibility, coverage and continuity of care for Brazilians. A bibliographic study by Arantes *et al* , (2016) pointed out that the wide range of services offered by the team promotes prevention and well-being and resulted in a dramatic change in the way Brazilians interact with the primary care system. health.

Community health agents (CHA) play critical roles as key members of the ESFs. According to Faria and Paiva (2020), agents focus on primary and secondary prevention, including the promotion of a healthy lifestyle and health education, and screening programs for early detection of hypertension, diabetes and other prevalent conditions. CHWs also serve as a first point of access to services, connecting patients to needed preventive and curative treatment.

Despite its challenges in achieving scale in urban areas, the model has been effective in addressing health disparities, with the most dramatic improvements seen in the poorest municipalities (VIANA & DALPOZ, 2005). Overall, the PSF has led to substantial improvements in service coverage and health outcomes over the past 20 years, including Pharmaceutical Care. According to Araújo *et al*, (2008, p. 613):

> pharmaceutical care is a large area composed of at least two distinct but complementary sub-areas, that is, one related to drug management technology (guarantee of access) and the other related to drug use technology (correct use of the drug), and pharmaceutical care can be considered as a specialty of the technology of drug use and private to the pharmacist.

Therefore, in the scope of primary care, pharmaceutical care represents a patient-centered approach, in which pharmacists, in collaboration with other health professionals, are responsible for the drug therapy of patients. Patient care produces better results when a comprehensive approach is used, which encompasses all relevant health professionals (GELBCKE; MATTOS; SALLUM, 2012).

It is noteworthy that Law No. 8080/90 attaches special importance to pharmacotherapeutic procedures and activities that involve or are directly linked to pharmaceutical services (ANDRADE; PONTES; MARTINS JUNIOR, 2000).

This involves a drug supply cycle at each constituent stage: selection, scheduling, acquisition, storage, distribution and a dispensing based on the concepts of drug safety and therapeutic efficacy; usage monitoring and evaluation; provision and dissemination of drug information; and the continuing education of health professionals, patients and the community to ensure the rational use of medications (BRASIL, 2002).

In Brazil, health professionals maintain a fragmented view of services related to medications, because, although the purchase, storage and dispensing are controlled, the pharmacist is excluded from other important stages of the PA cycle, something that does not characterize a job. teamwork (MARIN *et al*, 2003).

It is important to consider that, according to Franco (2007), a team is a group of individuals who work together to produce products or provide services for which they are mutually responsible. The team's shared goals are manifested by the mutual and cordial interaction of team members, and the roles of each professional on the team are mutually interdependent and accountable to enable the achievement of established goals.

Thus, as a team, the pharmacist working with the AF ensures that each of the patient's medications is evaluated to determine if it is appropriate, effective, safe and if the patient is able to take the medications as expected. The service can be provided in different service environments; pharmacies, primary, secondary and tertiary care (ARAÚJO *et al*, 2008).

In a historical perspective,

> in the first 10 years of the sus, af was characterized by the transition between the extinction of the ceme and the validity of the pnm. in this initial trajectory, the basic pharmacy program was reprinted, marked by the sending of medicine kits to small municipalities [...] between 1998 and 2007, principles coherent with the sus were identified, with a focus on the organization of af based on decentralization and in the search for resources to access medicines (BERMUDEZ *et al*, 2018, p. 1939).

It is noted that the implementation of pharmaceutical care at different levels of health care has been taking place for several decades. Many works were completed by pharmacists at this time, even before the first descriptions. However, according to Vieira and Zucchi (2013), even if reliable data have pointed out that PA can lead to progress in health and therapy outcomes with good cost-benefit ratio, and positive impact on health-related quality of life outcomes , implementation was not as fast as might be expected.

Lack of time and attitudes/opinions of other professionals, clinical education, communication skills and remuneration were reported as barriers to implementation. In this regard, little communication between pharmacists and physicians on clinical issues is reported, although pharmacists are taking on a greater role as primary care providers to patients (COSTA *et al*, 2017).

One of the challenges of PA is related to the fact that this shift in focus also implies that the pharmacy curriculum must be adapted in order to provide pharmacists with new knowledge and skills (ALMEIDA; MENDES; DALPIZZOL, 2014). Furthermore,

> [...] changes in pharmaceutical education, proposed by the 2002 DCNs, have already been discussed and recommended internationally since 1997, both by the World Health Organization (WHO) and by the International Federation of Pharmacists (FIP). However, Brazil has peculiarities that hinder the implementation of an adequate curriculum for the training of pharmacists, including the complexity of the organization of the SUS and the breadth of the professional scope (SOUSA; BASTO; BOGO, 2013, p. 132).

However, since the introduction of PA into the pharmaceutical education curriculum, there has been debate about its definition. Probably, differences in health systems between different countries are responsible for this, as well as problems related to resources, education requirements and skills development (COSTA *et al*, 2017).

Patient care produces better results when a comprehensive approach is used, including all relevant health professionals (LIMA *et al*, 2018). This is because the best and most profitable results for the patient are achieved by professionals who collaborate at work, learning, mapping a prognosis and generating new ideas.

It is in this context that the research by Araújo *et al*, (2017) reports that a multidisciplinary team, each team member implements a specialized part of a care plan and the main objective of multidisciplinary teams is to group a series of views on the care of people and make optimal use of the knowledge and skills of many professionals and sectors.

2.4 THE ROLE OF THE PHARMACIST DURING THE PANDEMIC

The pharmacist profession has played an important role in the frontline health response to COVID-19. According to Amorim *et al*, (2021) pharmacists

performed a number of roles and activities in response to the pandemic, which include providing public health advice, information and education on personal and environmental hygiene, and making appropriate referrals in suspected cases of COVID-19 .

Specifically in primary care, primary care pharmacists have also taken on a variety of roles and activities covering disease prevention and infection control, providing patient care and supporting other health professionals, as well as obtaining and ensuring adequate supplies of medications. (TRITANY AND TRITANY, 2020).

As the most accessible health workers during the pandemic, pharmacists have shown that they can deftly assist in the public health response to COVID-19, maintaining continuity of health services and taking on additional responsibilities to help relieve pressure in other areas of the service. health, such as general practice (PASSOS; CASTOLDI; SOLER, 2021).

According to Fuzari *et al*, (2021) they have become an information center on coronavirus infection, both for having a direct role in combating misinformation and for helping patients to select healthy behaviors.

Specific emerging issues also arise with media exposure, such as the provision of evidence-based information about the safety of ibuprofen and certain antihypertensives along with the COVID-19 threat. The role of pharmacists during the COVID-19 pandemic in dispelling inaccurate health information, for example, the dissemination of evidence-based regulatory safety information on hydroxychloroquine was exemplary (SILVA AND ARAÚJO, 2020).

Although the COVID-19 crisis resulted in considerable difficulties for many in the wider community, it also showed how PA can be integrated as a bridge between health care and broader community services, as the contribution of PA Pharmacy can ensure continuity of drug supply and early identification and treatment of adherence barriers and other medication-related problems (RUBERT *et al*, 2020).

In addition to the pharmacy staff, several of its vulnerable patient groups, those most in need of continuum of care, are facing additional risks associated with the COVID-19 pandemic. Elderly people, under the instruction of social isolation, depend on delivery services and may miss opportunities to discuss problems related to medication (FUZARI *et al*, 2021).

However, virtual and telephone consultations have become common, especially for vulnerable patients. In the study by Almeida *et al* , (2021) the process of adapting teleconsultations in the pharmaceutical care clinic of the pharmacy school of the Federal University of Paraíba is described, in which pharmacists implemented systems to dispense medication in advance to minimize waiting times and duplicate queries. In case-by-case examples, such as palliative care and for vulnerable patients, medication-related needs were managed in advance. All these actions are intended to reduce non-essential medical and pharmaceutical consultations, maintaining continuity of care and facilitating social distance whenever possible.

It is also important to consider that in vaccination, pharmacists are key players. According to the opinion of the Ordem dos Farmacêuticos (2020), decades of experience of these professionals in vaccine studies have shown that, with increased accessibility, pharmacists have helped to improve immunization rates, updating patients on vaccinations and reaching those who, otherwise, they would not have the opportunity to be vaccinated.

For Farinha and Rijo (2020), although the scope and nature of their clinical functions and activities vary across environments and jurisdictions, the focus of pharmacists is to provide effective pharmaceutical care to improve patients' health outcomes and quality of life.

Thus, the COVID-19 pandemic is placing extraordinary and sustained demands on health systems and care needs persist, in which pharmacists have had to adapt and adopt professional role changes amid a dynamic health system architecture, all on top of already scarce resources (PASSOS *et al*, 2011).

III. METHODOLOGY

This study was developed through an exploratory, qualitative and descriptive research. Qualitative data were sought to obtain a deeper and richer understanding of the factors related to the COVID-19 pandemic that impact changes in knowledge, attitudes, behavior and competence of the pharmacist working in PA.

The study population comprises the city of Montanha/ES, having as a sample professionals working in Pharmaceutical Assistance in a Basic Health Unit. All potential participants were informed about the study. Confidentiality and anonymity were ensured, and data were collected by signing the Informed Consent Form - Informed Consent Form (Appendix 1). Data were collected from April 26 to 29, 2021 through semi-structured interviews.

The study included pharmacists who regularly exercised in PA in the UBS in Montanha/ES. Professionals who work in functions other than PA, or professionals

outside the city of Montanha/ES, as well as participants who refused and/or did not sign the consent form were excluded from the study.

Data were analyzed using an inductive qualitative approach through content analysis with the aim of helping to understand the meaning of complex data through the development of discussion of the areas of expertise. Bibliographic research provided a systematic and objective means of making valid inferences from theoretical models to describe specific phenomena pointed out by the research. Confirmability was established by the objectivity and neutrality with which the data were treated.

IV. RESULTS AND DISCUSSION

Qualitative data were obtained from 03 pharmacists of a Basic Health Unit in the city of Montanha/ES, representing a range of clinical contexts, specialties and experiences in response to aspects of protection, preparation and planning during the ongoing pandemic. The sample data are organized in table 1.

Table 1 - Sample characteristics

Identification	Age	Formation	Time experience
EGSP	45	Degree in Pharmacy/Postgraduate in Public Health.	1 year and 2 months
TPD	33	Degree in Pharmacy/Postgraduate Degree in ESF.	2 years
ASS	37	Degree in Pharmacy/Postgraduate degree in Clinical Pharmacy with Pharmaceutical Care.	3 years and 4 months

In data collection, a series of prevention and mitigation measures for the continuity of PA services in the units where they were surveyed were described. This included adopting social distance, increasing hand hygiene and hygiene practices. Facilities have been reorganized to ensure limited staff and patients in clinical and office spaces, as well as waiting areas.

In that unit, patients received protective masks when entering clinical facilities. Participants noted that sanitizing chemicals, wet wipes, and personal protective equipment (PPE) were not in adequate stock at the start of the pandemic. In addition, they reported being unsure about how to effectively use PPE, which in several cases was attributed to a perception of lack of training.

"The personal protective equipment was not enough and not always adequate. They weren't of sufficient quality either... We didn't know how to use personal protective equipment" (ASS).

The description of being actively involved in the direct education of patients and members of the public about social distancing, the correct use of PPE and the prevention of the dissemination of COVID-19 was unanimous. This included verbal counseling, provision of information through social media and the development of educational material. The provision of advice on analgesic use in COVID-19 was frequently mentioned. Some participants, however, described the challenges they faced in educating the public.

"They thought we were overreacting. And some of them even said to me, "Why are you spreading panic?" I replied: "I am not spreading panic; ... Everyone must act according to these rules". But you know, they didn't perceive it as a threat. They just perceive it as an additional burden or something unnecessary" (EGSP).

Participants described a range of activities related to preparing for COVID-19. This included measures to ensure effective response systems were in place, adjusting the physical layout and infrastructure, including risk stratification, pharmacist deployment in clinical settings, adjusting working hours, staff leave, testing team for COVID- 19 and using health students to help with services.

EGSP and TPD participants described a redistribution of the pharmacy team from other areas of the UBS. However, TPD reports not having received any training prior to its implementation; in his words: *"I was upset that I didn't have any training to deal with the changes in the way I work. Plus I was the only one at the clinic who was still working remotely from home. I felt alone."*

It is important to consider that, in parallel with changes in pharmaceutical practice, according to Moreira; Sousa; Nóbrega (2020) high levels of anxiety and stress among pharmacists are recently highlighted by the pharmaceutical regulator due to the increased workload, the threat of infection, patient aggression and the financial implications of the pandemic. Thus, as demand for pharmacy services increases during the pandemic, pharmacy staff are at risk of mental breakdown.

The three participants stated that they had their working hours adjusted, including a reduced number of days, but more hours or alternate working days. However,

ASS reports that he had his annual vacation cancelled; in his words: *"Not taking a vacation would only cause a lot of illnesses and things like that. So the days I got on maternity leave were good in terms of maintaining resilience."*

However, it is important to consider that adjustments to the hours of operation of the UBS pharmacy were allowed by the government, which allowed them to operate limited hours to minimize wear and tear on employees. However, the three participants agreed that in the context of PA and primary care, this caused problems in the provision of medication to patients.

In this regard, Martins and Reis (2020) report that pharmacists were assigned an essential service and should, whenever possible, remain open during the pandemic to meet the population's pharmaceutical care needs. His practice had to adapt significantly, but the pandemic also drew attention to the case of the long-awaited evolution of the professional role.

Although participants noted that the team's tests for COVID-19 were not available in the early stages of the pandemic, the situation was perceived to have improved over time. According to ASS, *"We didn't have any tests. So, nobody knew about the situation…… and it didn't allow us to really measure the risks and benefits of our interventions [preventive measures]." However, over time we started to receive these tests.*

Lack of testing was not the only obstacle reported by participants, as all three respondents agree that there was a shortage of medical supplies during the initial phase of the pandemic; and mentioned the loan of shares of health facilities in the municipality.

"We had a brief moment where acetaminophen was a problem because they used it a lot for corona patients [COVID-19] ... but they managed to distribute it from the main pharmacy ... I needed to call them every day to ask for it" EGSP

Importantly, participants described ordering drugs such as hydroxychloroquine for the first time and this led to procurement challenges. Rationing of drugs, as well as PPE and disinfectants, was implemented at all stages. In addition, AF participants described the high demand for repeat prescriptions and over-the-counter pain relievers, vitamins, particularly vitamin C and products that claim to boost the immune system. Temporary restrictions were implemented to resolve the situation.

EGSP and ASS participants described repackaging larger packages into smaller packages to ensure equitable supply. According to them, they were allowed to extend the supply of repeat prescriptions without the need for additional authorization from the prescriber. Therapeutic substitutions were often performed due to supply problems in all environments.

"People wanted the same brand and we ran away. When the pandemic started, people were buying 10 packs or 100 pills of acetaminophen per person. In some pharmacies in the city, each person could buy only 2 packs of medicines and people didn't understand why...Patients were shocked at first [about the therapeutic substitutions for prescription drugs], but later they were very cooperative".

Participants described the enormous impact of COVID-19 on routine clinical practice at UBS. In addition, they reported that they could no longer provide blood pressure, temperature, oxygen saturation and cholesterol measurements and had to counsel patients on the use of continuous medications, specifically, patients with comorbidities. Reductions and adjustments to routine activities, such as medication use reviews and medication reconciliations, were noted and many were conducted over the phone.

"I used to do home inspections or see patients at the UBS and they often brought their medication. I was a little pessimistic to begin with. I thought that was not how medication review was done. But actually, it's doing great over the phone. People can explain their symptoms very well over the phone, have their medications on their side, and are surprisingly open about sensitive issues." TPD

Study participants further noted that the cancellation of routine clinical services created difficulties in ensuring that patients received adequate monitoring and follow-up.

Remote forms of communication, including electronic messaging services (Whatsapp) were widely used by participants to communicate with patients and other healthcare teams. However, they described that online platforms were overloaded. Remote communications were considered to have caused problems in communicating with patients with low levels of health literacy, as well as elderly and disabled patients, those without access to online communication resources.

As reported by EGSP, *"many patients are elderly, have hearing problems, have vision problems, do not understand what you say, especially when you wear a mask and cannot see your lips. So I had to write what I wanted to say."* Still on the remote form of care, it is reported that they were less effective in providing recommendations to physicians and some needed intensive follow-up to ensure that their advice was accepted by physicians.TPD reports: *"I noticed that the acceptance rate of interventions decreased. I really had to follow up*

with the patients to make sure the interventions were accepted. This took more time."

A similar study by Fuzari (2021) suggests that pharmacist-led telemedicine services can improve clinical outcomes in patients with chronic diseases and effectively provide public health services such as vaccinations, smoking cessation, hypertension management and adherence and counseling medicated. As many participants in this study identified that there will be greater use of remote communications in the future, healthcare systems should consider investing in digital communications and telemedicine platforms in the context of clinical pharmacy services.

Regarding the work opportunities, the experience at the UBS under study shows that the role of the pharmacy was defended, as well as becoming a source of information for physicians. Two participants (ASS and TPD) reported providing information to physicians during the pandemic, researching and evaluating guidelines, particularly regarding treatments with experimental drugs, including hydroxychloroquine and ivermectin. Therefore, they described that the pandemic offered the opportunity to showcase their experience as pharmacists.

"Doctors see me as someone who provides information about medications and, of course, critically assesses the importance of scientific knowledge, [for example] what is known about hydroxychloroquine etc." (SSA) *"[...] although clinical pharmacists are not recognized enough, I think this period may end with better recognition for clinical pharmacists and pharmacists as drug specialists"* (TPD).

However, not everyone agreed that pharmacists were well recognized. The EGSP participant felt that she was left out of care and planning activities during the initial crisis phase. According to her, *"The first two weeks were very unsettling. I felt like I was in some sort of identity crisis. I felt that we [primary care pharmacists] were useless, we didn't need it anymore. Everyone was working 24 hours on the front line, who cares about my job? But it turned out to be different, at least for patients. We developed protocols to deliver care remotely and patients really appreciated that."*

All three participants reported feeling proud to serve their community and country in this time of need. They considered this a professional and ethical responsibility. In the words of ASS: *"I felt this as my professional and human responsibility. I think it was something I couldn't even negotiate, I felt it was my responsibility".*

Furthermore, all participants felt that providing care during the pandemic was challenging but rewarding. It was also mentioned that they felt they were able to develop new skills related to PA, primary care and health care. Other skills mentioned by participants include remote communication, time management, resilience and the ability to work under pressure.

It is evident that pharmacists have adapted their existing roles and implemented innovations to existing work practices in order to meet the challenges presented by COVID-19. Thus, it is clear that they faced the pandemic to the best of their abilities to ensure that Pharmaceutical Assistance services were uninterrupted, as much as possible, at a time of critical need.

V. CONCLUSION

This study of pharmacists' views and experience around prevention, preparation, and response to COVID-19 identified the many contributions of pharmacists to patient care and the education of other healthcare professionals and the public.

In a matter of weeks, the role of the pharmacist has evolved considerably. Although it was a very challenging and stressful period, PA services were recognized as frontline and essential. The need for crisis has led to the expansion of professional roles, responsibilities and significant adaptation to care models. In addition, pharmacists will play an important role in continuing to combat misinformation during the COVID-19 pandemic, including the development of reliable and credible pandemic-specific information resources for the general public.

In this sense, the study points out that the main areas of contribution of pharmaceutical care include direct clinical care for patients with COVID-19; collecting and evaluating evidence to inform patients and healthcare professionals; ensure the uninterrupted supply of medicines in the community through the effective procurement, planning, distribution and supply of medicines and making therapeutic substitutions when necessary; provision of clinical pharmacy services to high-risk populations; and the adoption of a new digital communication with healthcare professionals and patients.

Thus, the government and should control facilitators and address barriers to the provision of pharmaceutical care services, as reported in this study. Future research should include outcome assessments to examine the effectiveness of adapted and new services in the context of the pandemic, including remote PA services.

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