BMJ Open

Resilience among primary care professionals in a time of pandemic: a qualitative study in the Spanish context

Ana María Palmar-Santos [1,2] Azucena Pedraz Marcos [3]
Laura Alicia Rubio-Casado [4] Montserrat Pulido-Fuentes [5]
María Eva García-Perea [1] Maria Victoria Navarta-Sanchez [1,2]

¹Deparment of Nursing, Autonomous University of Madrid, Madrid, Spain
²Nursing and Health Care Research Group, Puerta de Hierro-Segovia Arana Health Research Institute, Madrid, Spain
³Carlos III Health Institute, Madrid, Spain
⁴Madrid Health Service, Madrid, Spain
⁵Castilla-La Mancha University Faculty of Health Sciences, Talavera de la Reina, Spain

Correspondence to
Dr Azucena Pedraz Marcos;
azucena.pedraz@isciii.es

ABSTRACT

Objectives This study explores the impact of the COVID-19 pandemic on the Spanish primary care structure and services and the mechanisms implemented by the primary care workforce to restore and reinforce their reference care model.

Design An exploratory, qualitative study with semistructured interviews and a focus group discussion conducted during the fall semester of 2020.

Setting Primary health centres in Madrid (Spain), chosen based on factors such as infection rates during the earliest stages of the pandemic and demographic and socioeconomic aspects.

Participants A total of 19 primary health and social care professionals were purposively selected. Criteria for inclusion were gender (male/female), at least 5 years of experience in their current position, category (health/social/administrative worker), and whether they worked in a rural or urban healthcare setting.

Results Two main themes were identified: (1) reflecting on a model in crisis—particularly the reopening of centres to users and the proactive, participative strategies implemented by primary care professionals to reach their community; and (2) regaining a sense of purpose—how healthcare professionals implemented strategies to sustain their vision of their reference model. The COVID-19 pandemic exposed leadership deficiencies that, together with the initial unavailability of resources and difficulties maintaining face-to-face contact with users, triggered a sense of loss of professional identity. On the other hand, the analysis revealed potential strategies to restore and reinforce the traditional model, such as the adoption of digital technologies and reliance on community networks.

Conclusion This study highlights the importance of a solid reference framework and enhances the strengths and skills of the workforce to reinforce the community-based service provision model.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ A key strength of this study is the interdisciplinary and multisectoral nature of the participants, which allowed a deeper understanding of the role of these professionals during the first months of the COVID-19 pandemic.
⇒ Another strength was using a discussion group with nurses from rural and urban settings, who were responsible for chronic patient management.
⇒ During the qualitative research process, participants could find a space to talk about and reflect on their feelings about the pandemic for the first time.
⇒ A key limitation is that some interviews were conducted on the phone due to the public health restrictions in force at the time. This may introduce some risk of bias as the interviewers did not have the opportunity to build rapport as in face-to-face interviews.

Primary healthcare (PHC) workers were forced to adapt to tasks of detection and screening, as well as caring for and monitoring COVID-19 cases who were self-isolating at home.[2] These transformations affected countries such as Spain, whose primary care model was considered one of the most solid in Europe regarding its structure and the services delivered.[3]

The Spanish primary care provision model is based on a dense network of practices distributed throughout the country, with multidisciplinary teams composed of doctors and nurses specialised in family and community-based care, together with other health professionals—physiotherapists, midwives or social workers, among others. Over the last decade, Spanish primary care services have faced challenges such as an increasingly ageing population and having to care for more chronically ill patients, as well as budget cuts adopted as a consequence of a global financial crisis.[4] Despite these

INTRODUCTION

The COVID-19 pandemic caused an unprecedented health and economic crisis worldwide. Institutions and experts responded to a global health emergency that had caused more than 6 million deaths at the time of writing, with infections reaching more than 500 million confirmed cases worldwide.[1]

challenges, primary care remained the cornerstone of the Spanish healthcare system.[5]

Since the beginning of the COVID-19 pandemic, primary care remained the first point of access to healthcare systems worldwide, monitoring millions of infected individuals who did not require hospitalisation.[6] However, particularly during the first wave of the pandemic, healthcare professionals perceived a lack of clear guidance and unavailability of the resources necessary to respond to this health emergency.[7 8]

The disruption to some of the services provided or managed by primary care professionals has been one of the most significant challenges triggered by the COVID-19 pandemic.[9] Diagnosis and monitoring of chronic diseases, routine vaccination campaigns, contraception and family planning, mental health, cancer diagnosis and treatment, radiology services, physiotherapy, cervical screening and spirometry were some of the routine services affected by the guidance to cease non-essential care.[7 9] This might have led to delayed diagnoses and poorer health outcomes, and even an increase in the excess death rates through delayed care for acute emergencies and the exacerbation of chronic pathologies.[7–10]

The adoption of new technologies and telemedicine—or virtual care—in primary care delivery worldwide is one of the most significant transformations introduced as a consequence of the pandemic.[7 9 11 12] Digital healthcare solutions have long been available, but the present historical circumstances boosted their adoption on a large scale.[13] Many healthcare institutions encouraged individuals to use online platforms to book appointments with their registered practices and to communicate with their primary care providers via email or telephone calls.[7 8] Indeed, introducing an initial remote consultation for suspected COVID-19 cases has been crucial to minimise the spread of the virus, reducing in-person attendance to primary care centres.[7 8 14 15] Consequently, and for the first time ever, during the pandemic, remote primary care consultations outnumbered in-person consultations.[7] However, this technological transition has been abrupt, with no progressive adaptation for users, healthcare providers or institutions. Technologically illiterate users—or those without access to appropriate resources—and ill-equipped professionals could, in turn, contribute to worsening health inequalities.[16–18]

The WHO and other organisations have stressed the importance of ensuring the capacity of primary care settings to continue delivering essential services while also identifying and monitoring COVID-19 infections.[9] This study explored (1) the impact of the COVID-19 pandemic on the primary care structure and services through the experiences of its workforce; and (2) the mechanisms implemented by health, social and administrative care workers to sustain their reference model despite the disruption caused by this health emergency.

MATERIALS AND METHODS

Design

This qualitative, exploratory study is based on semistructured interviews and a focus group discussion (GD). Following an explanatory, sequential, mixed-methods research design,[19] it examined the impact of COVID-19 on the primary care workforce (including clinical and non-clinical professionals). The quantitative phase collected data through a survey answered by 252 PHC workers, which provided a general picture of the research problem.[20] An in-depth analysis in the qualitative phase allowed us to refine our focus, providing a better and broader understanding of the phenomenon studied.

Participants and recruitment

The study participants were clinical and non-clinical professionals working in primary care teams within the Madrid Healthcare Service (Spain). Participants were selected using purposive sampling within a regional healthcare area—chosen based on factors such as infection rates during the earliest stages of the pandemic and demographic and socioeconomic aspects. Criteria for inclusion were gender (male/female), at least 5 years of experience in their current position, category (health/social/administrative worker), and whether their work was conducted in a rural or urban healthcare setting.

Voluntary participants were selected from respondents to an online questionnaire corresponding to the first, quantitative stage of the study, which explored working conditions and burnout levels among primary care professionals.[20] We also used snowball sampling, with the initial participants and researchers identifying additional participants among their contacts. Participants were approached by email and then contacted by telephone. None of the professionals contacted declined to participate.

Data collection

We conducted 13 semistructured individual interviews between August and November 2020. Some interviews took place face-to-face, in venues chosen by the participants themselves, while video calls were used when necessary due to the COVID-19 health protection regulations in force at the time. Following a preliminary analysis of the interviews to enhance data richness,[21] we organised a separate discussion group that included six nursing professionals. This explored some topics mentioned during the individual interviews: teamwork, rural versus urban, and the needs of vulnerable people and responses. The focus GD was conducted in December 2020 in a room at the Autonomous University of Madrid, following guidelines on social distancing and hygiene in place for indoor group meetings during the COVID-19 pandemic.

Interviews lasted between 45 and 70 min and followed a guide (table 1) developed by the researchers, who were also in charge of conducting the interviews. The GD lasted 130 min and followed a separate guide developed by the researchers based on the analysis of the individual

Table 1	Interview guide
Subject areas	**Questions**
Working in a primary care setting	What happened right at the start of the pandemic? What did you do in your primary care setting? How did you adapt to the new situation? At the time, did you feel there was anything lacking/missing?
Working as part of a team	How has the relationship been with the rest of the team? Has anything changed during this period? What did the team members comment about what was going on? Have there been any cases of infection within the team? What was your experience of this? Is there anything you would like to mention regarding the team?
Healthcare provision	What changes have been implemented regarding healthcare service provision? What has happened to those patients who were being monitored by primary care teams? What has happened with home visits? What do you think has been the impact of this situation on the chronically ill and dependent population?
Wrap-up issues	What do you think has been the hardest thing about the pandemic? Can you mention any positive aspects during this period? Is there any significant moment that you would like to highlight?

Table 2	Group discussion guide
Subject areas	**Questions**
Team	Describe an average working day before and during the COVID-19 pandemic in your healthcare centre. How did you perceive the team? How did you perceive the interdisciplinary relationships? How did you perceive the relationships outside of the team (eg, with the regional healthcare authorities, other healthcare settings, etc)? How did you perceive the relationships with the population? Have new communication channels been established? What is your opinion of these? Could you highlight any strengths identified after the pandemic? What about the negative aspects?
Rural vs urban	What differences and similarities have you perceived in the management of the pandemic in rural vs urban primary care settings? Have patients in rural settings had the same access to healthcare as those in urban contexts? Have new ways of engaging with patients been established?
Sociocultural factors	How did you address care provision for COVID-19 cases? What differences have you noticed between care provision for COVID-19 and non-COVID-19 cases? As healthcare workers, how do you feel the population has treated you?
Vulnerable population	What changes have been implemented in care provision for the most vulnerable users, compared with the situation before the pandemic? Which population groups do you think have suffered more during the pandemic? In terms of care provision, which do you think has been the most affected population group? Have you noticed any changes in the dependency levels among your reference population?

interviews (table 2). Interviews and focus groups were audio-recorded, and a fieldwork diary was used to record contextual issues and the researchers' thoughts and observations.

Data analysis

The interviews and GD were transcribed verbatim. Accounts were inductively analysed following Braun and Clarke's steps for thematic analysis.[22] All research team members read the transcriptions to familiarise themselves with the accounts. Meaning units were identified and labelled with a code by the research team over several sessions. Following an iterative process, researchers reviewed the research goals several times, refining the codes established and reorganising them into broader categories.[23] A thematic map was prepared, grouping labels in themes and subthemes that were illustrated with relevant verbatim quotations.

Rigour

To ensure methodological rigour, the study followed Lincoln *et al*'s quality criteria for qualitative research.[24] To enhance its credibility, this article also includes verbatim quotations from the participants' accounts to support researcher interpretations. These quotations also illustrate the depth and nuances of the data collected. The researchers engaged in critical self-reflection through their field diaries, while both the fieldwork and data analysis were triangulated to ensure data confirmability. When considering the research design, the team also considered feasibility criteria in sample access and data saturation.

Patient and public involvement

No patients were involved in this study.

RESULTS

Participant profiles

We conducted 13 semistructured one-on-one interviews with primary care workers with different professional profiles. The focus group included six participants, all of them primary care nurses. Most of the participants worked in urban areas (16), with variability in the areas in which their health centres were located: Madrid Centre (2), East (3), North (2), South (2), Southwest (1) and Southeast (8)—the last three being areas where the most vulnerable populations, in socioeconomic terms, are concentrated. The profiles of the participants are illustrated in table 3.

All participants had extensive professional experience in the public healthcare system. The sample included workers in both rural and urban settings, attending communities with different demographic and socioeconomic profiles.

	Interview (I)/group discussion (GD)	Gender	Years of experience in primary care
Category			
Nurse	I1	Male	5
Nurse	I2	Female	23
Nurse	I3	Female	30
General practitioner	I4	Male	40
General practitioner	I5	Female	9
Nursing manager	I6	Female	40
Social work manager	I7	Female	25
Social worker	I8	Female	15
Administrative staff	I9	Female	28
Physiotherapist	I10	Female	26
Cleaning staff	I11	Female	14
Midwife	I12	Female	23
Director	I13	Female	17
Nurse	GD	Male	14
Nurse	GD	Male	34
Nurse	GD	Male	40
Nurse	GD	Female	30
Nurse	GD	Female	15
Nurse	GD	Female	29

Table 3 Participant profiles

Thematic framework

The analysis revealed two main themes, which illustrate the professionals' perception of the impact of the COVID-19 pandemic on primary care services: (1) reflecting on a model in crisis—particularly the reopening of centres for users, and the proactive, participative strategies implemented by primary care professionals to reach their community; and (2) regaining a sense of purpose—how healthcare professionals implemented strategies to overcome the crisis while supporting their vision of their reference model.

Reflections on a model in crisis

The impact of the COVID-19 pandemic on the healthcare system has been particularly severe in primary care. Its fundamental responsibilities, particularly in health promotion and disease prevention, were severely disrupted during the pandemic—which focused on urgent and emergency care. Our participants described the shortcomings and weaknesses affecting all dimensions of the primary care provision model—from its activities and strategies to its management, leadership and guiding principles. All these aspects underwent a process of redefinition that left its workforce feeling deeply disconcerted, while revealing the vulnerabilities of a model that underpins the whole healthcare system.

> This system, which we found already like that – it has blown up. (GD, nurse)

My main takeaway is that nursing in primary care is a giant with clay feet – our activity went under, we stopped doing all the things we used to do. (GD, nurse)

All the resources went to specialist care, and in fact, we can see that here – we ask for something and it takes forever; specialist care asks for something, and they get it the next day. (I7, social work manager)

Multidisciplinary teams as an essential component

Multiprofessional teams are a key organisational element of the primary care delivery model. During this crisis, healthcare workers recognised the importance of teamwork to address the challenges imposed by the COVID-19 pandemic—the constantly changing protocols, the redefinition of roles and activities, and high levels of uncertainty among service providers and users—underscoring its role as the basic organisational pillar of primary care. Some professionals who previously did not know each other became aware of the importance of establishing or reactivating multidisciplinary teams.

> You were more concerned about supporting your colleague next to you than about yourself or the circumstances. I mean this in the sense that – you are exposed to everything, and your colleague is your only support. (I4, general practitioner)

> We met and we lived together, [we had] multidisciplinary team awareness. (I8, social worker)

However, once the impact of the first stage of the pandemic—with its high mortality and contagiousness levels—was over, professionals were aware of the emergence of individualistic and protective attitudes that disrupted earlier collaborative dynamics.

> It was an absolute disaster for primary care settings when interprofessional relationships – even in the good [centres] – we took cover behind our professional class, even behind our professional interest. Perhaps that was normal, after a situation of crisis, a situation of shock. (GD, nurse)

> As things moved along everyone returned to their offices, there wasn't as much sense of professional unity, of being a team – 'all together' and that kind of thing. (I12, midwife)

'We have always lived without a door'

Healthcare centres have long been perceived as meeting spaces, always open for their users—whose sociodemographic profile, in the case studied, is that of an ageing population—and thus providers of ongoing, recurring care for a segment of society. However, with the onset of the COVID-19 pandemic, these centres closed their front doors, interrupting the usual dynamics of face-to-face contact and consultations. The disruption to the direct monitoring of their patients and communities was a source of distress for the primary care teams. In addition, workers were also affected by the negative response

of the general public to the sudden barriers to accessing the healthcare system.

> We have always lived without a door. This is primary care, not emergencies. They can come here for a sick certificate or just – as so many patients have done – to ask how we were doing. (GD, nurse)

> An added problem has been accessibility. I mean that, before, we were a lot easier to access, and now it is a bit more difficult. (I13, director)

> The general public still does not understand why we don't do more in-person [consultations], so there are frequent arguments at the front door – why can't we go in, why can't the doctor see me. So, it is difficult. I think [we need] a shift in the concept of healthcare – how we should have seen it – the healthcare centre is not a place to go and spend the day, it is a place for concrete action. (I12, midwife)

Identity and professional recognition

Some participants—mostly nursing professionals, but also others—highlighted a loss of professional identity as a consequence of transformative changes in their work dynamics and organisation. The disruption to their usual roles and routines, which defined their identities within the primary care system, triggered a sense of loss, of something missing.

> What is this that we are doing? I do not feel like a nurse, or a primary care worker – I don't even know what I am doing. (GD, nurse)

> I kind of lost the sense of what it was to be a midwife and what care I was providing women with, since during the pandemic I had to give up many of my responsibilities. I had to assume roles that were not those of a midwife, but since we were in an emergency system, then [I had to do] whatever was necessary to support the team. (I12, midwife)

Healthcare workers' expectations of receiving recognition from their users and senior management are perceived as a significant part of their professional development. These expectations were intensified when they felt they had risked their safety to deliver their professional duties.

> The patients, with some exceptions, have appreciated it enormously – and I have said this to my colleagues often, I do not expect any recognition from the television or the politicians, I expect recognition from my colleagues, from my patients. (I13, director)

> The primary care centres, which are the ones working on the front line, in the homes, with the patients, we were not on the media. We do not get visual recognition; we do not get social recognition. (I1, nurse)

> Yes, really, I do feel appreciated. This is my centre, I have been here 28 years, and I feel really appreciated. Yes, by my colleagues, and the people too, really, because they all know me. (I9, administrative staff)

New healthcare demands

The emergence of new healthcare demands due to the social impact of the COVID-19 pandemic imposed additional challenges on the primary care provision model. This included, for instance, people who had been invisible until this moment, whose needs the system had been unaware of—for example, people unable to work or who could not afford their basic living costs. It also included the mental health emergency triggered by the pandemic.

> The most common demand with COVID [is] I cannot work, I have absolutely nothing left in my bank account, I cannot pay for the medicines, or manage the medication – a lot of people have emerged who were not in the system before. (I7, social work manager)

> Also, what we see a lot of, particularly at the beginning, when they started – and once the lockdown was over, lots of acute mental pathologies, we saw a lot of that. (I10, physiotherapist)

Regaining a sense of purpose

Faced with a crumbling reference model, primary care professionals tried to find alternatives to continue providing their services. Driven by their conscientiousness and commitment to the healthcare system and patient care, they mobilised all the available human and material resources, adapting their roles to the new situation and demands.

Telemedicine

Communication channels underwent significant and varied transformations during the pandemic. Primary care teams organised spaces for interprofessional meetings and to express and share non-professional issues. The use of social media applications became frequent in clinical environments—to conduct conversations, video calls and online events. Digital formats facilitated communication between professionals and coordination with other sectors of the healthcare system.

> We have worked as a team thanks to the new communication resources. (I7, social work manager)

> The pandemic also brought a very good communication tool – online consultations, which are a way of reaching, of receiving consultations, of communicating via a fast and direct channel. (I13, director)

These new communication channels have affected how primary care professionals reach their users, effecting changes in the care delivery model. Despite their awareness of existing difficulties for some users to access their healthcare centres, professionals appreciate the possibilities enabled by new technologies.

> It did surprise me. For instance, I have managed with a telephone – [remote consultation] was an experience I did not have, I did not want to use it, I did not know how to use it […] but also to overcome that barrier that exists, and I liked that, and I think it is going to stay as part of my work. (GD, nurse)

Reliance on community networks

Primary care workers addressed problems in their communities—that is, access to essential supplies such as food or medicines—by working with existing neighbourhood support networks. Their reliance on local community networks and social agents to connect with and provide solutions for their users also resulted in increased support towards healthcare workers, which facilitated the supply of protective equipment—particularly in the earlier stages of the pandemic, when not enough personal protective equipment was supplied through official channels.

> Look, we had a significant involvement with the neighbourhood support networks – like those that could not go out shopping, lots of older people, pharmacies. So, well, we were organising that. (I8, social worker)

> We had no gowns, there were groups of neighbours, friends who have been sewing caps and gowns so we could work, because we were not getting materials. That was in March, now we have everything, there isn't any problem with materials now. (I12, midwife)

After the storm: back to normal

The lack of resources and guidance during the first stages of the pandemic was overcome with ingenuity, collaboration and dedication. In terms of safety and competencies, individuality was set aside for a common purpose.

> Between all the colleagues, we separated a dirty area from a clean one – I mean, before we got these instructions from the top, from the health authorities, we kind of started doing it. In fact, before the last grocery shop in the neighbourhood closed down, we went there and said, 'Let's see, we have all this money, how much bleach can you give us for this money?' (GD, nurse)

> Primary care is fighting tooth and nail, the professionals are fighting tooth and nail to go on and offer a minimum care provision, with the poorest and hardest-to-find resources that you can imagine, lacking staff and with limited means. (I1, nurse)

Primary care workers had to make decisions independently or within their teams, since they were not getting efficient responses from the healthcare authorities. The constant changes in protocols and guidelines, the lack of resources and the uncertainty meant they had to make ad hoc decisions while working.

> It was like being born again because, of course, we had to take on roles that had nothing to do with our professional call. On Friday, seeing what was going on, I asked my nurse colleagues: 'What do you need?' And they asked me if I could manage the COVID safety [triage] on the telephone, for people who were, or suspected, or had an infection. (I10, physiotherapist)

> During the first wave of the pandemic, we self-managed, we self-organised. We decided what the best way was, we changed the structure of the centre, the way we worked. We were meeting once or twice a week, revising the centre's organisation, the things that were working and those that were not, and we constantly changed things. (I13, director)

Once the first two waves of the pandemic were over (March–December 2020), with the number of deaths in Spain totalling almost 50 000, our participants' accounts reflected a common, primary goal—to go back to what they used to do, to what they used to be.

> We have to resume any activities that we can – we have to find vaccines for teenagers – we have to go back to in-person consultations. (GD, nurse)

> I think this is an opportunity, I have no doubt about it. I believe with all the crises, the bigger they are, the more changes they involve – more challenges and more development, I am pretty sure of that. (I12, midwife)

> I think everybody is aware that primary care is a really important tool within the system, and the first point of access. So, with a strong primary care, that is how you get a robust healthcare system. (I6, nursing manager)

DISCUSSION

The Spanish primary care model—which, according to the study of Kringos et al,[3] is one of the strongest in Europe—faced an exceptionally violent first wave of the pandemic. In the European context, only Italy presented higher incidence rates.[3 25] Some dimensions of the primary care delivery model that had shown particular strength before—that is, governance, professional development, the existence of a family and community-based healthcare specialisation for both doctors and nurses, user accessibility and other aspects such as its integral, continuous approach to care delivery—were threatened by the sudden onset of the pandemic.

This study explored primary care professionals' perceptions of the weaknesses and threats faced by the primary care model. In their opinion, these included leadership deficiencies and the initial unavailability of resources, which, together with their difficulties in maintaining face-to-face contact with their users, triggered a sense of identity loss. However, the study also revealed strategies to restore the model while adapting it to the social changes and healthcare organisational transformations implemented during the pandemic—for instance, adopting resources whose use emerged or was consolidated during this period, such as new communication technologies or the reliance on community networks (figure 1).

Participants in our study experienced a situation of lack of resources and guidelines—or rapidly shifting guidelines— in a short span of time. Although this was a shared experience in the European context, fear of infection or professional stigma was not a key component of our participants' accounts—as opposed to experiences in nearby
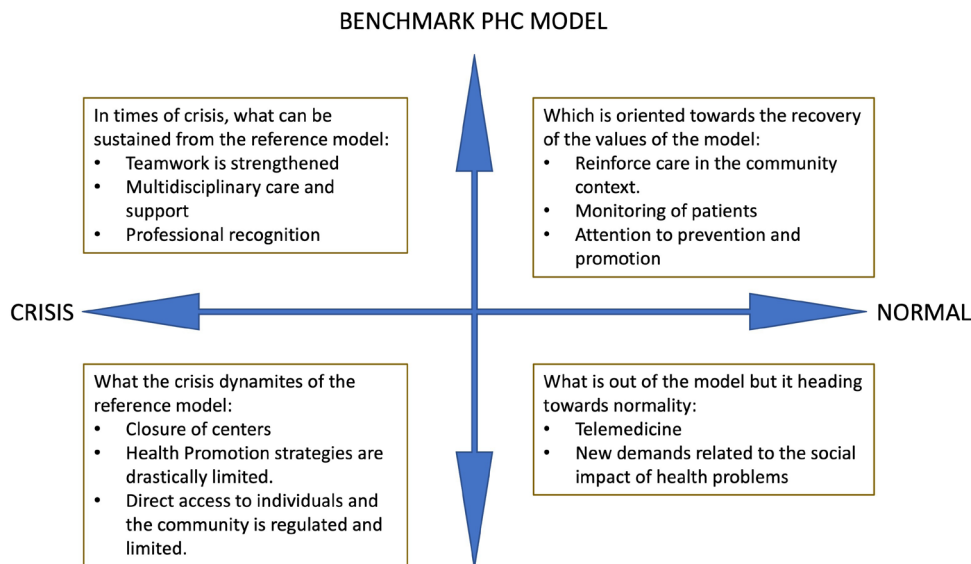
BENCHMARK PHC MODEL

In times of crisis, what can be sustained from the reference model:
- Teamwork is strengthened
- Multidisciplinary care and support
- Professional recognition

Which is oriented towards the recovery of the values of the model:
- Reinforce care in the community context.
- Monitoring of patients
- Attention to prevention and promotion

CRISIS ← → NORMAL

What the crisis dynamites of the reference model:
- Closure of centers
- Health Promotion strategies are drastically limited.
- Direct access to individuals and the community is regulated and limited.

What is out of the model but it heading towards normality:
- Telemedicine
- New demands related to the social impact of health problems

Figure 1 The transformation of the primary healthcare (PHC) model.

countries.[26 27] On the other hand, as also pointed out by Smyrnakis *et al*[27] in their study of Greek primary care professionals, our participants underscored the social recognition received and the strength of the public healthcare system.[27]

According to the COVID-19 Health System Response Monitor, European PHC services employed three prevalent models in their response to the pandemic: multidisciplinary teams coordinated with public health authorities to manage the frontline emergency response and deliver essential services; prioritisation of vulnerable populations; and extended use of digital technologies to deliver care services to as many users as possible.[28] Although, according to this study, Spain was limited to the first response model, our participants' accounts described a hybrid format with elements from all of them.

Our study revealed that the uncertainty caused by unexpected transformations in their professional roles, the imperative to contain the spread of the pandemic and the guilt for their perceived abandonment of chronically ill patients were only overcome through the ingenuity and adaptive skills of the healthcare workforce. This was illustrated by the new strategies implemented: different professionals sharing responsibility for triaging, establishing separated circuits within the primary care centres, and telephone monitoring of possible COVID-19 cases and vulnerable groups—strategies also noted in other studies.[8 29] The study conducted by Wanat *et al*[26] in eight European countries emphasised how routine primary care activities—health promotion, disease prevention and monitoring of chronically ill patients—nearly disappeared.[26] This is particularly important in the Spanish context, where the management of chronic patients is one of the pillars of care. In Spain, the health team, and especially the nursing professionals, are responsible for assessing the patient's health situation, together with their families, and carry out scheduled monitoring, both at the health centre and at home.[30] The professionals interviewed described this with concern as 'collateral damage'. Faced with this situation, primary care workers followed their own criteria to make decisions regarding the surveillance and monitoring of different cases—telephone calls, home visits or maintaining annual check-ups for users over 70 years of age.[26 31]

In general, telemedicine has been described as the most widespread system for delivering a range of primary care services.[32] Before the onset of the pandemic, telemedicine had already shown its effectiveness in the management of chronic health conditions, heart conditions and fibromyalgia.[33 34] However, during the pandemic, its use increased exponentially, with telephone calls—and, to a lesser extent, video calls—being the tool of choice for most professionals.[35] The lack of technological resources (ie, cameras or applications compatible with existing information technology systems) was one of the main challenges noted by professionals in this context. Varying levels of digital literacy were also noticed among many chronically ill patients—mainly due to the increasingly ageing profile of the population—making this a particularly vulnerable group.[32] Other issues noted in our study—that is, the inability to reach patients due to network saturation, contributing to feelings of having failed patients—are less frequently mentioned in the literature. However, our participants were aware that the adoption of digital technologies would not disappear and that the experience acquired during the COVID-19 pandemic was part of a learning curve—whose main takeaways included the importance of ensuring access for underprivileged and vulnerable populations.[36 37]

Awareness of the vulnerability of primary care users during the COVID-19 emergency increased in those settings located in areas with poorer socioeconomic conditions.[37] In these communities, meeting basic needs (ie, living costs, medication) required the support of preexisting community networks and collaboration between local associations and healthcare professionals. Job losses, lockdowns and reduced social interaction also increased stress and anxiety among the general public.[38 39] The

collaboration between professionals and institutions (primary and specialist care, social services and local governments) to ensure long-term support for individuals at risk of social exclusion or with mental health needs requires the implementation of robust programmes led by primary care settings—the healthcare system's first line of defence to protect communities.[40]

Primary care professionals have also suffered mental health issues, particularly stress and anxiety disorders—as noted in previous studies and the first phase of our study on primary care settings.[20 41] However, the system's robustness, the professional experience of the primary care workforce, and the specialist training in family and community-based care of both doctors and nurses were critical factors contributing to the resilience of primary care settings during the earliest stages of the pandemic.[5 42 43] In addition, strategies such as teamwork, the adoption of shared management roles—that is, providing information, managing resources within their settings, using new communication tools—and establishing closer relationships with local community networks to reach the most vulnerable allowed primary care professionals to overcome this crisis and provided viable avenues to face the 'new normal'—whenever this happened.[35] Primary care professionals expressed their desire to restore their role as the cornerstone and first point of access to the health system, delivering the services that define their model—health promotion, prevention and care for chronically ill patients. At the same time, they wanted to support users continuously along the course of their illnesses, coordinating all levels of attention. Nevertheless, participants in our study were aware of the challenges faced by this care provision model. Some of the threats, such as the consequences of recent financial crises or an increasingly ageing population, had been explored before the pandemic.[44] Others, however, are closely linked to shortcomings magnified during the crisis—lack of resources, particularly human resources, and poor leadership.[45]

Limitations of the study

Restrictions on mobility and social gatherings established by the Spanish government during the different stages of the COVID-19 pandemic affected how the interviews were conducted—some had to take place over the phone or using other communication platforms. In addition, the sample size and some of the most specific aspects of the Spanish primary care provision model could hinder generalisation of the results identified. Selection bias might have affected both the participant recruitment process and study inclusion criteria. Successful research begins with recruiting participants who meet the study aims. As the sample for this study was obtained from the respondents to an online questionnaire corresponding to the first, quantitative stage of the study—those who volunteered to participate in the qualitative study—the viewpoint of those who declined to participate remains elusive. Furthermore, obtaining the participants' feedback on the findings was impossible due

to the pressures of the health emergency to which these professionals were subjected.

CONCLUSION

The COVID-19 pandemic exposed some of the weaknesses and threats faced by primary care: poor leadership and the initial unavailability of resources—which, together with difficulties in providing in-person care to their communities, triggered a sense of identity loss among its workforce. At the same time, it revealed possible ways to reactivate this model—by fully supporting a primary care system with an extensive background and solid foundations, staffed by experienced professionals with specialist training in family and community-based care. Our study revealed how the strategies devised by these professionals—teamwork and shared management roles—contributed to the adaptive transformation necessary to ensure the delivery of primary care services during the first stages of the pandemic. Another critical aspect of this adaptation and survival during a crisis was adopting resources whose use emerged or was consolidated during this period, particularly new communication technologies and a reliance on community networks.

ORCID iDs

Ana María Palmar-Santos http://orcid.org/0000-0003-2294-390X
Azucena Pedraz Marcos http://orcid.org/0000-0002-4641-6891
Laura Alicia Rubio-Casado http://orcid.org/0000-0002-1784-6008
Montserrat Pulido-Fuentes http://orcid.org/0000-0003-1975-3929
María Eva García-Perea http://orcid.org/0000-0002-6972-3261
Maria Victoria Navarta-Sanchez http://orcid.org/0000-0002-9122-2260

REFERENCES

1 World Health Organization. WHO Coronavirus disease (COVID-19) dashboard. 2022. Available: https://covid19.who.int/
2 World Health Organization & United Nations Children's Fund (UNICEF). Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic: interim guidance. World Health Organization; 2020. Available: https://apps.who.int/iris/handle/10665/331975
3 Kringos D, Boerma W, Bourgueil Y, *et al*. The strength of primary care in Europe: an international comparative study. *Br J Gen Pract* 2013;63:e742–50.
4 Bernal-Delgado E, Garcia-Armesto S, Oliva J, *et al*. Spain: health system review. *Health Syst Transit* 2018;20:1–179. Available: https://pubmed.ncbi.nlm.nih.gov/30277216/
5 Hämel K, Toso B de O, Casanova A, *et al*. Advanced practice nursing in primary health care in the Spanish national health system. *Cien Saude Colet* 2020;25:303–14.
6 World Health Organization. Role of primary care in the COVID-19 response: interim guidance. World Health Organization, Western Pacific Region; 2020. Available: https://apps.who.int/iris/bitstream/handle/10665/331921/Primary-care-COVID-19-eng.pdf?sequence=1&isAllowed=y [Accessed 19 Sep 2021].
7 Majeed A, Maile EJ, Bindman AB. The primary care response to COVID-19 in England's national health service. *J R Soc Med* 2020;113:208–10.
8 Rawaf S, Allen LN, Stigler FL, *et al*. Lessons on the COVID-19 pandemic, for and by primary care professionals worldwide. *Eur J Gen Pract* 2020;26:129–33.
9 World Health Organization. Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020. World Health Organization; 2020. Available: https://apps.who.int/iris/handle/10665/334048
10 Woolf SH, Chapman DA, Sabo RT, *et al*. Excess deaths from COVID-19 and other causes, March-July 2020. *JAMA* 2020;324:1562–4.
11 Greenhalgh T, Wherton J, Shaw S, *et al*. Video consultations for COVID-19. *BMJ* 2020;368:m998.
12 Morreel S, Philips H, Verhoeven V. Organisation and characteristics of out-of-hours primary care during a COVID-19 outbreak: a real-time observational study. *PLoS One* 2020;15:e0237629.
13 Golinelli D, Boetto E, Carullo G, *et al*. Adoption of digital technologies in health care during the COVID-19 pandemic: systematic review of early scientific literature. *J Med Internet Res* 2020;22:e22280.
14 Khoshrounejad F, Hamednia M, Mehrjerd A, *et al*. Telehealth-based services during the COVID-19 pandemic: a systematic review of features and challenges. *Front Public Health* 2021;9:711762.
15 Wosik J, Fudim M, Cameron B, *et al*. Telehealth transformation: COVID-19 and the rise of virtual care. *J Am Med Inform Assoc* 2020;27:957–62.
16 Gergen Barnett K, Mishuris RG, Williams CT, *et al*. Telehealth's double-edged sword: bridging or perpetuating health inequities? *J Gen Intern Med* 2022;37:2845–8.
17 Eberly LA, Kallan MJ, Julien HM, *et al*. Patient characteristics associated with telemedicine access for primary and specialty ambulatory care during the COVID-19 pandemic. *JAMA Netw Open* 2020;3:e2031640.
18 Odendaal WA, Anstey Watkins J, Leon N, *et al*. Health workers' perceptions and experiences of using mHealth technologies to deliver primary healthcare services: a qualitative evidence synthesis. *Cochrane Database Syst Rev* 2020;3:CD011942.
19 Creswell JW, Plano Clark VL. Designing and conducting mixed methods research. 2nd edn. Thousand Oaks CA: SAGE Publications, 2011.
20 Aranda-Reneo I, Pedraz-Marcos A, Pulido-Fuentes M. Management of burnout among the staff of primary care centres in Spain during the pandemic caused by the SARS-Cov-2. *Hum Resour Health* 2021;19:133.
21 Lambert SD, Loiselle CG. Combining individual interviews and focus groups to enhance data richness. *J Adv Nurs* 2008;62:228–37.
22 Braun V, Clarke V. *Successful Qualitative Research: A Practical Guide for Beginners*. London, UK: SAGE, 2013.
23 Morse JM. Confusing categories and themes. *Qual Health Res* 2008;18:727–8.
24 Lincoln YS, Guba EG, Pilotta JJ. Naturalistic inquiry. *Int J Intercult Relat* 1985;9:438–9.
25 Working group for the surveillance and control of COVID-19 in Spain, Members of the Working group for the surveillance and control of COVID-19 in Spain. The first wave of the COVID-19 pandemic in Spain: characterisation of cases and risk factors for severe outcomes, as at 27 April 2020. *Euro Surveill* 2020;25:2001431.
26 Wanat M, Hoste M, Gobat N, *et al*. Transformation of primary care during the COVID-19 pandemic: experiences of healthcare professionals in eight European countries. *Br J Gen Pract* 2021;71:e634–42.
27 Smyrnakis E, Symintiridou D, Andreou M, *et al*. Primary care professionals' experiences during the first wave of the COVID-19 pandemic in Greece: a qualitative study. *BMC Fam Pract* 2021;22:174.
28 Kumpunen S, Webb E, Permanand G, *et al*. Transformations in the landscape of primary health care during COVID-19: themes from the European region. *Health Policy* 2022;126:391–7.
29 Matenge S, Sturgiss E, Desborough J, *et al*. Ensuring the continuation of routine primary care during the COVID-19 pandemic: a review of the international literature. *Fam Pract* 2022;39:747–61.
30 Hämel K, Röhnsch G, Heumann M, *et al*. How do nurses support chronically ill clients' participation and self-management in primary care? A cross-country qualitative study. *BMC Prim Care* 2022;23:85.
31 Kendzerska T, Zhu DT, Gershon AS, *et al*. The effects of the health system response to the COVID-19 pandemic on chronic disease management: a narrative review. *Risk Manag Healthc Policy* 2021;14:575–84.
32 Neves AL, Li E, Gupta PP, *et al*. Virtual primary care in high-income countries during the COVID-19 pandemic: policy responses and lessons for the future. *Eur J Gen Pract* 2021;27:241–7.
33 de Batlle J, Massip M, Vargiu E, *et al*. Implementing mobile health-enabled integrated care for complex chronic patients: intervention effectiveness and cost-effectiveness study. *JMIR Mhealth Uhealth* 2021;9:e22135.
34 García-Perea E, Pedraz-Marcos A, Martínez-Rodríguez SH, *et al*. Effectiveness of a Fibromyalgia online nursing consultation in the quality of life: A randomized controlled trial. *Pain Manag Nurs* 2022;23:478–85.
35 Alboksmaty A, Kumar S, Parekh R, *et al*. Management and patient safety of complex elderly patients in primary care during the COVID-19 pandemic in the UK-qualitative assessment. *PLoS One* 2021;16:e0248387.
36 Chang JE, Lai AY, Gupta A, *et al*. Rapid transition to telehealth and the digital divide: implications for primary care access and equity in a post-COVID era. *Milbank Q* 2021;99:340–68.
37 Norman C, Wildman JM, Sowden S. COVID-19 at the deep end: a qualitative interview study of primary care staff working in the most deprived areas of England during the COVID-19 pandemic. *Int J Environ Res Public Health* 2021;18:8689.
38 Boden M, Zimmerman L, Azevedo KJ, *et al*. Addressing the mental health impact of COVID-19 through population health. *Clin Psychol Rev* 2021;85:102006.
39 Raynor K, Panza L, Bentley R. Impact of COVID-19 shocks, precarity and mediating resources on the mental health of residents of share housing in Victoria, Australia: an analysis of data from a two-wave survey. *BMJ Open* 2022;12:e058580.
40 Krist AH, DeVoe JE, Cheng A, *et al*. Redesigning primary care to address the COVID-19 pandemic in the midst of the pandemic. *Ann Fam Med* 2020;18:349–54.
41 Ruiz-Fernández MD, Ramos-Pichardo JD, Ibáñez-Masero O, *et al*. Compassion fatigue, burnout, compassion satisfaction and perceived stress in healthcare professionals during the COVID-19 health crisis in Spain. *J Clin Nurs* 2020;29:4321–30.
42 Norful A, Martsolf G, de Jacq K, *et al*. Utilization of registered nurses in primary care teams: a systematic review. *Int J Nurs Stud* 2017;74:15–23.
43 Ashley C, Halcomb E, James S, *et al*. The impact of COVID-19 on the delivery of care by Australian primary health care nurses. *Health Soc Care Community* 2022;30:e2670–7.
44 Legido-Quigley H, Otero L, la Parra D, *et al*. Will austerity cuts dismantle the Spanish healthcare system? *BMJ* 2013;346:bmj.f2363.
45 Royo S. Responding to COVID-19: the case of Spain. *Eur Policy Anal* 2020;6:180–90.