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# Perspectives of Non-Hospitalised Patients with COVID-19 Self-Isolating for 10 Days at Home: A Qualitative Study in Primary Care in Greece

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Abstract: The aim of this qualitative research, conducted in Spring 2021, was to identify the inconveniences and the psychological and social impact of 10 days of home isolation, required by law, in non-hospitalised COVID-19 patients in Greece and to improve management. Thirty-seven semi-structured telephone interviews were conducted, audio-recorded, and transcribed verbatim. Thematic analysis identified four key emergent themes, i.e., everyday life during self-isolation, psychological issues, social issues, and information and guidance. Food provisioning was of particular concern. Solidarity was expressed to individuals in need. Isolation was not always viable due to space constraints and the necessity to care for sick family members. Fear of transmission to vulnerable groups, hospitalisation, irreversible complications, and death as well as anxiety, insecurity, guilt, and alienation were articulated. COVID-19 disrupted the normal functioning of families and led to revision of interpersonal relationships. Patients avoided re-integration in society due to the transmitter stigma and to limit the risk of infection spread in the community. Over-information promoted fear. Mild illness raised doubts about information validity. Primary care provided monitoring and psychological support. Home isolation caused disruption in various aspects of participants' life, ranging from logistic problems to dealing with the psychological burden of isolation and illness. Primary care could play a central role in supporting patients.

Keywords: psychological impact; social impact; COVID-19; home isolation; primary care



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## 1. Introduction

To limit the spread of coronavirus disease 2019 (COVID-19), restrictive measures, such as physical distancing, the use of face masks, regulations which incorporated lockdowns, self-isolation for those tested positive for SARS-CoV-2 or were in contact with a

confirmed case, and quarantine for those arriving from specific countries, were adopted by governments worldwide, including the Greek cabinet [1].

Previous studies on the impact of epidemics and pandemics on mental health have showcased an increase in mental disorders over time [2,3]. In COVID-19 literature, psychosociological burden is reported among hospitalised patients with COVID-19 [4,5], health care workers [6], and the quarantined population [7,8]. Isolation under certain circumstances should be healthy and natural, but when prolonged, it can become detrimental for the health of an individual [9].

Primary Health Care (PHC) has been the cornerstone of the response to the pandemic [10]. PHC in Greece has stepped up to respond to the pandemic challenge at multiple levels, including testing symptomatic patients, managing COVID-19 patients and their close contacts, and delivering the vaccination program on a mass scale. However, there was no organised support for patients with COVID-19 during self-isolation. The National Public Health Organisation (NPHO) instructions were limited to the transmission avoidance of the disease and when to visit a secondary health facility in case of worsening symptoms, while the instruction of the Civil Protection Service (CPS) was limited to contact tracing and informing patients about isolation length. Patients with COVID-19 self-isolating at home were forced to self-manage the unprecedented status of suffering from a disease in the absence of organised medical and social support.

With regards to literature, studies have demonstrated the psychological impact COVID-19 imposed on the general population as well as on more vulnerable subgroups. Foundoulakis et al. delved into university students' mental health during lockdown, highlighting increased prevalence of self-reported subclinical and clinical depression and anxiety [11]. These echoes the findings of a multicenter study that illustrated the psychological, emotional, and social toll lockdown brought upon the general population [12]. Smyrnioti et al. suggested that the aforementioned effects of home confinement are more impactful than the pandemic itself [13].

Although some published studies explored the detrimental effects of isolation during the lockdown on the wellbeing, mental health, and everyday life [14,15], and also the impact of self-isolation after hospitalisation due to COVID-19 [16], there is a gap in knowledge regarding the implications of self-isolation in patients with COVID-19 that required no hospitalisation. Their perspectives, hardships, and proposals are integral in understanding and reforming primary care in pursuit of optimal management of similar scenarios in the future.

The first step before any decision pertaining to health needs from PHC is to record these needs, in order to understand how they affect everyday life, physical and mental health, and also patients' attitudes towards the community. A thorough analysis of an unprecedented situation, such as the one imposed by the COVID-19 pandemic, helps to understand its magnitude, to assess the need for intervention, and to find the appropriate way to act.

The present study was carried out to assess the psychosocial impact of 10 days of self-isolation on patients with COVID-19, which required no hospitalisation, in Greece along with the behavioral changes due to the disease and the unmet needs of patients. This will allow PHC to meet patients' needs in an optimal way in terms of prevention, management, and response and to develop a well-organised support mechanism for patients self-isolating in the community.

# 2. Methods

# 2.1. Design and Setting

This is a qualitative study conducted in Spring 2021 in Greece during the third pandemic wave. We adopted the "grounded theory approach" as it is characterised by conceptualisation and theory building rather than theory or hypothesis testing. In this methodology, we investigated participants' insights towards the phenomenon of psychosocial pressure within the context of self-isolation at home using semi-structured interviews with

COVID-19 patients. In the grounded theory approach, in order to enhance the construction of and address research questions, it is necessary to collect and analyze data and to continue this process iteratively until new data ceases to emerge or data saturation is achieved [17].

# 2.2. Recruitment and Sampling

Recruitment was facilitated by the Aristotle University of Thessaloniki PHC Research Network (AUTH.PHC.RN). Study participants should meet the following inclusion criteria: (a) adulthood (≥18 years old); (b) recently tested positive for SARS-CoV-2 (interviews conducted within 15-20 days of diagnosis); (c) suffering from COVID-19 that required no hospitalisation and legally required to remain in self-isolation at home for 10 days. Purposeful sampling with maximum variation of characteristics (age, gender, residents of rural/urban/island areas of Greece, marital status, and insurance coverage) was sought. Members of the AUTH.PHC.RN approached family physicians who were external partners of the network, working either in the private or the public sector, in different geographical regions of central, northern, and islands of Greece. They informed the family physicians of the purpose and inclusion criteria of the present research so that they would invite some of their patients, who were at that time suffering from COVID-19, to take part in the study and to obtain, from those willing to participate, the consent to pass their contact information on to the researchers. A network member contacted potential candidates, who met the study's selection criteria, to get written consent through email and to schedule an interview within 15 to 20 days following the diagnosis so that the patient's experiences were still fresh in the memory and could be described in detail. Following the isolation time, on the day designated as the interview day, the interviewers called the patients who had completed and returned via email the consent form, reconfirmed that selection criteria were met, with a focus on non-emerging hospitalisation, and subsequently performed the interviews.

The need to select a sample of patients to be studied over a limited period of time was to ensure exposure to the same pandemic environment and to the same measures in response to a constantly changing pandemic, leading to the parallel conduct of the recruitment procedure, the interviews, and the analysis process. Recruitment of participants and interviews continued until data saturation was reached.

From the initial pool of candidates, five participants were excluded due to hospitalisation that was required at a later stage of the illness, four potential participants dropped out, three refused to provide written informed consent, and one cancelled participation due to scheduled restrictions.

# 2.3. Data Collection

A topic guide was developed, piloted twice, and reviewed by the research team (Table 1).

Interviews were conducted remotely via telephone by three experienced researchers (SD, PS, BC), members of the AUTH.PHC.RN, with no prior acquaintance with the participants between 17th March and 3rd May 2021. SD and BC are female General Practitioners (GPs) and PS is a Registered Nurse with special interests in qualitative studies and primary care. Interviews that on average lasted 45 min were audio-recorded with consent and transcribed verbatim, whereas identifiable data was anonymised in the transcripts. Transcripts were not returned to the participants but were compared to field notes. Follow-up interviews were not conducted. Field notes were taken during the interviews by the interviewers.

Table 1. Topic guide.

A. Health condition before COVID-19: How was your health before COVID-19? Please report any medical problems.

- B. Health condition during the COVID-19 infection: What symptoms did you experience? Who did you consult?
- C. Other problems and management: What were the main everyday issues you faced during the period of illness? (Was there someone at home who took care of you? Did they get infected?) How did you get food and medical supplies? How do you feel about the guidance you had in that week from the health care services (health professionals-Public Health Organization-Civil Protection)? How was the communication and contact with your relatives, friends, colleagues during the isolation and if any in which way? What was the reaction of your friends when they found out that you got sick? What was the level of support you received during self-isolation and in what way? How did they welcome you back at the end of self-isolation?
- D. Knowledge/Stances/Perceptions: What were your thoughts and feelings when you found out you were infected? How do you feel now? What would you advise someone going through the same problems with you? What would you advise someone who is not infected should do to protect themselves?
- E. Improvement suggestions: What did you mostly miss during the quarantine? What would have made you feel more comfortable during the period of isolation? If a beloved person gets COVID-19 and you find yourself in the position of taking care of them, what would your priorities be? How do you envision your supporting role?

## 2.4. Data Analysis

In grounded theory approach, the process of developing analytic codes and categories is based on collected data rather than pre-existing hypotheses. An inductive (bottom-up) approach was used in order to formulate conclusions from the data. The transcripts were consecutively coded manually while interviews were underway, and recruitment ended when no new codes emerged in the last three transcripts, indicating saturation. Open coding and then axial and selective coding were performed. The process of open coding involved the segmentation of data into smaller units of words or phrases, which were then categorised under conceptual headings, known as codes. During coding, the process of identifying similarities and differences was carried out through a continuous comparison of the data with newly emerging information. Coding was conducted by two female GP researchers (AC, SD) experienced in transcript coding and qualitative studies. A coding framework was developed, agreed upon, applied to all transcripts, and refined iteratively (Figure 1).

Our coding process involved a close examination of the participants' emerging feelings (e.g., fear), participants' processes (e.g., how they acted in response to problems), and opinions (e.g., expectations). During axial coding, we tried to identify possible connections between codes (e.g., managing work responsibilities during isolation) and subsequently generated sub-themes. During the phase of selective coding, the core themes were identified, which encompassed the sub-themes in terms of their explanatory significance. Ultimately, a comprehensive thematic summary was generated.

Key emergent themes and sub-themes and their meaning were identified [18] through inductive thematic analysis. Differences in coding or thematic analysis were discussed with the analysis team until a consensus was reached. Selected illustrative quotes are presented in the results.

# 2.5. Ethics Approval and Participation Consent

The study protocol received ethical approval by the Medical School Bioethics Committee of the Aristotle University of Thessaloniki (Ref. 4.313-26/1/2021). All participants signed informed consent forms (returned by email) before recruitment in the study.

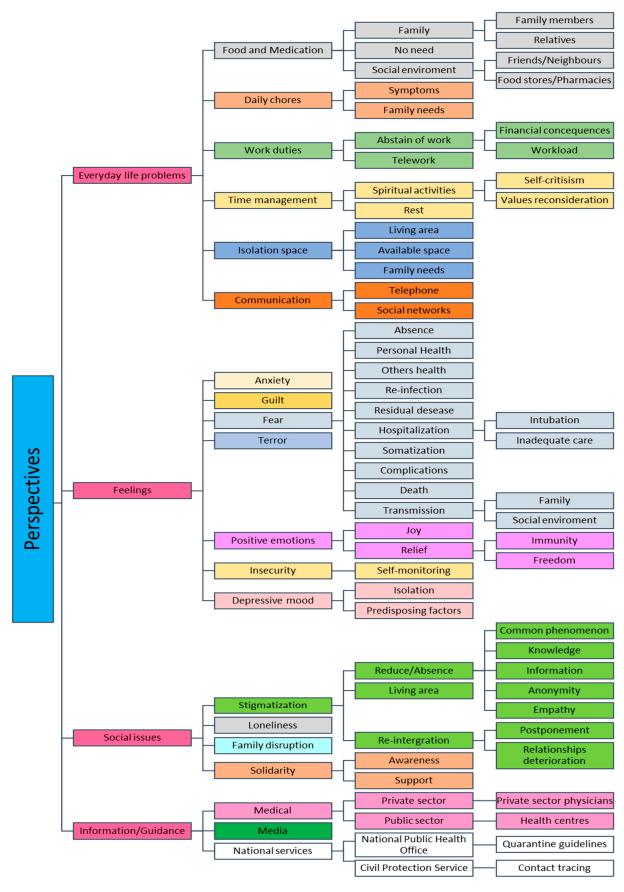


Figure 1. Coding tree. NPHO; National Public Health Office, CPS; Civil Protection Service.

#### 3. Results

Thirty-seven participants were interviewed. A summary of participants' sociodemographic characteristics is presented in Table 2.

Table 2. Participants' sociodemographic characteristics.

N	37	
Gender n (%)	Male	14 (37.8)
	Female	23 (62.2)
Age (Mean, SD)	48.6, 12.6	
Area of Residence n (%)	Rural	8 (21.6)
	Urban	14 (37.8)
	Town (Semi-urban)	10 (27)
	Island	5 (13.5)
Work Status n (%)	Unemployed	6 (16.2)
	Employed	27 (73)
	Pensioner	4 (10.8)
Marital Status n (%)	Single	6 (16.2)
	Married	29 (78.4)
	Widower	2 (5.4)
Insurance Status n (%)	Insured	35 (94.6)
	Uninsured	2 (5.4)

Four main themes emerged from our analysis: (1) Everyday life during self-isolation; (2) Psychological issues; (3) Social issues; (4) Information and guidance. Illustrative quotes are presented in Table 3.

Table 3. Illustrative quotes.

## **EVERYDAY LIFE DURING SELF-ISOLATION**

## Food and Medication

'My sister or my best friend would bring me food, place it outside the door and leave, or even the pharmacist would bring medicine outside the door. We would order from the supermarket, and they would bring them to us.' (P32, female, 52, semiurban, married, insured)

'My wife (quarantined) used to go to the supermarket we have nearby.' (P4, male, 57, urban, married, insured) 'I am one of those people who always have supplies at home, so I cannot say that we missed or struggled for something.' (P25, female, 37, urban, married, insured)

'I'm not just talking about COVID. When someone lives alone for years, once we get sick and stay at home, the only problem we face is nutrition.' (P10, female, 65, urban, single, insured)

# Daily Chores, Work Duties, and Time Management

'I cooked for 3–4 days. I cooked as a chore because we had to eat something. I did not do housework, because I did not want to strain my body.' (P18, female, 55, urban, widow, insured)

'In the morning when I got up, I was happy to log in to the computer, to connect with my work and work. That pleased me.' (P11, male, 44, rural, married, insured)

'Colleagues, who are subordinates and knew about my illness, were calling and inquiring about what they would have to do the next day.' (P18, female, 55, urban, widow, insured)

'As I am a bit workaholic, I felt fear about how I will be able to do my job. Mostly work was my problem.' (P24, female, 38, rural, married, insured)

'We have daily work in the fields; we have no other job. The only thing left behind is our work in the land. Can we afford to do this after 15, 20, 30 days?' (P6, male, 46, semiurban, married, insured)

'Because I have some post-COVID neurological symptoms the doctors gave me sick leave [ . . . ] The company does not pay me, so the only existing income is the Social Services' sickness benefit [ . . . ] As the hospital does not have a neurologist, I must visit a private doctor.' (P19, male, 60, rural, married, insured)

## Table 3. Cont.

#### **EVERYDAY LIFE DURING SELF-ISOLATION**

## **Isolation Space**

'Fortunately, the house is big. While I was in the room, my husband and son were separated, so they would not get infected.'
(P36, female, 59, island, married, uninsured)

'Can you be in the other room when your child is burning with fever? I could not do it; I live for these children.' (P32, female, 52, semiurban, married, insured)

#### Communication

'I was constantly talking on the telephone. I was talking... through the camera with my children, with friends...' (P5, female, 47, semiurban, married, insured)

'We discussed our problems through Facebook, especially with the people who had coronavirus [ . . . ] one supported the other.' (P18, female, 55, urban, widow, insured)

## **PSYCHOLOGICAL ISSUES**

#### Fear

'That night I had a lot of fever, dizziness, and vomiting. [...] I had not gone through something like this before. That night scared me a lot.' (P6, male, 46, semiurban, married, insured)

'To tell you the truth, I did not feel afraid for myself. I was only scared for my husband.' (P2, female, 60, urban, married, insured) 'We hear about complications, and that many times problems can occur after some time. I was concerned about whether there would be any untreatable complications.' (P19, male, 60, rural, married, insured)

'My first thoughts were more about my (hospitalised) parents; (wishing) no need for intubation and transfer to Athens. Unfortunately, our island does not have good medical care.' (P35, female, 45, island, married, insured)

'What can the state do for me now? Should people from the state come to visit me, and get infected? I do not demand such a thing.'
(P17, female, 69, urban, widow, insured)

'Anything happening to my body was probably psychosomatic. I thought it was from the virus. Maybe this rapid heartbeat, the intense one [...] was from my fear. I visited the cardiologist and he said that everything is fine, and I have no issue.' (P5, female, 47, semiurban, married, insured)

# Absence of Fear

'I have gone through worse processes in my life. I had cancer in 2004. This came to me . . . like a flu.' (P11, male, 44, rural, married, insured)

# Depressive Mood

'At first, I cried daily, as I did not know what would happen. I was afraid of the progression. Maybe I know I'm getting worse because I'm also a smoker. I'm very scared . . . Psychologically, I'm a mess. I had palpitations. I was depressed for ten days.'

(P5, female, 47, semiurban, married, insured)

## Insecurity

'I would feel safe if a doctor came to examine my lungs.' (P16, female, 37, urban, married, insured)

# Guilt

'Unfortunately, despite complying with these measures, we could not avoid it. Maybe because for a while I only wore fabric masks, before switching to double ones. Obviously, this transition was afterwards and probably too late . . . ' (P19, male, 60, rural, married, insured)

# Positive Emotions-Joy

'I'm glad I was not hospitalised, and I see myself now getting stronger and better. I feel happy.' (P23, male, 55, urban, married, insured)

# **SOCIAL ISSUES**

## Stigmatisation

'I do not pursue meeting people. I cannot imagine that I may still infect someone.' (P27, female, 55, urban, married, insured) 'I see it from me, from my friends, and it's justifiable because they are afraid. All my friends are in vulnerable groups, my sister as well. She has had heart surgery. She is afraid. [ . . . ] I have not met anyone yet. Everyone is still distancing to tell you the truth.'

(P32, female, 52, semiurban, married, insured)

'They did not show fear, but I know they are deeply afraid. Because that's how I felt when my two colleagues went through this. In the beginning, when I saw them, I strived to be safe and put on my mask in a better way. Later I learned that, in the end, it is completely harmless and especially after a month you develop antibodies.' (P26, male, 57, urban, married, insured)

'They even laughed at me. Okay, one told me, is this over? Are you clean? Just this. They know at some point they will go through it as well.' (P14, male, 33, semiurban, married, insured)

## Table 3. Cont.

## **SOCIAL ISSUES**

#### Loneliness

'I did not meet many acquaintances outside, because in my area of residence, I am virtually a stranger.' (P19, male, 60, rural, married, insured)

'Direct contact with my husband [ . . . ] human communication . . . getting a little closer to each other, sitting together, eating together, sleeping in the same bed, hugging. . . I missed these.' (P24, female, 38, rural, married, insured)

## Disruption in Family Functioning

'My older son takes national exams. As a philologist, I could not help him in the essay course, in our lessons. I could not support him and his morale.' (P33, female, 54, semiurban, married, insured)

## INFORMATION AND GUIDANCE

## Media

'They must check very closely their symptoms and consult their doctor, and no one else but him, because I believe there is over-information in terms of the media and the best source of information is the doctor who already knows patients. [ . . . ] What happens around us is real and we should not believe anyone posting online...' (P29, female, 37, rural, married, insured)

## Medical

'The best source of information is the doctor who already knows patients.' (P29, female, 37, rural, married, insured)
'My area's Health Centre was very helpful. I could not ever dream of such behaviour! Such great service and interest!' (P7, female,
48, semiurban, married, insured)

# National Services

'CPS advised us over isolation, behaviour, things to be cautious about.' (P1, female, 23, rural, single, insured)
'We were only told by NHPO to stay in the house... to isolate myself... things I did it on my own. [...] I did not have any information about the disease. [...] I guess because they were very busy, as in the island there was a mess. There were no full updates.' (P34, female, 27, island, single, insured)

# 3.1. Everyday Life during Self-Isolation

Family, friends, and neighbours are key in forming a supportive network for individuals self-isolating with COVID-19. They provide patients with the necessary food and medication. Stores provided home delivery services, whereas cases of close contacts who broke quarantine rules to buy things were reported. Many patients had already stacked products and needed no supplies during isolation. Food and medication provisioning was a main concern for people living alone or families living in urban areas who were without close relationships for support.

'Someone outside the house supported us. There are people who go through it as families, in urban centres, where no one can help them, shop for them, collect prescriptions from pharmacies...' (P27, female, 55, urban, married, insured)

Daily chores, subsequent work, and stress continued, and patients did their best to limit them, however, their ability to complete domestic tasks and take care of their family depended on how unwell they felt.

Professional duties did not cease during illness, mainly when symptoms were mild and telework was available. There were some patients who expressed the need to work remotely. However, other participants perceived ongoing communication with colleagues about work-related matters whilst they were on sick leave as irrational and inappropriate. Postponement of workload and the expected increased burden on return to work were also reported to be stress-provoking. The immediate financial consequences of not being able to work were discussed by patients who worked in agriculture, were self-employed, or worked in the private sector. Ongoing symptoms and a prolonged recovery from COVID-19 significantly reduced the income of those on unpaid sick leave.

Isolation allowed time to rest, engage in spiritual activities, and reflect, leading to self-criticism as well as reconsideration of values. The quality of interpersonal relations was revised, emphasising solidarity and support.

'I have revised life a little. Sometimes we complain about stupid things. I started to see that there are more important things in life. I also reflected upon our friendships, upon human relationships. One should be affectionate towards others when they have an issue.' (P33, female, 54, semiurban, married, insured)

The spatial planning and available space determined the level of self-isolation from other family members. In extreme cases, all family members were made to reside in separate rooms even when only one was ill. Isolation from family members who needed care, when they were unwell, was reported to be both practically difficult and morally unacceptable. Living in rural areas and in larger residencies provided more amenities compared to urban areas.

'I believe that people who live in an apartment will not feel as comfortable as someone in a village, who has his/her yard, his/her estate.' (P14, male, 33, semiurban, married, insured)

Communication was carried out mainly via telephone but also through social networking and video chatting. Increased communication was observed in known case clusters. However, isolation did not allow for substantial communication and support even from close family.

'I don't think there could be anything under these circumstances to help me, because I was isolated. I spoke on the phone with my wife, but not very often, let's say two, three or four times for a moment during the day, which means that even the theoretical need for communication could not be satisfied.' (P19, male, 60, rural, married, insured)

# 3.2. Psychological Issues

Fear about personal health was often related to the intensity and duration of physical symptoms, such as fever. However, some people said that the need to care for other sick people in the household outweighed the fear regarding their own health. Fear of re-infection, residual disease, irreversible complications, and death were also reported, and they usually stemmed from what the patients had heard from doctors, the media, or the social environment. Fear of hospitalisation was linked with intubation and inadequate medical care, especially in remote areas, such as islands. Fear of transmission to family or the wider environment and especially to vulnerable population groups was strongly recorded. To minimise risk of transmission, some refused help from relatives and authorities. Somatisation of fear was also reported.

'The only thing that scared me was whether my wife and children would get infected. I bought everything available for protection, as my wife is pregnant.' (P11, male, 44, rural, married, insured)

Absence of fear for personal health is associated with mild symptoms at onset, good level of health, and previous experience in dealing with more difficult health problems.

Terror was manifesting during the announcement of positive tests either due to the unexpectedness of disease or fear about the outcome.

'I was shocked to hear that, I was positive. (I felt) terror because I did not know how this would develop.' (P16, female, 37, urban, married, insured)

An emerging depressive mood stemmed from isolation, commonly in those with predisposing factors for developing severe illness.

Anxiety developed from uncertainty about disease progression but was often managed with medical advice and support from their family physician.

'I was a little stressed. I did not know its development, but as the days passed, I realised that things were going well, and my doctor reassured me.' (P8, male, 34, semiurban, married, insured)

Insecurity was expressed as clinical examination was absent, and patients were forced to self-monitor their illness.

Guilt emanated from doubts over the correct compliance with prevention measures. Joy appeared post recovery and was associated with favourable outcomes and no need for hospitalisation. Relief appeared also post recovery and was attributed to acquired freedom and immunity.

'I feel relieved now. I will go out and live. I feel more relaxed. I am not afraid of others, of being approached.' (P16, female, 37, urban, married, insured)

## 3.3. Social Issues

Stigmatisation was strongly reported by participants living in closed communities. Patients often postponed re-integration in society as personal responsibility and stigma of transmission were unbearable. Strain on close relationships, often justified by fear of transmission, was strongly reported. On the other hand, knowledge and information reduced fear of transmission and social stigma. Stigmatisation was absent in some cases as the disease could affect everyone and, in the third wave, this was no longer an unprecedented event. Additionally, anonymity and empathy promoted the absence of stigma.

'This is a closed community. As news has spread, this is a problem; I want to prolong (quarantine) a little longer, so that people around me feel safe.' (P28, male, 28, island, single, insured)

Loneliness is associated with isolation and feelings of deprivation of freedom. Even when isolating in the same house, patients conveyed feelings of alienation.

'Prison. It was like that for me [...] I missed walking out, dealing with other people, freedom . . . ' (P14, male, 33, semiurban, married, insured)

The social burden of disease was also expressed through the disruption of the normal functioning of the family, both in practical and emotional terms.

Solidarity was expressed through raising awareness and worrying about lone people or ill families isolated from society. People expressed willingness to support patients' mental health.

'Everyone wished me recovery. They called daily to check up on us and know our needs. Everyone is willing to help.' (P11, male, 44, rural, married, insured)

# 3.4. Information and Guidance

The provision of information by the media was often considered as misleading and promoted fear. Mild illness also raised doubts about the validity of information.

'All we're told is nonsense.... What I went through was too painless.' (P4, male, 57, urban, married, insured)

Medical information was recommended to be more valid and personalised. Patients were updated on the nature of disease and guided mainly by Primary Health Care Physicians (PHCPs). GPs and Internists exclusively practicing in PHC. Communication was regular, almost daily. Their role in supporting psychological wellbeing is underlined. Residents of urban areas reached out mainly to Private Sector Physicians, while patients of rural and semiurban areas reached out to Public Sector Health Centres.

'As soon as I got the test results, I called my Internist who gave me a list of medication and we communicated daily. [...] The doctor was always by my side. She helped me a lot, she did not let my morale deteriorate. [...] She gave me courage.' (P18, female, 55, urban, widow, insured)

NPHO and CPS were concentrating on quarantine guidelines and contact tracing, respectively. There were cases where communication was non-existent due to the high workload, and some people had complaints about incomplete information. The need for ongoing assistance services and medical support was strongly expressed.

'CPS should ask if you need something. If there is no one to take care of you, (they) should send you someone.' (P35, female, 45, island, married, insured)

## 4. Discussion

This study sought to highlight the problems that COVID-19 and home isolation brought to the lives of patients. In this section, we list the main findings of the study and their interpretation.

# 4.1. Main Findings

Close relationships with relatives and friends enabled patients to seek and receive help, when in need. Solidarity was shown specially to patients living alone and families in big cities with difficulty in food provisioning. The mental burden of patients was often exacerbated due to common life problems arising from isolation, i.e., the forced isolation in limited physical spaces and the disruption of their daily routine, work life, and family function. The need for access to medical care despite the isolation restriction was expressed, and personalised guidance by health care professionals could decrease patient insecurities and increase their trust in guidelines and measures.

Even though disease that did not necessitate hospitalisation did not elicit strong negative emotions, the risk of serious complications induced worry, anxiety, and depression symptoms, followed by feeling of relief upon recovery. People in self-isolation due to other viral illnesses, such as H1N1 flu or Ebola, faced similar negative [19] and positive emotions [20].

The abundance of information sources generated a feeling of being overwhelmed and, in some cases, their reliability and quality were criticised by patients who preferred to receive information from GPs. The importance of authorities and the medical community for providing accurate guidance and trustworthy information was emphasised.

A shift from individual to common interest was observed as patients often postponed re-integration in society to limit the risk of spreading the infection in the community, and solidarity and support was expressed to individuals and families in need.

# 4.2. Interpretation

Emerging problems are closely linked with the degree of confinement and less associated with the disease itself as the latter manifested mildly and without any particularly worrying symptoms. In our study, self-isolating COVID-19 patients were tormented by not being able to meet their basic needs. This has also been reported for the general population affected by lockdown measures [16]. The prevalent social isolation in large urban centres [21,22], also described as a "behavioural epidemic" [23], highlighted the imperative need for the development of a support mechanism for isolated individuals, both in health and in disease.

The present research showed that the lack of effective communication due to social isolation, which alienated patients from close family or the wider social environment, induced a feeling of helplessness during illness. This feeling combined with the need to self-monitor the disease further increased patient insecurities and drove them to seek information, monitoring, and support from PHCPs. The study also pointed that over-information from the media and the medical community about the disease and its complications led patients to develop fear of the occurrence of these complications during their own illness. This belief was so strong and posed as a challenge to the correctness of information from patients in whom a good outcome was observed. The lack of proper management of information by the general public highlighted the need for personalised guidance by PHCPs.

The most frequently occurring symptom related to mental health in this research was the fear about personal health. However, it is noteworthy that fear about personal health was in many cases overshadowed by that of transmission to family or wider environment and especially to vulnerable groups. This phenomenon, combined with the prevailed sense of solidarity and participants' projected sense of guilt, emanated from doubts over the correct compliance with prevention measures, highlighting that the COVID-19 experience shaped social behaviour and promoted social cohesion.

The present study showed that participants' depressive mood was closely related to isolation and was most observed in people with predisposing factors for low mental health and wellbeing to be severely affected, highlighting that they needed prioritised psychological support from the time of announcement of COVID-19 test results where panic is reported. Stress and insecurity, resulting from lack of face-to-face contact with clinicians, absence of clinical examination, and uncertainty about disease progression, can be managed with medical advice and psychological support. The exacerbation of mental health issues due to practical problems rising from isolation highlighted the diverse ways in which isolation and disease affect mood and wellbeing, especially in socially vulnerable groups [24]. The combination of illness and isolation could be so aggravating [25] that potential benefits of social isolation and confinement with psychological cost need to be calibrated [26].

The longitudinal interaction between PHCPs and allied PHCPs, such as psychologists and social workers, with patients and their families enabled the development of a trusting and empathetic relationship [27], facilitating the early detection of patients needing assistance during isolation. The use of telemedicine services for the follow-up of home isolated COVID-19 patients could assist in the early detection of health problems, the detection of everyday needs, such as the provision of medication, and the regular communication with health professionals [28]. The social responsibility shown by the study's participants could increase the compliance with preventive measures and the intention for vaccination.

The COVID-19 pandemic highlighted the fears and insecurities of people living alone, especially in densely populated urban areas with loose social cohesion. Solidarity from the existing networks was proven vital, but not all people who needed support had the opportunity to receive it (in view of lack of connections), especially in countries where volunteering was not established at a mass scale due to governments' lack of capacity to effectively utilize volunteers and to assign volunteers with appropriate tasks [29].

In addition to strengthening health systems in all countries [30], the multifaceted nature of the pandemic unearthed the urgent need to implement strategies safeguarding mental health [31]. At the same time, as the structure, cohesion, and functioning of societies are put to test, global socio-political mobilisation towards the organisation and preparation of the world community against possible future pandemic outbreaks is of utmost importance, and patients' perspectives and experiences should be valued and considered in the modeling of a future health crisis response.

## 5. Strengths and Limitations

One strength of this study is that it explored the patients' perspective about the problems faced during the self-isolation. The qualitative methodology leads to in-depth analysis and understanding of their views. However, although we employed purposive sampling of participants, there is always a possibility some views and perspectives might not have been fully represented. In addition, the ever-changing environment of the pandemic promoted the emergence and even resolution of new and older patient problems whose entirety is impossible to be recorded during the limited time of the study. Another limitation is that the study population consisted of patients who were mostly young to middle-aged and capable of self-monitoring their mild COVID-19 disease. People who were older and those with communication difficulties, such as cognitive impairment/dementia, severe mental illness, or learning disabilities, needed additional support, even with very mild forms of the disease; the needs of those groups and the role of their caregivers should be explored in a separate study.

# 6. Clinical Implications

There are important clinical implications arising from this study. Primary Health Care Physicians have a key role in supporting patients with mild COVID-19 in self-isolation. Their longitudinal relationship and knowledge of their patients, their families, and social circumstances enables them to monitor their patients' health and wellbeing as well as

promote self-monitoring in those groups who are capable of doing so. The use of remote technologies could be instrumental in helping to provide this group of patients (who are mostly middle-aged and have access to the internet) with an additional sense of security and to reduce levels of anxiety. Allied health professionals, such as nurses, mental health practitioners, and social workers (or social prescribing link workers where they are available) could also contribute in safeguarding the mental wellbeing of people in isolation due to ill health and are socially vulnerable.

#### 7. Conclusions

COVID-19 in combination with home isolation affects patients' mental health, promoting fear of personal or even other people's wellbeing, feeling of helplessness as patients are forced to self-monitor their disease, or alienation as they are forced to self-isolate from their family and social environment. These findings indicate that Primary Health Care should promptly respond to patients' needs, starting on the first day of self-isolation, by adequately utilising all its health professionals to achieve a holistic approach.

A key observation of this study is the occurrence of various difficulties due to self-isolation in the presence of various individuals' health needs arising from the disease. The combination of illness and isolation multiplies the psychological burden of patients, indicating the need for provision of psychological support.

Over-information on the complications of the disease promotes fear. As targeted information from the authorities and the scientific community define perception about illness and social behaviour, attention should be paid to provision of personalised information and guidance through Primary Health Care Physicians.

Finally, the fact that in our country the practical needs of patients were served by the social environment indicates that the state needs to strengthen characteristics that society displayed during the pandemic period, such as solidarity, in order to increase social cohesion.

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