

# Experience of SARS-CoV-2 virus infection and compulsory isolation during the first wave of the pandemic in Poland – a qualitative analysis

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## Abstract

**Aim:** The aim of the present study was to explore the experience of SARS-CoV-2 virus infection and mandatory isolation during the first wave of the pandemic in Poland.

**Method:** Five women who were infected with the virus and had been in isolation for three to more than five weeks participated in the study. The procedure used in the analyses was based on the phenomenological approach.

**Results:** 5 themes were identified in the analysis: 1. Crisis, 2. Infection, 3. Imprisonment, 4. Symptoms, and 5. Adaptation. Identifying the outlined themes captured the experience of crisis and adaptation to the situation of being infected with a potentially fatal virus and being imprisoned in one's own home for an extended period of time.

**Conclusion:** The experience of our subjects fits into the wider context of a time of megacrisis, which globally emerged with the SARS-CoV-2 virus, when medical knowledge about it was very limited and isolation became the only tool to deal with the threat.

**Keywords:** SARS-CoV-2, mental health, IPA, isolation

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The last months of 2019 and early 2020 were a dramatic time, with the SARS-CoV-2 virus rapidly becoming a global threat (Rahimi & Abadi, 2020). For many months, effective treatments for infection-related complications were unknown (Poland et al., 2020). People all over the world were faced with new and threatening situations, such as risking their health or lives, losing their jobs or having to stay in quarantine or isolation. Numerous studies on the impact of the COVID-19 pandemic on mental health have shown that it has negatively affected the mental and physical state of people around the world (Dragioti et al., 2022). In various studies participants were observed to experience sleep problems (Bhati & Chokroverty, 2022; Sher, 2020; Targa et al., 2021), as well as increased level of fear and anxiety (Lee, 2020; Menzies & Menzies, 2020; Wang et al., 2020) and depressive symptoms (Peng et al., 2020; Sommerlad, 2021; Ustun, 2021) induced by the threat of the pandemic and its consequences. In a study of the Polish population by Paczkowska and her team (2023), 70 percent of subjects experienced symptoms of psychiatric disorders, such as sleep disorders, increased anxiety and lowered mood. Qualitative research exploring the implications of the pandemic on mental health and wellbeing revealed factors that could have a significant impact on the development and maintenance of the symptoms mentioned earlier, including limited contact with health services, fear of the stigma associated with receiving a positive test result, and family problems (Moradi et al., 2020; Zhang et al., 2022). The studies also revealed processes that support adaptation to the threat and distress caused by the pandemic (Olufadewa et al., 2020).

After a brief phase of ignoring the risks associated with the virus, governments in successive countries, including Poland, began to use various forms of prevention to control the spread of infection (Plümper & Neumayer, 2022). Consequently, citizens in many countries faced a new challenge of dealing with the social isolation imposed by the authorities. This was particularly the case for those who had to stay in quarantine after contact with an infected person and those who were found to be infected with the coronavirus (Dragan et al., 2021; Mrozowicz-Wrońska et al., 2021). At the time, knowledge of the incubation time and the degree of contagiousness of the coronavirus was only just being formed. This resulted, among other things, in very strict isolation rules for infected people. According to the Polish legislation in force in 2020 from March the 15th to September the 2nd, those who did not require hospitalisation were forced under penalty of a hefty fine to stay at home until they had two consecutive negative tests for the coronavirus. In practice, this meant for many people remaining in strict home isolation for many weeks.

The aim of this study was to understand the experience of people who were infected with the SARS-CoV-2 virus and therefore had to be subjected to absolute home isolation for many weeks during the first wave of the pandemic in Poland.

## Method

The study is part of a larger project that aimed to explore the experience of compulsory quarantine and isolation. In the analyses presented in this article,

the authors focused on the experience of mandatory isolation imposed after a positive coronavirus test.

## Participants

Purposive sampling was used in the study. Subjects were recruited through Facebook groups, advertisements in local media and using a network of friends who put the authors in touch with people matching the profile of the research group. The selection criteria were: (1) being of legal age; (2) being formally imposed by the Sanitary and Epidemiological Station to remain in isolation or home quarantine, controlled by the police, under penalty of a fine; (3) the quarantine or isolation had to take place in Poland and be carried out in accordance with its law. Recruitment was conducted in 2020 from March the 15th to September the 2nd. The 35 people thus selected included five women who, after testing positive for the coronavirus, were placed in mandatory home isolation lasting between 21 and 41 days. The start of P1's (Participant 1) and P2's quarantine occurred during a period when a number of restrictions were introduced to inhibit the spread of the virus. The domestic isolation of P3 and P4 coincided with the gradual lifting of the restrictions that had been in place up to that point – restaurants and shopping centres, among others, were reopened, under the condition that the visitors cover their mouths and noses. P5, on the other hand, had to remain in home isolation at a time when restrictions were introduced for selected districts. The participant was in isolation until September the 2nd. A change of regulation recommended introducing a 10-day isolation period following a positive test result if there were no clinical symptoms.

Our participants underwent the coronavirus infection in different ways. P1 had already observed her symptoms (cough, diarrhoea and muscle aches) before receiving the test result, but did not link them to the possibility of SARS-CoV-2 infection. Participant 2 did not observe any symptoms and had doubts whether her test was not a false positive. P3 experienced severe symptoms, lasting more than a week, and including: high fever, severe weakness and loss of smell. P4 observed symptoms of infection, including vomiting, feeling cold and chills, which ended before she received a positive result and which she did not link to the possibility of coronavirus infection. However, her children, with whom she was going through the isolation, displayed the coronavirus symptoms. P5 had shortness of breath and cold-like symptoms. The condition of none of the subjects required hospitalisation. None of their family members were hospitalised either.

All participants of the study underwent isolation in their places of residence. P5 had a large house at her disposal, while the other respondents stayed in medium and large flats. P3 was in quarantine alone, P1, P2 and P5 with their husbands, and P4 remained in isolation with her husband and three adult children in a large flat with a garden. Details concerning the participants can be found in Table 1 (p. 110).

**Table 1***Participants in the study*

	Age	Sex	Occupation	Potential source of infection	Dates	Duration of isolation (days)
P1	60	F	nurse	workplace (hospital)	20.03 – 10.04	21
P2	28	F	doctor	trip abroad	22.03 – 23.04	32
P3	52	F	nurse	workplace (hospital)	does not recall specific dates ('late May, early June', approx. 5 weeks)	39
P4	49	F	nurse	workplace (hospital)	27.05 – 7.07	41
P5	48	F	teacher, therapist	her son's infection	30.07 – 3.09	35

## Procedure

All subjects received detailed information on the purpose and conduct of the study and consented to participate. Data was collected through a semi-structured interview. The interviewers had experience and clinical training confirmed by a specialist degree in clinical psychology. Interviews took place online using a variety of web and telephone applications such as Skype, Zoom, Messenger, and Whatsapp. Interviews were recorded on a digital dictaphone and, if the application allowed it, video footage was also recorded. The interviews were then transcribed into text, which was later analysed. Participants were asked to talk spontaneously about their experience of isolation and, after listening to their stories, follow-up questions were asked about their mental and physical wellbeing during isolation, its impact on relationships with relatives, etc. The first author interviewed P1, P3, P4, P5 and the second author interviewed P2.

## Method of data analysis

The analysis was conducted in the phenomenological approach, which allowed the focus to be on how the subjects experience, understand and try to make sense of their situation – being an infected and isolated person (Landridge, 2009; Smith, 2011). The analysis was carried out according to the procedure proposed by Smith, Flowers, and Larkin (2009; Pietkiewicz & Smith, 2014). The analysis of the interviews was carried out entirely by the first author. Subsequently,

through discussion, topic proposals were consulted with the second author, who also carefully reviewed the transcript of all the interviews. During this consultation, the final shape of the identified themes was agreed on.

## Results

Five themes were identified in the analysis to capture the experience of being in home isolation due to SARS-CoV-2 virus infection during the first wave of the pandemic: 1. Crisis, 2. Infection, 3. Imprisonment, 4. Symptoms, and 5. Adaptation.

### Theme 1: Crisis

The theme relates broadly to both the psychological crisis and the crisis of important institutions responsible for managing the pandemic. The psychological crisis was felt throughout the whole period of isolation. It appeared as soon as information about the infection was received and intensified at certain specific moments related to the isolation procedure and the course of the disease. Symptoms of psychological crisis included strong negative emotional reactions, a sense of not having sufficient coping skills, and difficulty in tolerating the accumulating frustration. Institutions managing the pandemic, such as the Sanitary and Epidemiological Station units and the health service, were also seen as being in crisis and unable to cope with the situation.

The first emotional crisis occurred in response to receiving a positive result of the coronavirus test. Our participants described this moment as something they were not prepared for. Their first reaction was denial. This is how all the respondents reacted. Three of them (P1, P4 and P5) had a strong negative emotional reaction after the first shock. An example of both the shock of the news of a positive result and the subsequent emotional breakdown is the experience of P1, who described her experience of a positive result in this way:

It fell on me like a bolt from the blue, because I didn't expect it to be positive (...). I mean, I was sick, I felt bad, but I was kind of hoping that I would still be... I won't have this coronavirus (...). Two minutes it was like, this..., this..., I don't know, I didn't know what... It fell on me like a bolt out of the blue (...). Life seemed to have stopped for me. I didn't know what to do... I had no plans because I didn't know if I would survive (...). Everything was ruined.

Although the state of shock gradually subsided, being in isolation remained a crisis situation and uncomfortable throughout. Even though the participants in the study were able to stay at home, with their family – if they had one – it was still a kind of a 'state of emergency' for them, as P4 described particularly vividly:

I have this June cut completely out of my life. For me, this time there was no June at all (...), literally to the point where I am unable to recall anything from that month (...). I think I also want to put that month sort of out of my mind.

In addition, four of the participants (P1, P2, P4, and P5) described situations that intensified the psychological crisis when, under the pressure of the built-up negative emotions resulting from the illness and prolonged isolation, ways of coping broke down. For P4, the moments that deepened the crisis were the successive positive test results:

Another positive result as it comes in, it's another shock and another sort of trauma that nothing is happening (...). I am still positive (...). Because... there are stages in this isolation... breakdowns too, there come stages where I have had enough, I have no strength left (...). How much longer are we going to be locked in here? How long?... I'm sorry, when I talk about it, I think it makes me want to cry straight away (*laughs through tears*). And yet it triggers such emotions still, and this despite the fact that a month has passed.

The process of breaking down of the ways of dealing with prolonged frustration is how P2 described it:

At a certain point [it] stopped being fun and became tiresome, as the incapacitation began to set in (...). I have already at some point (...) mentally I had a problem to, to... get out of bed (...). Even by my reaction now you can see (*the participant cries*) that it was a tough time.

Four of the participants (P2, P3, P4, and P5) did not only see themselves as being in crisis. According to them, the crisis also affected the institutions involved in the battle against the pandemic. For P1 and P4, the perceived inefficiency of the health service was important while P2, P3, P4 and P5 highlighted inadequate isolation procedures and a breakdown in the functioning of the sanitary services overseeing the isolation.

The breakdown of the healthcare system caused the participants to experience intense anxiety about their own health. They were concerned that they would not receive adequate hospital care if their condition worsened. This is how P1 described her concerns:

That's what I thought, maybe someone won't be able to handle it. Maybe I'll end up in that infectious diseases [ward](...) and someone there won't help me (...) will fail to see something (...). That perhaps an oversight of some kind (...) will simply happen.

As the timing of subsequent swabs, reporting of test results, duration and isolation rules depended on the State Sanitary Inspection units, their inefficiency evoked strong negative emotions in the participants. The interviewees complained about immense frustration, a feeling of helplessness and of being left

alone due to the difficulties in communicating with the institution. For P4, this was one of the most difficult aspects of isolation:

A huge downside is the contact with the SANEPID<sup>2</sup> (...). This is a total failure (...) what I experienced when contacting the SANEPID. The SANEPID (...) locks someone in their house and there is no contact with them (...). There is no such communication between the patient and the SANEPID, the SANEPID-patient relation is missing.

P3, on the other hand, saw the supervising institution as similarly confused and surprised as the ill:

Well, the SANEPID is really poor here (...). It seems to have come down on it like a bolt from the blue.

## Theme 2: Infection

Theme 2 describes how the participants experienced the coronavirus infection. Their narratives revealed that the infection caused them a great deal of anxiety about their own health, uncertainty about the subsequent course of the disease, surprise at the strength and unusual nature of some of the symptoms, and feelings of guilt and great concern for the health of those they potentially might have infected.

Anxieties about their own health emerged in the participants immediately after receiving a positive result. This was particularly the case for P1, P4 and P5. During the first days of isolation, those interviewees paid a lot of attention to analysing their own health: they wondered whether their body could cope with the infection and were alert to various physiological symptoms that could suggest a deterioration of their condition. P4 complained of severe anxiety, even though the symptoms of the infection were quite mild:

I was fine, I was physically healthy (...). But this awareness that this is something new, unknown (...) there may appear something additional at any time (...). It caused such great fear.

In P2's case, on the other hand, her young age (the youngest among the participants), her belief in her own resilience and her lack of perceived symptoms helped to lower her anxiety levels, as illustrated by the following extract from her statement:

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<sup>2</sup> This popular abbreviated Polish expression can mean both the State Sanitary Inspection and its local Sanitary and Epidemiological Stations. We render it here in capitals to differentiate it from the English context.

At the moment the result is what it is, but nothing is happening (...). I am young and (...) I thought it would be like nothing to me.

The symptoms themselves also caused psychological discomfort, inducing a state of severe weakness in the participants and forcing them to withdraw from all activity. This was particularly the case for P3 and P5. This is how the moments of the most severe symptoms were described by P3:

During these 10 days (...) I was lying down like a log (...). The process of the actual illness as it occurred was such an agony simply (...). The pain in the body, the unwillingness to do anything.

At the time, there was a lack of reliable and proven scientific knowledge on the course of the infection. The only certainty was that there was no proven and effective drug. This compounded the feeling of fear and uncertainty. This was particularly true of P1, P4 and P5, and is illustrated by the following quote from an interview with P1:

The coronavirus – something new. It is not known how it progresses. This is unexplored (...). There is too little knowledge (...) what might be with the person (...). Well, it caused (...) that this fear has materialised, that I have been sentenced, that (...) [when the interviewee's health deteriorates] medicine wouldn't cope.

A source of a strong stress associated with the infection, stronger than the concerns about one's own health, was the fear of the possibility of infecting others. The possibility of transmission to contacts was considered by all the participants, and the associated feelings of guilt were most strongly experienced by P5, who described her experience in this way:

And, and that fear of infecting someone else was worse than the fear of whether I would survive (...). I don't think I've ever experienced such fear, you know... as I have now (...). This week and a half when I was afraid I had infected someone. It was horrible.

The infection forced the interviewees to confront their own fragility and mortality. This theme was particularly evident in P1, in whom the confrontation with the fact that she might die caused the things she had previously enjoyed and to which she had devoted energy to lose their meaning:

It was a kind of a life in a vacuum. (...) Life without purpose (...). Why did I work so hard, earn so much, save so much (...). At the moment, I don't know if I will survive? Will I be healthy? (...) Does it all make sense?

P3 was challenged by the experience of losing her sense of smell and the severe weakness that followed her illness and prevented her from returning to



work. This contrasted with her strong belief in her own ability and performance. This is illustrated by the following quotes:

It was seemingly the simple sense of smell, and yet, believe me (...) it was a new experience in my life and a very absolute discomfort for me.

Being such a busy person, I didn't feel it somehow (...) that I simply wouldn't cope with the job, after all I was already healthy. Yet it turned out that this disease left exhaustion (...). For the first time in my life (...) the term was used – body exhaustion.

Subsequent negative test results and the release from isolation meant that those participants who feared for their health regained their composure. Winning the battle with the virus reinforced in them the feeling that they were more resilient than those who had not yet contracted the infection. That's what P5 said about it:

Because when I hear now what is happening (...) then I immediately say: 'God, thank you, I got over it, I've got it behind me and I'm not threatened by anything, nor is anyone threatened by me'.

At the same time, P1 and P4 increased post-isolation precautions, as illustrated by the following statement from P4:

Although I have this awareness that at the moment there is no possibility of me getting infected, since I went back to work, I still protect myself, right?

### **Theme 3: Imprisonment**

This theme relates to the discomfort the participants experienced in having to be isolated. They identified the following as sources of this discomfort: the absolute necessity to comply with all the rules regardless of one's own plans, desires or needs, social isolation, the lack of a time limit for isolation, and the need to rely on others for everyday matters. Discomfort was experienced to a greater or lesser extent by all the participants.

With the imposition of isolation, each of the participants had to abandon their plans for an indefinite period of time and then constantly reconcile themselves to the various losses and inconveniences that resulted from having to comply with an absolute ban on leaving the house or flat. P2 described a particularly strong frustration, as illustrated by the following quote:

I want to make dinner, but I don't have any groats and I can't make dinner anymore (...) until someone brings me the groats (...) either I eat rice or I eat nothing at all (...). The rubbish was terribly memorable: that I couldn't take the rubbish out, how I had to sit here in this stench.

Significantly, even when the various needs of the participants were met, the very fact of being forced to stay at home caused severe stress. It was experienced particularly by P1, P4 and P5, as illustrated by the following statement from P5:

And the fact that a person is so locked up in this... in this isolation, that they can't get out, that they feel enslaved, powerless (...). The sheer fact that I can't get in my car, I can't go to town, I can't meet anyone. That was a terrible enslavement, you know? Terrible.

Feelings of fatigue, discomfort and irritation were reinforced by having to wait a long time for the results of further tests, having no set date for the end of isolation and having to stay at home for days after all symptoms of infection had disappeared. All the participants whose isolation dragged on for up to several weeks spoke of their frustration at this (P3, P4, P5). An example of this experience is illustrated in the following statement from P3:

What I could not get over was the organisation of the waiting time for the results. The expectation of an... already, well, stronger person, right? (...) Such a person who should return to work (...) it's kind of... stress about the organisation, simply.

The isolation also intensified the difficulties in mental functioning, as it significantly reduced all social contact. This lack was felt to a greater or lesser extent by all the participants, and was explicitly mentioned by B1, among others, who complained that she could not fully benefit from the emotional support from loved ones:

Isolation ... is not good at all (...). A person cannot share with another person (...). [In isolation] you can't share, for example with some friend, with family. Well, by phone yes. But, but there is no such direct contact.

At the same time, remaining isolated required relying on the constant help of others to deal with many daily issues. P2 and P5 saw it as a source of discomfort, and P4 said it caused her severe stress, as illustrated in the following quote:

I was talking here about this shopping... These sisters of mine, of course, were standing up to the challenge as much as possible, whereas I had already had moments where I didn't, well, I won't be able to ask them anymore (...). I think it's a bit of a burden and it is also depressing that you have to use someone.

#### **Theme 4: Symptoms**

Theme 4 includes the various mental symptoms that emerged in the participants as a reaction to the coronavirus infection and the need to stay in isolation.

Participants reported mainly depressive and anxiety symptoms. The first ones manifested themselves through lowered mood, loss of meaning, feelings of helplessness, powerlessness, unwillingness to fulfil basic duties. Among the anxiety symptoms, those related to the fear of deterioration were at the forefront, rooted in the previously described lack of confidence in the efficacy of medicine against an as yet unknown pathogen. These experiences took on an obsessive character at times, when the subjects focused on any sensations coming from the body and immediately interpreted them in a catastrophic way. The analysed narratives also revealed an anxiety response to the sense of imprisonment. Among the symptoms, there was also a strong feeling of inadequate fatigue after isolation, which some respondents linked not only to the infection, but also to the mental fatigue of isolation.

Severe depressive symptoms were observed in P1, P2, P4 and P5. This is how P1 remembered her moments of poor wellbeing:

I wasn't interested in anything, I wasn't cleaning the house (...). I had no plans because I didn't know if I would survive (...) everything was ruined (...). I said: there is no point, why clean? Why wash? Maybe I'll die the next day? (...) the symptoms will worsen, they will take me away. So why should I do it, why should I clean this up?

P5, who is a psychotherapist, even used the language of psychopathology to describe her condition:

Very depressing, you know, very depressing, very... so subjugating, that's how I felt, enslaved (...). Helpless too, because what could I do? The fact that there is no cure of any kind, [I was also] angry about the whole situation that (...) so much modern medicine and still no cure.

For P2, on the other hand, it was a time of the most difficult mental crisis she had ever experienced:

Well the most memorable day for me was when I decided that I'm not getting out of bed because I have no reason to. It was the worst day of my life (...) and I find myself crying again, but it was a feeling of such hopelessness.... (...) I have never felt worse in my life... Nothing will happen, I will do nothing, I won't go out, I won't find out (...) I thought to myself, if this is how people with depression feel on a daily basis then.... wow, well I really respect that they are alive, because it's impossible to live like that.

For P1 and P4, in addition to the psychological ones, also somatic symptoms of depressive disorders in the form of sleep problems became apparent. These were described by the latter:

Because, in fact, the whole nights (...) I seemed to lie down, to go to sleep and sleep, but I would wake up early, get up at night too, couldn't sleep.

The revealing anxiety symptoms were predominantly rooted in catastrophic anticipation of bodily sensations experienced during the period of infection. Such symptoms were described by interviewees P1, P4 and P5, and this is how P1 talked about her experience:

All the time there is this fear: won't my health deteriorate? Will the shortness of breath start? Won't worse symptoms develop? (...) Any such additional pain, wherever anything appeared in me, [made me] fear that my health was deteriorating.

Anxiety symptoms were also induced by a sense of being trapped for an indefinite period of time. P4 spoke about this, describing the experience as follows:

I laughed that I must have some kind of claustrophobia symptoms, because it made me so tired, that I don't think I can live in that kind of confinement, even though I had that space, right?

Interestingly, some of these symptoms persisted even after the isolation ended. Participants P1, P3 and P4 mentioned severe fatigue, which they could not explain, and difficulties in returning to work. P4 described them as surprising to her and out of proportion to the effort she had to make:

I could do everything calmly, without a rush and still I could feel this fatigue, right? First shift awful, a tired person after first shift (...). Maybe a month of isolation has that effect, because it is both the psychological (...) and the illness, well everything accumulates though.

## **Theme 5: Adaptation**

The final theme identified in the data refers to the process of adaptation to the challenges of infection and isolation. All the participants described various ways, intentional and unintentional, in which they coped with emotional tension, depressive and anxiety symptoms, feelings of helplessness and lack of control. Both action-oriented strategies (actively seeking social support, attempting to regain partial control of the situation) and those that focused around reassessing one's situation (changing priorities, focusing on the positive aspects of the situation, 'downward' comparisons) emerged. For some interviewees, temporary social and emotional withdrawal also appeared to be a way of coping with the crisis.

The solution of actively seeking support was used by P1, P3 and P5. Support from others was particularly important for P1, who describes how the contact with her niece helped her as follows:

It's a good thing I have this niece of mine (...). She was such a pillar of support for me. I called her and said I didn't think I could do it anymore (...). That this coronavirus would develop. (...) So [the niece] says, aunty, hold on, hold on for

one more day, you have to hold on for two days. And just like that... I was calling, she was mentally supporting me.

The interviewees P2 and P4 also considered seeking professional help. This is shown in the following extract from P2's statements:

I had this idea to call some psychologist, to talk to someone (...) [because] I didn't want to burden my family.

Another strategy used by the participants can be characterised as downward comparisons – actively seeking positive aspects of one's situation in relation to the situation of others. This was the strategy employed by P3, as the following quote illustrates:

I had, in my opinion, a unique situation, because (...) I do not need today to be responsible for another person (...). I really sympathise with that mum who has the whole family 'locked up' and the husband cannot go to work (...). I can't compare myself with the ladies who (...) live with a violent person, for example. Well, that, then, is really a ... disaster.

Another way of adapting to the experienced crisis was to change one's life priorities and focus even on the less significant but positive aspects of the situation. This strategy was observed in P1, P3 and P4, and is confirmed by the words of P4:

Because they were such small, these... elements of this happiness, because my child's negative result, another one's negative result is great, right? Great, my husband's release, the child's release [from isolation], so it was such single elements during those six weeks, such single elements that really brought joy.

In-depth analysis identified forms of behaviour that could be understood as ways of coping, although the participants themselves did not define them in this way. We mean in particular the different ways of regaining control of one's situation by focusing on tasks that are achievable. Such strategies were used by P2, P3 and P4, and the following statement by P4 provides an example:

Fighting the SANEPID (...) because you can't get through to the people there, connecting borders on a miracle. (...) I just came up with this emails idea (...) and it worked. (...) Those emails were answered quickly by the SANEPID, so that, I say, maybe those two weeks later too, mmm... have made it easier for us to function.

Among the described forms of behaviour were also ways of coping unrelated to the isolation procedure. P1 and P2, for example, were coping through physical activity. In the case of P2, it was intense and regular, as the following quote shows:

I started using a personal trainer already before the pandemic and my trainer (...) offered me online classes. (...) It was one of the few things that sort of made me want to get up. Such (...) physical exertion somewhat... cleared my head.

One more way of adapting to not being able to change one's position was emotional and/or social withdrawal. This way of coping was revealed by P1, P2 and P5, as illustrated by P5 below:

Escape into sleep (...). That is, I was escaping from thinking about it, into sleeping, into dreaming. (...) I think it was probably the sleep that brought me the most relief. (...) I was constantly escaping into sleep. (...) First, out of fatigue, second, I just wanted to get away from, from thinking (...). It gave me some kind of peace of mind.

## Discussion

The aim of our study was to explore how compulsory home isolation was experienced by people infected with the SARS-CoV-2 virus during the first wave of the pandemic in Poland. To be able to gain a deeper and more complete understanding of these experiences, we used a qualitative data collection procedure and the phenomenological approach to analyse the data. The results show that the experience of compulsory isolation proved to be a challenge for our participants and their coping abilities. This difficult experience is illustrated by the five themes identified during the analysis, related to crisis, infection, imprisonment, symptoms and adaptation.

### Crisis

The participants' experience of psychological crisis followed the dynamics repeatedly described in the literature (Badura-Madej, 1996; Caplan, 1964). Receiving a positive test result triggered a phase of shock, denial and stagnation. Some participants, despite obvious signs of infection, expected a negative result until the end, so the information they received completely destabilised their functioning for some time. They froze in confusion and fear, which gradually gave way to strong negative emotions as they confronted the reality and inevitability of the stressful event. A similar response has been observed in various qualitative studies involving people infected with the coronavirus (Ahmadi et al., 2022; Muslu et al., 2022; Shaban et al., 2020; Sun et al., 2021). A meta-analysis of qualitative studies conducted in different countries showed that denial and panic associated with receiving a diagnosis may be a typical reaction to receiving information about a positive test (Zhang et al., 2022).

But it was not only the onset of isolation that was a stressful moment for the participants. Throughout, successive weaker or stronger stressors have

gradually emerged. As Kira et al. (2023) point out, the COVID-19 pandemic is a unique form of traumatic experience. Stress during a pandemic is experienced over an extended period of time and requires 'endless attempts to cope with persistent stressors, which can exhaust a person's coping capacity' (p. 52). The effect of a pandemic is a trauma made up of multiple components such as life and health risks, economic problems, lockdown stressors and isolation (Kira et al., 2021). Analysis of the material collected in our study indicates that virus-infected individuals in mandatory isolation during the first wave of the pandemic experienced just this specific type of multicomponent stress. In their case, strong stressors included the fear that their health would deteriorate and that they might die, fear for the health of loved ones and factors directly related to the isolation procedure, i.e. being banned from leaving the house and confronting the subsequent restrictions that resulted from this ban, waiting for further tests and their results, having to contact sanitary institutions, etc. In addition, due to the very nature of the isolation, the subjects were effectively cut off from their various typical coping methods.

The unique nature of the threat of the first wave of the pandemic, classified in the literature as a megacrisis (Alsaqqa, 2022), was also clearly reflected in the experience of the participants in our study. According to Helsloot et al. (2012), during a megacrisis the traditional ways in which the government and public institutions function cease to be effective and new ones need to be developed. A megacrisis is a megathreat because it creates both deep uncertainty and a sense of the need for immediate action (Helsloot et al., 2012, p. 5). The SARS-CoV-2 pandemic, especially at the beginning, hit the foundations of the functioning of the entire social system and destabilised key public services (Boin et al., 2021). In the experience of our participants, the megacrisis was reflected through a loss of confidence in the efficiency of the systems involved in dealing with the pandemic and a strong sense of disorientation. The inefficiency of public health care and the institutions supposed to take care of people in isolation made the study participants feel left behind and frightened, and the inefficiency of the systems of overseeing isolation and of developing appropriate procedures caused great frustration and a sense of lack of control over their own fate.

## **Infection**

The infection triggered in our participants a strong fear for their own health. This is consistent with the findings of a number of studies with infected people who have displayed a strong fear associated with the disease (Zhang et al., 2022). The ill were particularly concerned about health deterioration, hospitalisation and death (Aliakbari Dehkordi et al., 2019; Muslu et al., 2022; Sun et al., 2021) and the unknown possible complications following infection (Ahmadi et al., 2022). However, the threat to one's own health and life was not the most important stressor causing negative emotions in the participants of our study. As it turns out, and this is a phenomenon observed in many studies (Moradi et al., 2020; Muslu et al., 2022; Shaban et al., 2020), negative emotions were triggered

by experiencing oneself as a potential threat to others. The main reactions of our participants were fear for the health of the people with whom they had previous contact, the need to receive information about their condition and, above all, a strong sense of guilt. The latter was triggered by the exposure of loved ones to infection and confirmed infections among relatives. Our results support Cavallera's (2020) thesis of a strong negative impact of guilt on the well-being of coronavirus-infected individuals. Recognising guilt as an important emotional aspect of infection is important as often, left without appropriate intervention, it can lead to deterioration in psychological functioning, post-traumatic stress symptoms, depression and problematic substance use (Haller et al., 2020).

Our results also indicate that the psychological state associated with the infection is better when the disease is asymptomatic, and that the well-being of isolated individuals improves as the disease subsides, as they receive further negative test results and finally when they are officially released from isolation. As shown in existing research (Zhang et al., 2022), many people released from isolation after being infected experience a persistent fear of reinfection. Analyses of the narratives of the participants revealed a complex response to subsequent negative test results. On the one hand, the participants felt that they were safer after being infected than those who had not been exposed to the virus; on the other hand, the experience of illness and isolation made them aware of the reality of the risk and some of them maintained increased caution.

## **Imprisonment**

Theme 3 illustrates how difficult the experience of compulsory isolation was for the participants. It made them feel trapped in their own homes, cut off from daily activities and contacts, reliant on the help of others and helpless. Prolonged isolation caused many negative emotions and psychopathological symptoms. The lack of clear rules and of, above all, a specific time limit compounded the feeling of frustration and helplessness.

The results of our research are consistent with those of studies involving people under mandatory quarantine after exposure to the virus during the 2003 SARS virus outbreak in Canada. In Hawryluck's (2004) study, participants indicated that they found it stressful to have to limit social contact while depending on others (e.g. for shopping) and described feeling of being isolated from the outside world. In a study by Cava et al. (2005), participants talked about social exclusion and the difficulties of having to adapt to quarantine rules. Our results are also consistent with qualitative studies among those infected and isolated during the SARS-CoV-2 pandemic. Participants in these studies reported feeling socially excluded (Aliakbari Dehkordi et al., 2019), the destructive impact of isolation on their wellbeing and social interactions (Ahmadi et al., 2022; Moradi et al., 2020), feeling disconnected from the outside world (Shaban et al., 2020) and feeling trapped (Muslu et al., 2022). The results of our study differ from those mentioned above in that we note an emerging complaint about the prolonged duration of isolation and the lack of a time limit.



## Symptoms

As a consequence of the breakdown of previous coping mechanisms at various moments during isolation, the subjects developed psychological symptoms in a severity that met the symptomatic criteria for anxiety and depressive disorders (APA, 2013; WHO, 2019). This is consistent with numerous studies indicating an increased risk of adjustment disorders (Ben-Ezra et al., 2021), depression (Zhang et al., 2022), anxiety (Hasannezhad Reskati et al., 2023) and sleep problems (Bhat & Chokoverly, 2022; see also the review article by Serafini et al., 2020) among infected individuals.

At the initial stage, anxiety symptoms predominated in the subjects: feelings of constant worry, nervousness, apprehension and catastrophic predictions about the future, accompanied by physiological symptoms (heartache or constant feeling of internal tension). The anxieties mainly focused around uncertainty about the course of the infection. This is consistent with the findings of a number of qualitative studies that have identified a strong fear of the consequences of infection in participants (Zhang et al. 2022). Interestingly, as in the study by Podwalski et al (2022), the professional medical knowledge of the majority of our subjects did not reduce this anxiety because, as the participants stressed, the pathogen is new and medicine may prove helpless against it. Another factor that increased the anxiety levels of the participants was the inefficiency of the health service and the lack of confidence that they would receive appropriate help if things got worse.

With the gradual adaptation to the thought of infection and no deterioration in health, anxiety symptoms began to give way to depressive symptoms, such as lowered mood, reduced psychomotor drive, reduced interests, loss of the ability to feel pleasure, fatigue and feelings of lack of energy, sleep disturbances, and concentration problems. The prolonged isolation over time was primarily responsible for this, which is in line with the research indicating a positive relationship between the duration of isolation and the strength of psychopathological symptoms (Henssler et al., 2021). In our analyses, we identified a number of factors related to infection and isolation that can trigger and maintain depressive symptoms. These include a lack of control over one's own destiny, which is largely determined by test results and the orders of the institutions overseeing the isolation, total dependence on external help to meet daily needs, being cut off from many important sources of pleasure and activity, loss of a sense of meaning due to the threat to life, and feelings of guilt for being infected and for exposing others to the risk.

After the end of isolation, some symptoms continued to accompany the subjects (especially chronic fatigue and a feeling of lack of strength), although it is difficult to judge from our results how much of this was psychological and how much somatic, related to getting through the infection.

## Adaptation

Ultimately, all the participants managed to activate a variety of adaptation strategies to survive the period of isolation. Due to the nature of the stressors

(infection, having to stay at home), solution-focused strategies were significantly hampered. Instead, the subjects activated a range of coping activities appropriate to situations in which, according to Lazarus and Folkman's (1984) transactional model of stress, secondary cognitive appraisal implies an inability to act to remove stressors. These activities included positive reevaluation (Folkman and Moskowitz, 2000), downward comparisons (Taylor et al., 1983), and a focus on aspects of the problem situation that were controllable and provided a sense of agency (e.g. the 'fight' against the sanitary institutions). In addition, some participants used avoidance as a means of coping (Endler & Parker, 1990), e.g. by engaging in replacement activities (physical exercise) or by 'oversleeping' during isolation. In other circumstances such ways of coping could be considered ineffective, but here they seem adequate, as they have helped to block the process of constantly confronting the feelings of helplessness.

The participants also emphasised the important role of social support in the adaptation process. It helped to mobilise strength, make coping efforts, regulate emotions, and sometimes the mere knowledge that support was available had a calming effect.

The meta-analysis by Zhang et al. (2022) shows that our results are consistent with those of other studies conducted on the psychological aspects of infection and isolation. Among the ways of coping, Zhang et al. (2022) identified, for example, distraction from a difficult situation or using the support of family and friends. What we have been able to identify, and which to our knowledge has not emerged in other studies, are the coping methods described that are geared towards regaining at least partial control over one's own situation.

## Summary

A phenomenological analysis of interviews with five women who had to submit to compulsory isolation during the first wave of the pandemic in Poland after testing positive for the coronavirus revealed the overwhelmingly negative impact of this experience on their wellbeing and mental health. The coronavirus infection and the isolation caused crisis, anxiety and depressive symptoms. The participants adapted to the situation using a variety of adaptation strategies, but in most of them this remained an unpleasant experience which often exhausted their coping capacities.

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