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Doing isolation – Caring Citizens. A cross-country comparative analysis of patient experiences with isolation practices during the early phase of the Covid-19 pandemic

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ABSTRACT

The aim of this article is to investigate isolation experiences of individuals affected by Covid-19 and explore how care practices were enacted or upheld under the particular policies of the pandemic. Conceptually we draw upon Foucault's notion of biopolitics and scholarship on 'care practices' and 'carescapes'. We are interested in how theoretical ideas such as 'containing the virus' or 'flattening the curve,' as part of policies of 'pandemic management,' shaped lived realities and influenced practices and understandings of care. We reviewed qualitative interviews with individuals who were ill with Covid-19 in 2020/2021 from seven countries that we analyzed comparatively across emerging themes with a Foucauldian lens on biopolitics. The idea of 'carescapes,' suggests that 'care' and 'policy' intermingle, which allow us to bring to the fore what is silenced through the biopolitics of Covid-19. Carescapes are the embodied places of care where policies and regulations traverse from public into private spaces, effectively re-configuring the latter. To 'do' isolation in the context of Covid-19, carescapes were assembled with the help of material things such as, masks, disinfectants, doors and schedules; these served as boundaries that had to be sustained and navigated. 'Doing isolation' therefore presents a form of biopolitics that relies on individual citizenship and complex care practices required to chart the terrain created by the policies of the pandemic. Doing isolation was especially challenging because policies about safe spaces and safe practices were regularly changed as governments struggled to devise policies to contain the pandemic.

1. Introduction

The coronavirus SARS-CoV-2, which caused Covid-19, began to receive widespread international attention in December 2019 and was officially called a pandemic by the WHO in March 2020. With its spread to Europe in the beginning of 2020, unprecedented efforts were initiated worldwide to try to contain the virus. It was the first large-scale pandemic since the WHO had initiated the development of 'pandemic management plans' in the 1990s (Holmberg & Lundgren, 2018). At the heart of pandemic management lies the idea of 'securitization'

(Annandale & Hilário, 2020; Holmberg & Lundgren, 2018): securing the health of individual nations through a range of policies orchestrated worldwide under the guidance of the WHO. Starting in March 2020 in the face of rising incidences in countries around the world, fear about an exponential spread of the virus, and in consequence of overwhelmed health care systems, determined policies worldwide. This led to calls to 'flatten the curve' and 'contain the virus.' Images of overwhelmed hospitals, care being administered in tents and coffins piled up outside of morgues travelled the globe.

The aim of this article is to investigate experiences of isolation of

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individuals infected with the coronavirus SARS-CoV-2 in the first year of the pandemic. We write this article from a theoretical stance influenced by Foucault's notion of biopolitics (Lemke, 2011) and from work on the practice of care. Thus, we are interested in how theoretical ideas such as 'containing the virus' or 'flattening the curve,' as part of policies of 'pandemic management,' shaped lived realities and influenced and re-negotiated practices and understandings of care. We draw on concepts such as 'caringscapes' (Gill et al., 2017; McKie et al., 2002) and 'carescapes' (Ivanova et al., 2016). The notion of caringscapes urges investigation of the intermingling of 'care' and 'policy', which allows us to bring to the fore what was silenced through the biopolitics of Covid-19. Carescapes are the embodied places of care where policies and regulations traverse from public into private spaces, effectively re-configuring the latter. We investigated these carescapes by looking at practices of isolation and social distancing in the narratives of people who were infected with SARS-CoV-2 in 2020/2021 in seven countries of the Global North: Canada, Germany, Japan, Netherlands, Spain, the United Kingdom (UK) and the United States of America (USA).

In the following, we first outline some basic policies on isolation and quarantine, followed by the theoretical framing and concepts that informed the analysis of this article. After this, we describe the methods used to collect and analyze the materials.

1.1. Pandemic policies: Isolation and quarantine

The seven countries focused on in this article are similar to each other as they all have primary health care systems in place and all, with the exception of the US, provide universal health care coverage to their citizens. However, they differ in terms of some of the cultural dimensions developed by Geert Hofstede to characterize national cultures (Hofstede, 2023). It has been argued that some of these dimensions, such as individualism or uncertainty avoidance, influenced both Covid-19 responses and outcomes (Nair et al., 2022). More recent investigations with a longer-term perspective on the pandemic, and which included cultural dimensions and socio-demographic variables, suggest that socioeconomic factors were the driving force in terms of differences in pandemic outcomes (Lajunen et al., 2022). The seven countries selected for this study differ widely across these cultural dimensions. However, they were selected because in all of their respective country studies on Covid-19 experiences, isolation played an important role in the illness experience. Some of these country studies have been published elsewhere (Luning-Koster et al., 2022).

Starting in March 2020, some recommendations regarding isolation were in place in all seven countries, according to the global guidance of the WHO. Nevertheless, these rules shifted frequently and rapidly, and isolation and quarantine approaches varied distinctly, both between different regions and municipalities within a country, as well as between countries. Policies to reduce the spread of the virus were deeply embedded in time and place, which makes it difficult to present them as coherent or fixed rules in different places. Thus, we will present with a broad brush the general ideas behind very specific recommendations and regulations. In some countries, pandemic rules were implemented as laws and strictly enforced, while in others there were only recommendations which were not formalized or enforced. Furthermore, in all seven countries, such rules or recommendations were in constant flux and changed frequently. A summary description of policies during the first year of the pandemic in the respective countries can be found in the appendix of this special issue (link will be added once published).

Overall, the pandemic policies related to Covid-19 can be understood as a constant 'muddling through,' in which the WHO and individual countries tested out, refuted or ignored the ideas that had been developed on pandemic management in the years before. Nevertheless, separating infected persons from others through isolation and quarantine presented a central feature of various pandemic policies (World Health Organization, 2021). Isolation and quarantine practices were key strategies introduced to 'care for populations' worldwide. As a

consequence, individuals who were ill or had a suspected Covid-19 infection were requested or ordered by their governments to self-isolate. While the measure itself – the isolation of an affected individual – is a centuries-old practice, there are widely differing ways in which it may be enacted and regulated. In modern day pandemic management, molecular technologies such as laboratory testing and diagnosis are central. The identification of positive Covid-19 cases relied heavily on PCR (polymerase chain reaction) tests (Corman et al., 2020). Later on, self-tests that people could administer at home became available. Both became important infrastructures of the Covid-19 pandemic.

In six of our seven studied countries, the place of isolation was ideally the affected individuals' home, rather than a care institution such as a hospital or other public facility. Only when a person's symptoms worsened and they could no longer stay at home were they transferred to a medical hospital. Japan was the exception here, as the government tried to give people a choice of where to isolate, e.g. hotel or home, irrespective of symptom severity. The WHO recommended that all people with confirmed or suspected Covid-19 should isolate for 14 days "either in a designated facility or in a separate room in the household" (World Health Organization, 2021).

Quarantine and isolation were malleable policy measures that became entangled with other associated policies. In 2020, for example, sick leave payments in Germany were given to employees under quarantine, thus minimizing economic hardship for those infected. This was also true in Spain. In contrast, in the US and Japan, isolation was recommended but not necessarily financially compensated for. In most states in the US, no formal quarantine was ordered by the public health authorities; the recommendation to isolate came either from a provider, a contact tracer or was self-imposed based on guidance of the Centers for Disease Control and Prevention (CDC).

For most UK participants, the need to isolate coincided with worsening symptoms. In the first year of the pandemic, all members of a household had to isolate once one member fell ill; additionally, some UK residents had to self-isolate after visiting a hospital. In general, in the UK, the message was to self-isolate, without further formal orders. In Canada, state regulations and the rules of employers often diverged. The state enacted a mandatory 14-day isolation period after detection of an infection through a positive test, but they required no further test to end isolation. In some instances, however, employers required a negative test before an employee could return to work. In the case of false-positive tests at the end of the isolation period, which were not uncommon, this could lead to an interminable cycle of ever-prolonged mandated isolation. In the Canadian sample, it was not uncommon for interviewees to have had to take up to three months' leave from work for this reason.

In Japan, there was concern surrounding the language used for isolation policies. The term 'isolation' (*kakuri*) itself was seldom used in announcements from public offices, because it was too reminiscent of the human rights violations that resulted from the Leprosy Prevention Law of 1931 (repealed in 1996), which stipulated the institutionalization of patients diagnosed with Hansen's Disease. Thus, the Japanese government officially used the term 'recuperation' (*ryoyo*) instead (Hirokawa, 2021). At the very beginning of the pandemic, all those infected were requested to be hospitalized, regardless of the severity of their symptoms. Within a couple of months, expecting the rise in the number of cases, the government approved those who had no or mild symptoms to 'recuperate at home or at a designated facility,' so that hospital beds could be saved for those with a severe illness. However, the proportion of patients who stayed at home remained relatively low throughout 2020 (22% in April, 6% in June, 30% in December) and reached 40% in January 2021; the majority of people went to hospitals (Ministry of Health Labor and Welfare Japan, 2023).

For many people who could not work from home, being in isolation meant not being able to work and – in some countries – being left without any resources. In other countries, such as Germany, ensuring financial security required complicated bureaucracy and a functioning

public health infrastructure. In Germany, quarantine was officially enforced by the public health services if official test results were available: letters were supposed to be sent to individuals with a positive test, as well as to contact persons, indicating for how long they had to isolate and what fines they could expect if caught breaking the rules. Testing facilities were nevertheless scarce in Germany in 2020 and often people did not know where they could get an official test. Additionally, letters were not always sent, as indicated by the interviews and the personal experiences of the authors. Public health infrastructures in all of the countries we focused on were overwhelmed with the rules they tried to implement.

In this paper, we draw on accounts of people's experiences of managing and negotiating these various policies of isolation and quarantine. We explore how people 'did isolation' in order to care for themselves and for others. In order to gain analytic purchase from our qualitative data, we draw on conceptualizations of biopolitics, biosociality and ideas of care practices. We can learn from this investigation that 'doing isolation' was firstly a private endeavor that effectively reconfigured private spaces into 'riskscapes.' In addition to the materialities of isolation, such as test kits, disinfectants and doors, social networks – Rabinow's 'biosocial communities' (Rabinow, 2022) – were crucial to enable the practice of isolation.

1.2. Theoretical framing: Biopolitics – entanglements of policy and care practices

Pandemic policies offer a clear example of Foucault's notion of biopolitics, which sees the governing of modern nation-states through the administration of life and the making of populations. A healthy population is understood in metric terms, such as life expectancy and disease burden, among others, and this becomes a key driver of political action (Foucault & Senellart, 2008). Biopolitics can be understood as 'caring for the health of a population,' as the anthropologist Nancy Burke has put it (Burke, 2021), and is thus more about 'bare life' (Agamben, 1998) or about 'staying alive,' rather than the quality of a life lived (Stevenson, 2012).

The anthropologist Lisa Stevenson (2012) focuses on what she calls 'the psychic life of biopolitics' to understand the cultural – including emotional and personal – effects that biopolitics has. Biopolitics is about bureaucracy and statistics, making sure one survives physically. This, Stevenson convincingly argues, can well be murderous to the fabric of life, consisting of feeling, sensing and being (Stevenson, 2012). "Bureaucratic care, while working to maintain the physical life of (...) citizens, may also manifest a sort of indifference on the part of the state – (...), even though it is always couched in terms of benevolence and care" (Stevenson, 2012, p.573, p.573).

The particular form of isolation policies enacted and practiced during the Covid-19 pandemic presents a form of biopolitics that relied on individual citizenship, which implied that we ought to 'do the right thing': for the benefit of self-care, but also for the health of the community – what Rabinow refers to as 'biosociality' (Rabinow, 2022). Isolation practices bring to bear the close relationship between policy and care that Gill and colleagues refer to when they argue that policy is inherently intertwined with care, with each shaping the other (Gill et al., 2017). Policy, like care, they argue, consists of "a set of open-ended practices; policy is performed and re-performed in particular sites and settings and by particular actors (...)" (Gill et al., 2017, p.3). Thus overlapping, care and policy are ongoing practices that are relational and provisional (Gill et al., 2017). Indeed, the Japanese government, with its particular historical burden of the Leprosy Prevention Act, foregrounded the care aspect of its policies when choosing the word 'recuperation' over the term 'isolation.' A global pandemic and the associated health policies, often referred to as 'pandemic management,' not only magnify how policy shapes care practices in fundamental ways, but also how care and policy are always relational and provisional. Finally, isolation policies, where individuals and households in which

the sick are cared for must remove themselves from others, also disrupt received ideas of care that highlight health care as proximate, embodied, fleshy and hands-on, as body work (Kleinman, 2015; Twigg, 1999).

Approaches that investigate care as practice see it as involving tinkering and being deeply situated in both time and place (Twigg, 1999). The concept of 'carescapes' from Ivanova and colleagues is helpful here, in particular the need to explore 'care in place' (Ivanova et al., 2016). Carescapes are assemblages of policies, practices, materials, spaces and resources, among others, that shape and create care. This approach encourages thinking about care beyond the immediacy of embodied co-presence to appreciate how embodied practices are relational and circumstantial. Buse and colleagues built on this work when they explored social distancing practices in a cystic fibrosis (CF) clinic (Buse et al., 2020). The management of CF patients involves distancing them from one another to avoid cross-infections, which can be deadly (Saiman et al., 2014). Thus, the authors argue that "distancing can be conceptualised as an emplaced practice of care" (Buse et al., 2020, p.7), because for CF patients, even catching a cold could be fatal. Buse and colleagues' thesis reinforces the entanglements of isolation, care practices and place.

Looking at the *practices* of isolation allows for a reassembling of the dichotomous thinking of positive and negative, infectious and non-infectious, inside and outside, ill and healthy that shaped the policies and narratives about the Covid-19 pandemic. Such dichotomies are typical for bureaucratic thinking and thus structure pandemic policies, but do not reflect everyday life with an infectious disease, which is rather dominated by what Silberzahn-Jandt and colleagues have called *Zwischenräume* (Silberzahn-Jandt et al., 2023): the in-between spaces where care and everyday lives are negotiated. It is in these in-between spaces that tinkering takes place; for instance, being ill and having to isolate, yet finding ways to be cared for and to care for others.

Drawing on qualitative interview data from seven countries in the Global North, our analytical focus lies on how care for the self and care for others were practiced when public health policies prescribed or recommended varying degrees of self- and household isolation during the beginning phase of the Covid-19 pandemic. We do so by focusing on the experience of isolation and quarantine at home as presented in interviews with persons who were afflicted with Covid-19 in 2020 and 2021 in Canada, Germany, Japan, the Netherlands, Spain, the UK and the USA.

2. Material and methods

This article is based on interview studies in seven countries on the illness experiences of Covid-19. These interview studies were part of the DIPEX International (Database of Individual Patients' Experiences) project, an international project that aims to improve our understandings of health and illness experiences.

All individual country studies used the same methods, as developed by Oxford University colleagues for DIPEX International (Breuning et al., 2017; Spitale et al., 2023; Ziebland et al., 2021). Part of this methodology is a purposeful sampling strategy with the goal of achieving maximum variation (Coyne, 1997). Therefore, in all countries we sought our interview partners through the following channels: flyer distribution, social media calls and word of mouth within personal and professional networks (physicians, support groups, care homes), and snowball sampling with the aim of achieving diversity in terms of severity of illness, educational status, occupational status (especially in Germany), ethnicity (especially in UK samples), gender and age.

Semi-structured narrative interviews were conducted with the following narrative prompt to start the interviews: "Kindly share your experience with Covid-19, starting from the moment you first noticed something was amiss until the present, encompassing your encounters with healthcare, medical care, and any other support you received." This prompt was used in all interview studies. The interview guide was standardized across all countries and covered the following topics:

awareness about Covid-19 before diagnosis, first signs and symptoms, diagnosis, treatment, isolation, emotional and mental health aspects of Covid-19, impact on personal life and relationships, information search, recovery and messages (e.g. to others experiencing Covid-19, family members, doctors). For the purpose of this paper, we selected a sub-sample of interviewees from the overall country samples who had Covid-19 in the first year of the pandemic.

We performed a thematic analysis in two steps. First, each country team identified patterns in their data referring to participants' isolation experiences in a two-step-process. The individual country research groups read all interviews and coded each segment related to isolation found in the data and grouped them into the theme 'isolation experiences.' Then all groups used the OSOP (one sheet of paper) mind-mapping approach (Ziebland & McPherson, 2006), in which all researchers were trained. This process involved systematically going through each section of data and recording, on a single sheet of paper, all the different issues raised by the coded extracts, along with the corresponding respondent IDs. Once the OSOP was complete, we had summaries of all the issues that had emerged in the extracts.

The next step involved grouping all issues into broader themes. From this analysis, all researchers in each country wrote a theme summary in English about the participants' experiences during isolation (Ziebland & McPherson, 2006). These country summaries were discussed and made sense of during a series of online meetings. All researchers discussed and compared the theme summaries, which contained all pertinent interview data. During the comparative analysis within the research group, we compared the interview sequences and themes that emerged in the data in an iterative fashion and analyzed them in relation to our theoretical lens. Three authors (AT, SN, CH) then provided a first draft of the article, which was used by the entire author team to refine our collective understandings of the experiences of individual countries and how they relate to the theoretical ideas brought to bear on the materials. In addition, assumed and perceived discrepancies and similarities across countries were investigated to further understand isolation policies and care practices across countries. In drawing together and articulating the core argument from across the seven countries, the researchers shared and modified drafts, which included searching for examples of deviant cases that contradicted the main findings (Chapple & Ziebland, 2018).

3. Results and discussion

Table 1 presents the socio-demographic data from the study sample.

We present our data in order to reveal how isolation was 'done' in practice. In effect, doing isolation comprised of (i) isolation as a care practice and (ii) isolation practices as emplaced and sustained by materialities. In combination, we can see how these practices were manifestations of biopolitics on and of both individuals and populations, which enacted very particular kinds of Covid-19 citizenship.

Table 1
Socio-demographics in the seven study countries.

	UK	Germany	Japan	Spain	Canada	Netherlands	USA
Number of interviews	31	26	13	23	15	40	25
Age range	33–77 years	25–82 years	26–71 years	23–75 years	24–65 years	26–83 years	28–78 years
Sex	21 male 10 female	8 male 18 female	6 male 7 female	7 male 16 female	3 male 12 female	19 male 21 female	4 male 21 female
Ethnicity	22 white English/Scottish/ Irish/British 6 British Asian 3 Black/African British	26 white Caucasian	13 Asian	18 white Caucasian 2 Latin American 2 European Maghreb origin 1 Asian	8 white Caucasian 1 Jewish 1 Sikh Canadian 1 South Asian 1 Brazilian/ Latino	n/a	5 Hispanic/Latino 2 Black/African American 1 Asian 1 Arab American 18 white Caucasian

3.1. Isolation as care practice

In this section, we investigate how isolation was often conceived as care for others, and how simultaneously care for the self and care for others interacted within people's isolation efforts, revealing the inherent sociality of isolation practices. Being infected with the coronavirus SARS-CoV-2, regardless of the severity of the disease, dramatically reassembled and (im-)mobilized social relations in order to enable isolation following the recommendations and rules. Among those who tested positive, there was a sense of taking care of others by isolating themselves, though isolation had to be managed. How could they separate from others at home, particularly from young children? How could they ensure that they were taken care of if they were too ill to take care of themselves? How could they manage fear and difficulty breathing while trying to keep others away? Reciprocal care practices were needed between those infected and those not infected. These care practices can be seen as embodying an ethics of care in which 'a sense of responsibility' (Buse et al., 2020) existed among those who had tested positive to care about a more or less distant other (Milligan & Wiles, 2010).

Many of our interview partners talked about being offered help from nearby friends and family members during their isolation, to provide food, clean clothes and other everyday needs, but not everyone asked for help and support or accepted such offers. For example, a single woman from Japan (64 years, infected with Covid-19 April 2020) who had to stay at home with severe symptoms had a brother living within walking distance. His daughter was about to be married. She decided not to tell her brother about her infection, as she did not want him to come over and help. She did tell her sister, but declined the sister's offer to come over to help and told her to keep it secret from their brother's family. This is illustrative of the complex relational care practices in which other people were of deep concern. Doing isolation was thus a deeply social endeavor, with very many different types of relational care practices.

3.1.1. Caring for and about others

Not being able to leave the house meant that someone else had to provide food, medications or other necessary supplies from outside if necessary. Not all interviewees had someone who would or could care for them, and this led to difficulties in accessing help outside the house. Public health authorities in all countries became overwhelmed and with the exception of Japan seemed to have put little thought into any official procedures or services to support individuals to cope during isolation at home. Some Japanese municipalities had procedures in place to provide food rations to those who requested them. However, during the surge of infections, local healthcare centers were overloaded and interviewees reported that in some cases food rations arrived only after they had been released from isolation.

Some of our interview material from the US suggests that health authorities had procedures in place to not only trace the contacts of infected people, but also to offer support, including food deliveries. In

the example below, it was the health department that regularly checked in with the interviewee and offered to provide food.

RESPONDENT: They [the health department] would call me once in a while to see how I was doing. And then afterwards, when I was doing OK, I guess they stopped calling. I guess they called me about three times.

INTERVIEWER: And what were those calls like for you? Did they just sort of ask how things were?

RESPONDENT: Yeah. Yeah, it was kind of general, how I was doing. (...) Oh, they did offer if I needed food, somebody to bring me food. And I said, no, we're doing OK. (Male interviewee, US, 61 years, infected with Covid-19 June 2020)

In another example from the US, available support structures were mentioned. However, by the time the help system would have been in place, the interviewee's illness had worsened and he was hospitalized.

(...), in our state, what they do is contract tracing. So, what happens is that when I tested positive the laboratory sends the results to the Department of Public Health. Well, by the time that whole process goes through, it took a couple weeks, but it was too late in the process.

And so, it was a little too late to get the help, (...) as far as getting food and stuff like that. [Um] So when I first started, I made a laundry list and [uh] sent it to my family. So, my mom and my sister dropped it off outside at my door. (Male interviewee, US, 42 years, infected with Covid-19 November 2020)

Overall, our data suggest that authorities had few services and procedures in place to provide practical support to individuals and families who were isolating at home. When they did, interviewees often chose to decline the offer. Interviewees revealed how they relied primarily on family, neighbors and friends for supplies and support.

Proximal, bodily, hands-on care also became important with evolving illness. The contingent processes of the body constantly reshaped social relations during the course of a Covid-19 illness. The challenges of living in isolation as a family or with housemates when an infection had to be managed was experienced by interviewees in all countries. When the infection developed into a serious disease, those who were seriously ill faced new challenges in their isolation at home. Participants' accounts point to the necessity of having someone there in person to provide hands-on care in a situation of severe illness (Kleinman, 2012; Twigg, 1999). Those who lived alone had to enact creative solutions for the missing in-person help, but also to manage the concerns of others.

The following example demonstrates how, in a family setting, when one family member became severely ill, hands-on, proximate care was needed, making isolation unsustainable. Only after the sick person became less weak and could care for herself again could she initiate isolation practices with all family members, with high costs for all.

So I have a husband and two teenage boys. I was very reliant on my husband for those two, basically those two weeks when I had fever. I couldn't do anything, but he literally had to break the isolation part to be able to help me to do things. But once I was a little bit more functional for myself, and I mean I was able to lift a cup of water, they would bring things to the door, they would come meet me at the door, and that's how our visits were. We would FaceTime from one room to another. I would, say, by week four, when I was starting to somewhat feel better, that's when the psychological impact starts to hit. (Female interviewee, Canada, 49 years, infected with Covid-19 April 2020)

We see in this quotation some of the materialities of the carescapes (Buse et al., 2020; Ivanova et al., 2016) of isolation: the door, mobile devices, a cup of water. This reminds us of how doing isolation is rooted in places and mediated by material things; the navigation of which can be precarious in the context of a highly infectious disease.

The next example highlights the solitude of severe illness and alludes

to the importance of *presence* in suffering (Kleinman, 2012), precisely because it is absent. An interviewee who lived by herself talked about her severe illness, during which she had no other person close by. Her narrative illustrates well the 'psychic life of biopolitics' (Stevenson, 2012).

Maybe I have a different experience than people who had assistance in some way, (...) there's, maybe, still some like, emotionality for me around it. I don't know that I could over-emphasize the impact to somebody's, like, well-being as a human. Just overall well-being of not having human touch for as long as I went without it, and during a time when I was really scared and very sick. (...) there was really a time where I could not have just said any of those sentences without crying... (Female interviewee, US, 27 years, infected with Covid-19 March 2020)

In another example, a woman from Germany described how she managed the severity of her symptoms while living alone, with no one to take on proximal care.

I wanted to go to the toilet. I was lying on the floor. I was unable to stand up. I half crawled and half pulled myself along the carpet to the bathroom. It was about four meters... I arrived at the toilet thinking my chest will explode. My heart was racing. I saw stars, I was panting. I had to sit down. I thought I would faint. But I guess somehow I made it to the toilet. Then I sat on the toilet. My right side seemed to be lying away from myself. I couldn't move my leg. So I could not stand up. I just kept sitting. I had the telephone with me. I called the hospital. They said, 'Does not sound like an emergency. Just wait and see if it gets worse.' I cried the whole time. How could this get any worse? I can't even call anyone anymore. Then under force I took a bucket from the toilet and slowly made my way back to the sofa. It took about an hour to get there. I stayed on the sofa for three days and slept. I did not leave the sofa. I used the bucket as a toilet as I was unable to move anywhere. I couldn't do anything. I just vegetated and slept. After four days I woke up and I realized, I feel better. I kept my cell phone with me all the time. (Female interviewee, Germany, 39 years, infected with Covid-19 March 2021)

This is one of the very few accounts in which an interviewee described how she took care of her physical needs while feeling very ill and weak. Again, we see the importance of material things; she kept her cell phone with her constantly as a life line, even though it could not provide the service she wanted: to go to the hospital and be cared for. In another sequence from a German interviewee who lived by herself and was seriously ill at home, the cell phone played an equally important role. However, in this case, she used it to keep people at bay. Her family had asked her to stay in touch by phone. Once her condition worsened, she replaced the calls with daily text messages, as she did not want her family to hear her weak voice.

Caring for others during severe illness, then, was not only about proximate, hands-on care in the home, as with children or partners. In some instances, those seriously ill with Covid-19 cared for their worried loved ones by keeping them at a distance, because to receive in-person care would have effectively meant forfeiting isolation recommendations and rules and endangering their loved one's health. In all cases, care for others thus had to be managed (Buse et al., 2020). The second German woman mentioned above cared for her family by trying to minimize their worries by keeping the lines of communication open, albeit in a way that hid the severity of her actual physical state. For her, the phone became a caring device (Merz et al., under review), as did the video conferencing system in the case above of the US woman with her husband and sons. Care at a distance (Pols, 2012) here was directed towards those not ill, keeping them at bay by comforting them, so that they would not come to look after the ill person.

In other instances, caring for someone else did mean that isolation was impossible. Many of the interviewees who had caring relationships with children or persons with special needs in their home had to abandon isolation practices such as wearing a mask, as they were not sustainable. As a father from the Netherlands explained: "What some do is

no longer see your children or at 1.5 m, but then no one can sustain that” (Male interviewee, Netherlands, 42 years, infected with Covid-19 March 2020) (Luning-Koster et al., 2022). Official rules regarding the ‘care for a population’ were replaced by relational care, and with it, the pragmatics of care practices. For example, one of our female interview partners in Spain was her daughter’s sole caregiver during the day since her husband had to go to work. Her daughter was afraid of the facemask, however, and so she decided not to wear it around her.

My husband went to work to the hospital, 70 km away from where we live, and I stayed taking care of my daughter. When she saw me with a mask she cried screaming, very scared. Then it seemed unfeasible to me, the hours were a torture. I took off the mask at lunch time. (Female interviewee, Spain, 37 years, infected with Covid-19 March 2020)

In such relations, it *matters* who cares. The anonymous ‘care for a population’ approach was not sustainable. For Stevenson, anonymous care includes not only bureaucratic acts such as isolation rules or other policies that focus on the care for a population, but also extends to professional care in which it should not and does not matter who one is as a person. In such anonymous care, caregiving becomes a general human-to-human practice void of personal relations. It is not about the other as a person, an individual, but simply as a human (Stevenson, 2012). Such caring relationships by default cannot exist in private, personal care relations. Thus, there is a tension between anonymous care for a population and relational care that is inherent in the idea of isolation at home when severe illness or care relations are concerned.

This tension is vividly described by a man in the UK who tried to find an explanation for why he did not isolate from his wife when she was ill. He then also contracted Covid-19 and both had to be sent to hospital.

(...), we both got taken away at the same time. But she was definitely, that weekend, more poorly than myself. I was still moving about and doing things and then all of a sudden it seemed to hit me. Obviously, probably, because we were still in the same bedroom together and I, possibly earlier, should have gone into the other room. But at the time I was looking after my wife, so you just carry on. (...), I should have got all the gear on, shouldn't I, and put the mask on and ... ? But you don't start doing that, do you? We've been together a long time. We've been married 40 years, you know, and so we know one another. Which is important as well, isn't it? And you can see when one another is not well or there is something wrong. So, you try to help the other person out and that's how relationships work, isn't it? So that's what you do. (Male interviewee, UK, age range 60–69 years,¹ infected with Covid-19 October 2020)

In hindsight, he wondered why he did not immediately keep more distance from his wife or wear more protective equipment. However, as he described, it was the natural thing to do to stay close and in touch. His values of how to treat his long-time partner in distress were in conflict with the anonymous care for a population that pandemic management called for. Relational care, care that matters, is personal. Indeed, mask wearing and maintaining separate rooms remake the personal into anonymous care for a population. At that moment in time, this was not yet thinkable for the above interviewee. It is well possible that he might have reacted differently several months later, but at that point in time, during the early phase of the pandemic, he did not act in ‘population mode’ when caring for his ill wife.

Most interview partners felt a strong moral obligation to isolate to keep others safe, even though this moral obligation often conflicted with relational care practices with dependents such as children, the elderly or persons with special needs.

So then, the next few days, we were isolated in my house. So there's me, my cousin lives with me, she works in a nursing home, so she had to stay

home as well. And then my two children. School was already out by that time, but we were just in the house. And the first two weeks were really hard, because I was in my room and I couldn't have any contact with my children. And my daughter, it was probably hardest on her, because she couldn't be around any of her friends and then she also couldn't be around me. And so she ended up completely flipping her days and nights and she went through a miniature depression and then there was nothing I could do to help her, it was really devastating for her. (Female interviewee, Canada, 45 years, infected with Covid-19 March 2020)

Different from others in our interview data, in this case there was social support in the house that allowed mother and child to keep at a distance. For a father from the UK who had to isolate for two weeks after his discharge from hospital, where he had been admitted to intensive care with severe pneumonia caused by Covid-19, he found it very difficult to not be able to be physically close to his children after his critical illness and return from hospital.

The first two weeks [after discharge from hospital] were very, very hard because I had to obviously self-isolate so nobody, my kids and everybody, nobody came near me. And what's the first thing you want to do is hug your kids, isn't it, more than anything. That was really... (Male interviewee, UK, age range 50–59, infected with Covid-19 March 2020)

For those who strictly upheld isolation, this generally came at a high emotional cost and was only possible with the help of others who provided relational care for the dependents of those afflicted. It is such emotional costs that make up the psychic life of biopolitics (Stevenson, 2012), which in the pandemic management of Covid-19 also showed itself in those instances where isolation was given up by others so that they could care for the severely ill or in the way in which concerned family members were kept at bay out of concern for their wellbeing. Such practices made up the fabric of what it meant to live under pandemic management and the principle of ‘containing a virus’ in the context of Covid-19, and what was at stake in the everyday lives of people.

3.1.2. Self-care

Of the interviewees who had tested positive but were asymptomatic, they experienced isolation mostly as relaxing and tried to make the best of it. When symptoms were worse, participants had to stay in bed and rest, but once these more acute days had passed and they felt better, they described sharing time with family and friends online, making themselves comfortable, reading books or watching TV. For some, being at home was not much of a problem, although for others, especially those who lived alone or in small apartments, it was more difficult. As one interviewee from Germany (male, age 31 years, infected with Covid-19 November 2020) explained: “Whoever stays at home all the time during isolation is in danger of becoming crazy.” However, in countries like Germany and Spain, going outside while under a mandate to isolate was illegal behavior by law and subject to a fine. This led some to find creative ways to leave the house in order to preserve their own sanity, while also ensuring they did not endanger others. A Spanish interviewee who faced a long isolation period developed a routine of going for a walk between three and four o'clock in the morning, wearing multiple gloves and masks. He felt certain that these precautions ensured that no one would be infected by him.

Sincerely, thank goodness there was no curfew, because on the thirteenth day, or the twelfth day, so to speak, it is true that what I am going to confess is wrong but I needed it, I used to go at three, four o'clock in the morning and when there was no one in the street. I protected myself. I did not leave my room because I was afraid of infecting my parents. But what I did was to put on several gloves, put on several masks and at three, four o'clock in the morning walk, go to town and walk twenty, twenty-five minutes, get some air. (Male interviewee, Spain, age range 20–29, infected with Covid-19 August 2020)

¹ Due to the different data documentation in the participating countries, the presentation of the demographic data differs. This applies to every quote.

Finally, in many instances, isolation became a more relaxing experience once all members of a household were positive and they no longer needed to isolate from one another – at least when support was available from outside to provide food and when no one was seriously ill and in need of special care.

3.1.3. Sociality of isolation practices

As shown above, isolation practices were highly dependent on other people. Isolating at home successfully needed resources and was only possible for those who could afford it, socially and financially. This created an ambivalent space in which the moral imperative of doing the right thing generated tensions in the context of public health policies and recommendations. With the exception of Japan, official guidelines were based on dichotomous categories that assumed that people could isolate, that they knew when to isolate and that isolation was possible at home. The Japanese government in its official guidelines acknowledged that there would be people who would find it difficult to isolate themselves from the high-risk family members living in the same house and recommended that they isolate at designated facilities such as hotels and training centers. By offering people a choice to recuperate outside of the home, the Japanese government shaped the carescapes of isolation by officially preparing to provide ‘in-between spaces.’ The intention fell short, however, as officials became overwhelmed by the rapidly increasing number of cases and could not provide people with an alternative isolation facility in a timely manner.

As we have seen, isolation could not be achieved in isolation. In the everyday lives of our interview partners, doing isolation was a process of muddling through in which rules and recommendations had to be transformed to accommodate their sense of doing the right thing for the population and being true to their personal care relations. These are the in-between spaces in which care unfolds and which de facto re-shape the public and the private. In all seven countries, interviewees struggled to negotiate between the anonymous care for a population and the care for an individual that *matters* (Garcia, 2010). Such decisions, however mundane, involved moral and ethical considerations and consequences. They reflected and were shaped by policies, resources and affordances. To understand how private spaces were reconfigured in this process and how isolation was done, we elaborate below on the practices of isolation using the concept of ‘carescapes.’

3.2. Place and materiality in isolation practices

The case examples above talk about the struggle to negotiate relational and anonymous care while trying to ‘contain the virus’ and adhere to the rules and recommendations of isolating once afflicted with the virus. Isolation at home required particular negotiations of space, enacting very particular care practices. Following Ivanova and colleagues, we analyze these spaces as emplaced ‘carescapes’ (Ivanova et al., 2016). Illness experiences, they argue, must be understood in the context of place, as spaces imbued with meaning.

The carescapes of isolation were shaped by policies, the physical space in which isolation took place, the materiality of space, infrastructures, the illness/infection, and the available human and non-human resources. Embodied practices of care in isolation were thus unique in every home, differing significantly according to the architecture of the home, the inhabitants, the geographical location, the timing of the isolation period/illness and the illness experience itself. Doing isolation was thus a profoundly situated and pragmatic practice of care. In these carescapes, global, national and local ideas and policies of pandemic management were brought together with the materiality of space and the embodied beings in the practice of care and isolation.

Across countries, state regulations often seemed confusing and opaque, which gave rise to uncertainties. It was this opacity, together with the ‘placeness’ of isolation practices reported on here, we argue, that made the experiences, and more importantly the care practices, similar across countries; albeit particular rules regarding sick leave

and compensation, among others, differed, which very likely affected behaviors in specific ways. Nevertheless, the *feel* and the descriptions in the narrated illness experiences of muddling through while trying to keep a distance at home seem very similar across the study samples of the seven countries.

Similarities exist in the following domains: the place of isolation was primarily the home, policies were set in place to minimize the spread of the virus, and bureaucratic activities were related to proof of the virus through self-tests or laboratory results. The countries differed in how they addressed potential support needs of their citizens in home isolation. From our interview materials, in only two countries, the USA and Japan, did the bureaucracies appear have procedures in place to provide food and other supplies for people in home isolation. The interviews from the other countries rather suggest that it was dependent on the individual public health worker if they inquired about the support needs of those in isolation.

The notion of emplaced care (Buse et al., 2020), in the context of the isolation practices presented in the first section, highlights how distancing was shaped both by caring about and caring for the self and others. Furthermore, this care was not only directed towards those infected with the virus, but also towards family and concerns others. Emplaced care in this context situated global and local governance ideas of ‘managing a pandemic’ within the homes of those afflicted, where the social processes that enabled isolation then had to be constantly tinkered with in order to shape an appropriate carescape of isolation.

If possible, those who tested positive with the coronavirus SARS-CoV-2 lived in separate rooms and used their own bathrooms. Doors were kept closed and food was only delivered to the door with no direct contact. Often disinfectants were used to keep the (formerly) shared spaces safe. If no other dependents were present and enough space was available, a common way to isolate was demonstrated by this interviewee from the UK, whose wife, a nurse, was ill early on in the pandemic. One day when she came home from work, she did not feel well and she and her husband immediately separated their living space.

(...), she went to one of the other bedrooms which she uses as a dressing room. And fortunately, just down the passage from that bedroom there's a bathroom, [and] toilet. And then I've got a separate toilet up on the first floor as well. She lived in her room and only left it to go to the bathroom for a number of days. And what happened is, I had an antibacterial aerial spray which I used to [spray] everywhere up on the corridor upstairs. I would wear a mask and gloves. I put a little coffee table outside of her door and I used to leave a tray of food or whatever she wanted. And the communications were via good old FaceTime. (Male interviewee, UK, age range 70–79 years, infected with Covid-19 December 2020)

However, many narratives in our study sample tell a more complicated story of emplaced isolation practices, even when physical space was plentiful. They also demonstrate the assemblages that made up the carescapes. In one case in Canada, the origin of the particular carescape lay in a gathering of three generations two days prior to a positive test result of the grandfather. The gathering had taken place in a three-story home in which two generations were living. When the positive test result became known, the setting of the house would have allowed for the separation of the grandfather, but the question arose of from whom he should isolate, given that everyone in the house had all been together until the diagnosis. This example highlights the difficulty of making a space ‘safe’ that has, until the suspicion or diagnostic information is known, been inhabited by all. It also reveals the importance of testing in shaping carescapes and marks test results as crucial actants that enact a range of social and physical activities.

So as soon as my father got tested positive, it was hard because the day before, or the two days before, we were all around him. We all had dinner together in the house. So at that point I kind of assumed we had all got it. I guess I was more worried for my grandparents. So we isolated them. We separated my grandmother into a certain area. But then the hard thing

was how to provide her with dinner, for example, without being close. So my mom would just wear a mask and gloves and just kind of leave the tray in front of her [door] and then leave. It's so hard because at that point, how are you supposed to like move around the house? Like in the days up until my father did test positive, he's touched a lot of things, you know, he's been around my grandmother. He didn't know he had the virus, right? So definitely that was the difficult part. And even my grandma, she didn't really show symptoms. Like I would walk by, wave at her, not like close, but she'd be further than me. And then there'd be just that one day that her breathing kind of just stopped. So, yeah, it's difficult, very difficult. (Male interviewee, Canada, 29 years, infected with Covid-19 November 2020)

In this particular case, the grandmother, one of the most vulnerable in the household, died. For this family, this made the question of how space, time and distance were assembled an existential one. The example reiterates the amount of social work that was required by the family to make isolation possible. It also demonstrates how the theoretical idea of isolation, where there are dichotomous categories of infected and non-infected spaces and people, is incompatible with people's everyday lives and social and domestic infrastructures.

A focus on the practice of doing isolation brings to the fore the in-between spaces (Silberzahn-Jandt et al., 2023) in which the concept of a pandemic is experimented with, explored and thus lived. The physical space, the materialities in place and the time prior to the known infection all belong to these in-between spaces. Steps have to be retraced and spaces cleaned. Time itself becomes dangerous, both in retrospect and prospectively. The carescape is a riskscape. Where is the boundary and how can necessities travel through the boundaries? Test results, trays, masks, gloves, doors, disinfectants all are part of marking a carescape of isolation. In-between spaces were created and shaped by the materialities of the pandemic. The home became a riskscape that needed the tinkering and creativity of individuals in order to shape a carescape of isolation. The physical space of the home turned into a riskscape that had to be bounded and many of our interviewees implemented various protective measures at home in order to protect their family members or flatmates from infection.

We went over the door handles and hands with a disinfectant wipe a few times a day. And we opened the sliding doors a few times to let the air in. We did that for the first few days. But not after that. (Female interviewee, Netherlands, 52 years, infected with Covid-19 March 2020)

An interviewee from Spain explained that she had never previously been so careful with the disinfection of her home. Since everyone was telling her that she had to be very careful due to the 'viral load' in her house, this made her more aware and concerned about *how* she had to clean and she ended up using products that caused damage to the furniture. Another participant from Canada described how she tried to disinfect everything as soon as she had touched it to keep her flatmates safe.

And it was weird, because basically it felt – like what I would do is, we had disinfectants and stuff like that, so I would – you know, if I had to go to the washroom I would get up, I'd take the bottle of disinfectant with me and my own roll of toilet paper and my own roll of paper towel. And I'd walk down the hall to the washroom, you know, go the washroom, and then like clean up behind me. It was like this crime scene that I was cleaning up the whole way back. And this was just weird, like to be in my own house in that way. (Female interviewee, Canada, 49 years, infected with Covid-19 April 2020)

Interviewees wanted to protect their family members or flatmates from infection, but how exactly they separated from others in their household depended strongly on their living conditions. The materialities of the home, such as having a balcony, terrace or garden, and the number of rooms, particularly bedrooms and bathrooms, were important factors in shaping care practices. One Japanese interview partner in

his late sixties, who was infected in December 2020, could not secure a separate room to sleep in, and thus he slept with his wife opposite ways in the bed, thereby creating a 'safe space.'

Japan, as discussed above, was quite exceptional in comparison to the six other countries. Japanese health authorities tried to provide public spaces for residents to isolate and distance themselves from their families if they wanted. A 42-year-old husband and father who was infected in December 2020, for instance, was advised by the health center staff to go to a hotel in order to isolate himself from his wife and two-year-old son, particularly because they assumed isolation would be hard to keep up in such a family situation. However, while he was still on the waiting list for a hotel room, his wife became severely ill. Preparing for the worst-case scenario of both parents getting severely ill, the authorities advised that his wife and son, who had tested negative, go into a hospital instead of isolating at home. Many of the Japanese interviewees referred to conversations with health authorities regarding the choice of where to isolate, or as it was officially called 'recuperate.' Contrasting the Japanese case with the other countries highlights how strongly the Japanese authorities shaped carescapes and thus care practices. Caring for the population here meant offering a choice of space to isolate.

In countries in which isolation was mandatory, it was regularly linked to a positive PCR test and was thus highly dependent on a (functioning) public health system and testing infrastructure. In some countries, such as Canada, Germany, Japan and Spain, public health authorities mandated isolation through an official letter or phone call, insinuating the anonymous care for the population. Some interviewees indicated using the insecurities of policies and public communication to 'bend the rules' and found 'in-between' activities that they found morally acceptable. Thus we see in our data how care and policy were enacted in particular infrastructures, for instance the availability of laboratories, waiting for test results, compensation for loss of income, and the shifting of patients from domestic to hospital spaces. Understanding isolation practices as carescapes of isolation helps to theorize the re-bounding of public and private spaces, showing how policies interact with the mundane practices of care and thereby re-shape the private homes of citizens.

'Managing the pandemic' included the idea that infection chains had to be interrupted in order to stop the spread of the virus. In some countries, infected persons had to go into isolation and health authorities were supposed to contact them. However, regardless of what policies were in place, health authorities in all seven countries quickly became overwhelmed and could not sustain such policies. Doing the right thing by taking responsibility and supporting the public health measures of anonymous care was thus a practice that many individuals took on themselves: for instance, they informed others as soon as they knew they were sick or had a positive test result. Similarly, they went into self-isolation and kept distance also from their close kin.

This sense of moral duty can be seen in the following example of a Japanese journalist. She got infected in March 2020 and decided to isolate as soon as she noticed the loss of smell and taste, even though all the medical professionals she contacted denied the possibility of Covid-19. Relying on her knowledge acquired through remote interviews with Covid-19 patients in Wuhan, she made a self-diagnosis and decided to isolate herself from the community and her family.

When you are told by both the internist and the staff at the healthcare center that it's not Covid, I guess most people would believe that it's not. But working for the newspaper company, I had been reporting on the situation in Wuhan, China, since January [2020]. So, my instinct told me that 'This is definitely Covid.' ... I decided not to sleep with my children, and began to self-isolate within the house to keep distance from the children. At the same time, I explained the situation to my boss. He said that if a person suspected of Covid infection went out to collect stories for the newspaper, however remote the possibility may be, it would have a

huge impact on the society. So, he suggested to stay home. (Female interviewee, Japan, 38 years, infected with Covid-19 March 2020)

The advice the journalist received from her boss also pointed to the moral implications of doing the right thing, which implied staying at home and not infecting others.

4. Conclusion

Social isolation in the context of Covid-19 was generative of new identities and notions of citizenship, where isolation simultaneously involved care for the self and care for others. It effectively restructured the home as a riskscape. The interviewees' lived experiences speak of the in-between spaces that standard policies ignored, but which nevertheless needed to be filled with practical solutions to the new moral obligation to *do the right thing*. Our interviewees described how in the first year of the pandemic they had to chart the terrain of managing themselves as a potential threat to others. Risks had to be weighed and decisions made. Those infected with the virus in the first year were 'moral pioneers' who made decisions on the fly about how to resolve tensions between the anonymous care for a population and care relations that make one 'to matter' (Garcia, 2010).

As moral pioneers, our interviewees justified their behaviors and charted their terrain individually, making in situ decisions always under the assumption that doing the right thing was to keep away from others, an assumption that regularly resulted in moral dilemmas and tensions. They became responsible not only for themselves, but for a population. Caring for a population thus became a collective endeavor, though this endeavor was supported very differently by the seven countries in this study. In some countries, affected persons were provided financial compensation for the time of isolation, though in only a few cases were people officially offered food or supplies for the time they were isolating at home or offered an external space to isolate outside the home and be taken care of. The collective endeavor of caring for a population was, however, supported by the biosocial communities of Covid-19.

Most of our interviewees were generally in agreement with the notion of anonymous care for a population and considered isolation the right thing to do. However, as we have seen, paradoxically doing isolation could not be done in isolation, but relied on the support of others. Interviewees were entangled in multiple social relations that – in some instances – enabled isolation and in others hindered it. What we see in the narratives is that isolation practices were fundamentally and inextricably interlinked with social practices and infrastructures. Policies neglected the very different specificities of people's homes and the diversity of society in which some could isolate and others could not; what Annandale and Hilario have labeled 'together apart' (Annandale & Hilário, 2020).

Investigating care and policy in practice reveals what is focused on and what is neglected (Gill et al., 2017). Analyzing the carescapes of isolation does exactly this, by emplacing care in such a way that it exposes the social work necessary in the homes and communities of those afflicted. In the context of the early phase of the Covid-19 pandemic, carescapes of isolation consisted of emplaced practices of care (Buse et al., 2020) within the homes of the infected and of those outside the home providing supplies. Isolation practices consisted of care at a distance (Pols, 2012), with FaceTime or phones used to stay close when the illness allowed, or text messages during severe illness to manage others' concerns and keep them at bay. They consisted of bending the rules to allow for relational care with persons that mattered or to practice self-care by going for walks in order to stay sane while taking precautions to protect others. Isolation practices lived off Covid-19 tests, disinfectants and creative solutions to create space for isolation in homes with little room.

The Covid-19 policies in the countries of our investigation were dependent on citizens isolating in private spaces. Isolating at home was, however, a difficult endeavor. It de facto turned the supposedly safe

space of the home into a riskscape that had to be managed, effectively leaving many to struggle in complex, in-between situations. Japan may well have been an exception to this, as some of the interview data leads us to believe. Understanding isolation policies and pandemic management as a form of biopolitics highlights how the goals and ideals of a population are enacted through the individual as a biosocial citizen, effectively shifting the boundaries of the private and the public.

Local practices were influenced by particular local historical experiences, by local understandings and structures of state power, by local care structures and by particular built environments. To function, they had to be embedded in social networks, both those that were close and those at a distance. They were also underpinned by a general idea of biological citizenship. How these local practices played out and the particular effects they had on the psychic life of biopolitics (Stevenson, 2012) may well have been different across countries.

It was the aim of this article to understand how ideas of pandemic management played out in the everyday lives of people and how they influenced and shaped care practices under isolation. Through our theoretical lens, we have shown the communalities of the experiences across the seven countries, their rootedness in biological citizenship, and some of the joint effects that a general understanding of pandemic management, as put forward by the WHO and health authorities, may have had. Particularly the reconfiguration of private spaces into riskscapes and the moral obligation to navigate between personal care relations and anonymous care for a population highlight the joint discourses underlying the responses across these seven countries of the Global North, which led to similar stories of isolation and narrated emotions.

Nevertheless, this also points to some of the limitations of our study and approach. Firstly, we relied on a select study sample of people who were versed enough to tell their stories and who were interested in sharing their stories publicly. Secondly, our material consisted of interviews, which meant people *told* us how they did isolation; we did not investigate the practices themselves. In addition, particularly our thematic approach to analysis in the individual country studies may have produced more common themes than other analytical approaches may have found. We tried to overcome this through constant comparison, focus on deviant cases and discussion in our research group. A focus on locally situated case studies looking at practices in-the-making would likely have shown more diversity and brought to light even more the strong socioeconomic coloring and shaping in our findings.

It was our aim, however, to understand how theoretical ideas of pandemic management were lived, and thus we are confident that conceptually one can draw some suggestions for pandemic planning based on our study results. Most importantly, it seems self-evident to uphold isolation at home and emphasize the necessity to provide such networks if none are available. Secondly, understanding the difference between private care relations and care for a population may help to develop support strategies to alleviate the tensions between the two. Thirdly, through our Foucauldian lens, it becomes apparent how strongly the particular approach of pandemic management in the countries under study, with the exception of Japan, was geared towards individuals having enough space available so that safe spaces could be emplaced. This was often not the case, however, also in our study samples. Finally, the practices of isolation presented in this article highlight the in-betweenness of experiencing infections rather than clearly defined states in time and space. This *feel* of the pandemic, or in the words of Stevenson (2012), the psychic life of biopolitics, presents an important part of what it means to live a pandemic and should be recognized as such in 'pandemic management planning'.

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Declaration of competing interest

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References

- Agamben, G. (1998). *Homo Sacer. Sovereign power and bare life*. Stanford University Press.
- Annandale, E., & Hilário, A. P. (2020). *Health, illness and medicine—together apart? Securing health amid health inequality during the COVID-19 outbreak in Europe (RN16)* (Vol. 45). The European Sociologist.
- Breuning, M., Lucius-Hoene, G., Burbaum, C., Himmel, W., & Bengel, J. (2017). Subjektive Krankheitserfahrungen und Patientenorientierung. *Bundesgesundheitsblatt - Gesundheitsforschung - Gesundheitsschutz*, 4(60), 453–461.
- Burke, N. (2021). Care in the time of COVID-19. In L. Manderson, N. J. Burke, & A. Wahlberg (Eds.), *S. 27–47* *Viral loads: Anthropologies of urgency in the time of COVID-19: Bd.* UCL Press.
- Buse, C., Brown, N., Nettleton, S., Martin, D., & Lewis, A. (2020). Caring through distancing: Spatial boundaries and proximities in the cystic fibrosis clinic. *Social Science & Medicine*, 265, Article 113531.
- Chapple, A., & Ziebland, S. (2018). Methodological and practical issues in cross-national qualitative research: Lessons from the literature and a comparative study of the experiences of people receiving a diagnosis of cancer. *Qualitative Health Research*, 28(5), 789–799.
- Corman, V. M., Landt, O., Kaiser, M., Molenkamp, R., Meijer, A., Chu, D. K., Bleicker, T., Brünink, S., Schneider, J., & Schmidt, M. L. (2020). Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR. *Euro Surveillance*, 25(3), Article 2000045.
- Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling: merging or clear boundaries? *Journal of Advanced Nursing*, 26(3), 623–630. <https://doi.org/10.1046/j.1365-2648.1997.t01-25-00999.x>
- Foucault, M., & Senellart, M. (2008). *The birth of biopolitics: Lectures at the Collège de France, 1978-79*. Palgrave Macmillan.
- García, A. (2010). *The pastoral clinic: Addiction and dispossession along the Rio Grande*. University of California Press.
- Gill, N., Singleton, V., & Waterton, C. (2017). The politics of policy practices. *The Sociological Review*, 65(2_suppl), 3–19. <https://doi.org/10.1177/0081176917710429>
- Hirokawa, W. (2021). Reconsidering the isolation/quarantine policy of modern Japan in the era of COVID-19 (「隔離」と「療養」を再考する: COVID-19と近代日本の感染症対策). *The Humanities Journal of the Senshu University (専修人文論集)*, 109, 235–256. <https://doi.org/10.34360/00012448>.
- Hofstede, G. (2023). <https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/>.
- Holmberg, M., & Lundgren, B. (2018). Framing post-pandemic preparedness: Comparing eight European plans. *Global Public Health*, 13(1), 99–114. <https://doi.org/10.1080/17441692.2016.1149202>
- Ivanova, D., Wallenburg, I., & Bal, R. (2016). Care in place: A case study of assembling a carescape. *Sociology of Health & Illness*, 38(8), 1336–1349. <https://doi.org/10.1111/1467-9566.12477>
- Kleinman, A. (2012). Caregiving as moral experience. *The Lancet*, 380(9853), 1550–1551. [https://doi.org/10.1016/S0140-6736\(12\)61870-4](https://doi.org/10.1016/S0140-6736(12)61870-4)
- Kleinman, A. (2015). Care: In search of a health agenda. *The Lancet*, 386(9990), 240–241. [https://doi.org/10.1016/S0140-6736\(15\)61271-5](https://doi.org/10.1016/S0140-6736(15)61271-5)
- Lajunen, T., Gaygisiz, E., & Gaygisiz, Ü. (2022). Socio-cultural correlates of the COVID-19 outcomes. *Journal of Epidemiology and Global Health*, 12(3), 328–339.
- Lenke, T. (2011). *Biopolitics: An advanced introduction*. New York University Press.
- Luning-Koster, M. N., Alma, M. A., van den Boogaard, J., Verheij, N. P., van der Mei, S. F., Landsman, J. A., & Reijneveld, S. M. (2022). *Eerste covid-19-patiënten in Noord-Nederland: Ervaringen met informatievoorziening, bron-en contactonderzoek en thuisisolatie* (Vol. 166). Nederlands Tijdschrift voor Geneeskunde.
- McKie, L., Gregory, S., & Bowlby, S. (2002). Shadow times: The temporal and spatial frameworks and experiences of caring and working. *Sociology*, 36(4), 897–924.
- Merz, S., König, F., Bergholz, A., Paul, J., & Holmberg, C. (o. J.). The telephone as caring device? Crafting ethnographic relationships during the Covid-19 pandemic using voice-based technologies. under review..
- Milligan, C., & Wiles, J. (2010). Landscapes of care. *Progress in Human Geography*, 34(6), 736–754.
- Ministry of Health, Labor and Welfare Japan. (2023). *The survey results on recuperating circumstances and hospitalizations by the Ministry of Health. Labor and Welfare. 療養状況等及び入院患者受入病床数等に関する調査について | 厚生労働省. mhlw.go.jp.*
- Nair, N., Selvaraj, P., & Nambudiri, R. (2022). Culture and COVID-19: Impact of cross-cultural dimensions on behavioral responses. *Encyclopedia*, 2(3), 1210–1224.
- Pols, J. (2012). *Care at a distance: On the closeness of technology*. Amsterdam University Press.
- Rabinow, P. (2022). Artificiality and enlightenment: From sociobiology to biosociality. In *The ethics of biotechnology (S. 101–122)*. Routledge.
- Saiman, L., Siegel, J. D., LiPuma, J. J., Brown, R. F., Bryson, E. A., Chambers, M. J., Downer, V. S., Fliege, J., Hazle, L. A., & Jain, M. (2014). Infection prevention and control guideline for cystic fibrosis: 2013 update. *Infection Control & Hospital Epidemiology*, 35(5), s1–s67.
- Silberzahn-Jandt, G., Thier, A., & Holmberg, C. (2023). „wer hilft mir, wenn jetzt was ist?“ Beschäftigte in Einrichtungen der Gesundheitsversorgung berichten über ihre eigene Coronaerkrankung. In *Pflege: Systemrelevant-und nun? Theorie und Praxis im dialog (S. 79–100)*. Wiesbaden: Springer Fachmedien Wiesbaden.
- Spitale, G., Glässel, A., Tyebally-Fang, M., Mouton Dorey, C., & Biller-Andorno, N. (2023). Patient narratives – a still undervalued resource for healthcare improvement. *Swiss Medical Weekly*, 153, Article 40022. <https://doi.org/10.57187/smw.2023.40022>
- Stevenson, L. (2012). The psychic life of biopolitics: Survival, cooperation, and Inuit community. *American Ethnologist*, 39(3), 592–613. <https://doi.org/10.1111/j.1548-1425.2012.01383.x>
- Twigg, J. (1999). The spatial ordering of care: Public and private in bathing support at home. *Sociology of Health & Illness*, 21(4), 381–400. <https://doi.org/10.1111/1467-9566.00163>
- World Health Organization. (2021). *Infection prevention and control during health care when coronavirus disease (COVID-19) is suspected or confirmed: Interim guidance*. World Health Organization, 12 July 2021 (no.WHO/2019-nCoV/IPC/2021.1).
- Ziebland, S., Grob, R., & Schlesinger, M. (2021). Polyphonic perspectives on health and care: Reflections from two decades of the DIPEX project. *Journal of Health Services Research & Policy*, 26(2), 133–140. <https://doi.org/10.1177/1355819620948909>
- Ziebland, S., & McPherson, A. (2006). Making sense of qualitative data analysis: An introduction with illustrations from DIPEX (personal experiences of health and illness). *Medical Education*, 40(5), 405–414. <https://doi.org/10.1111/j.1365-2929.2006.02467.x>