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The impact of immigration detention on the health of asylum seekers during the COVID-19 pandemic



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ABSTRACT

COVID-19 disproportionately affects racial and ethnic minority groups as well as people in jails and immigration detention centers in the United States. Between April and August of 2020, the mean monthly COVID-19 case ratio for ICE detainees was 13.4 times that of the general U.S. population. This study aims to understand the experiences of detained asylum seekers during the pandemic and to provide insight into COVID-19's impact on this population's health. This qualitative study employed first-person, in-depth narratives obtained from 12 asylum seekers, all of whom were detained in immigration detention centers or prisons during the initial surge of the COVID-19 pandemic and were subsequently released. Detained asylum seekers reported inadequate medical care, obstacles to receiving care, an inability to social distance, poor hygiene, restricted movement, and a lack of infection control—all which increased their risk of contracting and spreading COVID-19 and exacerbated health inequalities brought to the forefront by the pandemic. Advocating for improved disease prevention and screening, prompt access to health care and treatment, cohorting of infectious cases, and community alternatives to detention to decrease the detained immigrant population sizes are crucial to halt communicability of the virus and its subsequent morbidity and mortality in this vulnerable population.

1. Introduction

The COVID-19 virus emerged on the global stage in late 2019 and spread to the United States (U.S.) in early 2020. Twenty months later, COVID-19 was responsible for nearly 216 million cases and over 4 million deaths worldwide (Dong et al., 2020). In the U.S., asylum seekers held in Immigration and Customs Enforcement (ICE) detention centers, as well as in county and local jails contracted by ICE, have been particularly vulnerable. In part, this is a consequence of preexisting inequities, as well as congregate living in immigration detention facilities, a system which has expanded exponentially over the past four decades. In fact, between April and August of 2020, the mean monthly COVID-19 case ratio for ICE detainees was 13.4 times that of the general U.S. population (Erfani et al., 2020). Currently, the U.S. detention system is the largest in the world, housing more than 52,000 immigrants (Kassie, 2019). This stems from a 2009 Congressional mandate that ICE maintains a minimum number of detention beds, or quota, through congressional appropriations for the U.S.

Department of Homeland Security, and many individuals in ICE detention have never been charged with a criminal offense (Public Law 111-83-Oct. 28, 2009).

Studies prior to the COVID-19 pandemic have exposed widespread failures in assuring quality medical care for detained immigrants and resulted in calls for legislative changes to improve policies and procedures at these facilities (Therrien & Mattie, 2011; Human Rights Watch, 2018). These suggested reforms are supported by a 2018 review of 15 deaths in immigration detention between December 2015 and April 2017 where over half the fatalities were linked to substandard care or medical neglect, poor emergency responses, or retaliatory use of solitary confinement with insufficient access to mental health care (Human Rights Watch, 2018). Furthermore, it has been noted that medical attention in immigration detention health facilities is often conducted exclusively in English, without the provision of interpreters, which significantly delays both chronic and acute care (Cho et al., 2020). It has been posited that this confluence of factors, in addition to the stressors of

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the COVID-19 pandemic inside detention facilities, resulted in an annual 2020 suicide rate for ICE detainees that was 11 times the prior 10-year average (Erfani et al., 2021).

In this paper, we examine detained asylum seekers' perspectives on immigration detention and its impact on their health during the COVID-19 pandemic. Our analysis draws on data from in-depth interviews with asylum seekers who were detained during the first surge of the COVID-19 pandemic from March 2020 to August 2020. This study seeks to understand the physical and mental health implications that resulted from living conditions this population faced while in held in detention centers. It is hoped that this may further strategies and initiatives to address healthcare inequalities in immigration detention centers and improve access to care in these facilities, particularly in light of the ongoing pandemic and the potential for other novel infectious diseases.

2. Background

During the initial stages of the pandemic, the lack of mitigation strategies in U.S. detention centers, including social distancing and decontamination practices, triggered public health advocacy for responsive intervention and the release on humanitarian parole of those detainees who were at risk of severe disease and death from COVID-19 (Meyer et al., 2020). Previous prison outbreaks of novel H1N1 influenza in 2009 were known to have precipitated a disproportionately high number of cases among inmates, despite attempts to test and isolate infected staff members (Reutter, 2010). Additionally, both a vaccine and antiviral medication existed for H1N1, neither of which were available for use against COVID-19 at the onset of the pandemic. Yet, in the spring of 2020 ICE facilities which lacked adequate on-site testing for COVID-19 and space for social distancing began cohorting or grouping all detainees with symptomatic respiratory illnesses together, regardless of their COVID-19 status (Openshaw & Travassos, 2020). ICE facilities also monitored the health of incoming, potentially infected detainees in the general population, rather than enforcing a 14 day quarantine (Openshaw & Travassos, 2020). Such practices contradicted CDC recommendations and may have contributed to the spread of COVID-19 in ICE facilities (Openshaw & Travassos, 2020).

The infrastructure surrounding immigration detention centers also played a factor in the transmissibility of COVID-19. While detention centers include ICE-run facilities, they also encompass federal prisons, private facilities, and county jails contracted by ICE where detainees are held alongside criminal system inmates. Such county jails and local facilities are often located in small towns, staffed by local communities, lack access to large medical centers, and are frequently stretched thin by a large influx of ill patients (Keller & Wagner, 2020; Loweree et al., 2020). Thus, ICE health guidelines and safety standards ushered in during the pandemic also faced implementation challenges in a diversity of facilities and often were not met. Additionally, detainees are routinely transferred between facilities as part of the internal processing system to meet the minimum bed occupancy levels set in contracts, thus increasing the risk of inter-facility transmission and cascading the spread of COVID-19 (Keller & Wagner, 2020; Loweree et al., 2020). The COVID-19 pandemic also presented the former Trump administration with an opportunity to expedite deportations and revise immigration policy. The U.S. engaged in rapid deportation of asylum seekers to Haiti, Mexico, Jamaica, Guatemala, and Colombia, some of whom tested positive for COVID-19 on arrival to their home countries and contributed to the global transmission of COVID-19 in regions of the world lacking capacity to effectively diagnose and treat the virus (Miller et al., 2020; Meyerowitz et al., 2021; Cénat, 2020). In addition, the threat of these deportations layered on to the threat of illness secondary to COVID-19 exacerbate the mental health sequelae from complex traumas that a sylum $\,$ seekers have previously faced (Cénat & Dalexis, 2020; Dalexis & Cénat, 2020).

Further contributing to the spread of disease in the U.S., was a lack of transparency concerning illness by detained asylum seekers who often

faced punitive measures such as solitary confinement if they reported COVID-like symptoms, even when confirmatory testing was not available (Meyerowitz et al., 2021). Some immigration detention centers' regulations and conditions prevented adherence to COVID-19 CDC guidelines altogether. One recent advocacy paper reported that detainees in facilities across the nation lacked information on COVID-19, as well as access to soap and hand sanitizer, the latter often categorized as contraband due to its ethanol content (Peeler et al., 2021). Another interview study of wardens, lawyers, advocates, and five former detainees, noted inadequate medical care and increased vulnerability of detained asylum seekers at four New Jersey detention centers (Tosh et al., 2021). Such overt lack of protection against COVID-19 precipitated hunger strikes at multiple ICE facilities during the outset of the virus (Amon, 2020; Trevizo, 2020). With this background, this study was undertaken to further investigate the experiences of detained U.S. asylum seekers during the COVID-19 pandemic through their own voices, and to better understand the implications of ICE policies on detainees' health during and after the COVID-19 response.

3. Method

Through in-depth interviews conducted between November 2020–January 2021 via phone or video conferencing technology, this study gathered the experiences of twelve asylum seekers who were formerly detained by ICE in immigration detention center or jails sometime during the period of March 27, 2020 through August 17, 2020, when COVID-19 first became prevalent in the U.S. This study was reviewed and approved by the Institutional Review Board of a large hospital system and participants were recruited through pro bono attorneys who were familiar with their cases. Participants provided their informed consent to engage in a voluntary 1-hour, audio-recorded, semistructured interview. The associated interview transcripts were deidentified and personal health information was protected in accordance with the IRB-approved protocol.

Eligible participants included adult asylum seekers to the U.S. or those seeking other forms of protected immigration status, who were 18 years of age or older, and who had been housed in - an ICE immigration detention facility or in local correctional facilities for a period of time after March 1, 2020. The participants were interviewed in English (n=5, 41.7%), Spanish (n=6, 50%), and French (n=1, 8.3%) from November 2020 to January 2021. Fluent, native speakers of Spanish and French were used as language interpreters when needed, and these interpreters also possessed training and experience working with asylum seekers. Eleven participants had been detained in the Northeast, including two asylum seekers who had been held in both an ICE detention center and in a jail, which housed asylum seekers. The 12th participant had been detained at an ICE facility near the U.S./Mexico border.

We analyzed the resulting interview transcripts using a consensual qualitative research (CQR) approach (Hill et al., 1997). This sample fell within the range of 12–15 participants recommended for a CQR study (Hill & Williams, 2012). The participants included cisgender men (n=11,91.7%) and cisgender women (n=1,8.3%) who ranged in age from 20 to 63 years (M=36.25;SD=13.6) and identified as Hispanic/Latinx (n=10,83.3%) and African/Black (n=2,16.7%). The participants described their highest education level as primary school (n=3,25%), secondary school (n=3,25%), and some college/vocational school (n=6,50%). Lastly, they reported that they were detained in an immigration detention facility for less than one month (n=1,8.3%), between one month and six months (n=2,16.7%), between six months and one year (n=4,33.3%), one to two years (n=3,25%), and two years or longer (n=2,16.7%).

Consistent with the CQR process, the team analyzed the data through the creation of domains, core ideas, and categories that organized the participants' experiences into thematic units (Hill et al., 1997). Throughout the analysis, the team worked to minimize interpretation through returning to the raw data and integrating the asylum seekers'

own words (Hill et al., 2005). In order to increase the accuracy of the analysis, four team members coded the data independently before meeting together to argue each code to consensus (Hill & Williams, 2012). In addition, the team shared their analysis with an external auditor who provided feedback and suggestions for ensuring that the coding adequately reflected the participants' narratives. Once the analysis was complete, the team assigned a frequency label to each category. General categories described 11 to 12 cases, typical categories included more than half the cases but fewer than 11, and variant categories included half the cases or fewer. Categories with only one case are not reported, because they do not represent the study sample (Hill et al., 1997).

4. Results

The CQR analysis yielded six domains that captured the general themes found in the participants' narratives: a) health before detention; b) general detention conditions; c) COVID-related detention conditions; d) prevalence of COVID-like symptoms; e) health care experiences in detention; and f) current health. The above domains contained a total of 22 categories. The domain and category frequencies are located in Table 1.

4.1. Health before detention

The first domain focused on the participants' descriptions of their health prior to their experience of immigration detention. This domain included one typical category: good physical health. Analysis of this domain also revealed two variant categories: experienced psychological distress; and reported pre-existing conditions.

4.1.1. Reported good health

More than half of the asylum seekers noted that they experienced good health before they were detained by ICE (n=7). They stated that they did not have medical complaints or mental health issues. As one participant stated, "before I was detained, I was fine. I didn't have any physical illness. Mentally, I was fine. Everything was fine."

Table 1
Frequency table.

Frequency table.		
Domains	Categories	Frequency Label
Health Bef	ore Detention	
	Good physical health	Typical (n = 7)
	Experienced psychological distress	Variant (n = 6)
	Reported pre-existing conditions	Variant (n = 5)
General De	etention Conditions	
	Poor Conditions	General $(n = 12)$
	Deterioration of physical health	Typical(n = 9)
	Deterioration of mental health	Typical (n = 9)
	Lack of food/poor quality	Variant (n = 6)
	Limited freedom of movement	Variant (n = 5)
	Isolation	Variant (n = 4)
	Disrupted sleep	Variant (n = 4)
COVID-Rel	ated Detention Conditions	
	Lack of Access to Masks	General $(n = 12)$
	Inability to social distance	General $(n = 11)$
	Poor Facility Hygiene	Typical (n = 10)
	Insufficient or Extended Isolation/Quarantine	Typical (n = 9)
	Prevalence of COVID-like Symptoms	
	Knew someone who had COVID-like symptoms	General $(n = 11)$
	Experienced COVID-like symptoms	Variant (n = 6)
Health Car	re Experiences in Detention	
	Poor response to COVID	General $(n = 11)$
	Obstacles to receiving care	Typical $(n = 9)$
	Dissatisfaction with management of symptoms	Typical (n = 9)
Current He	ealth	
	Experiences in detention continue to impact health	Typical (n = 8)
	Physical health improved after release	Typical (n = 7)
	Mental health improved after release	Variant (n = 6)

Note: 2-6 cases (variant); 7-10 cases (typical); 11-12 cases (general).

4.1.2. Experienced psychological distress

Some interviewees reported that they had experienced psychological distress before they were detained (n=6). In many of these cases, they indicated that their mental health symptoms were related to their exposure to ill treatment and trauma in their countries of origin. For example, one asylum seeker said, "I can't sleep well, I haven't been sleeping well for ten years, because of the anxiety, back in my country. Also, [after I had been kidnapped] everything got more complicated." Another interviewee connected his experience of anxiety to fears of deportation: "I was always uneasy, shaking, worried ... I was always worried about what would happen if I was deported back to my country."

4.1.3. Reported pre-existing conditions

Some participants also noted that they had a history of medical issues before their experience of detention ($n\!=\!5$). One asylum seeker indicated they experienced a work-related injury that required surgery. Others reported chronic conditions including "high blood pressure" and "diabetes." An interviewee stated, "I have asthma ... if I walk, I have to stop to breathe."

4.2. General detention conditions

The second domain centered on the interviewees' descriptions of the conditions they experienced in U.S. immigration detention centers. This domain yielded one general category: poor living conditions in detention. It also contained two typical categories: deterioration of physical health; deterioration of mental health; as well as three variant categories: lack of food/poor quality; limited freedom of movement; isolation; and disrupted sleep.

4.2.1. Poor living conditions in detention

All of the individuals who participated in this study noted poor living conditions while in immigration detention centers (n=12). They described the facilities as "ugly," "terrible," and "disgusting." Others spoke about the treatment they encountered, as one interviewee stated, "there is a stigma around being detained, they basically see you as a criminal." Another commented, "there were people who were discriminated against by the guards." Some asylum seekers noted that the detention centers were kept at uncomfortable temperatures, as exemplified by the statement: "they would have the heat on really high during the winter and the AC on really cold during the summer, so people would frequently get sick ... just because of the temperature." Lastly, one interviewee reported that "there were no legal services that we had access to [while detained].

4.2.2. Deterioration of physical health

The majority of the interviewees indicated that their physical health deteriorated while detained (n=9). Some participants reported they developed dermatological conditions with one noting "I spent about seven months, maybe more, with a rash" and a second stating, "I just remember that I had a terrible itch." Others stated that they developed high blood pressure and symptoms suggestive of edema. As one asylum seeker disclosed, "I started noticing that my feet got really swollen, I couldn't wear shoes."

4.2.3. Deterioration of mental health

Most of the individuals interviewed also stated that they experienced a decline in their mental health during their time in detention (n=9). One participant reported, "whenever I heard that someone was deported, I felt terrible. I started having headaches. I just cried and cried, and I was pulling my hair." Others noted that the delays in the adjudication of their cases increased their psychological distress, as exemplified by one interviewee's statement: "To be there for such a long time, it definitely takes a toll on you."

4.2.4. Lack of and poor quality of food

Half of the participants stated that they experienced a lack of access to food, as well as described the poor quality of food in detention (n=6). The reported experiences of hunger, with one interviewee noting "we barely got any food and we just had to eat what we could get our hands on ... the people [in detention] were skinny, they were malnourished." An asylum seeker also explained that the meals available to the detainees led to gastrointestinal issues, stating "a lot of people were constipated or couldn't have bowel movements at all. They had to go to the hospital." Lastly, an interviewee stated they could order their own food, but indicated that financial constraints made that impossible stating "I only ate what they fed me there, they would only let me order food from outside on a tablet, but it would be really expensive."

4.2.5. Limited freedom of movement

Some interviewees commented on the limited freedom of movement they experienced while detained (n=5). They described the detention facilities as "warehouses" and "dungeons." They also noted the impact of having no access to outdoor spaces, with one participant stating, "I saw outside for the first time after a year and two months ... You can see from the side, a little bit of the sky ... I could at least look up and see a plane pass."

4.2.6. Isolation

A few of the participants spoke about the impact of the isolation they experienced while detained (n=4). One interviewee recalled, "I would be sad that I was locked up and not with my family. I would be so humble and not talk with anybody." Others noted that the isolation from their loved ones was exacerbated by regulations that limited contact, as well as costs related to making phone calls. An asylum seeker recounted, "you needed to pay to be able to call. I wasn't able to talk at first, until my wife deposited some money and then the first thing I did was call my kids."

4.2.7. Disrupted sleep

The final category in this domain contained participant reports of disrupted sleep in the detention facilities where they were held (n=4). One asylum seeker recounted that when they were detained, "we had to sleep on the ground." Another stated that "they put us in a room that had a thin bed" which made it difficult for her and her child to sleep. The interviewees also stated that the noise in the detention facilities, as well as feelings of anxiety led to insomnia. One interviewee commented that it was common for the detainees to be prescribed sleep aids and noted "you had to drink the medications to sleep and if you didn't drink those medications you would stay up all night."

4.3. COVID-related detention conditions

The third domain focused on the asylum seekers' reports of the specific detention conditions they experienced related to the COVID-19 pandemic. This domain included two general categories: lack of access to masks; and inability to social distance. It also contained two typical categories: poor facility hygiene; and insufficient or extended isolation/quarantine.

4.3.1. Lack of access to masks

All of the asylum seekers reported that they did not have access to masks or face coverings for all or most of the time they were detained during the pandemic (n=12). One participant noted, "the time I was there, they never provided masks." Others indicated that the detention staff began to wear masks as the pandemic increased in intensity, with one interviewee stating, "the officers started to have protective gear and masks on, but would not give them to the actual people in detention." Another participant explained, "only the security guards had masks. [We] knew that things were bad outside, because the people who were visiting were wearing masks." Some also noted that the detention staff were not consistent in using PPE, as exemplified by the statement, "the

officers received their masks in March [2020]. They would not wear them in the dormitories, but ... if a second officer came in, they would put it on." An asylum seeker stated that detainees were not permitted to wear face coverings in order to protect the safety of the detention center staff. They explained, "I can't wear a mask, because they are saying ... that they aren't giving out masks because someone could do something to a [corrections officer] ... They should have had more protections for [us]."

4.3.2. Inability to social distance

All but one of the interviewees stated that they were unable to social distance while they were detained during the pandemic (n=11). They often spoke about the crowded conditions in their sleeping areas. For example, one asylum seeker commented, "with a packed dorm, it is literally impossible. If you choose to stay away, stay in your bunk, there is literally someone two inches from you on the top. But if you try to go out in the seating areas, it is even worse, because there are people all around you. It was impossible to distance from anyone." They also reported that they were unable to keep a distance from others when outside of their dorms. One participant noted, "when we were not in the bedrooms, we were in one big common area ... the occupancy for that was 160 people, so there were always a lot of us together." An asylum seeker commented that when they had learned of the recommended COVID precautions related to social distancing, "I was like, 'oh my God, they are doing the opposite of what I had heard they were supposed to be doing."

4.3.3. Poor facility hygiene

The majority of the asylum seekers disclosed that there were poor levels of facility cleanliness, as well as challenges to maintaining healthy personal hygiene (n=10). A participant reported, "once the virus started getting really bad, they started telling us that we needed to clean things, but they wouldn't give us anything to clean with. We had to fight for bleach, we had to fight for paper towels." One asylum seeker further noted, "there wasn't good hygiene overall. They wouldn't let us wash our hands, because the sink and toilet were in our rooms ... The facilities were dirty." Another indicated, "for 15 days ... we could take no measures of prevention at all ... We couldn't even shower, so I had to use a cloth to get myself clean." The asylum seekers also stated that there was no access to hand sanitizer, disinfectant, or liquid soap. Many reported "the detained people were buying soap ourselves ... from the commissary."

4.3.4. Insufficient or extended isolation/quarantine

In addition, the majority of the participants reported that they experienced insufficient opportunities to isolate or quarantine and/or that the separation from the other detainees was of an excessive duration (n = 9). As one asylum seeker said, "they only isolated the people who were really, really sick. That was worse, because I heard that if you were placed in those rooms, they were really, really cold rooms, they would not give you food and no one would pay attention to you. So, it was worse to be isolated." Another stated, "one night, they took 30 people and they moved them upstairs and we did not know why they were doing it, they didn't tell us. We just woke up the next morning and a few of us were not there anymore. So, the sickest people were the ones that they would isolate. They would not do anything else for us." The interviewees indicated that there was confusion and poor communication about the process of removing individuals who were sick from their living areas, which led to increased worries, exemplified by the disclosure "it was really secretive, when they took people to [the other part of the facility]. We had no idea, did those people die? Or didn't die? Or are they ever coming

4.4. Prevalence of COVID-like symptoms

This domain included the participants' reports of the prevalence of COVID-like symptoms while they were detained. The domain included

one general category: knew someone who had COVID-like symptoms. It also contained one variant category: experienced COVID-like symptoms.

4.4.1. Knew someone who had COVID-like symptoms

All but one of the asylum seekers interviewed in this study reported that they knew at least one person in the detention facility who experienced COVID-like symptoms (n=11). One participant stated, "I heard a couple people that I knew, like they were on the same unit with me, I heard a couple of people tested positive for COVID. I heard of corrections officers that died ... I heard mostly about officers who tested positive and were in the ICU."

4.4.2. Experienced COVID-like symptoms

Many participants also indicated that they experienced COVID-like symptoms during the time that they were detained (n=6). One asylum seeker stated, "I had a terrible fever, it was the worst fever of my life. I had never had anything like that. I had such a weak body, all my muscles hurt all over my body. The nights were the worst ... because of how much everything hurt. I had a really bad cough. I also had really bad chills." The interviewees also commented that, because COVID tests were not available to them, they could not be certain why they were ill. A participant explained, "when I was sick, I would just stay in my room with my roommate. My roommate would ask me, 'do you have COVID, do you have coronavirus?' But I would say, 'I don't know.' Yes, so the ugliest thing was that several of us were sick and we were together. We would tell [the detention staff] that we were sick, that we had fevers, that we had pain all over our bodies ... I had trouble breathing, back pain. Sometimes I thought it could be COVID, but how could I know?"

4.5. Health care experiences in detention

The following domain encompassed the interviewees' disclosures related to their health care experiences while they were detained. This domain included one general category: poor response to COVID. It also contained two typical categories: obstacles to receiving care; and dissatisfaction with management of symptoms.

4.5.1. Poor response to COVID

All but one of the asylum seekers reported that they witnessed a poor response to COVID while they were detained (n = 11). In addition to the previously stated issues, they noted that the detention centers admitted ill individuals into their facilities. As interviewee stated, "sick people would arrive all the time and they would just put them with us." The participants also indicated that they did not receive treatment for COVIDrelated illness, saying "the only thing they would do, for the sickest, if it got to the point where you were unable to get out of bed, they would take you food." Another participant reported that they were fearful of losing their belongings if they were taken away from their cells due to COVIDrelated illness. They remarked, "we knew that if you were sick, they took you away, we were all afraid to say we were sick. We didn't want to be taken where they were taken ... When they took you to that place, they made you leave everything behind. So, we didn't want to go there, where we would be freezing. Because we couldn't take the clothes that they had given us, we would lose everything we had."

4.5.2. Obstacles to receiving care

Most participants reported that they experienced obstacles in their ability to access health care while they were detained (n=9). "It was incredibly difficult to get any kind of medical attention. I had to wait a really long time. And by the time they come and ask if you want to see a doctor, I felt fine, so why would I want to see a doctor?" Another stated, "they took a really, really long time to take you to the doctor." One interviewee indicated that when they experienced a medical condition, "I had to wait about four months for them to take me over to the hospital. They said that immigration had to approve [the medical care]. I was miserable."

4.5.3. Dissatisfaction with management of symptoms

In addition, the majority of interviewees indicated that they were dissatisfied with the management of their physical and mental health symptoms while they were detained (n=9). A participant noted that they were routinely prescribed sleeping pills if detainees experienced anxiety, stating the medication "knocks you out, but you are not yourself. You are a zombie. You sleep, but the only thing it lets you do is sleep, for hours and hours and hours." Another asylum seeker explained, "I told the guy that gave out the pills that I had a fever. That person wasn't a doctor or a healthcare professional, he just gave us the pills. And that was it, they just kept giving me Tylenol." One participant noted that their experience of untreated chronic pain while detained led to significant weight loss, stating "I was 198 pounds when I came in and when I got out, I was 175 pounds."

4.6. Current health

The sixth domain focused on the asylum seekers' descriptions of their current physical and mental health. This final domain included two typical categories: experiences in detention continue to impact health; and physical health improved after release. It also contained one variant category: mental health improved after release.

4.6.1. Experiences in detention continue to impact health

Most participants in this study noted that their experiences in detention continue to impact their mental and/or physical health (n = 8). One asylum seeker stated, "I didn't have any high blood pressure before and as soon as I got there, my blood pressure went up." A second interviewee disclosed continued fears of being detained again, reporting "I find myself always afraid that they can pick me up off the street, because I don't have citizenship." Another participant indicated that their mood symptoms have increased in severity since being released and commented, "I mean [my depression] got worse, terrible after that whole situation. It has been really difficult." An interviewee noted, "when I got out, I had all of these muscle and joint pains, I felt like I had arthritis. I don't know if it was the stress, but you don't come out the same way you came in." An asylum seeker indicated, "But still, I am here with an ankle monitor on. I am lucky to have a court date, since I have been released, which is next year. The depressing thing about, what is frustrating and causing a lot of depression for me, is that is not going to be my final hearing ... It is unbearable." Another explained, "you come home to a lot of stuff, terrible things. You wish you had been [home], because if you had been there, a lot of these terrible things would not have happened. It did a lot of damage and the damage is still there, because the situation has not been resolved yet. It is not fixed. You are in limbo. You do not know what is going to happen. There is no certainty."

4.6.2. Physical health improved after release

Most of the individuals interviewed noted that they experienced an improvement in their physical health following their release from detention (n=7). One asylum seeker stated, "as soon as I got out, my blood pressure was normal again. I have no more tension." Another reported, "Well, thank god, I am okay physically. Thank god, now everything is okay."

4.6.3. Mental health improved after release

The asylum seekers in this study also indicated that their mental health has improved since they were released from detention (n=6). One interviewee reported, "After I got out, I felt very depressed. But, as time has gone on, I have been feeling better and I feel less depressed now than I felt back then." Another stated, "Once I left, I started to forget all about it, now I feel much more at ease."

5. Discussion

We have presented a qualitative, descriptive analysis of 12 in-depth interviews with asylum seekers who were detained in U.S. immigration

detention centers or jails during the onset of COVID-19 in 2020. We found that good physical health prior to detention was the norm among our sample population, and that poor detention conditions, poor food quality, and limited freedom of movement often contributed to a deterioration of physical and mental health. In addition, a lack of access to masks, an inability to social distance, poor facility hygiene- including a lack of soap, hand sanitizer, and towels—and poor communication surrounding policies of quarantine/isolation, all contributed to uncertainty, fear, and mistrust of the system among detainees. The overall poor response to COVID in detention, with many detainees either falling ill themselves or witnessing others become ill, in conjunction with ongoing barriers to healthcare, contributed to the general dissatisfaction of asylum seekers. The fact that most participants in this study noted their experiences in detention continued to impact their mental and/or physical health is significant and underscores the notion that disease and communicability of illness during pandemics are multifactorial, with long-lasting effects.

Race, economics, social capital, and social environments all have been acknowledged to have shaped COVID-19 health inequities among vulnerable populations, such as asylum seekers (Laster Pirtle, 2020). In addition to the social determinants of health, highly susceptible inmate and detained populations are often linked to disadvantaged communities where preexisting health conditions such as hypertension, heart disease, and diabetes, are prevalent and are separate specific risk factors for poor COVID-19 outcomes (Nelson & Kaminsky, 2020). Long term sequelae or ongoing health problems may, therefore, be more common in these populations than in the general population. In addition, the very condition of migration increases asylum seekers' vulnerability to develop mental health complications in conjunction with the stressors that COVID-19 presents (Nirmala et al., 2014). With this framework, it is important to consider the impact of COVID-19 on detainees in a public health context. From one modelling study which examined COVID-19's effect on U.S. ICE detention facilities in 2020, it was projected that under the most optimistic scenario the local healthcare system's critical care capacity would quickly be exceeded (Irvine et al., 2020). The COVID-19 pandemic has, therefore, given renewed focus to the immigration detention system within the U.S., the largest in the world, and highlighted the need to incorporate improved health policies and planning at these centers. Furthermore, the pandemic and its propagation of disease within conjugate living settings such as detention centers and jails, has once again illuminated the need to reverse restrictive immigration policies to ultimately decrease the population of detained migrants. An end to mandatory detention policies is one place to begin.

Although our sample size is appropriate for the inductive CQR methodology employed and for drawing conclusions about the representativeness of our results to our sample, one limitation of the study is the overall small number of participants. In addition, the majority of the participants in the study were held in detention in one region of the United States, thus our findings may not be generalizable to asylum seekers who were detained at other facilities in other geographic locations in the U.S. A third limitation is that the sample is drawn from asylum seekers who identify predominantly as cisgender men. The experiences of cisgender women, transgender, or gender non-conforming people may have been different than those of the participants interviewed.

6. Conclusion

The results of this study elucidate many short comings in COVID-19 mitigation strategies, barriers to containment, and deficits in medical provision that were present during the pandemic in immigration detention centers and jails housing asylum seekers. These important findings may serve to guide future public health and immigrant health policies and to better prepare clinicians and the U.S. immigration system for the next pandemic or novel infectious disease. Our findings also highlight the intersectionality of migrant status and health, and the social

determinants of health which were so starkly revealed during the COVID-19 pandemic and contributed to health inequalities. We hope this study will continue to encourage conversations about the vulnerabilities of asylum seekers, advance actions to improve this population's health care and better understand their health seeking behaviors, and promote future research to explore whether the experiences of the asylum seekers who participated in this study are representative of the larger population of asylum seekers detained in the United States during the COVID-19 pandemic.

Credit author statement

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Ethical statement

This study was reviewed and determined to be exempt by the Institutional Review Board of the Icahn School of Medicine at Mount Sinai.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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