University of Texas Rio Grande Valley

ScholarWorks @ UTRGV

School of Medicine Publications and Presentations

School of Medicine

8-2021

Clinicians' Perceptions of The Health Status of Formerly Detained **Immigrants**

Kathryn Hampton

Ranit Mishori

Marsha Griffin The University of Texas Rio Grande Valley

Claire Hillier

Elizabeth Pirrotta

See next page for additional authors

Follow this and additional works at: https://scholarworks.utrgv.edu/som_pub



Part of the Public Health Commons

Recommended Citation

Hampton, K., Mishori, R., Griffin, M., Hillier, C., Pirrotta, E., & Wang, N. E. (2021). Clinicians' Perceptions of The Health Status of Formerly Detained Immigrants. Preprint submitted to BMC Public Health. https://doi.org/10.21203/rs.3.rs-798340/v1

This Article is brought to you for free and open access by the School of Medicine at ScholarWorks @ UTRGV. It has been accepted for inclusion in School of Medicine Publications and Presentations by an authorized administrator of ScholarWorks @ UTRGV. For more information, please contact justin.white@utrgv.edu, william.flores01@utrgv.edu.

Authors Kathryn Hampton, Ranit Mishori, Marsha Griffin, Claire Hillier, Elizabeth Pirrotta, and Nancy E. Wang			



Clinicians' Perceptions of The Health Status of Formerly Detained Immigrants

Kathryn Hampton (

khampton@phr.org)

Physicians for Human Rights

Ranit Mishori

Georgetown University School of Medicine

Marsha Griffin

University of Texas Rio Grande Valley School of Medicine

Claire Hillier

Stanford University

Elizabeth Pirrotta

Stanford University School of Medicine

Nancy E. Wang

Stanford University School of Medicine

Research Article

Keywords: Immigration Detention, Social determinants of health, Maternal and child health, Chronic and Infectious Disease Epidemiology

DOI: https://doi.org/10.21203/rs.3.rs-798340/v1

License: © 1 This work is licensed under a Creative Commons Attribution 4.0 International License. Read Full License

Abstract

Background

In the past decade, the U.S. immigration detention system regularly detained more than 30,000 people; in 2019 prior to the pandemic, the detention population exceeded 52,000 people. Inhumane detention conditions have been documented by internal government watchdogs, news media and human rights groups, finding over-crowding, poor hygiene and sanitation and poor and delayed medical care, as well as verbal, physical and sexual abuse.

Methods

This study surveyed health professionals across the United States who had provided care for immigrants who were recently released from immigration detention to assess clinician perceptions about the adverse health impact of immigration detention on migrant populations based on real-life clinical encounters. There were 150 survey responses, of which 85 clinicians observed medical conditions attributed to detention.

Results

These 85 clinicians reported seeing a combined 1300 patients with a medical issue related to their time in detention, including patients with delayed access to medical care or medicine in detention, patients with new or acute health conditions including infection and injury attributed to detention and patients with worsened chronic conditions or special needs conditions. Clinicians also provided details regarding sentinel cases, categorized into the following themes: Pregnant women, Children, Mentally III, COVID-19, and Other serious health issue.

Conclusions

This is the first survey, to our knowledge, of health care professionals treating individuals upon release from detention. Due to the lack of transparency by federal entities and limited access to detainees, this survey serves as a source of credible information about conditions experienced within immigration detention facilities and is a means of corroborating immigrant testimonials and media reports. These findings can help inform policy discussions regarding systematic changes to the delivery of healthcare in detention, quality assurance and transparent reporting.

Background

For years, news reports, civil society, and human rights groups have documented inhumane conditions in United States (US) immigration detention, characterized by over-crowding, poor hygiene and decreased access to water and sanitation, direct verbal, physical and sexual abuse [1], as well as poor, negligent and delayed medical care [2]. During the Trump administration, conditions reportedly worsened due to a substantial increase in the number of people detained [3], increased duration of detention [4] and policy decisions not to release at-risk populations, such as pregnant people [5] or asylum seekers [6], who would ordinarily have been presumptively released or released after requesting bond [7]. While the Biden administration has reversed some of the policies regarding detention, at the writing of this article, there is another surge at the border, contributing to increasing numbers of asylum seekers, including children, being detained in different types of facilities.

Immigrants can be detained in a number of different types of facilities (Table 1). They each have different governance, infrastructure and health care facilities and protocols that determine access to care. Many immigrants do not know where they were detained, thus making it difficult for physicians to know where to report medical problems in a particular facility. It is also important to note that CBP, ICE and ORR operate in a non-transparent manner with little external medical oversight. The only individuals who may become aware of worsening medical conditions are the immigrants' attorneys or physicians treating them once they are released.

Table 1 Immigrant Detention facilities

Facility	Governance	Target population	Purpose
United States Customs and Border Protection (CBP)	Department of Homeland Security	All people crossing the border without documentation, including men, women, boys and girls	Processing or intake usually at the border, usually the first point of detention
U.S. Immigration and Customs Enforcement (ICE) Department of Homeland Security (Including Service Processing Centers, Contract Detention Facilities, Intergrovernmental Service Adults (men and women) or Families (parents and children)	Mandatory detention for certain categories of		
	Centers, Contract Detention	Families (parents	immigrants while their immigration proceedings pend;
			ICE has discretion to release on bond or parole immigration judges may release on bond
State-licensed shelters run by non- profit organizations throughout the country to detain unaccompanied children until sponsors can be identified and screened for reunification	U.S. Department of Health and Human Services; Office of Refugee Resettlement (ORR)	Unaccompanied children	Holding children while locating a family membe or other eligible sponsor while their legal case is pending, until the child turns 18

While news reports and other official investigations have documented poor conditions and lapses in medical care, much of the information has not been systematically obtained or published. As a result, it has been difficult to observe trends including the incidence or prevalence of certain conditions, or even to obtain details about sentinel events such as deaths. Health professionals in the hospital or community setting may see individuals after they are released from federal detention, be it CBP, ICE or ORR detention. In some instances, health professionals have informally shared de-identified information through professional networks and social media groups about the negative health status of some of their patients that they attribute to their time spent in immigration detention. We sought to systematically collect health care professionals' reports and impressions about the impact of immigration detention on their patients' health and well-being. We also sought to identify reporting practices of health care professionals of these incidents.

Methods

The authors developed a provider-facing survey based on their expertise and experience. The survey was reviewed for clarity and understanding by clinicians who were not involved in its creation (appendix 1). Health care professionals were surveyed regarding their demographics and practice characteristics, as well as their attitudes and actions relating to immigrant detention. Providers were also asked if they saw patients who had been detained, and if so, to estimate their perceptions regarding the detrimental health effects of immigrant detention, the number of their patients who experienced adverse health effects due to detention and if they had reported cases. In addition, clinicians were able to provide additional information regarding cases as free text.

The survey was designed, distributed and conducted online using Qualtrics software, [Qualtrics, Provo, UT, 2020]. SAS was used for data analysis [SAS Enterprise Guide V7.1, SAS Institute Inc., Cary, NC, 2017]. Tableau was used for data visualization [Tableau Desktop V2020.4, Tableau Software LLC, 2020, Seattle, WA]. This project was deemed exempt from Stanford institutional review board (IRB) review due to the anonymity of both provider and patient.

The survey was sent to authors' list serves and professional email lists including Emergency Medicine, Pediatric, Family Medicine, Human Rights and Asylum Medicine clinicians over the course of 2 months (October 1 - December 1, 2020). Repeat responses from the same IP address were not allowed.

Results

There were 150 responses received with complete practitioner demographics. Eighty-five, or approximately half of the respondents (57%), observed medical conditions they attributed to detention and included details about their observations. Of the 150 health care practitioners,

just over 75% were physicians and another 15% were mental health professionals. Table 2 provides an overview of clinician characteristics. Practitioners worked throughout the US (Fig. 1). The practitioners who did and did not observe medical conditions attributable to detention were similar, except that those who observed medical conditions related to detention were more likely to speak foreign languages and to not be located in the Northeast (Table 2).

Table 1: Immigrant Detention facilities

Facility	Governance	Target population	Purpose
United States Customs and Border Protection (CBP)	Department of Homeland Security	All people crossing the border without documentation, including men, women, boys and girls	Processing or intake usually at the border, usually the first point of detention
U.S. Immigration and Customs Enforcement (ICE)	Operatment of Homeland Security (Including Service Processing Centers, Contract Detention Facilities, Intergovernmental Service Agreements, U.S. Marshals Service Intergovernmental Agreement) [24]	Adults (men and women) or Families (parents and children)	Mandatory detention for certain categories of immigrants while their immigration proceedings pend; ICE has discretion to release on bond or parole, immigration judges may release on bond
State-licensed shelters run by non- profit organizations throughout the country to detain unaccompanied children until sponsors can be identified and screened for reunification	U.S. Department of Health and Human Services; Office of Refugee Resettlement (ORR)	Unaccompanied children	Holding children while locating a family member or other eligible sponsor while their legal case is pending, until the child turns 18

^{*}ICE contracts with both local governments and private prison companies, such as the GEO Group, Inc. and Core Civic, to operate the majority of its vast network of facilities [25].

Table 2
Characteristics of Clinicians answering survey

Provider Characteristics	All respondents (who completed demographic questions)	Providers who observed medical conditions relating to detention
N	150 (100.0%)	85 (56.7%)
Race/Ethnicity		
White	114 (76.0%)	67 (78.8%)
Hispanic	32 (21.3%)	21 (24.7%)
Asian or Pacific Islander	21 (14.0%)	11 (12.9%)
Native American	7 (4.7%)	5 (5.9%)
Black	6 (4.0%)	1 (1.2%)
Other	5 (3.3%)	3 (3.5%)
Sex		
Female	109 (72.7%)	64 (75.3%)
Male	41 (27.3%)	21 (24.7%)
Languages Spoken		
English-only	42 (28.0%)	14 (16.5%)
Spanish	95 (63.3%)	62 (72.9%)
French	11 (7.3%)	9 (10.6%)
Haitian Creole	4 (2.7%)	3 (3.5%)
Other	17 (11.3%)	8 (9.4%)
Years in Practice		
9 (6.0%)	2 (2.4%)	
1-5	41 (27.3%)	25 (29.4%)
6-10	30 (20.0%)	18 (21.2%)
11-20	30 (20.0%)	19 (22.3%)
21-30	22 (14.7%)	14 (16.4%)
>31	18 (12.0%)	7 (8.2%)
26-30	12 (8.0%)	7 (8.2%)
Type of Profession		
MD/D0	116 (77.3%)	65 (76.5%)
Mental Health Professional	22 (14.7%)	13 (15.3%)
NP/PA	6 (4.0%)	4 (4.7%)
Public Health Professional	6 (4.0%)	3 (3.5%)
Specialty		
Pediatrics	59 (39.3%)	37 (43.5%)
OB/GYN	11 (7.3%)	7 (8.2%)
Family Medicine	18 (12.0%)	8 (9.4%)
Internal Medicine	17 (11.3%)	9 (10.6%)

Provider Characteristics	All respondents (who completed demographic questions)	Providers who observed medical conditions relating to detention
Emergency Medicine	13 (8.7%)	9 (10.6%)
Mental Health	30 (20.0%)	17 (20.0%)
Other Specialty	21 (14.0%)	12 (14.1%)
Setting		
Outpatient (non-urgent)	112 (74.7%)	64 (75.3%)
Urgent Care	17 (11.3%)	11 (12.9%)
Emergency Department	23 (15.3%)	14 (16.5%)
Inpatient	46 (30.7%)	25 (29.4%)
ICU (includes NICU, PICU)	18 (12.0%)	9 (10.6%)
Other Setting	10 (6.7%)	4 (4.7%)
Shelter/Legal	4 (2.7%)	3 (3.5%)
Institution		
Academic	93 (62.0%)	54 (63.5%)
County/City Dept of Health	11 (7.3%)	7 (8.2%)
Federal Qualified Health Clinic	25 (16.7%)	20 (23.5%)
Private Practice	29 (19.3%)	15 (17.6%)
Other	24 (16.0%)	7 (8.2%)

The vast majority of health care practitioners surveyed (98%) believed that detention affected health (Table 3); although only 67 (44.7%) "routinely" and 44 (29.3%) "sometimes" asked if patients had been in detention. The major reasons for not always asking were: "I'm not sure how to frame the question" (24.0%) and "It's not relevant to the patients I see" (26.0%).

Table 3
Clinicians' attitudes regarding whether detention affects health and why they do not ask patients if they have been in detention.

N	150
Do you believe detention affects health	
Yes	147 (98.0%)
No/Unsure	3 (2.0%)
Do you ask patients if they have been in detention	
Yes	67 (44.7%)
Sometimes	44 (29.3%)
No	39 (26.0%)
Reasons for not always asking (N = 83)	
I'm not sure how to frame question in every situation	36 (24.0%)
It's not relevant to the patients I see	35 (23.3%)
I don't always have time	19 (12.7%)
It interferes with patient trust	16 (10.7%)
Do not think to	9 (6.0%)
Concern for/previous experience of patient (re)traumatization.	7 (4.7%)
Other	8 (5.3%)

Table 3 Clinicians' recollection of Select Cases Involving Individuals recently released from immigration detention.

Cases Involving Pregnant Women Patient with pyelonephtils that went untreated while in detention center, was released only when she went into unstoppable preterm labor due to he in fection? Patient was told by medical providers at the detention center that she was not pregnant, and thus was not provided with any prenatal care. Was released when she reached full term gestation, and ended up giving birth with her IUD still in place the ceases no one at the detention facility would remove it for her? The one I constantly think about it is a woman who was pregnant and kept complaining of stomach pain. She was told it was reflux and given turns. She complained several times and finally, a week after the pain started, was brought to the hospital. She was found to have an ectopic pregnancy—a pregnancy outside of the uterus, in one of her plant in the hird timester. We took her back to the OR emergently and look out the ectopic pregnancy, but her entire belly was full of blood. She had clearly been bleedled blood pressures. Found to have severe range blood pressures along with other markers of pre- celampsia with severe features and an intrauterine fetal demise. "We had a third-intenset pregnant patient who was clearly visibly pregnant (and reported that she had advised authorities that she didn't feel well she wasn't taken for medical attention until is her and examine to examine the sew as critically ill from the time she was transported from the original hospital she was taken to (unequipped to handle the level of care she needed). She didn't follow up as needed due to fear she would be taken back to the detention center. Patient in the service of the pregnant state of the pregnant stat	Themes	Illustrative Descriptions
women Women Well as told by medical providers at the detention center that she was not pregnant, and thus was not provided with any prenatal care. Was released when she reached full term gestation, and ended up giving birth with her IUD still in place because in one at the detention facility would remove it for her. "The one I constantly think about is a woman who was pregnant and kept complaining of stomach pain. She was told it was reflux and given turns. She complained several times and finally, a week after the pain started, was brought to the hospital. She was found to have an ectopic pregnancy - a pregnancy outside of the uterus, in one of her fallopian tubes. We took her back to the OR emergently and took out the ectopic pregnancy, but her entire belly was full of blood. She had clearly been bleeding for a while. "A case of a young lady who was pregnant in the third trimester. Brought into the emergency department due to headcaches, elevated blood pressures. Found to have severe range blood pressures along with other markers of precelampsia with severe features and an intrauterine fetal demise." "We had a third-immester pregnant patient who was actearly visibly pregnant (and reported that she had advised authorities of her pregnant status) who had no basic health intake or blood pressure check, and despite complaining to authorities of her pregnant status) who had no basic health intake or blood pressure check, and despite complaining to authorities of her pregnant status; who had no basic health intake or blood pressure check, and despite complaining to authorities of her pregnant status; who had no basic health intake or blood pressure check, and despite complaining to authorities of her pregnant status; who had no basic health intake or blood pressure check, and despite complaining to authorities of her pregnant status; who had no basic health intake or blood pressure check, and despite complaining to authorities of her pregnant status; and the status of the check of her pregnant status, and the	THEITIES	Illustrative Descriptions
"Patient was told by medical providers at the detention center that she was not pregnant, and thus was not provided with prenatal care. Was released when she reached full term gestation, and ended up giving birth with her IUD still in place because no one at the detention facility would remove if or her." The one I constantly think about is a woman who was pregnant and kept complaining of stomach pain. She was told it was reflux and given tums. She complained several times and finally, a week after the pain started, was brought to the hospital. She was found to have an ectopic pregnancy outside of the uterus, in one of her fallopian tubes. We took her back to the OR emergently and took out the ectopic pregnancy, but her entire belly was full of blood. She had clarly been bleeding for a while. "A case of a young lady who was pregnant in the third timester. Brought into the emergency department due to headaches, elevated blood pressures. Found to have severe range blood pressures along with other markers of pre-eclampsia with severe features and an intrauterine fetal demise." "We had a third-timester pregnant patient who was clearly visibly pregnant (and reported that she had advised authorities of her pregnant status) who had no basic health intake or blood pressure check, and despite complaining to authorities that she didn't fed well she wasn't taken for medical attention until she had an eclamptic seizure. She was ortically ill medically ill m	involving	"Patient with pyelonephritis that went untreated while in detention center, was released only when she went into unstoppable preterm labor due to her infection".
was reflux and given turns. She complained several times and finally, a week after the pain started, was brought to the hospital. She was found to have an ectopic pregnancy a triggenancy outside of the uterus; in ord her fallopian tubes. We took her back to the OR emergently and took out the ectopic pregnancy, but her entire belly was full of blood. She had clearly been bleeding for a while. "A case of a young lady who was pregnant in the third trimester. Brought into the emergency department due to headaches, elevated blood pressures. Found to have server range blood pressures along with other markers of pre-eclampsia with severe features and an intrauterine fetal demise. "We had a third-trimester pregnant patient who was clearly visibly pregnant (and reported that she had advised authorities of her pregnant status) who had no basic health intake or blood pressure check, and despite complaining to authorities that she didn't feel well she was start she for medical attention until she had an eclamptic seizure. She was critically ill from the time she was transported from the original hospital she was taken she was transported from the original hospital she was taken to unequipped to hande was critically ill from the time she was transported from the original hospital she was taken to the detention center." Pediatric cases Pediatric cases A child in family detention for 4 months who demonstrated mainutrition based on weight for stature in first percentile, and weight loss over the first 2 months of his detention. He was given inadequate diet and medical care during this period. Child with seizure disorder whose medications were confiscated and whose condition deteriorated because of lack of access to medications upon arrival in our community. Child with seizure disorder whose medications were confiscated and who was ultimately hospitalized. A 10 year old with asthma, meds taken away while in detention and not returned, had asthma exacerbation after release and mother had no meds. Teenage boy with refrac	Women	any prenatal care. Was released when she reached full term gestation, and ended up giving birth with her IUD still in place
headaches, elevated blood pressures. Found to have severe range blood pressures along with other markers of pre- celampsia with severe features and an intrauterine fetal demise. "We had a third-trimester pregnant patient who was clearly visibly pregnant (and reported that she had advised authorities of her pregnant status) who had no basic health intake or blood pressure check, and despite complaining to authorities that she didn't feel well she wasn't taken for medical attention until she had an eclamptic seizure. She was critically ill i from the time she was transported from the original hospital she was taken to (unequipped to handle the level of care she needed). She didn't follow up as needed due to fear she would be taken back to the detention center. Pediatric cases A child in family detention for 4 months who demonstrated malnutrition based on weight for stature in first percentile, and weight loss over the first 2 months of his detention. He was given inadequate diet and medical care during this period. Child with juvenile dermatomyositis whose prescription medications were confiscated and whose condition deteriorated because of lack of access to medications upon amival in our community. Child with seizure disorder whose medications were confiscated and who was ultimately hospitalized. A 10 year old with asthma, meds taken away while in detention and not returned, had asthma exacerbation after release and mother had no meds. Teenage boy with refractory epilepsy that was ultimately deemed surgically resectable (2 years after his arrival), who upon arrival had limited supply of Vimpat and was not provided with a bridge supply or adequate substitute while in detention. His second medicine, Keppra, was available. Teenage held in ORR shelter x 1 year, misdiagnosed bipolar, sedated on meds x 6 months and had PTSD, seen by psychiatry at discharge and taken off of these meds Child unnecessarily kept in detention despite the fact that his mother was available because staff reasoned she could not take		was reflux and given tums. She complained several times and finally, a week after the pain started, was brought to the hospital. She was found to have an ectopic pregnancy- a pregnancy outside of the uterus, in one of her fallopian tubes. We took her back to the OR emergently and took out the ectopic pregnancy, but her entire belly was full of blood. She had
of her pregnant status) who had no basic health intake of blood pressure check, and despite complaining to authorities that she didn't feel well she wasn't taken for medical attention until she had an eclamic seizure. She was critically ill from the time she was transported from the original hospital she was taken to (unequipped to handle the level of care she needed). She didn't follow up as needed due to fear she would be taken back to the detention center." A child in family detention for 4 months who demonstrated malnutrition based on weight for stature in first percentile, and weight loss over the first 2 months of his detention. He was given inadequate diet and medical care during this period. Child with juvenile dermatomyositis whose prescription medications were confiscated and whose condition deteriorated because of lack of access to medications upon arrival in our community. Child with seizure disorder whose medications were confiscated and who was ultimately hospitalized. A 10 year old with asthma, meds taken away while in detention and not returned, had asthma exacerbation after release and mother had no meds. Teenage boy with refractory epilepsy that was ultimately deemed surgically resectable (2 years after his arrival), who upon arrival had limited supply of Vimpat and was not provided with a bridge supply or adequate substitute while in detention. His second medicine, Kepra, was available. Teenager held in ORR shelter x 1 year, misdiagnosed bipolar, sedated on meds x 6 months and had PTSD, seen by psychiatry at discharge and taken off of these meds Child unnecessarily kept in detention despite the fact that his mother was available because staff reasoned she could not take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with mother, trealized the minor was not cognitively impaired but traumatized. Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's A minor who acquired a		headaches, elevated blood pressures. Found to have severe range blood pressures along with other markers of pre-
and weight loss over the first 2 months of his detention. He was given inadequate diet and medical care during this period. Child with juvenile dermatomyositis whose prescription medications were confiscated and whose condition deteriorated because of lack of access to medications upon arrival in our community. Child with seizure disorder whose medications were confiscated and who was ultimately hospitalized. A 10 year old with asthma, meds taken away while in detention and not returned, had asthma exacerbation after release and mother had no meds. Teenage boy with refractory epilepsy that was ultimately deemed surgically resectable (2 years after his arrival), who upon arrival had limited supply of Vimpat and was not provided with a bridge supply or adequate substitute while in detention. His second medicine, Keppra, was available. Teenager held in ORR shelter x 1 year, misdiagnosed bipolar, sedated on meds x 6 months and had PTSD, seen by psychiatry at discharge and taken off of these meds Child unnecessarily kept in detention despite the fact that his mother was available because staff reasoned she could not take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with mother, I realized the minor was not cognitively impaired but traumatized. Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's A minor who acquired an ankle fracture and was not treated for days. Infant with concem for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. Mental health poorly addressed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health are first particularly hurtful. Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was alrea		of her pregnant status) who had no basic health intake or blood pressure check, and despite complaining to authorities that she didn't feel well she wasn't taken for medical attention until she had an eclamptic seizure. She was critically ill from the time she was transported from the original hospital she was taken to (unequipped to handle the level of care she
because of lack of access to medications upon arrival in our community. Child with seizure disorder whose medications were confiscated and who was ultimately hospitalized. A 10 year old with asthma, meds taken away while in detention and not returned, had asthma exacerbation after release and mother had no meds. Teenage boy with refractory epilepsy that was ultimately deemed surgically resectable (2 years after his arrival), who upon arrival had limited supply of Vimpat and was not provided with a bridge supply or adequate substitute while in detention. His second medicine, Keppra, was available. Teenager held in ORR shelter x 1 year, misdiagnosed bipolar, sedated on meds x 6 months and had PTSD, seen by psychiatry at discharge and taken off of these meds Child unnecessarily kept in detention despite the fact that his mother was available because staff reasoned she could not take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with mother, I realized the minor was not cognitively impaired but traumatized. Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's A minor who acquired an ankle fracture and was not treated for days. Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. I followed one schizophrenic male who was decompensating and put into solitary and treated with vistaril and antidepressants. It took close to a year to get him on an antipsychotic. Other serious defense profile (which was particularly hurtful. Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		and weight loss over the first 2 months of his detention. He was given inadequate diet and medical care during this
A 10 year old with asthma, meds taken away while in detention and not returned, had asthma exacerbation after release and mother had no meds. Teenage boy with refractory epilepsy that was ultimately deemed surgically resectable (2 years after his arrival), who upon arrival had limited supply of Vimpat and was not provided with a bridge supply or adequate substitute while in detention. His second medicine, Keppra, was available. Teenager held in ORR shelter x 1 year, misdiagnosed bipolar, sedated on meds x 6 months and had PTSD, seen by psychiatry at discharge and taken off of these meds Child unnecessarily kept in detention despite the fact that his mother was available because staff reasoned she could not take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with mother, I realized the minor was not cognitively impaired but traumatized. Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's A minor who acquired an ankle fracture and was not treated for days. Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. Mental health poorly addressed I followed one schizophrenic male who was decompensating and put into solitary and treated with vistaril and antidepressants. It took close to a year to get him on an antipsychotic. Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health issues of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was resistance testing never performed and regimen never changed.		
Teenage boy with refractory epilepsy that was ultimately deemed surgically resectable (2 years after his arrival), who upon arrival had limited supply of Vimpat and was not provided with a bridge supply or adequate substitute while in detention. His second medicine, Keppra, was available. Teenager held in ORR shelter x 1 year, misdiagnosed bipolar, sedated on meds x 6 months and had PTSD, seen by psychiatry at discharge and taken off of these meds Child unnecessarily kept in detention despite the fact that his mother was available because staff reasoned she could not take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with mother, I realized the minor was not cognitively impaired but traumatized. Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's A minor who acquired an ankle fracture and was not treated for days. Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. Mental health poorly addressed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health are feromed and regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		Child with seizure disorder whose medications were confiscated and who was ultimately hospitalized.
upon arrival had limited supply of Vimpat and was not provided with a bridge supply or adequate substitute while in detention. His second medicine, Keppra, was available. Teenager held in ORR shelter x 1 year, misdiagnosed bipolar, sedated on meds x 6 months and had PTSD, seen by psychiatry at discharge and taken off of these meds Child unnecessarily kept in detention despite the fact that his mother was available because staff reasoned she could not take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with mother, I realized the minor was not cognitively impaired but traumatized. Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's A minor who acquired an ankle fracture and was not treated for days. Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. Mental health poorly addressed Tellolowed one schizophrenic male who was decompensating and put into solitary and treated with vistaril and antidepressants. It took close to a year to get him on an antipsychotic. Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health issues Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		
Child unnecessarily kept in detention despite the fact that his mother was available because staff reasoned she could not take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with mother, I realized the minor was not cognitively impaired but traumatized. Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's A minor who acquired an ankle fracture and was not treated for days. Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. Mental health poorly addressed I followed one schizophrenic male who was decompensating and put into solitary and treated with vistaril and antidepressants. It took close to a year to get him on an antipsychotic. Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health issues Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		upon arrival had limited supply of Vimpat and was not provided with a bridge supply or adequate substitute while in
take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with mother, I realized the minor was not cognitively impaired but traumatized. Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's A minor who acquired an ankle fracture and was not treated for days. Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. Mental health poorly addressed I followed one schizophrenic male who was decompensating and put into solitary and treated with vistaril and antidepressants. It took close to a year to get him on an antipsychotic. Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health issues Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		Teenager held in ORR shelter x 1 year, misdiagnosed bipolar, sedated on meds x 6 months and had PTSD, seen by psychiatry at discharge and taken off of these meds
A minor who acquired an ankle fracture and was not treated for days. Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. Mental health poorly addressed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health issues Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		take care of his behavioral needs (including a form of selective mutism). Through my evaluation and interview with
Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress. Mental health poorly addressed I followed one schizophrenic male who was decompensating and put into solitary and treated with vistaril and antidepressants. It took close to a year to get him on an antipsychotic. Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health issues Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		Child with undiagnosed congenital heart disease who came to clinic with dyspnea and oxygen saturation in the 70's
Mental health poorly addressed Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health issues Out of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		A minor who acquired an ankle fracture and was not treated for days.
antidepressants. It took close to a year to get him on an antipsychotic. Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other serious health issues Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		Infant with concern for dehydration separated from minor breastfeeding mom and given to adult dad. Neonate with fever and cyanosis. Dehydration from gastroenteritis. Severe respiratory infections and respiratory distress.
Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Other Serious Health Issues Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful. Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.	health	I followed one schizophrenic male who was decompensating and put into solitary and treated with vistaril and antidepressants. It took close to a year to get him on an antipsychotic.
Other serious health issues Case of patient placed on incorrect HIV regimen for months and experienced worsening resistance profile (which was already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.	poorly addressed	Out of control dm II, depression with psychosis sent out with no housing, ptsd not diagnosed
serious already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate resistance testing never performed and regimen never changed.		The staff were insensitive, took clothing away from the transgender woman which was particularly hurtful.
	serious health	already very severe) further limiting treatment options. HIV virus level never reached undetectable, but appropriate
	199069	Patients with post-concussive syndrome getting no imaging or treatment with significant morbidity.

Themes	Illustrative Descriptions
COVID-19 related Care	Young woman with COVID, tachy to 160s documented, reported CP/SOB/palpitations. Detention center did not get any imaging, ECG, or labs (except for a routine thyroid study) and had no consideration of PE/MI/arrhythmia/etc. They sent her back to her cell with no vitals for 13 hours and told her to "drink more water".
	A 3 yo experienced constipation and poor weight gain as a result of inappropriate diet during a 3 month detention. He also got influenza and fractured a finger in a metal door at the facility. He was on COVID quarantine (22 hours in a small room with his mother and brother) for 14 days following trip to ER for his finger
	A 40yo experienced worsening of severe depression, PTSD, and passive suicidality in ICE detention. He was afraid to report medical complaints (chest pain and flank pain with a medical history significant for prior ureteral obstruction) because he was afraid of the mental health suffering he would experience in medical isolation for COVID.
	A woman with Multiple chronic conditions ready for release and got COVID.

The eighty-five clinicians who observed medical conditions attributed to detention reported a combined 1300 patients with a medical issue related to their time in detention (Table 4). Seventy-five (88%) observed patients with delayed access to medical care or medicine in detention including vaccine preventable diseases, need for prenatal care, and medications which were taken away. Thirty-nine (46%) of clinicians observed seeing patients with new or acute health conditions including infection and injury they attributed to their time in detention; this included 36 (42%) of clinicians who saw patients with mental health symptoms. Fifty (59%) saw worsened chronic conditions or special needs conditions. Forty-five (53%) of clinicians observed patients who delayed care after detention.

Table 4
Health conditions related to detention

Health Condition	Number of Patients	Number of Providers	Percent of Providers
Total Patients with health conditions related to detention	1303	85	100%
Delayed access or lack of access to appropriate medical care and medication		75	88.2%
Patients with vaccine-preventable conditions acquired in detention (Varicella).	83	17	20.0%
Patients whose medications were taken away or denied access to their medications during their time in detention.	307	55	64.7%
Patients who required pre-natal, delivery and/or post-partum care during their time in detention	163	26	30.6%
New, acute health condition		39	45.9%
Patients diagnosed with or experiencing symptoms consistent with COVID19 during detention or within 2 weeks of release from detention	84	22	25.9%
Patients with non-COVID19 infections acquired during detention (GI, Respiratory, etc.)	169	26	30.6%
Patients with injuries acquired during detention (musculoskeletal, burns)	78	21	24.7%
Patients who were subjected to substandard living conditions that affected their health (malnutrition, dehydration)	241	31	36.5%
Patients with mental health symptoms related to their time in detention (anxiety, depression, PTSD)	402	36	42.4%
Worsened chronic condition or special needs condition			
Patients with chronic conditions that worsened during detention (diabetes, heart disease)	253	50	58.8%
Other concerning health issues			
Patients with other concerning health circumstances not covered above	341	61	71.8%

Below we provide details of categories of medical issues with the largest quantity of comments, namely lack of access to medications, mental health, and access to health care after discharge. Table 5 highlights additional cases reported, categorized into the following themes: Pregnant women, Children, Mentally III, COVID-19, and Other.

Lack of access to medications:

The theme of lack of access to medications was pervasive throughout all survey responses. According to survey respondents, the most commonly reported medications confiscated from the detainees or thrown out and then not provided in detention (listed from most commonly reported to least commonly reported), were medications to prevent seizures, asthma medications, blood pressure and heart failure medicines, insulin or other diabetes medications, antidepressants or antipsychotic medication, and HIV medications. Sometimes an alternative medication was provided but was inadequate, such as a clinician who reported a "low supply of anti-epileptic medications or inadequate substitute available within the center". Two clinicians mentioned a lack of access to hormone treatment for gender-affirming care for transgender patients. Clinicians also reported more specific cases including a patient with congenital hypothyroidism whose levothyroxine was taken away, and patients with lupus juvenile dermatomyositis, and glaucoma who did not receive their medications while in detention, and a patient suffering from psychosis (delusions) who relapsed due to a forced discontinuation of their psychotropics.

Abuse and Mental Health Conditions:

Using free-text response, clinicians noted that some patients reported abusive conditions in detention, including physical and sexual assault and verbal abuse: "Patients subjected to sexual assault and verbal and physical harassment"; "Traumatizing interactions or neglect with resulting prolonged emotional distress"; "Hunger strikes, being sprayed with tear gas in detention"; "People screamed at and demeaned by US border/detention officials" and "An indigenous child in a juvenile detention facility was tasered". Given reports of abuse, it is perhaps not unsurprising that clinicians consistently noted the high prevalence of mental health issues among patients who had been in detention, and that they received inadequate treatment for post-traumatic stress disorder (PTSD), anxiety, and depression. Clinicians also reported: "severe emotional distress caused by being detained"; "Decompensation of pre-existing psychiatric conditions"; and "The experience of detention exacerbates PTSD and other mental health problems."

Access to health care after release from detention

Many of the clinicians reported that recently-released individuals were often not able to access the health care that they needed post release. The main cause was the fear of immigration enforcement which would result in either return to detention or deportation. Clinicians reported: "patients fear that accessing care and more specifically the funding sources for care will lead to tracking by immigration officials". "I had a patient who delayed seeking care despite having daily seizures for 2 weeks; he went into status epilepticus and was transported to the hospital and found to have a brain tumor"; "failure to show for outpatient epilepsy appointments at a time when ICE apprehensions in the community were increasing"; "Critically ill patient didn't follow up after hospital discharge due to fear."

Clinicians also indicated their perception that experiences in detention resulted in a high overall level of mistrust in the system's ability or intent to safeguard patients' well-being: "Most of them were wary of encountering the system"; "they don't know their rights to access healthcare"; "This person experienced feelings of not deserving basic care because she was criminalized". Tele-health was one modality which some patients felt more comfortable to access: "We started doing more prenatal care over the phone when ICE enforcement was expanded within the interior of the United States, because of patient concern about being detained again". Surveyed clinicians provided short descriptions of memorable cases they attributed to poor conditions and subpar medical care in detention.

Lastly, while clinicians reported caring for immigrants who had been detained in CBP, ICE and ORR custody, 22% did not know in which agency their patients had been detained. When asked if they reported some of these concerning encounters to anyone, the vast majority did not. Reasons for not reporting included: "I did not know I could report" (43.6%); "I didn't know why or how to report" (45.5%); The cases didn't meet reporting criteria (25.5%); I didn't want to bring attention/pressure on the patient (21.8%); and other (20.0%). Reasons clinician did not report written in the free text section included: "Patient requested that I not report," and "seems futile." Of the 21 providers who reported, 3 reported to the local health department; 6 to the Department of Homeland security; 2 reported to Child Protective services (CPS), and 13 reported to an "other" agency including attorneys and advocates, institutional social workers and client immigration lawyers.

Discussion

In this unique inquiry into clinicians' perceptions of the health effects of US immigrant detention, clinicians attributed acute or worsening medical conditions in their patients to delayed access to appropriate medical care, poor living conditions and lack of access to medications while in custody. Concerns regarding mental health conditions and access to care were particularly prevalent.

This is the first survey, to our knowledge, of health care professionals treating individuals upon release from detention. Due to the lack of transparency by federal entities, limited responses to Freedom of Information Act (FOIA) requests, and an inability to survey clinicians working within the system or detainees themselves, the results of this survey serve as a source of credible information about conditions

experienced within immigration detention facilities and is a means of corroborating testimonials from immigrants themselves or from media reports.

The reported high prevalence of mental health conditions is aligned with previous evidence of high rates of post-traumatic stress disorder (PTSD), anxiety and an association of being in detention with deteriorating mental health outcomes even when controlling for prior trauma [8, 9]. The findings in this survey also remind us of the unique vulnerabilities of women and children in detention. These results, coupled with increased knowledge of the effects of toxic stress [10], specifically on children, and adverse childhood experiences (ACES [11]) increase the urgency to reform immigration protocols that emphasize detention rather than community-based alternatives, to release individuals from immigration detention, to decrease the length of detention, and to improve the conditions of detention.

Reports about patients' reluctance to seek care because of fear of Immigrations and Customs Enforcement (ICE), and deportation corroborate earlier studies as well [12–17].

Immigration is a known and significant social determinant of health, as is immigration detention [18–19]. There is a broad consensus among experts that being held in detention has a cumulative adverse effect on health. While, importantly, attention is focused on reversing harmful policies, it is important to consider systemic changes to the immigration system at large.

Healthcare professionals have sought to address negative health consequences of detention in various ways. They have spoken up as whistleblowers in 2018 on the severe health risks at stake in forced family separation and family detention [20] and in 2020 on the lack of COVID-19 mitigation measures that put both detention facility staff and the detainees at risk [13, 21, 22]. Organizations such as Medical Review for Immigrants, Doctors for Camp Closure, and Physicians for Human Rights have engaged in medico-legal work to review medical records of detainees and to assist immigration attorneys seeking to obtain urgent humanitarian release for their clients with worsening serious medical conditions attributed to subpar medical care in detention facilities [23]. Other clinicians who continue to work in these contexts, or with patients who are detained or recently released, may face moral distress or dual loyalty challenges.

Our study had several limitations. First, our survey respondents comprise a self-selected group, consisting of clinicians who work with immigrant patients and other marginalized populations, and routinely serve as advocates for social justice and equity in health. They are thus oriented and sensitized to explore and elevate systemic issues negatively affecting these populations. These factors may reflect both a selection and a perception bias. Second, we used a snowball sampling methodology. As such, our clinician health care professional population, while distributed across geographical areas, specialties and practice settings, is not representative of the wider clinician community engaged with immigrant populations. This may contribute to an under-representation of health situations involving formerly detained individuals. Third, this survey is based on self-reporting and is thus subject to recall bias. We did not review medical records of individual patients, nor require any proof or validation of the situations reported by the survey respondents. Lastly, and importantly, we did not interview members of the population in question themselves. While the information included in this survey is second-hand and subject to various limitations as noted above, healthcare clinicians represent a highly credible professional group.

Conclusions

Our survey assesses clinician perceptions about the adverse health impact of immigration detention on migrant populations based on real-life clinical encounters. These perceptions unfortunately corroborate other testimonials and media reporting. Our findings can help inform policy discussions specifically surrounding systematic changes to the delivery of healthcare in detention, quality assurance and transparent reporting, specifically for the medical community.

Declarations

Ethics approval and consent to participate: The study was deemed exempt by Stanford IRB (Protocol 55394 - Dr. Nancy E. Wang) as it does not meet the definition of human subject research as defined in 45 CFR 46.102(d). Survey participation was voluntary. Clinicians participating in the survey were advised about the purpose of the research in the recruitment email and first page of the survey, and gave their consent prior to participating. All methods were carried out in accordance with relevant guidelines and regulations.

Consent for publication: Not applicable.

Availability of data and materials: The datasets analyzed during the current study are available from the corresponding author on reasonable request.

Competing interests: The authors declare that they have no competing interests

Funding: No funding was obtained for this research.

Authors' contributions:

Conceptualization: All authors

Data Acquisition: KH, NEW, MG, RM

Formal analysis: EP

Methodology: All authors

Project administration: NEW, CH, EP

Qualitative analysis: KH

Resources: NEW

Supervision: RM, NEW

Visualization: EP, NEW

Writing - original draft: NEW, KH, RM

Writing - revising and editing: All authors

References

- Alvarado M, Balcerzak A, Barchenger S, Campbell J, Carranza R, Clark M, et al. Deaths in custody. Sexual violence. Hunger strikes. What we uncovered inside ICE facilities across the US. USA Today. 2019 Dec 19 [cited 2021 Apr 29]. Available from: https://www.usatoday.com/in-depth/news/nation/2019/12/19/ice-asylum-under-trump-exclusive-look-us-immigration-detention/4381404002/
- 2. The Fatal Consequences of Dangerously Substandard Medical Care in Immigration Detention. 2018 Jun 20 [cited 2021 Apr 29]. In: Human Rights Watch [Internet]. Available from: https://www.hrw.org/report/2018/06/20/code-red/fatal-consequences-dangerously-substandard-medical-care-immigration
- 3. Detained: How the US built the world's largest immigrant detention system. The Guardian. 2019 Sep 24 [cited 2021 Apr 29]. Available from: https://www.theguardian.com/us-news/2019/sep/24/detained-us-largest-immigrant-detention-trump
- 4. Immigration Detention in the United States by Agency. 2020 Jan [cited 2021 Apr 29]. In: American Immigration Council [Internet]. Available from:
 - https://www.americanimmigrationcouncil.org/sites/default/files/research/immigration_detention_in_the_united_states_by_agency.pdf
- 5. FAQs: Identification and Monitoring of Pregnant Detainees. 2021 Jan 7 [cited 2021 Apr 29]. In: ICE: U.S. Immigration and Customs Enforcement [Internet]. Available from: https://www.ice.gov/detain/directive-identification-and-monitoring-pregnant-detainees/faqs
- 6. American Immigration Lawyers Association. Attorney General Barr Strips Bond Eligibility from Asylum Seekers: Matter of M-S- Analysis and Q&A. 2019 Apr 17 [cited 2021 Apr 29]. In: National Immigrant Justice Center [Internet]. Available from: https://immigrantjustice.org/staff/blog/attorney-general-barr-strips-bond-eligibility-asylum-seekers-matter-m-s-analysis-and-qa
- 7. Health Risks of Customs and Border Protection Detention. 2019 July [cited 2021 Apr 29]. In: Physicians for Human Rights [Internet]. Available from: https://phr.org/wp-content/uploads/2019/07/PHR-Fact-Sheet_Health-Risks-of-CBP-Detention.pdf
- 8. von Werthern M, Robjant K, Chui Z, Schon R, Ottisova L, Mason C, Katona C. The impact of immigration detention on mental health: a systematic review. BMC Psychiatry. 2018 Dec 6;18(1):382. doi: 10.1186/s12888-018-1945-y. PMID: 30522460; PMCID: PMC6282296.
- 9. Keller AS, Rosenfeld B, Trinh-Shevrin C, Meserve C, Sachs E, Leviss JA, Singer E, Smith H, Wilkinson J, Kim G, Allden K, Ford D. Mental health of detained asylum seekers. Lancet. 2003 Nov 22;362(9397):1721-3. doi: 10.1016/S0140-6736(03)14846-5. PMID: 14643122.
- 10. Shonkoff JP, Garner AS, Siegel BS, et al. The lifelong effects of early childhood adversity and toxic stress. Pediatrics. 2012 Jan;129(1):e232-46 doi: 10.1542/peds.2011-2663. Epub 2011 Dec 26. PMID: 22201156.
- 11. Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Koss MP, Marks, JS. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study," Am J Prev

- Med. 1998 May;14(4):245 58. doi: 10.1016/20749-3797(98)00017-8. PMID: 9635069.
- 12. Hacker K, Chu J, Leung C, Marra R, Pirie A, Brahimi M, English M, Beckmann J, Acevedo-Garcia D, Marlin RP. The impact of immigration and customs enforcement on immigrant health: perceptions of immigrants in Everett, Massachusetts, USA. Soc Sci Med. 2011 Aug;73(4):586–594. doi: 10.1016/j.socscimed.2011.06.007. Epub 2011 Jun 30. PMID: 21778008; PMCID: PMC3159749.
- 13. Erfani P, Uppal N, Lee CH, Mishori R, Peeler KR. COVID-19 testing and cases in immigration detention centers, April-August 2020. JAMA. 2021 Jan 12;325(2):182–184. Doi: 10.1001/jama.2020.21473. PMID: 33119038; PMCID: PMC7596672.
- 14. Saadi A, Sanchez Molina U, Franco-Vasquez A, Inkelas M, Ryan GW. Assessment of perspectives on health care system efforts to mitigate perceived risks among immigrants in the United States: A qualitative study. JAMA Netw Open. 2020 Apr 1;3(4); e203028. doi: 10.1001/jamanetworkopen.2020.3028. PMID: 32301990; PMCID: PMC7165299
- 15. Rhodes SD, Mann L, Simán FM, Song E, Alonzo J, Downs M, et al. The impact of local immigration enforcement policies on the health of immigrant Hispanics/Latinos in the United States. Am J Public Health. 2015 Feb;105(2):329–37. doi: 10.2105/AJPH.2014.302218. PMID: 25521886; PMCID: PMC4318326.
- 16. Maldonado CZ, Rodriguez RM, Torres JR, Flores YS, Lovato LM. Fear of discovery among Latino immigrants presenting to the emergency department. Acad Emerg Med. 2013 Feb;20(2):155–61. doi: 10.1111/acem.12079. PMID: 23406074.
- 17. Lee J, Bruce J, Wang NE. Opportunities for supporting Latino immigrants in emergency and ambulatory care settings. J Community Health. 2020 Jul 22:1–8. doi: 10.1007/s10900-020-00889-7. PMID: 32700173; PMCID: PMC7373833.
- 18. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Roundtable on the Promotion of Health Equity. Immigration as a Social Determinant of Health: Proceedings of a Workshop. Washington (DC): National Academies Press (US); 2018 Aug 30. 3, Immigration and the Social Determinants of Health. Available from: https://www.ncbi.nlm.nih.gov/books/NBK535940/
- 19. Gurrola MA, Ayón C. Immigration policies and social determinants of health: Is immigrants' health at risk? Race Soc Probl. 2018 Jul;10(3):209–20. doi: 10.1007/s12552-018-9239-z
- 20. Praying for Hand Soap and Masks: Health and Human Rights Violations in U.S. Immigration Detention during the COVID-19 Pandemic. 2021 Jan 12 [cited 2021 Apr 29]. In: Physicians for Human Rights [Internet]. Available from: https://phr.org/ourwork/resources/praying-for-hand-soap-and-masks/
- 21. McKenzie K, Mishori R. Releasing migrants from detention during the Covid-19 pandemic. J Gen Intern Med. 2020 Sep;35:2765–6. doi: 10.1007/s11606-020-05954-4. Epub 2020 Jun 15. PMID: 32542498; PMCID: PMC7295322.
- 22. Mishori R. Risk behind bars: Coronavirus and immigration detention. The Hill. 2020 Mar 17 [cited 2021 Apr 29]. Available from: https://thehill.com/opinion/immigration/487986-risk-behind-bars-coronavirus-and-immigration-detention
- 23. Sirkin S, Hampton K, Mishori R. Health Professionals, Human Rights Violations at the US-Mexico Border, and Holocaust Legacy. AMA J Ethics. 2021 Jan 1;23(1):E38-45 doi: 10.1001/amajethics.2021.38. PMID: 33554846.
- 24. Gassama H, Altman H, Tidwell Cullen T, Small M. Toolkit Immigration Detention Oversight and Accountability. 2019 May 22 [cited 2021 Apr 29]. In: National Immigrant Justice Center [Internet]. Available from: https://immigrantjustice.org/research-items/toolkit-immigration-detention-oversight-and-accountability
- 25. Immigration Detention 101. 2020 [cited 2021 Apr 29] In: Detention Watch Network [Internet]. Available from: https://www.detentionwatchnetwork.org/issues/detention-101

Appendix

Appendix 1 is not available with this version.

Figures

Provider Location



Figure 1

Location of health care providers The size of the dot indicates the # of patients seen.