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Justin MacNeill
Purdue University, macneill@purdue.edu

Alexa Lahey
Purdue University, lahey@purdue.edu

Nina Teo
Purdue University, teon@purdue.edu

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HOMELESSNESS AND COVID-19

Justin MacNeill *(Engineering)*, Alexa Lahey *(Pharmacy)*, Nina Teo *(Pharmacy)*

STUDENT AUTHOR BIO SKETCHES

Nina Teo is a professional student in the College of Pharmacy at Purdue University. Her present research focus is on how quality health care and access can be expanded to include vulnerable populations. She has been involved in community outreach and engaging with those who are underserved throughout her professional school career.

Lexi Lahey is a professional student in the College of Pharmacy at Purdue University. Her present research focus is on understanding health disparities in underserved populations. She is involved in campus organizations that reduce health inequities in her community using innovative strategies.

Justin MacNeill is an undergraduate student in the College of Engineering at Purdue University. His present research interest is on understanding undervalued inputs into the multifactorial model of physical health, leveraging local community resources to mitigate external life stressors for vulnerable individuals, and reducing health care strain.

ABSTRACT

The COVID-19 pandemic has exacerbated the struggle of people experiencing homelessness (PEH) and presented new challenges to those that currently serve this vulnerable population. To better understand and articulate how COVID has impacted both PEH and their ecosystem of support, we compared the national response—aggregated via a literature review—to the statewide response in Indiana and the local response—relative to Purdue University—in Tippecanoe County. We began our research by writing a literature review to understand the current COVID responses nationwide regarding the homeless population and to understand previous responses for this population during disasters. For our primary sources, we contacted homeless organizations around the state and interviewed them about their perspective on organizational and systemic pandemic responses and how the spread of COVID-19 is affecting PEH. We conducted and transcribed 18 interviews and coded and analyzed them through NVivo. The common challenges that emerged revolved around the ability of homeless shelters and organizations to provide accommodations pursuant with best-practice public health guidelines intended to ensure the safety of residents and treating existing mental health and substance use disorders of PEH. A general theme throughout our interviews with service organizations was their ability to quickly adapt to new information to continue to provide their essential services and resources to PEH. Local homeless service providers emphasized that organizational partnerships are key—policy changes in one organization can have negative effects extending throughout other organizations within the local homeless services ecosystem. Moreover, building community awareness and engagement with organizations serving PEH during

normal times can have beneficial effects in times of crisis. Considering the problems elucidated by various homeless providers, certain governmental policies and provisions native to Tippecanoe County and Indiana could be beneficial to export elsewhere in the event of another public health crisis of this scope.

INTRODUCTION

Prior to the COVID-19 pandemic, people experiencing homelessness (PEH) were already struggling with access to affordable housing, mental health, substance use disorders, trauma and violence, poverty, and unemployment (*Homeless Health Concerns*, 2020). The problem of homelessness affects nearly 17 out of every 10,000 people in the United States on a single night with around 65% sheltered and 35% unsheltered (*State of Homelessness: 2020 Edition*, 2020). The COVID-19 pandemic has further exacerbated the struggles PEH face, while also presenting additional challenges to this marginalized population and those who serve them. Service providers were already overburdened, but the pandemic forced them to adapt quickly to federal guidelines intended to ensure the safety of community residents and their guests, such as enhancing cleaning procedures and implementing social distancing measures into their local organizations (*Caring for Homeless Services Staff During the COVID-19 Pandemic*, 2021). Many communities are experiencing an increase in demand for their resources and services due to influxes of PEH from the lack of an outdoor safety net (fewer donations from pedestrians and closures of public restrooms and soup kitchens), increased rates of domestic violence, eviction filings, and the release of prisoners without housing assistance (Baggett et al., 2020; Bradbury-Jones & Isham, 2020; Culhane et al., 2020; *The Effect of COVID-19 on Homelessness in the US*, 2021; Fuller, 2020; Kinner et al., 2020; Stewart, 2020; Tsai & Wilson, 2020; Wood et al., 2020).

The COVID-19 pandemic has further exacerbated the challenges of a strained and underresourced homeless service system. Before the pandemic, service providers were limited by the capacity of their facilities and unable to meet the needs of PEH. Recent shortages of supplies and volunteers have increased the strain on the ability of this group to maintain the safety of its guests, staff, and the community (*State of Homelessness: 2020 Edition*, 2020). Federal guidelines created to protect this vulnerable population such as social distancing measures and maintaining personal hygiene such as washing one's hands regularly are impractical for a population who do not have regular access to basic needs, therefore increasing the risk of disease transmission among this population and those who interact with them (*COVID-19 and Your Health*, 2020). PEH are at particularly high risk for disease transmission and adverse outcomes of COVID-19 due to their age and prevalence of chronic health conditions such as strokes and falls (*COVID-19 and Your Health*, 2020).

In Indiana, there are approximately 5,471 total PEH, with around 900 in Tippecanoe County alone (*Homelessness Statistics by State*, 2019). As of February 2021, there have been a total of 657,037 reported positive cases of COVID-19 and 12,025 total deaths in Indiana and 19,483 positive cases and 192 deaths in Tippecanoe County with only 20–30 cases among PEH and no reported deaths (*Indiana COVID-19 Dashboard and Map*, 2021). According to the Tippecanoe County Community Health Needs Assessment in 2018, substance abuse, mental health, food access, affordability, and safety, and homelessness were among the top five community concerns (*Tippecanoe County Community Health Assessment & Improvement Plan 2019–2021*, 2021). In this community, there are over 20 different service providers that provide PEH with primary care, mental health services, employment services, access to basic needs such as showers, bathrooms, food and clothes, overnight shelters, and case management. One central organization to the homeless population in Tippecanoe County is the Lafayette Transitional Housing Center (LTHC), which acts as the coordinated point of entry for PEH and connects them to the services they need in order to end their homelessness.

It is important to recognize that PEH were a particularly vulnerable population prior to COVID-19, but due to their high risk of transmitting the virus and experiencing severe outcomes, pandemic response efforts must prioritize this group and their service providers. Limited research currently exists on how pandemics affect this marginalized population and a more robust investigation of this area is needed in order to engage with the homeless community. The goal of this research is to better understand the adversity that this population has faced and how the challenges they experience may have been exacerbated as a result of the pandemic. We participated in this place-based research under Dr. Natalia Rodriguez and the Department of Public Health at Purdue University to understand the impact of COVID-19 in homeless communities. Guidance from community-based organizations is key to understanding the needs and available resources for this population and how ideas are communicated between providers and PEH. This paper aims to understand how COVID-19 has impacted both PEH and

their support system at the national, state, and county levels, ultimately with the goal of informing local community-based organizations and helping them tailor their response to best practices. This end goal was materialized by gathering information from a literature review of both gray and academic literature, conducting interviews with local service providers, and providing local partners with a combination of actionable qualitative and quantitative data to enhance their service of vulnerable individuals. The lessons learned from this research can be applicable to improving future disaster responses for PEH and their service providers.

METHODOLOGY

In order to better understand and assess the challenges of PEH during a pandemic, we completed a thorough research review using academic and gray literature. The academic literature we consulted was peer-reviewed scholarly pieces from various academic journals. The gray literature we researched included publicly available government documents, organizational information pages, news reports, and social media. The literature review was complemented by interviews with local directors and staff members of community-based service organizations serving people experiencing homelessness.

Academic Literature Review

A literature review was performed to collect information about disaster response in vulnerable populations prepandemic and the initial response to the pandemic in organizations that support homeless populations. We created two search queries to aggregate peer-reviewed academic articles: one that covered homelessness during COVID-19 and another that covered homelessness during general disaster events. The first search query contained words associated with the COVID-19 pandemic, like COVID-19 and SARS-CoV-2, and words associated with homelessness. The second search query contained the same homelessness terms and instead of COVID-related terms, included disaster-related terms. The intent of searching publications that were published before the pandemic was to establish an understanding of the resources offered to the homeless population in other natural disasters as a baseline to reference for the COVID-related resources. A systematic search was carried out in PubMed. Studies were excluded if they (1) focused on vulnerable populations that suffered chronic conditions but were not homeless, (2) described services available for populations that were displaced as a result of a disaster but not specifically directed toward

individuals with preexisting homelessness, and (3) were published later than 10 years ago.

Gray Literature Review

Due to the emergent nature of the COVID-19 pandemic, academic literature was often not being published fast enough to keep up with the ever-changing news and policies of the pandemic. In order to stay up-to-date on the newest information on COVID-19, a gray literature search was also conducted by searching key terms such as COVID-19 and the homeless population, homeless providers' response to COVID-19, and homeless COVID-19 cases. Gray literature includes research and data that is not published academically and includes publicly available government documents, organizational information pages, and news reports. With the use of gray literature, we were able to study PEH demographics and statistics collected by organizations who aim to end homelessness such as the National Alliance to End Homelessness. We also subscribed to receive updates from various homeless provider organizations to stay updated on their responses and changes to their services throughout the pandemic. Our gray literature search included collecting and analyzing information from websites for organizations, federal websites such as the CDC or WHO, and social media information sources for various homeless advocate organizations. This also allowed us to study how various cities around the country were responding to the pandemic, what was successful, and what could use improvement.

Organizational Interviews

The literature search was performed to identify gaps in care and resources for people experiencing homelessness. The intent of collecting this information was to both characterize the national pandemic response pertaining to PEH and create an informed interview questionnaire delivered to local organizations to examine common problems regarding their responses to the COVID-19 pandemic. The results of the interviews outlining the responses of community organizations in Tippecanoe County could then be compared with the larger scope literature review, helping to inform and improve the local response. The organizations that we interviewed included local homeless shelters, government officials, food pantries, and rental assistance services. Many of these organizations were part of the Homeless Prevention and Intervention Network (HPIN) of northwest central Indiana. We interviewed one organization based in Indianapolis that provided resources to other homeless organizations in Marion

County and surrounding counties to understand how information was being communicated throughout the state. Because the research involved aggregating and analyzing qualitative data as opposed to running a traditional experiment that might offer suggestions about a causal relationship, success was not measured via an experimental yield or statistical significance. Rather, success was measured by the ability to produce and deliver policy or service recommendations to local community-based organizations.

RESULTS

The primary objective of this study was to aggregate both national and local COVID-related challenges and responses for both people experiencing homelessness and the community-based organizations serving this population. After this data was collected and analyzed via a literature search and interviews with staff of local homeless service organizations, the findings were shared locally with community-based organizations to help them improve their pandemic response efforts. The data highlighted challenges for PEH including improving public health and financial literacy and managing various co-morbidities. The data also elucidated challenges for service providers such as housing homeless individuals in their facilities pursuant to public health guidelines, presenting COVID-related information and guidance to PEH in an easily digestible manner, and coordinating responses with other local service providers to ensure optimal coverage of the homeless population. The following subsections elaborate upon the aforementioned findings pertaining to both PEH and their respective service organizations.

Ending Homelessness versus Managing Homelessness

Some regions tried to prevent people from becoming homeless by extending eviction moratoriums, but some believed that homelessness prevention programs have little effect in preventing homelessness and could lead to more unserved individuals and further perpetuate racial disparities among the homeless population (*Use ESG-CV to Help Those Currently Experiencing Homelessness First*, 2020). The National Alliance to End Homelessness stated that the goal should be to focus on helping people currently homeless obtain safe temporary housing and then eventually permanent housing; they argued that homelessness prevention programs are ineffective because it is difficult to predict who will actually become homeless (*Use ESG-CV to Help Those Currently Experiencing Homelessness First*, 2020). In a Chicago study of

low-income houses with eviction notices, of those who applied for eviction assistance and did not get it, only 2.1% entered a homeless shelter. Some areas have tried to combat racial disparities by incorporating Black people with lived experience into outreach teams and service delivery, so they start their work with an understanding of how institutional racism affects homelessness (*The Intersection of Homelessness, Race, and the COVID-19 Crisis*, 2020). While it would be ideal to provide permanent housing solutions for individuals with preexisting homelessness during a crisis, various factors exist that make this service difficult to deliver.

The majority of local homeless providers interviewed seemed to follow this directive. Many did not offer direct rental assistance during the pandemic but instead provided emergency or extended shelter to those in need, with various supplemental housing programs for those under care. These housing support programs included transitional housing and permanent supportive housing. Transitional housing allowed clients to obtain subsidized rental units for a short time until financial independence was possible. Permanent supportive housing offered a more long-term housing solution for the chronically homeless. Moreover, financial literacy and other educational programs were offered to clients to help maintain their independence once their housing needs were met.

In theory, keeping homeless individuals in long-lasting housing would reduce the burden on shelters and serves as a solution to homelessness, both generally and during a disaster. For now, temporary shelters seem to be the most common option. Many cities have responded to this increased pressure on homeless shelters by isolating confirmed, suspected cases, or those at higher risk of contracting COVID-19, in hotels, stadiums, or parking lots. The outdoor settings make it possible for people to increase their distance, but this often does not provide important ethical requirements of a living space such as adequate access to hygiene facilities, or connection to services and health care. The method of using hotels as temporary housing can help generate revenue for empty hotels and often low-wage workers who operate hotels. However, this solution can be very expensive and is not possible to sustain long-term. The city of Los Angeles is spending millions of dollars to lease hotels, provide three meals a day, and cover the added costs for staffing, PPE, supportive services, and security (Lee, 2020). Temporary shelters may be reasonable in an emergency situation, but not realistic as a permanent residence. If permanent residence cannot be established, there are alternative ways to provide for homeless individuals. For instance, Seattle has created a more permanent

solution for PEH in the form of tiny house villages where residents have separate living and sleeping spaces spaced 5 feet apart. A tiny house village costs on average $38/day/house vs $130/day/night at a hotel. Moreover, in addition to cost, sleeping spaces pursuant with social distancing practices allows residents to not breathe the same air as their neighbors and provides additional protection against the airborne virus. Residents also have access to shared hygiene and kitchen facilities and on-site case managers to help move residents into permanent housing (Lee, 2020).

Communication Between Service Providers and PEH

Communication with PEH was also a universal issue for many community services, such as homeless shelters, food banks, and other neighborhood organizations. Spreading information is crucial in a disaster when circumstances may be constantly changing. Mainstream media is not easily accessible for homeless people, so there is difficulty in keeping this vulnerable population informed (Morris, 2020). Television is an effective mode of communication in the context of reaching the most people as possible in a shelter (Rodwell et al., 2010). However, television time may be limited at some shelters, and certain shelters may not have televisions. In addition, word of mouth could spread information regardless if an individual is staying in a shelter. Nonetheless, relying on others to communicate important messages may not be reliable. If inaccurate information is circulated, resources could not be utilized (Washington, 1998). Perhaps the best method of communication is information leaflets (Wexler & Smith, 2015). These papers could be distributed to both unsheltered and sheltered individuals and could contain critical information from transportation to operating times of services. Another way to improve the communication between organizations/governmental bodies with homeless individuals would be to create an SMS/mobile alert system that could remind people of new emergency opportunities and could alert sheltered and unsheltered individuals of any sudden changes in rules or procedures regarding the pandemic (Culhane et al., 2020). Prior researchers found that around 95% of homeless individuals own cell phones and a vast majority use text. In our interviews with homeless shelters, we found that information about the pandemic was communicated either in person during daily announcements or check-ins or online via social media platforms. These modes of communication may limit the number of PEH that stay informed with the

changing circumstances of the pandemic if they are not physically at the shelter, considering the reductions in capacity due to the pandemic and their access to a cell phone or computer.

Interviews revealed that the way that information was presented to PEH also had an impact. During COVID-19, local community organizations found that culturing a family atmosphere without sounding overly paternal was most conducive to spreading new, crucial information about policy and public health changes to PEH. Because many PEH exhibited regular skepticism toward systems and authority because of their life experiences, fostering this familial atmosphere was very important to obtaining receptive ears. When PEH did not believe or buy in to new policies or health practices, some organizations brought in representatives from the local health department to bolster the ethos of their argument.

Collaboration Between Community Organizations and Government

While there is difficulty in communicating to homeless individuals themselves, there is another communication barrier that exists between service providers. Effective collaboration between community services and government officials, both on the local and national level, is necessary to provide the homeless population the resources they need. Continuous support from the government and community is the backbone in operating homeless shelters. When it comes to stable funding and distributing resources, governmental bodies have more authority than community leaders (Sundareswaran et al., 2015). In addition, services or resources for the homeless population should be included in systemic disaster planning (Settembrino, 2016). However, there may be significant barriers with the involvement of community-based organizations in disaster readiness. For example, homeless service providers lack a formal role in disaster preparedness and may not have an established reimbursement process or may not have collaboration between governmental entities for disaster response (Gin et al., 2020).

Through our series of interviews that we completed with local community partners, at the start of the COVID-19 pandemic, organizational partnerships between homeless organizations, the health department, and local government officials in Tippecanoe County were bolstered by increasing the frequency of interagency meetings to ensure adequate resource distribution and coverage.

One salient example of interagency communication expressed during our interviews occurred when one emergency shelter was going to reimplement their cap on an extended stay to 6 months due to what they saw as a lack of motivation on behalf of their clients. After contact with another organization, however, this shelter decided not to enact this change because the local homeless ecosystem would not be able to support the resultant surge in PEH. Throughout the duration of the pandemic, these organizations were frequently in contact with each other and were effective in establishing community preparedness for the pandemic and helping spread new information between services.

Prevention of Disease Outbreaks Among PEH

As for protection of PEH from an infectious disease, there are other considerations when it comes to containing the infection. In past disease outbreaks in homeless populations, a free vaccine was the most effective method of preventing the spread of a disease such as HBV or tuberculosis (Badiaga et al., 2008). However, the COVID-19 vaccine is hard to access in the general population, so homeless services must rely on preventing the spread of the virus. To incorporate lessons learned from an analogous disease, it was found that screening was more effective when testing was based on common sites of spread than individual contact of tuberculosis (Badiaga et al., 2008). Interviews revealed that homeless shelters in Tippecanoe County recorded temperatures daily and provided quarantine spaces for individuals that came in contact with COVID-19. It seemed that these measures were effective in preventing a large-scale COVID-19 outbreak.

Earning the Trust of PEH Helps Better Implement Solutions

Overall, it could be beneficial to examine the causes of chronic homelessness in order to prevent it (Sundareswaran et al., 2015). However, the specific applications of "resilience" or how to implement permanent housing plans are rarely outlined. In the papers that discussed the impact of natural emergencies on individuals with preexisting homelessness, there was a recurring theme of trust. Resources, such as homeless shelters or vaccine clinics, were more widely accepted and utilized if the targeted population trusted volunteers (Every et al., 2019). The acceptance of idealized solutions requires forming intimate and reciprocal relationships with PEH, a difficult yet necessary task when serving vulnerable populations, especially with the backdrop of COVID-19.

Overall, organizations in Tippecanoe County were able to adapt to state and federal policy changes, immerse themselves in the emerging research studies, and adjust their resources and responses accordingly to meet the needs of individuals in the homeless population during the COVID-19 pandemic.

COMMUNITY IMPACT

With the onset of COVID-19, community-based organizations around the state and the nation were thrust into a constantly evolving and at times nebulous regulatory and public health environment in which their clients were often members of a vulnerable population—both generally and especially medically so during the spread of a highly contagious airborne respiratory virus. To gauge and adjust their activities and responses in accordance with best health practices, many executives of such organizations attended informative webinars and participated in statewide meetings with other service providers. However, they felt it would be informative to see an aggregation of various national and local statistics and trends due to the constant drip of COVID-related literature. Therefore, the conglomeration and presentation of current literature in a review format to community partners exposed them to alternate and innovative measures implemented by other community-based organizations. When serving such a population—especially during a pandemic—an indefinite number of scenarios may present themselves to service providers; being up-to-date on published case studies from other locations may help or inspire a particular service provider when confronted with challenging circumstances.

Results were presented verbally at a meeting with 20 HPIN members. At this stage, no follow-up interviews have been conducted to assess material changes in policy or procedure, but this could be an avenue of further investigation. The dissemination of the results externally, however, may have some use. Local community-based organizations stated that the Tippecanoe County homelessness ecosystem was uniquely coordinated and comprehensive relative to those of other midsize cities, so it could be beneficial to other external homelessness providers to publish a detailed accounting of this region's COVID-19 response efforts.

Due to restrictions imposed on human subjects research due to COVID-19, the research group could not obtain firsthand qualitative data directly from actual homeless individuals. Further research interviewing PEH

specifically would be a very appropriate and potentially fruitful extension of the current project.

STUDENT IMPACT

The experience of participating in research involving PEH and their service providers was professionally and personally rewarding as it challenged us to adapt to a new learning environment beyond the didactic approach. Prior to this experience, only one of us had experience with research. Our research presented several challenges. It took a lot of time to filter through resources as new information on the COVID-19 pandemic was coming out daily, but was not necessarily undergoing the peer-review process. Therefore, it was important for us to keep up with the most recent information and screen for quality resources to inform us on this population and their experiences with the pandemic.

One particularly interesting finding was the opinion that some homelessness prevention services may be ineffectual because it is difficult to predict who would actually become homeless. Some individuals may have family members willing to house them temporarily or are able to find some other source of housing posteviction. During a disaster, however, rental assistance may prove to be a viable mechanism to keep those temporarily without income housed, but it is fascinating that such a program might not be similarly effective in ending homelessness generally.

This opportunity to work with an underserved and vulnerable population highlighted the need for quality health care for PEH and access to basic resources such as a place to sleep and wash your hands. This will also impact how we approach quality care as future health care workers as it puts a spotlight on this population that has often been overlooked in times of crisis. Two members of the research team plan to become pharmacists and the other plans to become a physician. Interacting directly with patients and earning their trust is a privilege, and this research will serve as a reminder for each team member to consider the background and current housing situation of each patient. Many factors outside of the hospital affect the health trajectory of any given patient, and health care providers must consider that reality when diagnosing, discharging, and recommending therapeutic options to patients.

This research allowed us to develop essential skills in research and analysis that will contribute to our goal of helping others and ensuring access to health resources to all. This project gave us the opportunity to give back to our local community and to inform our local partners on the current COVID-19 response and gaps in response that can be improved on in future disasters or crises with a concentration on the homeless population. Our research on this vulnerable group of people is ongoing with the Department of Public Health with a concentration on PEH individuals and families under the guidance of Dr. Natalia Rodriguez and Dr. Yumary Ruiz, who gave us the tools and support we needed. Our objective with this research moving forward is focusing on PEH individuals and their challenges, how they view the services available to them, and what services they need to achieve their own goals instead of focusing on the organizations that serve them. In order to enhance reciprocity to PEH individuals and families that volunteer to participate in our research, we will give them gift cards for participating in an interview or survey and help connect them to services they need if applicable. As we publicize our research, we hope more instructors become inspired by this topic area and seek more opportunities for their students to succeed. Similarly, we hope that local practices to streamline COVID testing and quarantining procedures and the need to develop a strong relationship between PEH, providers, and the community will be shared with other counties in our overall goal to end homelessness.

CONCLUSION

This research project allowed us to understand previous disaster responses dedicated to PEH and the current status of how PEH and service providers are coping with and responding to the COVID-19 pandemic both through our literature review and our interviews with organizational service providers. Local organizations who serve PEH emphasized how partnerships and communication within the community are key, as changes in the services of one organization can have a downstream effect within the local homeless services ecosystem. Moreover, building community awareness and engagement consistently with organizations serving PEH can be important in diminishing stigma against this vulnerable population and can be beneficial in times of crisis. This may make community outreach in times of need more fruitful if relationships between PEH and the community are already established. Furthermore, certain governmental policies and provisions native to Tippecanoe County and Indiana could be beneficial elsewhere in the event of another public health crisis. Providers relayed that a strong relationship with the local health department and hotels helped expedite the COVID testing process, the placement of individuals in need of quarantining, and the extended stay of homeless COVID-positive individuals. After we conducted our

literature review, we communicated our findings to local partners such as LTHC in the hopes that they would be able to incorporate or build upon them in Tippecanoe County. Reciprocity could potentially be enhanced by participating in drafting future disaster response plans or aiding in grant writing, but both activities would have to be set up and conducted on an organization by organization basis, if they were desired.

REFERENCES

Badiaga, S., Raoult, D., & Brouqui, P. (2008). Preventing and controlling emerging and reemerging transmissible diseases in the homeless. *Emerg Infect Dis, 14*(9), 1353–1359. https://doi.org/10.3201/eid1409.080204

Baggett, T. P., Keyes, H., Sporn, N., & Gaeta, J. M. (2020). *COVID-19 outbreak at a large homeless shelter in Boston: Implications for universal testing* [Preprint]. Public and Global Health. https://doi.org/10.1101/2020.04.12.20059618

Bradbury-Jones, C., & Isham, L. (n.d.). The pandemic paradox: The consequences of COVID-19 on domestic violence. *Journal of Clinical Nursing*, *n/a*(n/a). https://doi.org/10.1111/jocn.15296

Caring for Homeless Services Staff During the COVID-19 Pandemic. (n.d.). National Alliance to End Homelessness. Retrieved February 27, 2021, from https://endhomelessness.org/resource/caring-for-homeless-services-staff-during-the-covid-19-pandemic/

COVID-19 and Your Health. (2020, February 11). Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html

Culhane, D., Treglia, D., & Steif, K. (2020). *Estimated emergency and observational/quarantine bed need for the US homeless population related to COVID-19 exposure by county: Projected hospitalizations, intensive care units and mortality.* 51.

The Effect of COVID-19 on Homelessness in the US. (2021, January 12). United Way NCA. https://unitedwaynca.org/stories/effect-pandemic-homeless-us/

Every, D., Richardson, J., & Osborn, E. (2019). There's nowhere to go: Counting the costs of extreme weather to the homeless community. *Disasters*, *43*(4), 799–817. https://doi.org/10.1111/disa.12400

Fuller, T. (2020, March 10). Coronavirus outbreak has America's homeless at risk of "disaster." *New York Times*. https://www.nytimes.com/2020/03/10/us/coronavirus-homeless.html

Homeless Health Concerns. (2020). National Library of Medicine. Retrieved February 27, 2021, from https://medlineplus.gov/homelesshealthconcerns.html

Homelessness Statistics by State | United States Interagency Council on Homelessness (USICH). (n.d.). Retrieved February 27, 2021, from https://www.usich.gov/tools-for-action/map/#fn[]=1400&fn[]=2800&fn[]=6200&fn[]=10000&fn[]=13200

Indiana COVID-19 Dashboard and Map. (2021). Retrieved February 23, 2021, from https://www.coronavirus.in.gov/2393.htm

The Intersection of Homelessness, Race, and the COVID-19 Crisis. (April 7, 2020). National Alliance to End Homelessness. https://endhomelessness.org/the-intersection-of-homelessness-race-and-the-covid-19-crisis/

Kinner, S. A., Young, J. T., Snow, K., Southalan, L., Lopez-Acuña, D., Ferreira-Borges, C., & O'Moore, É. (2020). Prisons and custodial settings are part of a comprehensive response to COVID-19. *The Lancet. Public Health*. https://doi.org/10.1016/S2468-2667(20)30058-X

Lee, S. (2020, May 2018). The case for building tiny house villages during the pandemic. Retrieved June 17, 2020, from https://shelterforce.org/2020/05/28/the-case-for-building-tiny-house-villages-during-the-pandemic/

Morris, S. C. (2020). Disaster planning for homeless populations: Analysis and recommendations for communities. *Prehosp Disaster Med*, *35*(3), 322–325. https://doi.org/10.1017/S1049023X20000278

Rodwell, T. C., Robertson, A. M., Aguirre, N., et al. (2010). Pandemic (H1N1) 2009 surveillance in marginalized populations, Tijuana, Mexico. *Emerg Infect Dis*, *16*(8), 1292–1295. https://doi.org/10.3201/eid1608.100196

Settembrino, M. R. (2016). Hurricane Sandy's impact on the predisaster homeless and homeless shelter services in New Jersey. *J Emerg Manag, 14*(1), 7–16. https://doi.org/10.5055/jem.2016.0268

State of Homelessness: 2020 Edition. (n.d.-b). National Alliance to End Homelessness. Retrieved May 15, 2020, from https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness-2020/

Stewart, N. (2020, April 13). "It's a time bomb": 23 die as virus hits packed homeless shelters. *New York Times*. https://www.nytimes.com/2020/04/13/nyregion/new-york-coronavirus-homeless.html

Sundareswaran, M., Ghazzawi, A., & O'Sullivan, T. L. (2015, August 18). Upstream disaster management to support people experiencing homelessness. PLoS Curr, 7, ecurrents.dis.95f6b76789ce910bae08b6dc1f252c7d. https://doi.org/10.1371/currents.dis.95f6b76789ce910bae08b6dc1f252c7d

Tippecanoe County Community Health Assessment & Improvement Plan 2019–2021. (2021). Tippecanoe County Health Department. https://www.tippecanoe.in.gov/DocumentCenter/View/22319/County-Health-Needs-and-and-Assessment-Plan-2019-2021

Tippecanoe County Community Health Needs Assessment. (2016, February). Tippecanoe County Health Department. http://www.tippecanoe.in.gov/DocumentCenter/View/10015/Community-Health-Needs-Assessment-Plan-2016?bidId=

Tsai, J., & Wilson, M. (2020). COVID-19: A potential public health problem for homeless populations. *The Lancet Public Health*, *5*(4), e186–e187. https://doi.org/10.1016/S2468-2667(20)30053-0

Use ESG-CV to Help Those Currently Experiencing Homelessness First. (2020, June 10). National Alliance to End Homelessness. https://endhomelessness.org/use-esg-cv-to-help-those-currently-experiencing-homelessness-first-prevention-as-a-back-up-strategy/

Washington, G. T. (1998). After the flood. A strategic primary health care plan for homeless and migrant populations during an environmental disaster. *Nurs Health Care Perspect, 19*(2), 66–71.

Wexler, B.,& Smith, M. E. (2015). Disaster response and people experiencing homelessness: Addressing challenges of a population with limited resources. *J Emerg Manag, 13*(3), 195–200. https://doi.org/10.5055/jem.2015.0233

Wood, L. J., Davies, A. P., & Khan, Z. (2020). COVID-19 precautions: Easier said than done when patients are homeless. *Medical Journal of Australia*, *212*(8), 384–384.e1. https://doi.org/10.5694/mja2.50571