
Homelessness and Public Health: Lessons Learned from the COVID-19 Pandemic

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Introduction

Homelessness has long been recognised as a health issue – how could it not be when people experiencing long-term forms of homelessness have mortality rates many times higher than those of the general population (Baggett et al., 2013; Cheung and Hwang, 2004; Hwang et al., 2009; Ivers et al., 2019)? But the COVID-19 pandemic has illustrated sharply how homelessness is not only connected to individual health but to public health. In this article we give examples of successes as well as missteps in public health responses to homelessness during the COVID-19 pandemic in the United Kingdom (UK) and the United States (US) and describe lessons for the future.

Absent Data

Nobody knows the true toll of the COVID-19 pandemic on people experiencing homelessness because this data is not uniformly tracked. In the UK, the Office for National Statistics (ONS) estimated the deaths of 16 people experiencing homelessness as a result of COVID-19's first wave, through June 2020 (ONS, 2020a). To provide some context, the ONS estimated that 778 people died while homeless in England and Wales in 2019. Data on testing from London suggests more outbreaks and higher levels of infection in the second wave (Story and Hayward, 2021). Fuller evidence on the extent of infections and possible mortality among people experiencing homelessness is not yet available for the UK's second wave.

In the US, Federal agencies do not report on deaths of people experiencing homelessness, but one website has counted 462 deaths across 23 U.S. localities from COVID-19 through August 2021 by aggregating information from news articles and

local websites (Fowle and Gray, 2021). In Los Angeles alone, there were 1 637 hospitalisations and 219 deaths from COVID-19 among people experiencing homelessness as of late August 2021 (LAC Dept of Public Health, 2021). These numbers fall short of early US projections that, absent intervention, over 21 000 people experiencing homelessness would require hospitalisation for COVID-19 and over 3 000 would die (Culhane et al., 2020), likely due in part to undercounting (McFarling, 2021) and in part to the health-protective responses described later in this article.

The pandemic has illustrated deficiencies in public health data keeping and reporting as it pertains to homelessness. In many cases, public data on homelessness was simply absent. In the US, reporting of much COVID-19 data – particularly in absence of strong federal leadership in the first year of the pandemic – generally fell to states and cities. Many localities presented data stratified by age, gender, race, ethnicity, and other characteristics but fewer reported specifically on homelessness. The National Health Care for the Homeless Council (a non-governmental organisation) has compiled data on COVID-19 specifically reported by health centers that receive Health Care for the Homeless funding (NHCHC, 2021). In the UK case, data on a range of COVID-19 outcomes is difficult to come by, largely being collected by individual organisations and not retained centrally, although the ONS expediting mortality statistics is a notable exception.

Lack of data on COVID-19 infections among people experiencing homelessness hampered efforts to plan and respond appropriately and may have even lulled some into a false sense of confidence that people experiencing homelessness were not at significant risk. Illustrating the limitation of our knowledge, one large study found that 52% of people experiencing homelessness in Paris tested positive for SARS-CoV-2 antibodies, most of whom did not report having had COVID-19 symptoms and would have been uncounted among official tallies of those infected (Roederer et al., 2021). A key component of post-pandemic work should include greater collaboration between homeless service and public health sectors to ensure future inclusion of homelessness in public health data in a manner that is complete, timely, transparent, and accessible. Some such collaborations have been born or built upon during the pandemic and will hopefully continue to grow and address the health crisis of homelessness even absent the additional crisis of an infectious disease pandemic.

Rethinking Communal Shelters

If not already evident, the COVID-19 pandemic illustrated with certainty that communal shelters are not conducive to good health. In the US, shelter outbreaks – where up to 66% of a given shelter's residents were found to be infected with the virus – were reported across the country (Karb et al., 2020; Mosites et al., 2020). Most individuals were asymptomatic, illustrating the challenges of relying on symptom screening and highlighting the importance of addressing the environment itself. In New York City, age-adjusted COVID-19 mortality rates were over 50% higher among single adults living in shelters compared to NYC overall (Routhier and Nortz, 2020). While many shelters were spared – whether due to protective measures within the shelter or primarily to luck remains unclear – research clearly illustrated the potential of SARS-CoV-2 to spread rapidly once introduced into a communal shelter (Mosites et al., 2020). The outbreaks observed in communal shelters stand in contrast to relatively lower numbers of COVID-19 infections observed among people experiencing unsheltered/street homelessness (albeit with the obvious limitation of incomplete data), which now makes some sense given what scientists have learned about airborne transmission of SARS-CoV-2.

The pandemic led to dramatic new responses to homelessness implemented with a speed previously only dreamed about. In the UK, it was recognised that communal shelters meant self-isolation for those with symptoms was impossible, and so the Everyone In scheme in England, and similar initiatives in the rest of the UK, focused on self-contained units, frequently in hotels (NAO, 2021; O'Carroll et al., 2021). Everyone In was enacted quickly in March 2020 despite lacking any form of contingency planning and had housed 33 000 people by the end of November 2020. Everyone In has been accompanied by other funding streams, including those increasing the COVID-19 security of communal shelters and funding for local authorities to increase GP registration among people experiencing street homelessness in order to increase vaccination rates (NAO, 2021). A Faculty for Homeless and Inclusion Health report covering the first wave argued the minimal use of communal shelters was a significant contributor in preventing widespread infection among people experiencing homelessness in the UK, with a contrast drawn with higher infection levels in the US (Story and Hayward, 2020). Everyone In, alongside the national lockdown and increased infection control in hostels, has been credited with preventing around 21 000 infections and 266 deaths among people experiencing homelessness in the first wave up to May 2020 in the UK in one estimate (Lewer et al., 2020). However, in the second wave in the winter of 2020/2021, communal shelters were permitted to be used as a last resort in cold weather. As a result, there are indications the public health response was less effective. In London during the second wave, those in communal hostels had an infection level around twice that of the general population, while those in self-contained accom-

modation had an equivalent level (Story and Hayward, 2021). There were also a significant number of outbreaks in hostels compared to emergency hotels, 22 compared to two in the second wave (Story and Hayward, 2021). This highlights the trade-off for health since the beginning of the pandemic, between cold weather exposure and communal shelters with a high risk of infection. In part due to this concern, the Scottish Government announced plans to phase out the use of communal night shelters in favour of rapid rehousing welcome centres (Scottish Government, 2020).

Similarly, widespread efforts in the US (Rice et al., 2020) to move individuals out of unsheltered settings or communal shelters and into non-communal settings such as hotel and motel rooms have been credited with preventing the feared massive number of COVID-19 infections among people experiencing homelessness (Colburn et al., 2020). The total number of individuals moved to hotels during the pandemic in the US is unknown since these efforts occurred by locality, but to give some sense of scope, over 14 000 people were moved in California, 9500 in New York City, 2 000 in Vermont, and 1 100 in Washington State.

Health impacts of such hoteling efforts have spanned beyond prevention of COVID-19. The initiatives are not without complexity, of course. For example, interviews with those who lived in the emergency hotels in the UK revealed some found it harder to manage health conditions (Cookson and Orchard, 2021). More research is needed, but most findings from early evaluations have been quite positive. One study in Washington State found movement of people experiencing homelessness into hotels was associated with improvements in self-reported health and wellbeing, reduced interpersonal conflict, increased feelings of safety, and reduced 911 emergency calls (Colburn et al., 2020). Similarly, a small study in Manchester, UK found that people who moved to hotels reported improved physical and mental well-being, stability in substance use treatment, and increased hope for the future (Harrison, 2020). The University College London Hospitals (UCLH) COVID-19 study found 35% of those assessed in emergency hotel accommodation in London said their physical health had improved (Cookson and Orchard, 2021). Researchers at the St Mungo's homelessness charity attributed this improvement in health to safe and secure accommodation, on-site support workers, and problems viewed holistically rather than in isolation (Cookson and Orchard, 2021). Others have reported promising new adaptations of substance use treatment and harm reduction combined with hoteling efforts (O'Carroll et al., 2021; Fuchs et al., 2021).

We have also seen benefits from hotel schemes spanning beyond effects on health. Impressively, Everyone In led to a significant number of people experiencing homelessness quickly helped into settled housing, around 23 000 (NAO, 2021). In New York City, unsheltered people who were offered hotel rooms were more likely to

accept and remain in a placement than those who were only offered communal shelter (Routhier, 2021). And the Washington State study referenced earlier found that placement in hotels was associated with higher quality engagement with homeless services staff and a greater focus on future goals (Colburn et al., 2020).

Of course, it seems obvious that providing people with accommodations that offer safety and dignity would result in improved mental health and wellbeing, and increased ability to work on the next steps out of homelessness. Particularly as we consider a future where the COVID-19 pandemic smoulders or other pandemics brew – not to mention ongoing presence of other infectious diseases such as tuberculosis and influenza – concern for public health should increasingly push us away from mass communal sheltering models.

Collaboration Between Healthcare and Homeless Services

The pandemic underscored the interconnectedness of the healthcare and homeless service systems and the necessity of bidirectional communication and active collaboration. It also magnified gaps in such coordination. Early in the pandemic, 500 New York City health care providers, frustrated with their inability to safely and seamlessly discharge patients experiencing homelessness who did not require hospital-level care, signed a letter to local leaders urging greater communication and collaboration between the healthcare and homeless services systems (Health and Housing Consortium, 2020). In some US cities, hospitals arranged their own 'recuperation units' or other alternate discharge locations for people experiencing homelessness who otherwise were feared might overwhelm the hospitals (Barocas et al., 2021). The lack of a national healthcare system in the US obviously made it more challenging for any sort of national-level coordination, and some localities fared better in this regard than others. Somewhat surprisingly, the US Centers for Disease Control and Prevention (CDC) did enter the housing space quite directly by declaring a national moratorium on evictions to prevent the spread of COVID-19. While some saw this as an overstep of the agency's authority, in this action the CDC demonstrated its understanding of the interconnectedness between housing and health.

At the beginning of the pandemic in the UK, the Everyone In type schemes and messaging led to a period in which "collaboration between sectors and organisations was a defining characteristic" (Fitzpatrick et al., 2021, p.26). This was broader than simply between the NHS and local authority housing departments, including a range of charities and service providers, although councils did benefit from NHS guidance and cooperation on the homeless sector plan. This relied on triaging people experiencing homelessness into separately housed cohorts based on symptoms and vulnerability (Local Government Association (LGA), 2020). There

were differences in organisation and collaboration across the UK. London, which has a disproportionate share of those experiencing street homelessness, had additional developments. For example, two developments specific to London were the COVID-19 Homeless Rapid Integrated Screening Protocol (CHRISP) and the Hotel Drug and Alcohol Service (HDAS). CHRISP is a remote health assessment to inform housing and individual health and support needs, and a modified version has been created for use post-pandemic (Callaghan et al., 2021). The Hotel Drug and Alcohol Service (HDAS) was a multi-agency response to substance use during Everyone In (LGA, 2020). Although the particular moment in March 2020 when a public health mission co-aligned with increased funding and strong cross-sector leadership has ended, there are still lessons from Everyone In for local government. Some councils have reconsidered existing pathways which placed a period of hostel accommodation before self-contained accommodation, while others are committing to continuing joint work and comprehensive rather than simple accommodation assessments of need (LGA, 2020). Problems also arose during Everyone In, both pre-existing – such as coverage of those with no recourse to public funds – and more specific to the programme, although still generalisable, such as the portability of services and prescriptions across areas (Cookson and Orchard, 2021).

One basic prerequisite to cross-sector collaboration is cross-sector data sharing. Ideal cross-sector data sharing would allow easy, real-time access to pertinent information necessary to improve services while also including appropriate privacy protections. In the US, HIPAA (the Health Insurance Portability and Accountability Act, a law that protects privacy of patient information) is often cited as a barrier to data sharing to or from the healthcare system. The actual provisions of HIPAA, however, are narrower than often assumed and do not preclude data sharing across systems. In New York City, for example, some hospital workers have access to a database called Worker Connect which shows, in near-real time, individuals' shelter assignments. Such information is useful for hospital workers in discharge planning, particularly during a pandemic when there was a desire not to send people infected with COVID-19 into communal settings. The system is not without its limitations; it is only accessible at public hospitals, only certain workers have been trained in its use, and it requires use of a separate system rather than being integrated into the existing electronic health record. We should expeditiously build upon such integrated, real-time data sharing systems, so that they are fully functional well before the next pandemic.

Importantly, during the COVID-19 pandemic we have also seen how the condition of homelessness itself presents barriers to adequate healthcare. In the US it was observed that while emergency department use among the general population plummeted dramatically during the pandemic as many avoided hospitals, people experiencing homelessness did not have similar reductions (Castillo et al., 2020).

This observation is likely due to a combination of high burden of illness (including physical illness, mental illness, and substance dependence) and poor access to other sources of healthcare, including new telehealth modalities. Similarly, in London, some of the new service delivery models such as the Hotel Drug and Alcohol Service were largely delivered remotely, with limitations around English proficiency, mental health, and access to telephones posing a barrier to intensive engagement (Pathway, 2020). We have also seen how homelessness has presented practical barriers to COVID-19 vaccine delivery. While communities have risen to the challenge through initiatives such as using mobile vans to deliver vaccines (Pereira, 2021), we would not need to jump through such hoops to provide the very fundamentals of healthcare (e.g., vaccines) if so many people were not homeless to begin with.

Health and Social Inequities

In the US, pervasive systemic racism underpins the fact that 39% of the US homeless population is Black compared to 12% of the US general population (HUD, 2021). The same racism is reflected in significantly higher COVID-19 infection and mortality rates for Black versus White US residents (Cowger et al., 2020; Gross et al., 2020; Millett et al., 2020). Similar inequities—with common upstream drivers—in both homelessness and COVID-19 mortality rates have been observed in the US among Hispanic/Latinx, American Indian, Alaska Native, Pacific Islander, and Native Hawaiian populations (HUD, 2021; Rodriguez-Diaz et al., 2020). That the fate of people experiencing homelessness in actuality reflects larger inequities in social structures and systems became all the more apparent during the COVID-19 pandemic.

There are also considerable inequities in relation to race and ethnicity in the experience of housing in the UK. In England, those from a Black, Asian, or other minority ethnic background make up 30% of those owed a homelessness prevention or relief duty, compared to 15% of the population of England overall (MHCLG, 2020). Data on the street homeless population is not available by ethnicity for England or the UK as a whole. Ethnic minority groups in the UK have experienced higher levels of age-standardised mortality from COVID-19 (ONS, 2020b). Housing conditions such as overcrowding are thought to have contributed to this higher mortality (PHE, 2020). The success, in the first wave at least, in preventing widespread infection from COVID-19 among the population experiencing homelessness prevented this from contributing to a widening of health inequalities further.

The colour of one's skin or one's country of origin do not themselves inherently cause homelessness, nor proclivity to dying from COVID-19; the common pathways lie not in biology but in unequal access to uncrowded housing, quality healthcare,

secure well-paying jobs, and agency in determining workplace location, among other social factors. Ultimately the COVID-19 pandemic underscored how larger social inequities can result in health inequities. The pandemic also demonstrated how our lack of investment in 'upstream' goods such as social housing and public health infrastructure contribute to worse health and more spending on crisis management such as intensive care units. The inequities that we observe both in homelessness and in COVID-19 are not inevitable: they are expected outcomes from policy choices and priorities many years in the making. Different outcomes would require different choices.

Conclusion

People experiencing homelessness — we hope — will always represent a relatively small proportion of any given country's total population, and thus may not be at the forefront of most public health leaders' minds. Therefore, explicit steps are required to ensure that the unique needs of this group are adequately considered in pandemic planning. Among the most impactful studies during the COVID-19 pandemic are those that have shown how the condition of homelessness and housing instability affected the course of pandemic more broadly. A range of studies in the UK have pointed to how housing conditions such as overcrowding have contributed to the transmission of COVID-19 (for example, Raisi-Estrabragh et al., 2020; Aldridge et al., 2021; Soltan et al., 2020). A study in the US showed higher incident rates of COVID-19 in states that lifted their eviction moratoriums, translating to an estimated 433 700 excess COVID-19 cases and 10 700 excess deaths nationally (Leifheit et al., 2020). One study used phylogenetic analyses of SARS-CoV-2 virus strains to discover that homeless shelters in Boston, Massachusetts were among the early sites for spread of SARS-CoV-2 in the city, after it had been introduced at a medical conference (Lemieux et al., 2020). These studies show that the social conditions and health of a few can significantly impact public health more broadly. To take an optimistic view, one might hold hope that the COVID-19 pandemic has shown how all of us humans are interconnected, how the health and wellbeing of some affects the health and wellbeing of all. It remains to be seen whether such awareness prompts concerted investments in the basic building blocks of health — including a guarantee of a safe, secure home — for everyone.

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