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#### **ABSTRACT**

Homelessness is defined by a lack of stable and permanent housing. Homeless shelters serve as epicentres of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission, given shared living spaces, lack of physical distancing and inadequate access to healthcare resources. Individuals experiencing homelessness are not only inherently at greater risk of contracting COVID-19, but they are also more likely to engage in unsafe substance use and high-risk sex work, further augmenting this risk. This paper aims to explore the unique impact of COVID-19 on individuals experiencing homelessness and changes that should be implemented to mitigate these challenges.

### RÉSUMÉ

Le problème des sans-abris est défini par un manque de logement stable et permanent. Les refuges pour sans-abri servent d'épicentres de la transmission du coronavirus du syndrome respiratoire aigu sévère 2 (SRAS-CoV-2), compte tenu des espaces de vie partagées, du manque de distanciation physique et d'un accès inadéquat aux ressources de santé. Les personnes sans domicile fixe sont non seulement intrinsèquement plus à risque de contracter la COVID-19, mais elles sont également plus susceptibles de consommer des substances dangereuses et de se prostituer à haut risque, ce qui augmente encore ce risque. Cet article vise à explorer l'impact unique de COVID-19 sur les personnes sans domicile fixe et les changements qui devraient être mis en œuvre pour atténuer ces défis.

nfectious disease outbreaks often shed light on longstanding disparities within healthcare systems. This was illustrated during the COVID-19 pandemic. where individuals experiencing homelessness were disproportionately affected compared to the general public.1,2 According to the Canadian Mental Health Association (CMHA), homelessness refers to a lack of stable, permanent, and appropriate housing exacerbated by factors such as low income or chronic illness.3 Homeless shelters serve as epicentres of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission, given shared living spaces and lack of access to healthcare resources.2 These individuals are not only at a greater risk of contracting COVID-19, but they possess several social and health adversities. This paper explores the unique consequences of COVID-19 on individuals experiencing homelessness, the underlying challenges, and the implementation of changes to help reduce viral transmission.

# HOW HAS COVID-19 AFFECTED THE HOMELESS POPULATION?

Individuals experiencing homelessness are inherently disadvantaged by the environment they inhabit. A large proportion of homeless persons live in underprivileged settings conducive to illness. Of the 200,000 Canadians affected by homelessness, 65% permanently reside in emergency shelters.<sup>4</sup> Congregate settings, such as shelters, encampments, and abandoned buildings, have limited access to standard hygiene and sanitization facilities, including poor ventilation and lack of physical distancing between individuals.<sup>1</sup> When combined with infrequent health and social services, this augments the risk of SARS-CoV-2 transmission.

Individuals experiencing homelessness are more likely to have risk factors that make them vulnerable to COVID-19 than the general population. An increasing number of persons, who are homeless, are older than 65 years of age and have numerous comorbidities (i.e., cancer, chronic kidney disease, respiratory illness, diabetes, etc.).<sup>5-7</sup> The presence of underlying disease not only aggravates their risk of contracting COVID-19 due to their weakened immune system, but it also leads to poorer clinical outcomes if they were to contract the virus.<sup>7</sup> According to researchers at the University of California, Los Angeles

(UCLA), those homeless persons were 30% more likely to die from COVID-19 than the general population.<sup>8</sup> It is evident that homelessness results in unique challenges that may amplify the effect of COVID-19. For instance, homeless persons are more likely to engage in substance abuse and unsafe sex work, putting them at a high risk of contracting the virus through the exchange of blood or bodily fluids.<sup>9</sup>

Individuals experiencing homelessness encounter a lack of stability and tend to have more transient housing, making it difficult to follow them and provide effective patient care. Infrequent access to healthcare resources leads to delayed management of preventable illnesses, including COVID-19. The pandemic has made healthcare services more difficult to access. For instance, many primary care services are available via telemedicine which individuals experiencing homelessness may struggle to access. This inherently puts homeless persons at a disadvantage of receiving timely and effective medical care.

### WHAT SPECIAL CHALLENGES ARISE IN MANAGING COVID-POSITIVE INDIVIDUALS?

Despite efforts to resolve, challenges exist in the management of homeless persons with COVID-19. First, individuals experiencing homelessness are more likely to experience mental illness compared to those with stable housing. The CMHA estimates that between 25-50% of homeless persons are living with a mental condition.11 This may make them less apt to seek medical care and, in return, may make it difficult for clinicians to provide safe and appropriate intervention. Similarly, individuals experiencing homelessness may be unable to self-isolate following confirmed or suspected COVID-19. In many U.S. hospitals, a self-quarantine screening tool has been implemented to identify whether homeless persons can safely return to emergency shelters without compromising their health or the health of others. 12 Community outbreaks in emergency shelters resulting in the rapid increase in COVID-19 could overwhelm the healthcare system. Inadequate personal protective equipment (PPE) and lack of spacing limit the availability of healthcare services in proportion to the growing needs of homeless persons. These individuals are also challenged by limited access to real-time, evidencebased public health information, and acquiring proof of vaccination, or acquiring a vaccine passport for that matter.

This can be overcome by collaboration at the municipal, provincial, and federal levels to ensure that the needs of homeless persons are prioritized, including providing a PPE kit and distributing up-to-date infographics to those residing in emergency shelters and elsewhere. Without efforts to resolve, these factors may impede timely screening and management in this high-risk population.

# WHAT CHANGES CAN BE MADE TO REDUCE THE SPREAD OF COVID-19?

Changes must be made on all levels to combat the disparaging effect of COVID-19 on individuals experiencing homelessness. At the structural level, healthcare professionals (HCPs) must advocate for priority testing for vulnerable persons. While work on this front is currently underway, cities like Ottawa are still struggling to provide rapid testing for the homeless. 10 Dr. Jeff Turnbull, medical director for Ottawa Inner City Health, notes that homeless persons feel incapable of doing anything within their means to alleviate viral transmission. 10 Priority testing would allow early intervention to take place, including organizing adequate living arrangements in hotels and motels for those who test positive for COVID-19. In addition to frequent screening, individuals experiencing homelessness should be prioritized for vaccination. In December 2020, Ontario shortlisted a select group of highrisk populations, notably those in long-term care homes, retirement homes, and frontline healthcare workers, for phase 1 of vaccination. 13 It is unfortunate that individuals without stable housing, who are known to be at high risk for COVID-19, were initially overlooked and included in the priority list after much thought and deliberation. Given that homeless persons generate high costs for the healthcare system, it is prudent to offer them priority medical services before hospitalization is required. 14-16 In May 2021, vaccination among individuals experiencing homelessness was halted due to outbreaks in emergency shelters and a lack of supply. 16 The provincial government must do whatever it can to expedite the vaccination process for this marginalized group as delaying care will only overwhelm the healthcare system in the long run.

With more individuals turning to emergency shelters to seek refuge from intimate partner violence, significant crowding has started to occur in these settings. Currently, a growing number of homeless persons who test positive

for COVID-19 are hesitant to return to shelters for fear that they will spread the virus. 10 The same is true among those afraid to move to the shelter out of fear of contracting the virus. People experiencing homelessness often reside in communal living spaces with limited isolation facilities. To prevent outbreaks in congregate settings, adequate physical distancing must be achieved, in line with public health guidelines. This should be done by opening new shelter spaces and increasing the spacing between beds. In San Francisco, homeless individuals, who tested positive for COVID-19, were told to self-isolate in repurposed hotels with adequate support and monitoring.<sup>17</sup> The results were remarkable; 81% of patients completed their quarantine while only 4% required hospitalization for subsequent complications, contributing to a lower transmission rate. 15 A similar approach should be adopted in Canada, although it would require an unwavering commitment to increased funding and active lobbying among clinicians.

At the institutional level, HCPs must communicate and collaborate with all stakeholders involved in patient care. This includes: implementing a transitional support program that screens for homelessness during an assessment, identifying a patient's living conditions, following up with the shelter to verify if there is a capacity for safe isolation practices before discharge, involving other care providers as needed (i.e., caseworker, community outreach team, social worker, addiction services), and constantly communicating with public health units. At the individual level, HCPs must educate the public about the myths and realities of COVID-19. In October 2020, Dr. Naheed Dosani, a palliative care physician and founder of Palliative Education and Care for the Homeless (PEACH), took to TikTok to educate youth about the importance of wearing masks, hand-washing, and physical distancing. 18,19 By informing individuals of all ages about the dangers of COVID-19, precautionary measures can be taken to prevent the spread of SARS-CoV-2 into the community and subsequently to homeless persons. Medical professionals have a moral duty to share scientific evidence and counter misinformation in the media. We must all work together to achieve this shared goal.

#### CONCLUSION

Housing is a major social determinant of health that

significantly affects one's well-being. Before the pandemic, individuals experiencing homelessness were disproportionately affected by a lack of access to healthcare services. The COVID-19 pandemic has only made this situation worse as homeless persons are forced to share living space. Under these conditions, homeless persons are more likely to be infected by as well as suffer serious complications from SARS-CoV-2 than the general population. As leaders of the healthcare system, medical professionals must advocate on behalf of marginalized groups. At the structural level, priority testing and vaccination, along with increased shelter space, should be made available for the homeless. Hospitals must institute a transitional support program that includes screening for poverty and communicating with shelters to ensure safe isolation practices before discharge. At the individual level, healthcare providers must continue to educate the public about preventative measures to overcome COVID-19. Change, on all levels, must occur to tackle the disproportionate effect of COVID-19 on the homeless population. The COVID-19 pandemic has highlighted disparities in access to healthcare for many marginalized groups, including those experiencing homelessness. Policymakers must respond to future healthcare crises by prioritizing the needs of those with unstable housing before shifting their response to the general population.

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