

Abstract

Homelessness remains a pervasive, long-standing problem in the United States and is poised to increase as a result of the COVID-19 pandemic. Individuals experiencing homelessness bear a higher burden of complex medical and mental health illnesses and often struggle to obtain quality and timely health care. The United States desperately needs to train a workforce to confront this large and growing crisis, but few health professional schools currently devote curricula to the clinical needs of people experiencing homelessness. This article discusses educational and curricular strategies for health professional students. Understanding the health needs of—and the social influences on the lives of—people experiencing homelessness is crucial for addressing this health equity challenge.

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Preparing for the Health Impacts of Poverty

On any single night in January 2020, 580 466 people in the United States were estimated to be experiencing homelessness, up 2.2% from 2019.¹ In 2017, it was estimated that more than 1.4 million people experiencing homelessness used an emergency or transitional housing program.² The COVID-19 pandemic, together with economic recession and high unemployment, has exacerbated this crisis. People experiencing homelessness rarely have single risk factors or conditions; they tend to bear an inequitable burden of trimorbidity (eg, co-occurring medical, psychiatric, and substance use disorders), which increases premature death risk.³,4,5 Health, racial, and economic inequity narrow their chances for better living conditions, and many health professionals are ill equipped to respond to these patients' needs. Cultivating a capable workforce is key to motivating better service delivery to members of this vulnerable population.

Interprofessional Learning

A small number of health professional schools do devote curricular time to the clinical needs of people experiencing homelessness. Evaluation of limited medical and nursing

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education efforts published to date have shown progress.⁶ In the early 2000s, secondand third-year primary care internal medicine residents at an urban public hospital training program completed a clinical elective in settings where health care is offered to people experiencing homelessness.⁷ One program required primary care interns to offer clinic-based care to patients experiencing homelessness,⁸ and one physician assistant program integrated street medicine, which required students and preceptors to care for people living outside. The Doctors Without Walls-Santa Barbara Street Medicine program at the University of California, Santa Barbara, offers a seminar each winter, and the University of California, San Francisco (UCSF), is developing street medicine didactics and clinicals open to nursing and medical students.

Nurses have long cared for people experiencing homelessness, and public health nursing embodies an ideal of social justice by offering essential services to vulnerable persons. In tenements and settlement houses of the late 1800s, as well as in modern-day shelters and other sites, nurses have been caring for impoverished patients, embracing service-learning and research opportunities, striving to mitigate bias and stigma, and improving access to care. 9,10,11 In 2019, UCSF launched the Benioff Homelessness and Housing Initiative, with a focus on homelessness research, policy, and interprofessional education. That same year, Harvard University launched the Initiative on Health and Homelessness at the Harvard T.H. Chan School of Public Health dedicated to education, service learning, and research and, in 2020, piloted a 6-hour "nanocourse" on homelessness for medical and public health students. In 2021, this mini-course grew to become a full course, including a case study on Boston Health Care for the Homeless Program's response to COVID-19, exploration of the relationships between structural racism and homelessness, speakers with diverse backgrounds, and experiences in active learning settings.

Selecting what content to include in health professions curricula is as important as considering how to, and who should, teach it. Ideally, health professions students should learn about homelessness' influences on health from community experts and from persons with lived experience. Consumer advisory board members and advocates for people experiencing homelessness are well situated to describe clinical and ethical complexities of health care for this population and to advise about best practices in disease prevention and service delivery. Explorations of clinician biases, who clinicians think "the deserving poor" are and why, and how to distribute resources are key ethical and resilience-building questions that should be included in curricula. Complex confluences of poverty, structural racism, siloed care, and homelessness necessitate mastering "complicated medicine" 13 and interprofessional collaboration (eg, among physician assistants, nurse practitioners, psychologists, psychiatrists, dentists, social workers, case managers). Interdisciplinary learning allows students to collectively examine their own and others' attitudes toward people experiencing homelessness, recognize and value colleagues' and community members' expertise, learn from local organizational leaders, and test career choices. 14,15,16 Improving care coordination, clinical management, and disease and injury prevention among people experiencing homelessness requires health professional schools to make a commitment to serving the most vulnerable, a defining feature of health professionalism.

Broad Applicability

Instruction must include cross-disciplinary care management of multiple clinical conditions and facilitate students' and trainees' recognition of how social determinants (eg, poverty, racism, food and housing insecurity, trauma history, immigration status,

limited opportunities to practice hygiene, violence, limited transportation access) influence the health of individual patients and entire communities. These skills are not singularly relevant to people experiencing homelessness but are applicable across populations that are impoverished. The National Health Care for the Homeless Council is a key resource for training and advocacy and facilitates health professional programs' partnerships with community health organizations to teach skills practiced daily in 300 Healthcare for the Homeless programs across the United States.¹⁷

Collaboration is critical. Clinicians' capacity to deftly collaborate in order to integrate medical, dental, psychosocial, and substance use strategies at a single point of care for a single patient relies upon how well they are trained to diagnosis and treat during encounters or at sites (eg, the streets, shelter-based clinics, rehabilitation programs) that are atypical in health care. Clinicians' capacity to skillfully collaborate is also key to helping patients—during single or multiple encounters—manage acute and chronic disease, injury, or recovery with short- and long-term plans that persons experiencing homelessness can navigate, despite the persistent conditions of deprivation, neglect, and instability they face daily. Supporting students and trainees also means preparing them emotionally for their exposures to conditions of homeless life, which will be unfamiliar to many, if not most, health professionals in training. Such support can be enhanced by further collaboration and collective engagement in processing what trainees witness and how they respond.

Conditions of poverty and diverse presentations. Health education for populations experiencing homelessness means unlearning that conditions generally regarded as rare (eg, scurvy, 18 pellagra, 19 frostbite, 20 hypothermia, 20 Bartonella quintana 21 from lice infestation) in resource-rich parts of the world are common among people in the United States who experience homelessness. People experiencing homelessness also suffer excess burdens of cancer, 22 mental illness, 23 and substance use disorders 23 that have often gone untreated for longer than many health professions students or trainees are used to seeing, so rigorous health curricula to address the needs of people experiencing homelessness must incorporate acute and chronic noncancer pain management while also exposing students and trainees to detoxification protocols for managing substance (eg, alcohol, opioid) withdrawal symptoms.

Widespread trauma. Compared to women in the general population, women experiencing homelessness have higher rates of childhood physical abuse (67% v 20%) and sexual abuse (55% v 32%), respectively.²⁴ For many who lack control over their environment and experience their life and health choices as limited by social determinants, healing from trauma tends to be inequitably compromised, if not impossible. Importantly, racial trauma and the impacts of structural racism on homelessness should be integrated throughout clinical training. These improvements will better prepare health professions students to improve not only health care delivery and outcomes but also social and structural determinants that perpetuate homelessness.

Beyond the Pandemic

Despite tragic losses, the COVID-19 pandemic offered unique opportunities for clinicians to care for people experiencing homelessness. Efforts to test, social distance, quarantine and to provide safe shelter, food, clothes, other needed services, along with increases in locations and numbers of care sites,²⁵ demonstrate key successes. US public health capacity was shown to be inadequate overall, underscoring the need to

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capitalize on these successes through academic health programs' building a capable health care workforce that motivates improved—and equitable—health outcomes in hospitals, clinics, shelters, and everywhere we live.

References

- 1. US Department of Housing and Urban Development. *The 2020 Annual Homeless Assessment Report (AHAR) to Congress. Part 1: Point-In-Time Estimates of Homelessness*. January 2021. Accessed July 28, 2021. https://www.huduser.gov/portal/sites/default/files/pdf/2020-AHAR-Part-1.pdf
- 2. US Department of Housing and Urban Development. *The 2017 Annual Homeless Assessment Report to Congress. Part 2: Estimates of Homelessness in the United States.* October 2018. Accessed July 28, 2021. https://www.huduser.gov/portal/sites/default/files/pdf/2017-AHAR-Part-2.pdf
- 3. Institute of Medicine. *Homelessness, Health, and Human Needs.* National Academy Press; 1988.
- 4. Gelberg L, Linn LS. Assessing the physical health of homeless adults. *JAMA*. 1989;262(14):1973-1979.
- 5. Hwang SW. Homelessness and health. *CMAJ*. 2001;164(2):229-233.
- 6. McNeil R, Guirguis-Younger M, Dilley LB, Turnbull J, Hwang SW. Learning to account for the social determinants of health affecting homeless persons. *Med Educ*. 2013;47(5):485-494.
- 7. Buchanan D, Rohr L, Kehoe L, Glick SB, Jain S. Changing attitudes toward homeless people. *J Gen Intern Med*. 2004;19(5, pt 2):566-568.
- 8. O'Toole TP, Hanusa BH, Gibbon JL, Boyles SH. Experiences and attitudes of residents and students influence voluntary service with homeless populations. *J Gen Intern Med.* 1999;14(4):211-216.
- 9. Gardner J, Emory J. Changing students' perceptions of the homeless: a community service learning experience. *Nurse Educ Pract*. 2018;29:133-136.
- 10. Richmon R, Noone J. The impact of a service-learning foot soak experience on nursing students' attitudes toward the homeless. *Nurs Forum*. 2020;55(2):236-243.
- 11. Zrinyi M, Balogh Z. Student nurse attitudes toward homeless clients: a challenge for education and practice. *Nurs Ethics*. 2004;11(4):334-348.
- 12. Initiative on Health and Homelessness. Harvard T.H. Chan School of Public Health. Accessed July 28, 2021. https://www.hsph.harvard.edu/healthandhomelessness/
- 13. O'Connell J. Boston Healthcare for the Homeless Program: a success story. *Virtual Mentor*. 2009;11(1):78-82.
- 14. Chrisman-Khawam L, Abdullah N, Dhoopar A. Teaching health-care trainees empathy and homelessness IQ through service learning, reflective practice, and altruistic attribution. *Int J Psychiatry Med.* 2017;52(3):245-254.
- 15. Feldman CT, Stevens GD, Lowe E, Lie DA. Inclusion of the homeless in health equity curricula: a needs assessment study. *Med Educ Online*. 2020;25(1):1777061.
- 16. To MJ, MacLeod A, Hwang SW. Homelessness in the medical curriculum: an analysis of case-based learning content from one Canadian medical school. *Teach Learn Med.* 2016;28(1):35-40.
- 17. 2019 Special populations funded programs. Health Resources and Services Administration. Accessed July 28, 2021. https://data.hrsa.gov/tools/data-reporting/special-populations
- 18. Colacci M, Gold WL, Shah R. Modern-day scurvy. CMAJ. 2020;192(4):E96-E96.

- 19. Kertesz SG. Pellagra in 2 homeless men. Mayo Clin Proc. 2001;76(3):315-318.
- 20. O'Connell JJ, ed. The Health Care of Homeless Persons: A Manual of Communicable Diseases and Common Problems in Shelters and on the Streets. Boston Health Care for the Homeless Program; National Health Care for the Homeless Council; 2004.
- 21. Brouqui P, Lascola B, Roux V, Raoult D. Chronic *Bartonella quintana* bacteremia in homeless patients. *N Engl J Med.* 1999;340(3):184-189.
- 22. Holowatyj AN, Heath EI, Pappas LM, et al. The epidemiology of cancer among homeless adults in metropolitan Detroit. *JNCI Cancer Spectr.* 2019;3(1):pkz006.
- 23. US Department of Housing and Urban Development. *The 2016 Annual Homeless Assessment Report (AHAR) to Congress. Part 1: Point-in-Time Estimates of Homelessness*. November 2016. Accessed September 9, 2021. https://www.huduser.gov/portal/sites/default/files/pdf/2016-AHAR-Part-1.pdf
- 24. Green HD Jr, Tucker JS, Wenzel SL, et al. Association of childhood abuse with homeless women's social networks. *Child Abuse Negl.* 2012;36(1):21-31.
- 25. Baggett TP, Racine MW, Lewis E, et al. Addressing COVID-19 among people experiencing homelessness: description, adaptation, and early findings of a multiagency response in Boston. *Public Health Rep.* 2020;135(4):435-441.

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