

Oral Health and Behavioral Health in Patients Experiencing Homelessness

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Purpose

This publication was developed by the National Network for Oral Health Access (NNOHA) and the National Health Care for the Homeless Council (NHCHC). The purpose is to bring awareness to the intersection of oral health and behavioral health concerns or cognitive impairment in people experiencing homelessness (PEH). This publication will share the impacts of behavioral health illness on oral health and how behavioral health and dental providers can work together to address this intersection in their practices.



Oral Health and Behavioral Health

Behavioral health and oral health is an important and at times overlooked intersection in an individual's health. Both types of care are delivered by different providers that are often conducted in different settings yet play vital roles in service integration and multidisciplinary care delivery. Oral health needs and behavioral illness can have a bi-directional relationship with each condition influencing the other¹. Mild, severe or chronic behavioral health illnesses such as depression, anxiety, and psychosis can lead to neglect of oral hygiene. Alternatively, fear or triggering experiences with oral health procedures can induce anxiety and high levels of stress¹. For individuals experiencing homelessness, this intersection can add to pre-existing traumatic experiences and be triggering, requiring integrated care from both dental and behavioral health providers.

Relationship of Behavioral Health and Oral Health

1. People with behavioral health illness may be at higher risk for oral diseases like periodontal disease and dental caries. This may be due to lack of motivation or prioritization of oral health, poor nutrition, higher consumption of foods that may cause cavities, substance use, and financial barriers.
2. Many medications that treat behavioral health conditions may have adverse effects on the mouth. For example, some anti-depressant medications can cause dry mouth (xerostomia) leading to increased risk for dental caries.
3. People with behavioral health concerns may have behaviors that negatively affect the mouth including teeth grinding (bruxism).
4. Behavioral health illnesses can reduce the body's immune response against inflammatory diseases. Periodontal disease is an inflammatory disease.

¹ Kisely S. No Mental Health without Oral Health. *Can J Psychiatry*. 2016 May;61(5):277-82. doi: 10.1177/0706743716632523. Epub 2016 Feb 10. PMID: 27254802; PMCID: PMC4841282.

5. Health care for the homeless patients are 4% of all health center patients, but make up 38% of all medication assistance treatment (MAT) patients at health centers². PEH may be experiencing substance use disorder (SUD) in conjunction with a behavioral health challenge,³ and SUD has been noted as one of the major drivers for homelessness⁴. The use of substances contributes and results in oral health side effects like dental caries, dry mouth, and tooth loss. Oral health care services can help improve SUD treatment outcomes, including long-term benefits like improved employment, food security, and permanent housing⁵.
6. Both behavioral health illness and poor oral health-related stigma may affect a person's willingness to access health care.
7. Oral health conditions like missing teeth and dental caries may contribute to anxiety and insecurity to engage in social activities and seek or retain employment.
8. Oral health procedures can induce and exacerbate past traumas and anxieties.

Prevalence of Behavioral Health Issues and Oral Health Diseases in PEH

Periodontal disease is a chronic condition that affects all groups and individuals despite level of income, education, or housing status. Oral health concerns with behavioral health issues expand beyond periodontal health. Other concerns include tooth loss and tooth decay which could lead to reduced quality of life. The access to resources and barriers to obtain sufficient care can determine an individual's response to oral diseases. Without stable housing, people may experience negative impacts to their health^{6,7}.

According to the National Health and Nutrition Examination Survey (NHANES) 2009-2014 data, 60.4% of adults below 100% of the federal poverty level experienced periodontal disease. Prevalence of periodontal disease increases with increased poverty levels⁸.

Barriers to Health Care

² <https://files.kff.org/attachment/Issue-Brief-Addressing-the-Opioid-Crisis-Medication-Assisted-Treatment-at-Health-Care-for-the-Homeless-Programs>

³ National Health Care for the Homeless Council. (May 2017.) Addressing the Opioid Epidemic: How the opioid crisis affects homeless populations. (Authors: Brett Poe, Research Associate, and Alaina Boyer, Director of Research.) Available at: <https://nhchc.org/wp-content/uploads/2019/08/nhchc-opioid-fact-sheet-august-2017-1.pdf>

⁴ <https://endhomelessness.org/resource/opioid-abuse-and-homelessness/>

⁵ Hanson GR, McMillan S, Mower K, Bruett CT, Duarte L, Koduri S, Pinzon L, Warthen M, Smith K, Meeks H, Trump B. Comprehensive oral care improves treatment outcomes in male and female patients with high-severity and chronic substance use disorders. *J Am Dent Assoc.* 2019 Jul;150(7):591-601. doi: 10.1016/j.adaj.2019.02.016. Epub 2019 May 20. PMID: 31122616; PMCID: PMC6599580

⁶ van de Rijt LJM, Stoop CC, Weijenberg RAF, de Vries R, Feast AR, Sampson EL, Lobbezoo F. The Influence of Oral Health Factors on the Quality of Life in Older People: A Systematic Review. *Gerontologist.* 2020 Jul 15;60(5):e378-e394. doi: 10.1093/geront/gnz105. PMID: 31729525

⁷ Oral health interventions for people living with mental disorders: protocol for a realist systematic review; Kenny, A., Dickson-Swift, V., Gussy, M. et al. Oral health interventions for people living with mental disorders: protocol for a realist systematic review. *Int J Ment Health Syst* 14, 24 (2020). <https://doi.org/10.1186/s13033-020-00357-8>. Link: <https://rdcu.be/ceX5X>

⁸ Eke P, Thornton-Evans G, Wei L, et al. Periodontitis in US Adults: National Health and Nutrition Examination Survey 2009-2014. *J Am Dent Assoc.* 2018; 149(7):576-588.

Daily experiences of homelessness are traumatizing and mentally challenging due to poor sleep and competing needs for survival. Ensuring optimal oral health care is often superseded by other priorities like safety and food. In addition to these competing priorities, other barriers to oral health care include lack of access to a dentist, oral health tools like toothbrushes, toothpaste, nutritious foods, and clean water. Persons with unstable housing may experience higher rates of comorbidities that affect oral health such as diabetes, substance use and alcohol use, and weakened immune systems.

Traumatic experiences and behavioral health challenges may contribute to barriers in receiving dental services. Additionally, oral health care may not be a priority over one’s own behavioral health care. People with behavioral health illness may hesitate to access dental services due to the negative stigma of mental illness and poor oral health. Past experiences from trauma related to the mouth can trigger anxiety and fear, and the idea of something forced into one’s mouth can be retraumatizing particularly for individuals who may have experienced sexual or domestic violence or other abuse that may center around the mouth area. Sounds of a drill can also induce panic attacks, fear, and anxiety. Dental providers should consider previous trauma when conducting dental procedures. Strategies may include motivational interviewing, creating a calm environment, and prioritizing developing a trusting relationship with the patient.

Trust can also be a barrier to oral health care for PEH. Oftentimes in their settings, PEH witness many individuals with all of their teeth pulled, and in turn this can lead to delay seeking oral care and reliance on other methods to treat oral-related pain. Loss of dental prosthetics while unstably housed due to lack of proper and clean storage may also contribute to delay in seeking care.

Lack of access to health care can result in poor health outcomes and missed opportunities for early detection of oral health diseases such as periodontal disease and dental caries. Not all health care for the homeless health centers offer on-site or co-located dental services resulting in a reliance on outside entities to provide dental care through contracting or referrals.

Consequences of Behavioral Health Issues and Oral Diseases

Consequences	Poor Oral Health	Poorly Controlled Behavioral Health Issues
Short Term	<ul style="list-style-type: none"> • Anxiety, insecurity • Alterations in taste, difficulty eating • Tooth mobility • Tooth loss • Attachment loss of gum tissue, exposure of root surfaces • Pain 	<ul style="list-style-type: none"> • Disconnection from social groups • Changes in mood • Lack of motivation for self-care • Disinterest in regular activities
Long Term	<ul style="list-style-type: none"> • Continued dental caries and tooth loss • Impact to overall health (diabetes, heart disease, etc.) 	<ul style="list-style-type: none"> • Feeling of isolation • Health consequences or enhanced impact of

	<ul style="list-style-type: none"> • Health consequences related to unhealthy diet • Experiencing negative stigma – lowered confidence, anxiety, less employability • Changes in appearance • Changes in speech • Pain and difficulty when eating 	<p>current health conditions</p> <ul style="list-style-type: none"> • Loss of work • Self-harm • Poor nutrition • Re-traumatization from past or recurring events
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Access to Care

Persons experiencing homelessness have many barriers to gaining access to oral health and behavioral health care. In addition to the barriers listed earlier, health centers may have limited capacity in their dental and behavioral health clinics. According to the 2019 Uniform Data System, 52 health centers that receive health care for the homeless funding only had 57.11 total dental provider Full-time Equivalent (FTEs), 17.25 total dental hygienist FTEs, and none had dental therapists on staff, and 90.16 FTEs for “other dental personnel”⁹. Concerning behavioral health staff, the health centers had 44.02 psychiatrists FTEs, 25.46 licensed clinical psychologists FTEs, 137.4 licensed clinical social workers FTEs, 115.73 FTEs for “other licensed behavioral health providers”¹⁰, and 150.89 FTEs for “other behavioral health staff”¹¹.

According to the 2019 Uniform Data System, 1,051,869 patients were served in health centers that receive health care for the homeless funding, and of those, 990,411 were experiencing homelessness. When looking specifically at services provided in the aforementioned health centers, there were 486,771 dental visits with 183,054 patients served and 952,445 behavioral health visits (14,917 of which were done via telehealth) with 193,732 patients served. Although this is health center level data, there is a precedent to consider this intersection at the patient level. In addition, it is important to consider the integration of dental and behavioral health providers in order to systematically improve quality, equity and coordination of care.

Access to Coordinated Care Challenges:

- Number of dental programs in homeless shelters
 - There are few health care for the homeless programs that offer dental services at homeless shelters. Many health care for the homeless health centers may offer dental services through mobile or portable units. These programs may not offer dental care daily, or at hours that are convenient for the client population, creating barriers in ability to access care. Limited access to dental care poses a significant challenge for patients experiencing homelessness.

⁹ Other dental health personnel: dental assistants, advanced dental assistant, aides, and technicians

¹⁰ Other licensed behavioral health providers: psychiatric social workers, psychiatric nurse practitioners, family therapists, and other licensed master’s degree prepared clinicians

¹¹ Other behavioral health staff: unlicensed support staff and certified individuals providing counseling, treatment or support to behavioral health providers

- Limited scope of dental services in homeless shelters
 - Health care for the homeless programs that have onsite dental programs often have limited scope of services. Dental services are often limited to preventive dental care and simple restorative services like fillings. Many PEH require treatment that is more extensive. As a result, they may not access available comprehensive dental services in the health center or homeless shelter or continue to experience consequences from more significant dental problems.
- Access to behavioral health care in homeless shelters
 - PEH with behavioral health conditions may experience difficulty accessing behavioral health care. Health care for the homeless programs may not have direct access to behavioral health care at homeless shelters.
- Health care system barriers
 - The siloed nature of the health care system creates barriers to effective care coordination. Many health care for the homeless programs may not have integrated electronic dental and medical records. This creates challenges to communicate across disciplines. Primary care, behavioral health, and dental departments may often work independently with minimal integration. Lack of integration creates significant barriers to care coordination and access to care.
 - There is limited data related to dental services. The limited number of oral health measures and diagnostic dental codes makes it difficult to identify effective strategies that address the social determinants of health including homelessness and behavioral health.

Recommendations for Behavioral Health and Oral Health Integration

A comprehensive, team based approach would benefit individuals experiencing homelessness and mental health issues. Oral health and behavioral health integration is a way to increase access to care and care coordination.

- Systems Integration:
 - Expansion of services/care delivery in shelters
 - Telehealth
 - Improved crosstalk between electronic health records. This can be challenging given privacy regulation with behavioral health records; however, connecting electronic dental records and other primary care medical records can improve care coordination and linkage of health outcomes.
- Behavioral Health Provider's Role in Oral Health
 - Behavioral health providers who treat persons experiencing homelessness can engage in oral health activities to help with oral health disease management and prevention.

- Behavioral health providers can provide oral health education to their patients including the importance of dental visit and the relationship between oral health and general health. (Training on oral health: <https://www.smilesforlifeoralhealth.org/>)
- Persons experiencing homelessness may require care coordination and assistance in navigating the health care system. Behavioral health providers can assist patients in accessing dental care including providing referrals to dental providers or scheduling dental appointments with in-house dental clinics.
- Oral health risk assessments can be used with a combination of behavioral health providers and support staff. (Example risk assessment tool: <https://www.ada.org/en/member-center/oral-health-topics/caries-risk-assessment-and-management>)
- Dental Provider's Role in Behavioral Health
 - Dental providers can engage in behavioral health activities for mental illness prevention and management. Dental providers can perform behavioral health screenings such as the Patient Health Questionnaire-2 (PHQ-2) or PHQ-9 during the dental visit.
 - Dental providers can help with behavioral health care coordination by connecting patients to behavioral health providers through referrals and scheduling appointments.
 - Dental clinics can develop a workflow for dental appointments to integrate behavioral health screenings. The whole dental care team can be utilized (providers and support staff) to perform screenings and risk assessments.
 - Dental providers should be more familiar with trauma informed care approaches and have awareness of a patient's past trauma history.
 - Dental providers should be aware of other pain treatments or be able to prescribe suboxone or other medication assistance treatment. Patients seeking dental care may be in recovery from substance use, and as a result, providers may need to explore alternatives to short-term pain resulting from dental treatment.

COVID-19's Impact on Health Care Delivery

- Telehealth
 - During the COVID-19 pandemic, many health centers began utilizing or expanded the use of telehealth and teledentistry as a method to ensure continued care for their patients. Telehealth allows for safer delivery of care during COVID-19 by encouraging social distancing and reducing exposure. Behavioral health care can be delivered through video and telephone visits. In addition, many states expanded regulations to allow for teledentistry. Health center dental programs use teledentistry to triage for care. Some health center programs use teledentistry for preventive dental care, providing oral health education, and guiding patients to apply their own fluoride varnish.

- **Dental Services**
 - In response to the COVID-19 pandemic, many states limited dental services to emergent care only as a strategy to reduce the exposure to the virus and encourage social distancing. As states began the process of re-opening to allow for non-emergent health care, health center dental programs experienced an influx of patients needing to access dental services. With this backlog of dental patients, there is a delay in accessing dental services for all populations, especially those who already experience limited access to dental care.
- **Behavioral Health Services**
 - With the emergence of COVID-19 and states implementing stay-at-home orders, many individuals faced uncertainty that led to increased need for behavioral health care. Some challenges that individuals face include significant restrictions in daily living in an effort to reduce the spread of the virus, loss of employment, reduced childcare services, lack of physical contact with friends and family, loss of friends and family from the virus, fear of contracting the virus, and reduced access to health care.
 - Individuals experiencing homelessness may experience other stressors in addition to the daily stress that comes from homelessness. During the pandemic, 4 in 10 adults¹² in the U.S. reported symptoms of anxiety or depression. Many adults also reported negative behaviors that may affect behavioral health including difficulty sleeping, increased alcohol and substance use, and worsening of chronic conditions¹³. With increased demand for care, health centers may have difficulty meeting the increased demand due to limited capacity.

Conclusions:

This publication describes the relationship between behavioral health and oral health among unstably housed individuals and how behavioral health conditions can affect oral health, and vice versa. We have identified how behavioral health and dental providers can collaborate and integrate services to provide improved whole person care. Co-location of these services improves linkages to care and ensures expertise is present to address patient trauma. Coordinated care is imperative to quality and equitable care to particularly vulnerable populations.

¹² <https://www.kff.org/other/state-indicator/adults-reporting-symptoms-of-anxiety-or-depressive-disorder-during-covid-19-pandemic/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

¹³ <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>

Tools and Resources

- 1) NHCHC COVID-19 Dental Issue Brief. April 2021. <https://nhchc.org/wp-content/uploads/2021/04/NHCHC-COVID-Dental-Issue-Brief-April-2021.pdf>
- 2) Oral Health and Diabetes in Patients Experiencing Homelessness. NNOHA and NHCHC. March 2019. https://nnoha.org/nnoha-content/uploads/2019/04/NHCHC-NNOHA-FAQ_final_2019.pdf
- 3) National Association of Counties. How Oral Health and Mental Health are Connected. https://www.naco.org/sites/default/files/documents/oral-mental-health_06.29-v3.pdf
- 4) NHCHC Oral Health Resources. <https://nhchc.org/clinical-practice/diseases-and-conditions/oral-health/>
- 5) NNOHA Promising Practice: Teledentistry During COVID-19. January 2021. <https://nnoha.org/download/teledentistry-during-covid-19-promising-practice/>
- 6) NNOHA Oral Health Infrastructure Toolkit. <https://nnoha.org/ohi-toolkit/ohi-toolkit-background/>
- 7) <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety.html>
- 8) Oral Health Integration in Medication Assisted Treatment for Substance Use Disorder. Webinar slides. National Network for Oral Health Access. February 17, 2019. <https://nnoha.org/nnoha-content/uploads/2019/02/NNOHA-MAT-Webinar-2-7-19.pdf>
- 9) Harvard University Resource Library for the Integration of Oral Health and Medicine. <https://resourcelibrary.hsdm.harvard.edu/links/resource-type/curriculatraining-resources>

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