

## Review Article

# Barriers and Enablers in Accessing Dental Care among Homeless Population in the U.S: a Review

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The onus of oral disease in the US has been termed a “silent epidemic” that strikes a severe blow on the most susceptible sections of the society. This hardship weighs massively on the homeless population that obviously does not have access to private systems of care but is also forsaken by a poorly supported public safety net. In spite of the presence of social inequalities and significant evidence which supports that proper oral health contributes greatly to overall general health, delivery of oral health care to the most vulnerable populations is not being given adequate importance. This review focuses on uncovering how homeless American adults cope with oral health issues in the midst of barriers. This review focuses to close the gap by exploring how structural inequalities are affecting the oral health of the homeless. A literature search was performed to understand the nature of homelessness, its causes, health impacts, and social impacts. Additionally, oral health and coping mechanisms were discussed. The literature review demonstrates that without proper access to oral health care, the homeless are bound to depend on emergency departments, over the counter medications and other inappropriate measures. Emergency services were the sole option in many cases. The many dental extractions that were performed led to edentulism among the homeless and an ongoing struggle to cope up in the society. The review also highlights the efforts of voluntary organizations in helping to deal with the problem and the need for expansion of those efforts.

**Keywords:** Dentistry; Health care; Medicine; Homeless; Sociology

## Introduction

Homeless Emergency Assistance And Rapid Transition To Housing (HEARTH) Act, the Housing & Urban Development (HUD) definition of “homeless” was expanded to include an individual who is exiting an institution where he or she temporarily resided; an individual or family who is at the imminent risk of losing their housing and has no resources to secure new permanent housing; unaccompanied youth and homeless families with children and youth who are defined as homeless under other federal statutes; and an individual or family who is experiencing domestic violence and other dangerous or life-threatening conditions such as dating violence, sexual assault, and stalking, etc [1]. However, HUD still uses the older, narrower definition in its counts. In January 2018, 552,830 people were calculated as homeless in the United States. Of those, 194,467 which accounts for 35 percent were unsheltered, and 358,363 which represents 65 percent were sheltered [2]. The overall homeless population on a single night represents 0.2 percent of the U.S. population or 17 people per 10,000 in the population [3]. In the year 2019 Washington, D.C. had the highest estimated rate of homelessness in the United States, with 94 homeless individuals per 10,000 of the population [2,4]. When both sheltered and unsheltered individuals are considered, New York is the metropolitan area with the most homeless people, 78,604 [2].

The National Law Center on Homelessness & Poverty currently estimates that each year at least 2.5 to 3.5 million Americans sleep in shelters, transitional housing, and public places not meant for human

dwelling [1]. At least an additional 7.4 million have lost their own homes and are living up with others out of economic necessity [2-4]. Risk factors for homelessness include the following, disengagement with school or other education and training, involvement in or exposure to criminal activities, antisocial behavior, lack of family and/or community support, and staying in a boarding house for twelve weeks or more without the security of tenure [5,6]. The top four causes of homelessness among unaccompanied individuals were (1) lack of affordable housing, (2) unemployment, (3) poverty, (4) mental illness and the lack of needed services, (5) substance abuse and the lack of required services [7]. Other social causes of homelessness include, life events that lead individuals to become homeless. Homelessness occurs when people leave prison, care, or the army without a home to return to. Many homeless women have escaped abusive relationships. Homelessness can mostly be broken down into four categories: chronic, episodic, transitional, and hidden [8]. These are all having an impact on individual health care in a different, broader way. The homelessness crisis could be ended by stabilizing people through shelter, moving them into permanent housing, and implementing assistance programs to keep them in their house; we can not only reduce but eliminate, homelessness along with improvement in their health care delivery system including oral and general [9,10]. Oral diseases ranging from dental caries to oral cancers cause pain and disability for millions of Americans [11]. The impact of these diseases does not stop at the mouth and teeth [9-12]. Plenty of evidence suggests that lack of oral health, particularly periodontal disease is linked to several chronic diseases like diabetes,

heart disease, and stroke [11]. Premature births and low birth weight in pregnant women have been attributed to poor oral health [13-17]. Oral health is a crucial component of overall health and must be included in the provision of health care and the design of community programs [18]. The broader meaning of oral and general health does not reduce the relevance and pertinence of the two most prevalent dental diseases, caries, and periodontal disease. They remain rampant and widespread, affecting the majority of the American population at some point in their life. The critical role played by dentists, dental hygienists, and other health professionals in the prevention of oral disease and disability cannot be overemphasized. Safe and efficacious disease prevention techniques can be readily utilized to improve oral health and deter disease. Such adoptable measures include daily oral hygiene procedures and various lifestyle modifying behaviors, community water fluoridation [19], tobacco cessation programs, and clinical interventions like the placement of sealants and screening for oral and pharyngeal cancers. The elements requiring immediate attention are the determinants of health and disease with a primary focus on prevention [20]. Optimal oral health allows a person to speak, smile, taste, chew, swallow, and make facial expressions to express feelings and emotions with ease [11].

### **Health Care System and Need for the Common Man**

The consequences of inadequate oral health are illustrated through the quality of life of the homeless population as they are often denied access to appropriate dental care [9-22]. In the United States, the populations most likely to suffer from poor oral health are those that are categorized as low-income, uninsured, members of an ethnic minority, and immigrant or rural populations. This suboptimal access to an appropriate standard of oral health care in certain facets of the population serves as a national symbol of social inequality [12]. There is increasing recognition among those in public health that oral diseases like dental caries and periodontal disease, along with general health conditions like obesity and diabetes, are intimately related to one another by sharing common risk factors. Such factors include, tobacco use, excess sugar consumption, and underlying infection and inflammatory pathways [23]. Tooth loss and oral pain are highly prevalent in older homeless adults. Increasing age, alcohol, drug, and tobacco use are associated with tooth loss [24]. In the market-based economy of the United States, where dental care is privatized, oral health care has become a commodity that only the privileged can afford [25]. This grave economic disparity in obtaining dental insurance lays heavily on the impoverished segment of the population, namely the homeless [26]. Not only are they deprived from the benefits of private systems of care, but also endure the effects of a poorly supported public safety net further rejects them. Access to appropriate health care services which is paramount in achieving health equity for all Americans. Reaching this state of health equity for all relies heavily on three primary sectors: health services, prompt availability of care, and insurance coverage [27]. Adequate access to health care leads to various beneficial effects, improving one's physical, social, and mental health, as well as the overall quality of life. Impediments to health services in America are essentially due to little or no insurance coverage, increased cost of visits, and a scarcity of services and culturally competent care [10-12]. True and anticipated difficulties in receiving care when patients are ill or injured likely reflect significant barriers to treatment. Along with primary care

and preventive services Emergency Medical Services (EMS) are an important aspect in the delivery of care. EMS includes basic and advanced life support. The longer the delay in between identifying the need for a required service versus obtaining those services can have a negative impact on the health and the cost of service.

### **Emerging Issues for Access to Health Services**

Over the first half of this decade, as a result of the Patient Protection and Affordable Care Act of 2010, 20 million adults have gained health insurance coverage [27,28]. Data from the healthy people midcourse review clearly shows that there are significant discrepancies in access to care by sex, age, race, ethnicity, education, and the level of family income [29-33]. These discrepancies exist with all levels of access to care, including health and dental insurance, it presents an ongoing source of concern in accessing primary care. Differences also exist by geography, as millions of Americans living in rural areas lack access to primary care services due to workforce shortages. All future efforts should lay emphasis on the placement of a primary care workforce that is trained to provide culturally competent care to diverse populations and evenly distributed geographically.

### **Specific Issues that Should be Monitored Over the Next Decade**

Serious steps should be taken to expand and measure insurance coverage. Assuring access to care in the entire spectrum including preventive clinical services, oral health care, long term and palliative care must be prioritized. Discrepancies that affect access to health care such as age, sex, race, ethnicity, disability status, socioeconomic status and residential location need to be addressed. The capacity of the health care system to provide services for newly insured individuals should be properly assessed. Determination of changes in health care workforce is needed as new models for the delivery of primary care continue to evolve, such as the patient-centered medical home, team-based care and the use of telehealth.

### **Positive role that Dental Schools can play**

Some of the dental schools in the US have adopted curriculums that include community-based learning. Wherein dental students and residents provide oral health services at federally qualified community health centers (FQHC) and learn hands-on about providing oral health care to the vulnerable populations. If this type of learning is adopted by many schools the graduating students will have greater appreciation for cultural, social and ethical issues and will be more comfortable and willing to care for such populations. At most of the places where voluntary organizations provide dental care for the homeless the services are usually single day or two-day events providing limited dental care without follow up care. If dental schools can create a service-learning experience for its students and residents through a program that can provide continued oral health care for the homeless at their partnered FQHC's it will greatly expand the number of homeless populations that can obtain oral health care. Programs like these are relatively easy to implement at schools that are already partnered with FQHC's and have the necessary infrastructure in place.

### **Conclusion**

The homeless population in the United States is vastly diverse and continues to expand. In spite of a low available data regarding

the oral health status of the homeless, studies consistently report that both the perception and clinical evidence of dental needs among the homeless to be low and the utilization rate for dental services to be low as well. A proper integration of oral health and primary health care along with necessary interventions should be made to improve both the access and the quality of services provided to the homeless. Steps should be taken to create mobile health care teams as necessary to provide patient centered care in certain communities to reduce the disparities in access to oral health care among the homeless. The authors have noted that most of the homeless population derive great benefit from the services of certain nonprofit organizations with the help of members of the dental community who donate their time and efforts by serving at these events. The dental schools can help these organizations to expand their services through their involvement by encouraging graduating dental students and residents to participate in these events and by providing the follow up care to some of the most needy among them thus providing a great opportunity for the future members of the dental community to see the greater benefit which would prompt the future clinicians to continue to help them with their oral health needs.

## References

- National Law Center on Homelessness and Poverty. Homelessness in America: Overview of Data and Causes 2015; 1-4.
- Homelessness rate in the U.S, by state 2019. Statista. [https://www.statista.com/statistics/727847/homelessness-rate-in-the-us-by-state]
- National Alliance to End Homelessness. The State of Homelessness in America. Am J Public Health. 2016; 84: 83.
- The council of economic advisers. Executive summary September 2019. The State of Homelessness in America.
- 10 facts about Homelessness in America. US News & World Report. [https://www.usnews.com/news/cities/articles/2019-09-23/10-facts-about-homelessness-in-america]
- Risk of Homelessness. [https://meteor.aihw.gov.au/content/index.phtml/itemId/401065]
- What Causes Homelessness? National Alliance to End Homelessness. [https://endhomelessness.org/homelessness-in-america/what-causes-homelessness]
- Jaggi S. The Many Forms of Homelessness - Join PDX nd. [https://joinpdx.org/the-many-forms-of-homelessness]
- King TB, Gibson G. Oral health needs and access to dental care of homeless adults in the United States: a review. Spec Care Dent. 2003; 23: 143-7.
- Conte M, Broder HL, Jenkins G, Reed R, Janal MN. Oral health, related behaviors and oral health impacts among homeless adults. J Public Health Dent. 2006; 66: 276-8.
- Surgeon General's Report on Oral Health in America | Data & Statistics | National Institute of Dental and Craniofacial Research. [https://www.nidcr.nih.gov/research/data-statistics/surgeon-general]
- Northridge ME, Kumar A, Kaur R. Disparities in Access to Oral Health Care. Annu Rev Public Health. 2020; 41: 513-535.
- Pregnancy and Oral Health Feature CDC. [https://www.cdc.gov/oralhealth/publications/features/pregnancy-and-oral-health.html]
- Henry JA, Muthu MS, Swaminathan K, Kirubakaran R. Do Oral Health Educational Programmes for Expectant Mothers Prevent Early Childhood Caries? - Systematic Review. Oral Health Prev Dent. 2017; 15: 215-221.
- Silk H, Douglass AB, Douglass JM, Silk L. Oral Health during Pregnancy. Am Fam Physician. 2008; 77: 1139-44.
- Hope CK, Wang Q, Burnside G, Adeyemi AA, Quenby S, Smith PW, et al. Assessing the Association between Oral Hygiene and Preterm Birth by Quantitative Light-Induced Fluorescence. The Scientific World Journal. 2014.
- Pregnancy: Bad Oral Hygiene Can Lead To Complications In Pregnancy And Problems For Babies. ScienceDaily. [https://www.sciencedaily.com/releases/2009/03/090330200712.htm]
- Oral health: A window to your overall health. Mayo Clinic. [https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/dental/art-20047475]
- El-Yousfi S, Jones K, White S, Marshman Z. A rapid review of barriers to oral healthcare for vulnerable people. Br Dent J. 2019; 227: 143-151.
- Rogers LM, Weil CE, Hackett A. Improving Dental Health for Homeless Children. Pediatrics Meeting Abstract. 2018; 142: 438.
- DiMarco MA, Ludington SM, Menke EM. (2010) Access to and utilization of oral health care by homeless children/families. J Health Care Poor Underserved. 2010; 21: 67-81.
- Paisi M, Kay E, Plessas A, Burns L, Quinn C, Brennan N, et al. (2019) Barriers and enablers to accessing dental services for people experiencing homelessness: A systematic review. Community Dent Oral Epidemiol. 2019; 47: 103-111.
- Oral Health and Diabetes in Patients Experiencing Homelessness | National Health Care for the Homeless Council nd. [https://nhchc.org/research/publications/oral-health-and-diabetes-in-patients-experiencing-homelessness/]
- Freitas DJ, Kaplan LM, Tieu L, Ponath C, Guzman D, Kushel M. Oral health and access to dental care among older homeless adults: results from the HOPE HOME study. J Public Health Dent. 2019; 79: 3-9.
- Cooper PF, Manski RJ, Pepper JV. The Effect of Dental Insurance on Dental Care Use and Selection Bias. Med Care. 2012; 50: 757-763.
- Leu RE, Rutten FFH, Brouwer W, Matter P, Rüttschi C. The Swiss and Dutch Health Insurance Systems: Universal Coverage and Regulated Competitive Insurance Markets. 2009. The common wealth fund.
- Access to Health Services | Healthy People 2020. [https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services]
- Uberoi N, Finegold K, Gee E. Health Insurance Coverage and the Affordable Care Act, 2010-2016. Dep Health Hum Serv. 2016; 1-14.
- Akintobi TH, Hoffman LM, McAllister C, Goodin L, Hernandez ND, Rollins L, et al. (2018) Assessing the Oral Health Needs of African American Men in Low-Income, Urban Communities. Am J Mens Health. 2018; 12: 326-337.
- Muthra S, Hamilton R, Leopold K, Dodson E, Mooney D, Wallington SF, et al. A qualitative study of oral health knowledge among African Americans. PloS One. 2019; 14: e0219426.
- Aguirre-Zero O, Westerhold C, Goldsworthy R, Maupome G. Identification of barriers and beliefs influencing engagement by adult and teen Mexican-Americans in oral health behaviors. Community Dent Health. 2016; 33: 44-7.
- Macy JT, Moser EAS, Hirsh AT, Monahan PO, Eckert GJ, et al. Factors associated with seeking preventive dental care: an integrative model exploration of behaviors in Mexican immigrants in Midwest America. BMC Oral Health. 2018; 18: 37.
- Hidalgo B, Garcés-Palacio IC, Scarinci I. (2012) Preventive and curative care utilization among Mexican immigrant women in Birmingham AL. J Immigr Minor Health. 2012; 14: 983-9.