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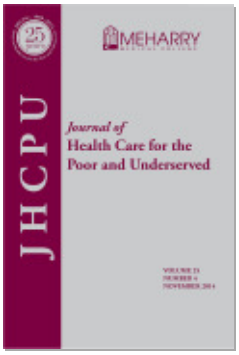

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Oral Health is the Measure of a Just Society

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Abstract: Former Surgeon General David Satcher's report, *Oral Health in America*, documents the higher burden of oral diseases and conditions borne by those with relatively low social standing at each stage of life. When an entire community suffers from a health concern, that concern becomes a social justice issue. Racial and ethnic minorities, prisoners, and seniors suffer disproportionately from oral diseases and conditions due to societal prejudices that place them at risk over and above any risk associated with their economic means. Community-based delivery models that involve the community in planning and implementation, build upon the existing health safety net to link oral health services with primary care, and change public or institutional policy to support the financing and delivery of oral health care have proven successful. Here we champion the need for a national health plan that includes oral health care to promote social justice and oral health for all.

Key words: Oral health, dental health, health policy, social justice, medically underserved areas, racial and ethnic minorities, prisoners, seniors, community health services, health care reform.

Introduction

In the United States today, there are those who would have us believe that class lines are blurred: we eat increasingly similar food at all-too-familiar national chains, dress up and dress down in fashions that cross traditional class lines, and listen to music from rap stars regardless of our income or wealth (or at least our children and grandchildren do). Yet for those of us in the health care field, when we want to know a person's social class, we look that person not in the eye, but in the mouth.

Our purpose in this Guest Editorial is to use former Surgeon General David Satcher's ground-breaking report, *Oral Health in America*[1] as the basis for reinvigorating the quest for a national health care plan that includes oral health care. When entire communities suffer from a health concern such as poor oral health, that concern becomes a social justice issue that demands attention from elected officials, funding institutions, and the larger public.

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Oral Health in America: A Report of the Surgeon General

On May 25, 2000, David Satcher released the first-ever Surgeon General's report on oral health.[1] Among its incontrovertible findings were that the burden of oral diseases and conditions is disproportionately borne by those with relatively low social standing at each stage of life. Poor nutrition, lack of preventive oral health care, violence leading to face trauma, and tobacco and alcohol use harm teeth and their supporting structures during various periods of the life course. In particular, such exposures may lead to dental caries (beginning in early childhood and continuing throughout life), periodontal diseases and tooth loss (especially in adults), and oral and pharyngeal cancers (predominantly disorders of the elderly).[2] Furthermore, research is currently underway to understand the relationship between periodontal infections in mothers and pre-term low birth weights of their babies,[3] which suggests that there may be intergenerational effects of oral diseases.

In addition, the Surgeon General's report went beyond health to document the pervasive effects of oral diseases and conditions on the well being of disadvantaged members of our society. That is, oral diseases and their treatments may undermine self-image and self-esteem, discourage family and other social interactions, and lead to chronic stress and depression—all at great emotional and financial costs. They also interfere with vital functions of daily living such as breathing, eating, swallowing, and speaking.[1] Targeted initiatives for vulnerable populations including racial and ethnic minorities, seniors, and prisoners are key priorities in eliminating oral health disparities in the U.S. Also deserving of increased public health attention and funding are proven population-based prevention measures, such as community water fluoridation, school-based sealant programs, and tobacco prevention and control programs.[4]

Inequalities in Oral Health Is a Global Concern

Of course, social inequalities in oral health and health care are not limited to the United States. A national survey in Australia found that significant social differentials in perceived oral health exist among dentate adults, and that inequalities span the socio-economic hierarchy.[5] A Brazilian ecological study reported a significant negative correlation between dental caries and the proportion of the population that received fluoridated water, principally in the municipalities with the worst income inequality indicators.[6] The authors concluded that these results underscore the importance of fluoridation for the reduction of caries rates as well as to attenuate the impact of socioeconomic inequalities on the prevalence of dental caries.[5]

Thompson and colleagues[7] examined New Zealand's structural changes to the welfare state in the early 1990s and determined that the oral health of Maori children deteriorated over a five year period in comparison with their European counterparts. They therefore cautioned policymakers to consider the health implications of major social and economic policy changes before they are implemented.[7]

It Takes a Community

From 1992 to 1994, an in-person, community-based survey was conducted among 695 adults aged 18–65 years in Central Harlem, the largely African American community located in northern Manhattan, New York City.[8] Of more than 50 health complaints that were part of the survey, problems with teeth or gums were the most frequently cited among respondents (30%), a greater proportion than those reporting suffering from hypertension, asthma, or diabetes.[9] In contrast, only 10% of the participants surveyed in a 1989 special supplement on oral health in the National Health Interview Survey (NHIS) reported fair or poor oral health.[10] [Note: The NHIS is the largest source of self-reported data for the civilian, non-institutionalized household population of the United States related to (1) health and illness status; (2) general health attitudes, behaviors, and knowledge; and (3) health care utilization.[11] Prior to a survey redesign in 1997, the NHIS questionnaire consisted of two parts: a set of basic health and demographic items contained within a core component and one or more sets of questions on current health topics contained within a supplement component, e.g., the 1989 oral health special supplement that contained questions on oral health care utilization.[11]]

Rural communities also suffer oral health disparities, due in part to fewer practicing dentists in these medically underserved areas.[12,13,14] When an entire community suffers from a health concern, that concern becomes a social justice issue. As Allukian and Horowitz[4] argue, "Just as it takes a village to raise a child, it will take a village to resolve the neglected epidemic of oral diseases, especially for vulnerable populations" (p. 370).

The Mouth Is a Reflection of Overall Health and Well Being

As it is put in the Surgeon General's report, the mouth is the gateway of the body.[1] It not only senses and responds to the external world, it also reflects what is happening deep inside the body. The mouth signals nutritional deficiencies and serves as an early warning system for diseases such as HIV/AIDS, other immune system problems, general infections, and stress.[1] Poor oral health is associated with diabetes, heart disease, and stroke.[4] The cultural values and symbolism attached to facial appearance and teeth are underscored in the anthropological and ethnographic literature.[1] Moreover, the stigma associated with facial disfigurements due to craniofacial diseases and conditions and their treatments limit educational, career, and marital opportunities and affect most other social relations.[1]

Conversely, good oral health allows us to eat, chew, talk, smile, kiss, sleep, read, think, study, and work without oral pain, discomfort, or embarrassment. In other words, "Oral health is having a smile that helps you feel good about yourself and gives others a healthy and positive image of you" (p. 358).[4]

How the Mouth Became Disconnected from the Rest of the Body

Beginning with the establishment of the first dental school in 1840, the medical and dental professions developed separately in the United States. Today, U.S. medical schools

teach very little, if anything, about oral health.[4] Moreover, since medicine has played a dominant role in the development of health policy and practice in the United States, oral health is usually excluded or not considered part of primary health care.[4] As Allukian[15] marveled, "It makes no sense that children, diabetic patients, or senior citizens with an abscess on their leg can receive care through their health insurance or a health program, but if the abscess is in their mouth, they may not be covered" (p. 843).

Only 4% of dental care is financed with public funds, compared with 32% of medical care.[1] But what does this coverage mean in terms of access to quality oral health care? Consider New York State, for instance. In New York, Medicaid includes comprehensive primary oral health care coverage, Medicare has no dental component, and private insurance may or may not cover oral health services.

In the Central Harlem survey previously cited,[9] the oral health assessment consisted of the question, "During the past 12 months, have you had problems with your teeth or gums?" Those who answered *yes* to this question were then asked, "Did you see a dentist for problems with your teeth or gums?" Among participants reporting oral health complaints (n = 209), two thirds (66%) reported having seen a dentist for the complaint. People who had private insurance were more likely to have sought treatment from a dentist (87%) than those who had public insurance (62%) or were uninsured (48%). In the authors' view, "It is disturbing that a third of those who suffer from dental problems did not seek care. Among those who did, having insurance coverage was significantly associated with receipt of care. Those with private coverage were less likely to report having dental problems and more likely to report seeking treatment when problems existed than were those with public coverage or no coverage" (p. 51).[9]

Zabos et al.[9] then speculated that, "Receipt of oral health services for people in need may be improved if those services can be integrated into comprehensive primary care programs. This problem is particularly vexing because the New York State Medicaid program has one of the most comprehensive dental benefit packages among the 50 states, providing coverage for people of all ages. This suggests that there are other barriers to care that must be examined (e.g., geographic accessibility and availability of dentists who both accept Medicaid and provide culturally competent care)" (p. 51).

Addressing Oral Health Disparities and Increasing Workforce Diversity

According to the Sullivan Commission[16] report entitled, *Missing Persons: Minorities in the Health Professions*, African Americans, Hispanic Americans, and American Indians together make up more than 25% of the U.S. population, but only 9% of the nations' nurses, 6% of its physicians, and 5% of its dentists. Evidence of the direct link between poorer health outcomes for racial and ethnic minorities and the shortage of racial and ethnic minorities in the health care professions was compiled by the Institute of Medicine[17] in its landmark report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care.*

Mitchell and Lassiter[18] recently reviewed the literature concerning health care disparities and workforce diversity issues, particularly within the oral health field. They then synthesized the recommendations intended to address identified needs, with a

focus on the role of academic dental institutions (ADIs). They believe that, first and foremost, ADIs must develop a culture conducive to change and must reflect diversity considerations. This will require consistent support from the leadership within ADIs, including a formal declaration of each institution's commitment to diversity, cultural competency, and the elimination of oral health care disparities.[18]

In the coming decades, the racial and ethnic composition of the United States is expected to shift to include more people of color, particularly Hispanics.[19] The need for ADIs to enroll and support more applicants from underserved minority groups is crucial to the elimination of disparities in oral health care. Two other underserved groups with respect to oral health care are prisoners and seniors, both of whom face considerable societal hurdles in accessing and receiving respectful oral health care.

Ensuring the Oral Health of Prisoners

Dental care is listed as an essential health service by the National Commission on Correctional Health Care.[20] Nonetheless, the oral health status of prisoners is overridingly poor. As with other individuals of low social standing in the U.S. population from which prisoners disproportionately come, adults who are incarcerated in either federal or state prison systems are more likely to (1) have extensive caries and periodontal disease; (2) be missing teeth at every age; and (3) endure a higher percentage of unmet dental needs than employed U.S. adults.[21,22] Even taking these differences into account, racial differences remain. At the United States Penitentiary in Leavenworth, Kansas, White inmates had significantly fewer decayed teeth than did Black inmates, and the number of decayed teeth increased significantly with inmate age.[21]

The empirical evidence to date indicates that prisoners deem oral health a priority, and that access to oral health services improves the conditions of their mouths. For instance, among prisoners in Maine, smoking and dental health were the most commonly reported health problems after mental health and substance abuse.[23] A recent study of continuously incarcerated individuals in the North Carolina prison system found that the prison dental care system was able to improve markedly the oral health of a sample of inmates,[24] confirming the idea that dental health improves when access to services is provided.

The Crisis in Oral Health Care for Seniors

McNally[25] and Lamster[26] have recently called attention to the disproportionate effect on the elderly of oral and dental diseases. After years of exposure of the teeth and related structures to microbial assault, oral cavities show evidence of wear and tear as a result of normal use (chewing and talking) and destructive oral habits such as bruxism (habitual grinding of the teeth). The elderly also suffer from chronic disorders that can directly or indirectly affect oral health, including autoimmune disorders, and often require multiple medications, which commonly reduce salivary flow.[26] Several societal changes have left many of our seniors unable to afford any dental services whatsoever, let alone the most appropriate treatments.[2,26] Among the changes responsible for the lack of oral health care for older adults are (1) rapid population shifts and the resulting

larger numbers of older adults in the United States; (2) lack of routine dental service coverage under Medicare; (3) willful neglect; and (4) ageism.

Disparities in oral health and health care accumulate and intensify throughout the life course, yet it is never too early or too late to intervene to improve the oral health status of disadvantaged groups.[2] McNally[25] believes that determining the extent to which elders endure an unreasonable burden of illness and disability, or are underserved with respect to illness or disability, is an important first step toward understanding the meaning of justice in the context of caring for elders. Lamster[26] perceives the need for a coordinated effort to address the oral health care needs of the elderly.

With adequate attention and focus, a variety of national initiatives with implementation on the state and local levels will serve to improve access to oral care for older Americans who are currently most in need, including the poor and disabled. According to McNally,[25] "A clearer understanding of justice will allow the oral health community to begin to recognize appropriate levels of responsibility to address the issue of just and respectful caring for these vulnerable populations" (p. 56).

Community Voices Delivery Models to Improve Access to Oral Health Care

One size does not fit all when it comes to improving access to oral health care for uninsured and underserved populations. Three Community Voices programs—Northern Manhattan's Community DentCare, New Mexico's Health Commons, and North Carolina's FirstHealth—were recently presented as innovative partnership models that seek to address the unmet oral health needs of diverse populations.[27] Even given this diversity, however, three common core elements were identified that made these models successful: (1) involving the community in planning and implementation; (2) building upon the existing health safety net to link dental services with primary care; and (3) changing public or institutional policy to support the financing and delivery of dental care.

Such delivery models, which offer basic oral health services in connection with community-based primary care services, may help ensure holistic, comprehensive health care for our nation's most vulnerable and underserved populations. Unfortunately, state governments, desperate to get their budget deficits under control, are cutting adult dental benefits from their Medicaid programs.[27] Rather than having made progress since the Surgeon General's report on the neglected epidemic of oral diseases, there are indications that we are losing ground on hard won gains and that oral health disparities are widening between the haves and the have nots.

Oral Health Is the Measure of a Just Society

The Surgeon General's report on oral health describes the mouth as a mirror of health or disease, as a sentinel or early warning system, as an accessible model for the study of other tissues and organs, and as a potential source of pathology affecting other systems and organs.[1] While improved nutrition and living standards after World War II have enabled certain population groups to enjoy far better oral health than their forebears

did a century ago, not all Americans have achieved the same level of oral health and well-being. According to Allukian and Horowitz,[4] people are much more likely to have poor oral health if they are low-income, uninsured, developmentally disabled, homebound, homeless, medically compromised, and/or members of minority groups or other high-risk populations who do not have access to oral health services.

A Framework for Action for developing a National Oral Health Plan to improve quality of life and eliminate health disparities was set forth in the Surgeon General's report on oral health.[1] Without funding or legislation, however, no national impact was or is expected. Allukian and Horowitz[4] offer the following five recommendations:

(1) A national health program should be made available for all U.S. residents, with a meaningful comprehensive oral health component that stresses prevention and primary care.
(2) A much higher priority should be given to oral health by federal, state, and local government agencies and by nongovernmental organizations and institutions.
(3) All public schools should provide (a) comprehensive health education, with an oral health component, for all children in grades K through 12; and (b) dental care services in all school health clinics and centers for high-risk children.
(4) Effective prevention programs, initiatives, and services, such as water fluoridation, must be the foundation for all dental programs at the local, state, and national levels.
(5) Responsible parties must promote, in the oral health workforce, greater diversity, flexibility, sensitivity, and expertise in population-based oral health prevention programs and services for vulnerable populations. (p. 374)

Social justice, meaning equity and fairness, has been envisioned by Krieger and Birn as the foundation of public health.[28] Levy and Sidel have recently reviewed definitions and concepts of social justice,[29] endorsing the view of Braveman and Gruskin that social justice is an ethical concept grounded in principles of distributive justice.[30] In order to achieve true social justice in U.S. society, we must summon the popular and political will to address the root causes of current inequities, notably poverty and the increasing gap between the rich and the poor; maldistribution of resources within society; racism and other forms of discrimination; weak laws or enforcement of laws protecting human rights and other rights; and disenfranchisement of individuals and groups from the political process.[29] Further, we must reconnect the mouth to the body of public health and convince funding and legislative institutions to prioritize oral health and health care needs.[1,31] If and when we are able to ensure respectful and accessible health care that includes comprehensive oral health care to everyone regardless of race/ethnicity, socioeconomic position, age, gender, sexuality, or immigration status, then the United States will have achieved the measure of a just society: oral health for all.

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Notes

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