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Straight Teeth and Crooked Policies: Why Dental Care Matters for Anti-Poverty Efforts

Oral health is largely treated as a luxury in the United States. This sentiment is echoed by our nation's current health care legislature, and evident by growing dental disparities despite advanced technology and increased Medicaid eligibility. I argue that dental care is, 1) an important determinant of overall health, 2) imperative for psychological well-being and, 3) a predictor of economic success. Furthermore, due to the widespread impact of dental care, society has a moral obligation to make dental care accessible to low-income individuals. As I conclude, I specify that due to the relative effectiveness of child health initiatives in recent years, attention and effort ought to focus specifically on improvements in adult dental health access.

Straight Teeth and Crooked Policies:
Why Dental Care Matters for Anti-Poverty Efforts

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> The people who received promotions tended to have something that Caroline did not. They had teeth. Caroline's teeth had succumbed to poverty, to the years when she could not afford a dentist. Most of them decayed and abscessed, and when she lived on welfare in Florida, she had them all pulled during a grueling two-hour session that left her looking bruised and beaten. Under the state's Medicaid rules as she understood them, a set of dentures would be covered only if she had been without any teeth at all; while some of them could have been saved, she couldn't afford to do less than everything. In the end, the dentures paid for by Medicaid didn't fit and made her gag, so she couldn't wear them. An adjustment would have cost about $250, money she didn't have[1].

Many Americans dread their biannual visit to the dentist, but this infrequent inconvenience is saving their lives, their self-esteem, and their jobs. In recent years, debates surrounding the Affordable Care Act have shifted eyes towards health care and disparities in insurance coverage, but little to no attention has been paid to dental care specifically; these talks are swept under the rug. In reality, for those living at or below the poverty line, it is often impossible to obtain an adequate level of oral health. As a result, cavities and periodontal disease are among the most common chronic diseases in the United States[2]. These diseases are almost entirely preventable with basic dental care. When left untreated, however, they can cause pain, dysfunction, absence of school or work, difficulty concentrating, loss of self-esteem, and poor appearance[3].

It's not all about looks, but some of it is. Americans place value on appearance, and having an attractive smile is no exception. The rise of the middle class in America after World War II was accompanied by increased interest in dental work, which quickly became a societal norm. In the twentieth century, parents became concerned with the 'social value of children', focusing energy and resources on improving the health of their children, including dental care. Today, the straight, white teeth trend has risen exponentially as the American fixation on body image is perpetuated and popularized by the media.

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[1] David Shipler, "A Poor Cousin of the Middle Class," www.nytimes.com, (January 18, 2004).
[2] Regina Benjamin, "Oral Health: The Silent Epidemic", *Public Health Report*, (April, 2010).
[3] Benjamin, "Oral Health: The Silent Epidemic", (2010).

The saying goes, "A smile is an inexpensive way to change your looks". In America, however, this is only true when that smile is toothy, bright, and perfectly white. The price of this smile is unobtainable for more than 47 million Americans, leading to stigma and discrimination.

> Caroline Payne was not the victim of racial discrimination; she was white. She was not lazy; she was caustic about colleagues who were. She was punctual, rarely out sick, willing to do night shifts and assiduous in her work habits. The Wal-Mart manager, Mark Brown, called her 'a nice lady' with lots of enthusiasm. 'She's self-driven,' he observed. 'She's always willing to learn and better herself. She's got potential. She can definitely move up.' But she did not move up. *She had never moved up*[4].

Caroline Payne's story is not just her own, but that of so many other hardworking Americans who are in need of quality, accessible dental care. Despite consensus in the medical and scientific community that oral health is intertwined with overall bodily health, society as a whole continues to treat it as a mere luxury. Even those who do not treat it as a luxury still greatly subordinate it to almost all other medical procedures and concerns. These sentiments are implied by our current health care legislation. Under Medicaid, dental insurance is only available to low-income adults as, to use the technical term, a "purchasable add-on" to health coverage. In what follows, I argue that dental care is, 1) an important determinant of overall health, 2) imperative for psychological well-being and, 3) a predictor of economic success. Furthermore, due to the widespread impact of dental care, society has a moral obligation to make dental care accessible to low-income individuals. As I conclude, I specify that due to the relative effectiveness of child health initiatives in recent years, attention and effort ought to focus specifically on improvements in adult dental health access.

The *Capabilities Approach*

A paper on dental care disparities could be expected to begin with a monetary definition of poverty, perhaps from the U.S. Census Bureau. However, in keeping with a growing consensus in the field of poverty studies that poverty reaches beyond income deficits, I employ the *Capabilities Approach*.

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[4] Shipler, "A Poor Cousin of the Middle Class," (2004).

Certainly, dental care has negative effects on economic outcomes, but this approach allows us to reach deeper in describing the negative effects of poor oral health. Drawing on the work of Amartya Sen, Martha Nussbaum and the *Capabilities Approach* focus on the question, "What is each person to do and be?" where the answers to that question are termed 'capabilities'. In her words, capabilities, "…are not just abilities residing inside a person but also the freedoms or opportunities created by a combination of personal abilities and the political, social and economic environment."[5] In this approach, what we would normally label as outcomes are called, 'functionings'—"A functioning is the active realization of one or more capabilities."[6] But don't get lost in all of the jargon. Essentially, the *Capabilities Approach* asks, "…among the many things that human beings might develop and have the capacity to do, which ones are the really valuable ones, which are the ones that a minimally just society will endeavor to nurture and support?"[7] In order to answer this question, she asks another: Which capabilities would be essential in order for all to live a dignified life? Martha Nussbaum has made our job a little easier in determining what exactly it takes to consider society minimally just. The central question that has to be answered is: *is our system meeting the requirement of a minimally just society, making it possible for all to live a dignified life?* Drawing on Nussbaum's specific list of the ten Central Capabilities, the following paper argues that our society is not just because it does not guarantee four of those ten Central Capabilities for marginalized individuals: *Life, Bodily Health, Affiliation,* and *Control over one's environment*.

Why is dental care important?

If Nussbaum is right in that a just society promotes and protects Central Capabilities, then an examination of the relationship between those capabilities and dental care is necessary. To begin, one might argue that a lack of access to dental care is a threat to the two first Central Capabilities on her list, namely *Life* and *Bodily Health*.

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[5] Martha Nussbaum, *Creating Capabilties: The Human Development Approach* (Cambridge, Massachusetts: Harvard University Press, 2011), 20.
[6] Nussbaum, *Creating Capabilties,* 24.
[7] Nussbaum, *Creating Capabilties,* 28.

> *Life*. Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to not be worth living
>
> *Bodily Health*. Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter[8].

Therefore, our current system is unjust insofar as it denies *Life* and *Bodily Health* capabilities for low-income Americans, especially low-income adults. Dental health and overall bodily health are connected, where deficits in dental health equate deficits in life and overall bodily health.

Health care professionals have understood the importance of dental care for overall health for more than a decade: in 2000, the Surgeon General deemed dental disease a "silent epidemic", and referred to the mouth as, "a mirror of health and disease occurring in the rest of the body," where oral examinations can detect a host of health issues, including microbial infections, nutritional deficiencies, immune disorders, injuries, and some cancers[9]. More than 500 strains of bacterial exist in dental biofilm, or plaque. These bacteria can lead to localized infections that spread, wreaking havoc on other parts of the body, namely the heart and the brain[10].

Those with gingivitis and periodontitis have a 23-46% higher chance of death in general and are two to three times more likely to die sooner than those with good oral health. In his book, *Real Age: Are you as young as you can be?*, Dr. Michael F. Roizen reports that periodontal disease can make our Real Age increase by more than 3.4 years, while the absence of dental disease makes us 6.4 years younger than the median person[11]. These are not just statistics. In September, 2011 a 24 year-old father who could not afford his medication died from a preventable tooth infection. Frontline reported:

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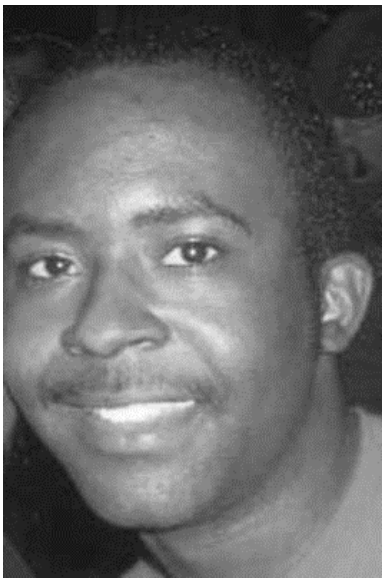
[8] Nussbaum, *Creating Capabilties*, 33.

[9] Committee on an Oral Health Initiative, *Advancing Oral Health in America*, (Washington, D.C.: The National Academy Press).

[10] Caswell Evans, Dushanka Kleinman, William Maas, Harole Slavkin, Joe Wilentz, Rosanne Price, and Maria Fogelman, "Chapter 5: Linkages with General Health," *Surgeon General's Report on Oral Health Care in America*," www.nidcr.nih.gov, (July, 2002).

[11] TNT Dental, "Daily Flossing Can Add 6.4 Years to Your Life," www.21stcenturydental.com, (Irving, Texas).

"In August 2011, Kyle Willis had a toothache. Like many Americans, what he didn't have was a job — or health and dental insurance. The 24-year-old single father living in the Cincinnati area first went to a dentist, where he was told his wisdom tooth needed to be pulled. But without a way to pay for it, he put off the procedure.



A few weeks later, Willis got a headache, and his face became swollen. He went to the emergency room, where he was prescribed painkillers and antibiotics. The former cost $3; the latter cost $27, reported The Cincinnati Enquirer. Not able to afford both, Willis bought the painkillers but not the antibiotics. Soon after, he became delirious. The infection had spread to his brain. In early September, he was rushed to a local hospital, where he later died[12]."

In 2007, 12 year-old Deamonte Driver died from a bacterial infection in his brain originating in an abscessed tooth. In his last two weeks of life, his hospital bills soared, reaching $250,000. If Deamonte had access to a dentist (only 900 of Maryland's 5,500 dentists accepted Medicaid at the time), a simple, $80 procedure would have saved his life.

It is not controversial to argue that these stories should not be originating in The United States, where dental technologies and advancements are among the best in the world. By their constitution, the World Health Organization (WHO) holds that, "…the highest attainable standard of health is a fundamental right to every human being, including access to timely, acceptable, and affordable health care of appropriate quality"[13]. American ideals largely coincide with this statement, where people in general believe that at least some level of health care is a basic right for all. Dental care is inseparable from the overall bodily health of peoples, so it follows that society should begin to recognize dental care as a basic right as well. Unfortunately for those like Kyle and Deamonte, it is clear that there are some

[12] Gretchen Gavett, "Tragic Results When Dental Care is Out of Reach," *Frontline*, (June 26, 2012).
[13] World Health Organization, "Health and Human Rights Fact Sheet," (December, 2015).

who believe that the costs associated with quality, accessible dental care outweigh our moral obligation to provide it, evident by the failings of our current Medicaid system.

The rights and wrongs of our current system

In some ways, Medicaid and recent government policies are doing their job. Under the Affordable Care Act, federal law now requires state Medicaid programs as well as private insurers provide comprehensive dental care for children, including relief of pain and infections, tooth restoration, and oral health maintenance. Under the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit, children are required to receive dental exams periodically along with their routine physical exams. Other benefits programs exist for low-income children, such as Children's Health Insurance Program (CHIP). This program requires coverage for children in participating states to include services, "necessary to prevent disease and promote oral health, restore oral structures to heath and function, and treat emergency conditions." The Children's Oral Health Initiative, a Medicaid and CHIP advocacy group, ensured that 24 states achieved a minimum of ten percentage point increase in the proportion of children enrolled in these programs, as well as received preventative dental care from 2007 to 2011[14]. However, it remains that only 45 percent of Medicaid eligible children are receiving any dental or oral health service, only 39 percent of eligible children are participating in preventative dental care, and 60 percent of children enrolled in Medicaid do not see a dentist annually[15].

For low-income adults, the results are significantly bleaker. There are absolutely no minimum requirements for adult dental coverage; 15 states have almost comprehensive coverage, 16 states and our nation's capital have limited coverage, 14 states offer solely emergency care, and 5 states offer no adult dental coverage at all. In other words, 0 states provide full dental coverage for adults, and 24 states provide either no coverage or emergency-only dental care for low-income adults. The Affordable Care

[14] Medicaid.gov, "Dental Care," www.medicaid.gov, (Baltimore, Maryland).
[15] The American Dental Association, "Medicaid Issues Flyer," www.ADA.org.

Act has provided an incentive for states who agreed to expand Medicaid to consider dental coverage, and we have seen 1.4M people purchase dental coverage since January 2014. However, according to Dr. Jonathan Shenkin, the Vice President of the American Dental Association, "We have seen no real improvement in the quality of adult dental coverage for decades." Even worse, when individuals are covered by Medicaid, the program offers low reimbursement rates for dentists and creates excessive red tape, dissuading dentists from accepting these patients[16]. Accompanied by implicit and explicit negative stereotypes held towards the poor, as well as a lack of education about eligibility requirements and enrollment, the barriers created by Medicaid has led to a drastic imbalance between the number of Medicaid-eligible Americans and those who actually enjoy their benefits.

Initially proposed in 1971 by Dr. Julian Tudor Hart, the 'inverse care law' is the idea that, "The availability of good medical care tends to vary inversely with the need for the population served[17]". This could not be truer today, where socioeconomic status is related to lower standards of health care quality. Low-SES individuals receive fewer mammograms, childhood vaccinations, eye examinations, and lower quality ambulatory and hospital care than their wealthier counterparts[18]. The Affordable Care Act has been lauded by some as a first step towards health care equality in the United States by increasing the availability of health insurance coverage and access to adequate health care for disadvantaged populations. However, research has shown that policies promoting overall improvements in access and quality can actually increase disparities in health care due to a disconnect between policy-makers and low-income individuals, where disadvantaged populations are not well-equipped to take advantage of new programs[19]. Patients who are eligible for Medicaid a) need to understand that they qualify, b) need to apply, and c) need to find a dentist who actually accepts it. Unfortunately, each of these steps provides a hurdle along the way to oral health.

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[16] Christine Vestal, "Adult Dental Coverage Expanding Slowly in Medicaid," www.pewtrusts.org, (June 10, 2015).
[17] Graham Watt, "The Inverse Care Law Today," *The Lancet*, vol. 360, (July 20, 2002).
[18] Fiscella, Franks, Gold, and Clancy, "Inequality in quality: addressing socioeconomic, racial, and ethinic disparities in health care," *JAMA*, (May 17, 2000).
[19] Lyn Paget, Claudia Salzberg, and Sarah Scholle, "Building a Strategy to Leverage Health Information Technology to Support Patient and Family Engagement," (February, 2014).

Although online resources are available which outline Medicaid eligibility requirements, it is not uncommon for individuals to be unaware of the benefits that they qualify for. Further, the application process can be confusing and time-consuming. For the computer-savvy, an online application takes approximately 45 minutes to complete, assuming that they do not have any questions about the application itself. To have any questions answered, individuals need to visit a case-worker, which ultimately minimizes delays, however this is not a reasonable option for everyone. This would require that people be located conveniently or have transportation to reach a local Social Security Office, as well as be prepared to wait in line for up to six hours. Some questions may be answered by phone, but these phone lines are often busy, include hold times, or even require that the applicant call back at another time[20]. For low-income Americans who disproportionately work longer hours on irregular, shifting schedules, and who have little agency in scheduling their work hours, this process can prove to be not only inconvenient, but impossible. Finally, finding local dentists who actually accepts Medicaid is a challenge in its own right, where health care practitioners across the board engage in avoidance towards the poor due to a variety of factors.

> "Last year, I had a toothache that was so painful, I had trouble eating and sleeping. My girlfriend is also covered by Medicaid so I called her dentist, but they wouldn't see me. So I called 12 more dentists in the area, but they all said the same thing: they weren't taking new Medicaid patients. A few said to call back in three months, which seems like a long time to live with a bad toothache"[21] ***Shawn Jones, Brattleboro, Vermont***

On Nussbaum's list of Central Capabilities, she defines *Affiliation:*

> *Affiliation. (B)* Having the social bases of self-respect and nonhumiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of nondiscrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin[22].

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[20] Diane Taylor, "Red Tape for Medicare and Medicaid Often Hurdles for Applicants," www.reviewjournal.com, (June 12, 2015).

[21] Bernard Sanders, "Dental Crisis Report," *U.S. Senate Committee on Health, Education, Labor, and Pensions,* (February 29, 2012).

[22] Nussbaum, *Creating Capabilties,* 34.

Like *Life* and *Bodily Health*, our current system is unjust insofar as it denies *Affiliation* capabilities for low-income Americans. As the result of stereotyping and issues associated with Medicaid, in health care more generally and in dental care more specifically, the poor are not treated as equal citizens.

In the American scientific climate, there is experimental and semantic distancing from the poor, where the bulk of psychological research and literature fails to include issues of class in their investigations[23]. This phenomenon follows the more general societal pattern, where there is an attitude of avoidance towards the poor, especially in health care. In health care generally, the poor experience what is known as institutional distancing. Lott (2002) describes this as the deliberate or subtle erecting of barriers to full societal participation, usually leading to the disenfranchisement and discrimination of low-status groups. The World Health Organization (WHO) ranked the United States 37th in the world in overall quality of health care due to the unfair treatment towards the poor and the staggering number of persons in the United States who are uninsured[24]. In 2012, the US Census Bureau reported that 48 million people in the US were without health insurance, of which 91 percent were employed. The Affordable Care Act dropped the percentage of uninsured individuals making less than $36,000 a year from 30.7 percent in 2013 to 22 percent, however more than 20 percent of people still lack coverage. This data shows a trend in society where the poor are systematically receiving less when it comes to health care. The impact of this pattern is noteworthy, where the poor experience a greater number of health-related issues than their wealthier counterparts.

A study of cardiovascular disease found that, "heart attacks were significantly more likely for people in poor neighborhoods than for those in affluent neighborhoods, a conclusion that was unaffected when cholesterol levels, exercise, and other risk factors were taken into account"[25]. In other words, there is something unique about being poor that leads to greater inequities in health outcomes—a poor person with the same cholesterol levels, exercise and other risk factors as a wealthier person is more likely to

[23] Bernice Lott, "Cognitive and Behavioral Distancing from the Poor," *American Psychologist*, (2002), 100-110.
[24] World Health Organization, "WHO's Ranking of World's Health Systems," thepatientfactor.com, (2016).
[25] Heart Risks, (2001).

have a heart attack. The literature points to health access and quality as the missing link; In a study of 20,000 health practitioners who were incentivized to provide care to low income people, only 1,900 out of the 20,000 decided to participate, distancing themselves and their practices from the poor. "Patient dumping", or the denial or limitation of services for economic reasons, is a well-documented occurrence that forces low income patients to be transferred to different facilities frequently, contributing to a lack of trust in health care services and doctors in general[26]. The actions of these doctors likely arises from implicit and explicit stereotypes held towards the poor, including the belief that low income people are lazy, cannot understand directions about their health care, and prefer to stay on welfare[27]

These avoidance practices are true of health care across the board, including dental services. Recent reports indicate that two-thirds of dentists do not accept Medicaid patients. Dentists cite various reasons for their refusal to treat low-income patients, including that Medicaid patients are unreliable, Medicaid could shut them down, there is inadequate reimbursement, and why bother?:

> *"I accepted Medicaid for 18 years, but no longer serve this population. They are the most unreliable and ungrateful group of patients, not to mention the low reimbursement of fees."* ***Kansas dentist***
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> *"With all the dentists being prosecuted and some thrown in jail lately for what appear to be honest coding miscoding mistakes, I'd quit dentistry before I'd take Medicaid patients. It's just too risky."* ***Texas dentist***
>
> *"Medicaid is a loss leader. If they ever reimburse for what the procedures/time/materials are worth, I might change my mind."* ***Arkansas dentist***
>
> *"Too much red tape, broken appointments and unappreciative patients. Not worth my time or my staff's time."* ***Alaska dentist***[28]

With regard to the first claim made by the anonymous dentist from Kansas, it is entirely clear to that society is not succeeding in educating our country's dentists on the circumstances affecting low-income populations. Although he or she may have valid reasons for extending their stereotype of being

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[26] Price, Desmond, Snyder, and Kimmel, "Perceptions of family practice residents regarding health care and poor patients," *The Journal of Family Practice*, (1988).

[27] Steele and Aronson, "Stereotype threat and the intellectual test performance of African Americans," *Journal of Personality and Social Psychology*, (1995).

[28] Jim DuMoin, "Dentists not Impressed with Medicaid," *The Wealthy Dentist*, (2008).

unreliable and ungrateful to the entire population of Medicaid recipients, it is important to note that he or she is likely committing what psychologists refer to as 'the fundamental attribution error'. Well-documented in research, this phenomenon refers to the tendency for people, especially in individualist cultures such as the United States, to attribute the failings of others to an individual's disposition rather than their situation. For example, if you are driving in heavy traffic and are cut-off by another motorist, are you more likely to deem that person an a**hole, or give them the benefit of the doubt, (i.e. assume that they must be in a rush for some very important reason, and that they are probably a good driver after all)? If you are like myself and so many other reasonable people, you would identify with the former.

> One time I missed an appointment because my car broke down, and when I called to reschedule, they told me that we had been blacklisted and that no one from my family could be seen by that office again.
> ***Heather Getty, East Fairfield, Vermont[29].***

In other words, when dentists complain of Medicaid patients not showing up for appointments, they are likely not considering the multitude of other factors influencing their ability to get to the office on time, including a lack of reliable transportation, inability to take time off work or alter their schedules, unforeseen health issues, or needing to stay home with children to avoid the costs of child care. The fundamental attribution error relates to the concept of moral exclusion presented by Lott (2002) that exists among dominant groups in society, where individuals in these groups assume that certain emotions such as guilt and sensitivity are not shared with outgroups. In this way, low income individuals are "othered" and dehumanized. According Lott (2002), another type of distancing—cognitive distancing—refers mainly to stereotyping. Lott explains that dominant groups hold negative stereotypes towards the poor, including negative expectations for their behavior and attributions of their poverty to personal failings rather than system injustice.

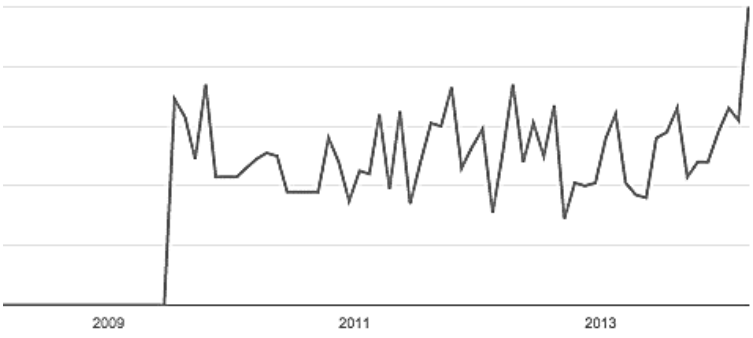
Of course, that is not to say that *all* low-income people are entirely reliable or don't miss appointments due to circumstances within their own control, however it is important to note that

[29] Sanders, "Dental Crisis Report," (2012).

individuals are more likely to make the fundamental attribution error towards vulnerable or groups of lower social status, such as ethnic minorities and the poor.

Not all dentists are immoral, evil beings. In fact, I aspire to become one myself. However, many dentists are left between a rock and a hard place. There are real reasons for dentists not to accept Medicaid patients. The Affordable Care Act (ACA) has expanded Medicaid eligibility to families who earn up to 133 percent of the federal poverty level. However, this is turning health care professionals away from accepting Medicaid patients out of fear of a great influx of new patients receiving care with low reimbursement rates. This is echoed by the sharp increase in the number of monthly Google searches for "doctors accepting Medicaid" since the ACA was instituted in 2009[30].

On average, Medicaid pays 61% of what Medicare pays, and these payments are often delayed[31]. A dentist in New Jersey stated that he only got reimbursed $23.50 for a basic office visit, which is less than half of what he would receive from private insurance providers. Further, he noted that he will not accept new Medicaid patients in fear that reimbursement rates will drop even lower, leaving him with an ethical obligation to treat patients for little pay[32]. According to the Center for Studying Health System Change, doctors frequently complain of administrative hassles associated with treating Medicaid patients. For many, accepting Medicaid is a waste of valuable time and resources. As a consequence, even when low-income individuals are able to jump the hurdles associated with Medicaid enrollment, they are stymied from accessing the care that they require. The



[30] Google Trends, www.google.com, (2016).
[31] Kamyar Nasseh, Marko Vujicic, and Cassandra Yarbrough, "A Ten-Year, State-by-State, Analysis of Medicaid Fee-for-Service Reimbursement Rates for Dental Care Services," *American Dental Association Health Policy Institute*, (October, 2014).
[32] Phil Galewitz, "Study: Nearly a Third of Doctors Won't See New Medicaid Patients," khn.org, (August 6, 2012).

impact of inadequate dentition reaches farther than affecting overall bodily health: it has negative consequences for the psychological well-being of individuals as well.

Social exclusion and the psychological consequences of being the 'other'

As noted in the introduction of this project, the phenomenon of straight, white teeth that has swept the United States since WWII is staggering. A recent survey by the American Dental Association (ADA) found that people in general rank their smile as their most important physical feature, evident by the $2.75 billion spent on cosmetic dentistry each year[33]. Societal norms develop a standard for behavior, leading to a situation in which some members do not meet these societal requirements, either out of choice or due to structural barriers beyond their control. In the case of obtaining perfect smiles, it is clear that low-income people are facing barriers produced by the Medicaid system, as described in the previous section. In what follows, I delve into the psychological consequences that are associated with being unable to achieve what Americans consider an attractive smile.

Failing to meet the societal standard for an attractive smile has larger consequences than meets the eye, so to speak. Khalid and Quinonez (2015) draw on the work of Pierre Bordieu to describe how the cultural phenomenon of straight, white teeth has served to maintain social class boundaries. Bordieu describes the body as a "materialization of class taste" where individuals from similar classes develop the same tastes, perceptions, and preferences in a socially patterned and predictable way. Further, these tastes are bound by social class in that they generally reflect the resources of individuals. In the US where dental care is privately financed, the poor are socially excluded from engaging in the cultural practice of achieving straight, white teeth: "…teeth have become a 'commodity' that demonstrates ways in which social class differences are embodied and projected as symbols of social advantage or disadvantage"[34].

[33] "Americans spend on cosmetic dentistry to keep smiles bright," www.dentalplans.com, (January 18, 2010).
[34] Khalid and Quinonez, "Straight, white teeth as a social prerogative," *Sociology of Health and Illness*, (2015), 791

This type of social exclusion is associated with negative behavioral, emotional, and physical problems, which can act to further differentiate "us" from "them"[35].

Feelings of social inclusion and group solidarity are correlated with lower levels of psychological distress, and greatly contribute to personal identity, or ideas about oneself, as well as social identity, or one's self-concept derived from and based on their group membership. People form meaning and place importance on their social groups and internalize them so they contribute to their self-worth. Social identity theory, presented by Tajfel and Turner (1979) postulates that, "in many social contexts people define their sense of self in terms of group membership". This means that people's groups provide them with a sense of stability, meaning, purpose, and direction in life.

> "The social environment comprising communities, families, neighborhoods, work teams, and various forms of social groups is not simply an external feature of the world that provides a context for individual behavior. Instead these groups impact the psychology of individuals through their capacity to be internalized as part of a person's social identity[36]"

When an individual is excluded from membership in ingroups, or more dominant groups in society, there are negative consequences on the psychology of the individual. This theory also employs the perceived permeability of group boundaries to explain how individuals cope with negative ideas towards their groups, "if individuals perceive group boundaries to be impermeable (one's low status is inescapable) members are predicted to engage in social creativity", or deny their inferiority. However, when group boundaries are impermeable and insecure, "they are likely to define themselves in terms of social identity and act in line with their social demographic status […] this can affect the way people respond to various stressors"[37]. In other words, social exclusion is a key aspect in the cyclical nature of poverty, where when low income people are excluded from higher-powered groups, they begin to

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[35] Robert Kurtzban, "Evolutionary Origins of Stigmatization: The Functions of Social Exclusion," *Psychological Bulletin*, (2001).

[36] Alexander Haslam, Jolanda Jetten, Tom Postmes, and Catherine Haslam, "Social Identity, Health, and Well-Being: An Emerging Agenda for Applied Psychology," *Applied Psychology*, (2009).

[37] Haslam et al., "Social Identity, Health, and Well-Being, (2009).

associate psychologically and act more in line with their low-status group thereby contributing to increased polarization in society.

Low-income children, who are relatively better-off than adults when it comes to receiving dental care, are still at a disadvantage when compared to their wealthier counterparts. This is not only due to the fact that they have poorer oral health, but also that they almost never receive orthodontic care or treatments, namely braces. Children who are of racial or ethnic minorities or living in poverty are less likely to visit the dentist, have more cavities, more missing teeth, and use preventative dental sealants less frequently than wealthier children[38]. An inexpensive solution to treat cavities is tooth extraction, but losing teeth and the prevalence of other dental issues at a young age leads to an increased need for expensive orthodontic treatment in the future[39]. Early childhood dental care and access would theoretically decrease the likelihood of requiring braces in the future. However, according to the ADA, malocclusion, or having crooked teeth or a "poor bite", affects approximately 80 percent of American children. In other words, children need braces, according to US standards, regardless of prior dental treatment. Malocclusion is the primary reason that children in the United States receive orthodontic treatment, or braces. Without treatment, malocclusion has been documented to drastically decrease quality of life, including physical, social, and psychologic functioning[40].

Liu et al. (2009) systematically reviewed 23 articles published between 1960 and 2007 on the impact of needed malocclusion/orthodontic treatment and quality of life (QoL), where the majority of the studies were conducted among child and adolescent populations. The researchers defined QoL as reflecting physical, social, and psychological functioning, and found that there was a negative association between orthodontic need and QoL. These conclusions were echoed by Johal, Cheung, and Marcenes (2007), who found that malocclusion in children 13-15 years of age had a significant negative impact on both the child

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[38] Tinanoff, Kanellis, and Vargas, "Current understanding of the epidemiology mechanisms, and prevention of dental caries in preschool children, *Pediatric Dentistry,* (2002).

[39] Clemencia Vargas and Cynthia Ronzio, "Disparities in Early Childhood Caries," *BMC Oral Health,* 2006.

[40] Liu, McGrath, and Hagg, "The impact of malocclusion/orthodontic treatment need on the quality of life. A systematic review," *Angle Orthodontics,* (2009).

and their family's quality of life when compared to control groups. The reduction in QoL in this study was attributed to a decrease in psychological functioning as a result of poor dental aesthetics and self-esteem in the children, as well as social embarrassment felt by their parents. Those suffering from psychological stress had lower morale, more life stress, and felt less satisfied with their lives than other groups when controlling for income[41].

Research suggests that low self-esteem is related to aggression, anti-social behavior, and delinquency. These findings were true of self-report, teacher ratings and parent ratings of adolescents and college students in the United States, and the results persisted when controlling for confounding variables such as parent and peer relationships and SES[42]. If poor children are experiencing a reduction in self-esteem due to poor dentition, it is reasonable to consider that this could contribute to the behavioral issues mentioned by these researchers. Bad behavior in schools is related to poor educational outcomes, which could lead to decreased economic opportunities in the future. In other words, psychological health is important for children, and self-esteem be increased through improved dentition. This claim holds true for low-income adults as well, who also suffer from negative psychological effects associated with poor oral care.

Throughout childhood and adolescence, we are told to "fake it until we make it", suggesting that putting on a happy face will somehow lead to actual happiness. Well, there is science behind this idea as well. In 2009, a study found that patients who were injected with frown-inhibiting botox reported feeling happier and less anxious in general than those who were not. Further research suggests that the inability to express emotions may actually reduce the extent to which that emotion is felt by the individual; participants who were asked to hide their emotions while viewing disgusting images reported feeling less disgusted than participants who were free to express their emotions[43]. This research suggests that there is a link between expression of emotion and emotion itself, where it follows that feeling embarrassed to

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[41] Johal, Cheung, and Marcenes, "The impact of two different malocclusion traits on quality of life," *Br Dental Journal*, (2007).

[42] Donnellan, Trzesniewski, Robins, Moffitt, and Caspi, "Low self-esteem is related to aggression, antisocial behavior, and delinquency," *Psychological Science*, (2004).

[43] Melinda Werner, "Making and emotional face—or suppressing one—influences your feelings," *Scientific American*, www.scientificamerican.com, (September 1, 2009).

smile, or in too much physical pain to smile, could be associated with the suppression of happiness overall. Of course, this claim is entirely speculative, but it cannot be ruled out, especially considering the well-documented relationship between positive emotion and psychological and overall well-being.

If an individual is socially excluded or 'othered' in society, they are more likely to form negative ideas towards their self, creating psychological distress. Psychological distress has been shown to impact the biological health and well-being of the individual, as well as impact the life-outcomes of that person. Further, poor dentition is a criterion for social exclusion in society more generally, and it negatively impacts the psychological well-being of low-income people of all ages. As demonstrated by the previous section low-income individuals are institutionally put at a distance, where health care professionals employ negative stereotypes and discriminate against them, often due to a combination of their personal implicit stereotypes as well as the failings of Medicaid. These discriminatory practices are not only prevalent in health care, but in hiring practices as well.

What everyone knows, but no one wants to admit

The final Central Capability relevant to the discussion of dental disparities is *Control over one's environment:*

> *Control over one's environment. (B) Material.* Being able to hold property (both land and moveable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others;[44]

Due to the positive correlation between attractiveness and employment, inadequate dentition excludes low-income individuals from an equal opportunity of employment. In addition, when low-income adults are employed, they lose a disproportionate number of hours at work for dental visits and procedures.

Let us revisit Caroline Payne:

[44] Nussbaum, *Creating Capabilties,* 34.

> Probably no employer would ever admit to passing her over because she was missing that radiant, tooth-filled smile that Americans have been taught to prize as highly as their right to vote. Caroline had learned to smile with her whole face, a sweet look that didn't show her gums, yet it came across as wistful, something less as the thousand-watt beam of friendly delight that the culture requires. Where showing teeth was an unwritten part of the job description, she did not excel. She was turned down for a teller's position with the Claremont Savings Bank, which then hired her for back-room filing and eventually fired her from that. Wal-Mart considered her for customer-service manager and then promoted someone else, someone with teeth[45].

It is no secret that attractiveness plays a role in overall success, where those perceived as physically attractive are consistently labeled as possessing positive, socially desirable characteristics[46]. These positive traits not only influence the number of social connections that you form, but translate into employment, where research suggests that facial attractiveness is especially important in being selected for employment[47]. Therefore, appearance is a predictor of success, and an important element of appearance is the smile[48]. Eli et al. (2001) examined the relationship between employment and smile appearance in the context of first impressions and found consistent results with the literature, where individuals with normal dentition were perceived to be more successful socially and professionally than those with decayed teeth. Beall (2007) also demonstrated these results by studying the snap judgments made by 528 Americans towards images of individuals before and after receiving cosmetic dental treatments. The individuals in the images after receiving cosmetic dental treatments were consistently rated as more attractive, successful in their careers, popular, intelligent, interesting, and kind.

Patty Kennedy, 53-year-old woman from California with five broken teeth, three cavities, and a gum abscess faces the same barriers to employment as Caroline Payne: "I know that when you have a job, you want to have a pleasant

[45] Shipler, "A Poor Cousin of the Middle Class," (2004).
[46] Eli, Bar-Tat, and Kostovetski, "At first glance: Social meanings of dental appearance," *Journal of Public Health Dentistry*, (2001).
[47] Cunningham, "The psychology of facial appearance," *Dental Update*, (1999).
[48] Eli et al., "At first glance,"(2001).

attitude and you've got to smile and be friendly," she told NBC News as she stood in line at 5:30 a.m. alongside 2,200 others like her, waiting to be treated at the California Dental Association (CDA) Cares Clinic. Lindsey Robinson, the president of the CDA sums it up nicely: "If they have a job that requires them to interact socially with the public, it's almost impossible for them to get that job…Customer service jobs, good entry-level jobs, they're not available to people who lack the basic ability to smile, to function, to chew properly"[49]. It is clear how poor dentition can lead to unemployment, and further how unemployment perpetuates poverty by stifling economic opportunity. For those who *do* have jobs and are able to maintain them, they are often unable to find time to engage in preventative dental practices, bringing us to an economic-related issue associated with the failings of Medicaid and a lack of access to dentists who accept Medicaid patients.

Like other health-related fields, preventative care in dentistry is extremely important. Engaging in preventative dental practices such as attending biannual check-ups can dramatically decrease the likelihood of needing costly, time-consuming dental procedures later down the road. Those who visit the dentist regularly have visits lasting 30 minutes -1 hour including travel time, while those who do not have regular visits have dental problems that result in reduced activity, lengthy treatments, and/or multiple appointments[50]. Frequent visits to the dentist, however, are only enjoyed by wealthier Americans, so these effects are disproportionately impacting low income Americans. SES-disadvantaged adults lost more total hours from work and school compared to those with time lost in general[51]. The CDC reports that 70 percent of adults reported visiting a dentist in the past 12 months. However, those with incomes at or above the poverty level are much more likely to report a visit to a dentist in the past 12 months as those with lower incomes.

In another example of the inverse care law, wealthier Americans in general have more authority in their jobs to make dental appointments within their schedule, they have better access to transportation,

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[49] Joel Aleccia, "Bad teeth, broken dreams: Lack of dental care keeps many out of jobs," *NBC News*, www.nbcnews.com, (June 12, 2013).
[50] Dushanka Kleinman, "Healthy people 2010 Oral Health Toolkit," *National Institutes of Health*, (2010).
[51] Kleinman, "Healthy people 2010 Oral Health Toolkit," (2010).

and are generally geographically close to quality dentists who accept their insurance plans. This undoubtedly impacts the frequency with which they attend dental appointments. On the other hand, poor individuals generally have less authority in their jobs to schedule appointments and are geographically isolated from quality dentists who accept Medicaid. These facts contribute to them scheduling fewer visits with dentists, consequently requiring lengthy procedures in the future due to a lack of preventative care. When lengthy, costly procedures are necessary, they can result in reduced activity levels or multiple appointments, impacting the number of hours missed at work, leading to missed pay and termination.

The CDC reports that employed adults lose more than 164 million hours of work each year due to oral health problems or dental visits, but that customer service industry employees lose 2 to 4 times more work hours than executives or professional workers. For customer service employees, which are typically individuals with fewer economic resources, missing even one or two shifts can lead to termination due to high employee turnover and the low skill level needed to hold the position. In other words, improving dental care quality and access would most likely decrease hours missed at work, allow low income people to keep their jobs, and therefore improve their economic outcomes.

It is my aim, by now, to have convinced the reasonable reader that there are several substantial reasons to recognize the importance of dental care in ensuring overall bodily health, psychological well-being, and economic opportunity, especially for low-income Americans. It is now that I present my ethical arguments in hopes that you, too, will believe that we *ought* to do something about it—in fact, society is morally required to act.

The values that move us

To begin, a cost-benefit analysis:

The ADA reports that between 2008 and 2010, more than 4 million patients turned to hospital emergency departments for help with dental conditions at a cost of $2.7 billion[52]. According to DentaQuest, a research and advocacy organization and administrator of dental insurance plans (including Medicaid), Americans spend as much to treat *preventable* dental disease as on the treatment of all cancers combined. And the fact is, many emergency rooms don't have the resources to treat most dental diseases—they often send patients away with antibiotics and tell them to see a dentist (which we know is generally unrealistic), and the patients soon return for another ER visit. Ultimately, the way in which the system is currently operating is costing tax-payers a whole hell of a lot, especially when these procedures are almost entirely preventable with routine check-ups. It follows then, that moderate investments in dental care would decrease hospital costs and costs to individuals. Of course, this cost-benefit perspective raises the question: would actually be cheaper to keep people going to ERs? I concede that in the long-run, it may be the case that the new system is more costly than our current one, however, even if this is so, there are other reasons why society is morally obligated to sustain these costs—they are rooted in the American value and ideal of justice.

John Rawls introduces a Theory of Justice whereby he argues that justice for all requires fair equality of opportunity. As Americans, this is an idea we are very familiar with: "Equality of opportunity". It is something that is fundamental to the American Dream, where *anyone* in America should be capable of achieving *anything*, given that they work hard enough. Under this assumption, it is apparent that the gap in dental care and access is working against the ideals of fair equality of opportunity, where not all Americans have the ability to gain the dental services they require, regardless of how hard they work. In modernity, a modified version of this ideal exists, where we can generally agree that not all are born on entirely equal playing fields. Nonetheless, Americans still hold the ideal of

[52] Veerasathpurush Allareddy, Sankeerth Rampa, Min Lee, Veerajalandhar Allareddy, and Romesh Nalliah, "Hospital-based emergency department visits involving dental conditions: Profile and predictors of poor outcomes and resource utilization," *Journal of American Dental Association*, (April, 2014).

fair equality of opportunity close to their hearts and would act to promote it, given the opportunity. If you are not convinced, imagine yourself in this situation:

> You are anonymous. You have no identity, no class, sexual orientation race, sex or gender identity. You are sitting around a table with other anonymous individuals, trying to decide the principles on which you should found your society.

Acting purely out of self-interest, wouldn't you try to maximize the outcomes of any given individual in that society, given that you could end up among the most disadvantaged? Again, out of self-interest, you would still probably agree to some level of inequality, where complete equality would no progress, no motivation, and likely economic collapse. In this new society, you would agree to give genuine, fair equality of opportunity to all, not based on race, class, gender, etc., but rather on talent and effort. There will be some who lack effort and talent, but you could be one of them. So, is there some sort of net? Behind this veil, Rawls argues, the decisions of you and your fellows would be those characterized by fairness and justice, one of which being fair equality of opportunity.

Daniels, Kennedy, and Kawachi (2002), take Rawl's argument one step further, extending it to the issue of health care. Central to their argument, they demonstrate that life-expectancy cannot be fully explained by the wealth of a nation. For example, the US GDPpc is $21,000 greater than that of Costa Rica, however the life expectancy of Costa Ricans exceeds that of Americans. Ultimately, they find that income inequality, a 'social determinant of health', is a much better predictor of life-expectancy than GDPpc. Other social determinants of health include investment in health insurance, public education, and human capital, to name a few. The WHO defines social determinants of health as, "the conditions in which people are born, grow, live, work, and age…" and are shaped by the distribution of power and resources in a given society[53]. Daniels et al. (2002) employs a Rawlsian framework, which I will modify here, to argue that society is required to provide adequate social determinants of health in order to achieve justice.

[53] World Health Organization, "What are social determinants of health?," (May, 2012).

1. Societies who do not promote social determinants of health, such as quality, accessible health care, have lesser life-expectancies, i.e. worse health outcomes. In other words, a basic level of health functioning requires quality, accessible health care.

2. If people do not have a basic level of health functioning, they do not have fair equality of opportunity.

3. Justice requires fair equality of opportunity, as it would be agreed upon by anonymous individuals under the veil of ignorance[54].

Therefore, without providing quality accessible health care, society is behaving unjustly—our society is unjust. Further, if you agree that health care is a basic right and is required for justice, you should also agree that dental care falls into that category as well due to its importance for overall bodily health, psychological well-being, and economic outcomes.

Using elements of the *Capabilities Approach* as rationale for changing our current dental care system is an even stronger argument than that of fair equality of opportunity. In accordance with Beckley (2002), I argue that unlike what we think of as equal opportunity today, where we too often consider outcomes, the opportunities implied by the *Capabilities Approach* allow us to consider individual differences in assessing true equality of opportunity. Instead of simply trying to equalize outcomes such as equality of wealth and job opportunities as a result of a level playing field, we aim for a goal where, "Equally capable persons are free to achieve equally valuable functionings"[55]. In other words, we aim to produce a society in which any given individual has the freedom to develop whichever capabilities they choose, which leads them to different functionings, or outcomes. This approach does not establish that the outcomes of all must be equal, but that everyone be free and able to choose to develop certain skills which may lead to them to achieve their personal goals.

Now I return to the question that was asked at the beginning of this discussion: *is our system meeting the requirement of a minimally just society, making it possible for all to live a dignified life?*

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[54] Norman Daniels, Bruce Kennedy, and Ichiro Kawachi, "Justice, health, and health policy," *Ethical Dimensions of Health Policy*, (Oxford University Press, 2002).

[55] Harlan Beckley, "Capability as Opportunity: How Amartya Sen Revises Equal Opportunity," *The Journal of Religious Ethics*, (Blackwell, Spring, 2002), 110.

Under the *Capabilties* framework, and according to the four most relevant of Nussbaum's Central Capabilities, the answer is a resounding 'No'.

> 1. *Life*. Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to not be worth living
>
> 2. *Bodily Health*. Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.
>
> 7. *Affiliation. (B)* Having the social bases of self-respect and nonhumiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of nondiscrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin.
>
> 10. *Control over one's environment. (B) Material*. Being able to hold property (both land and moveable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others;[56]

Due to the negative health outcomes associated with poor oral care, including premature death, it is immediately clear that Nussbaum would require adequate dentition for all under the Central Capabilities of *Life* and *Bodily Health*. From our discussion of the social distancing practices exhibited by health care professionals, as well as the negative psychological impacts associated with poor dental care, we know that inadequate dentition can lead to discrimination by doctors as a result of SES, embarrassment, and a lack of self-esteem and self-respect, thereby violating the Central Capability of *Affiliation*. Further, having a smile that doesn't meet societal standards leads to discriminatory hiring practices, leading to a lack of *Control over one's environment*. If we are to consider ourselves a just society where individuals have the freedom to develop whichever skills they choose—if we even want to approximate a just society, it is morally required that we provide quality, accessible dental care. It is clear that we are failing to do so, and therefore society is morally and ethically required to act.

So, what do we do?

First and foremost, individuals should use the arguments provided, as well as any others, to persuade others to recognize the importance of oral health care and to stop considering it a luxury. We

[56] Nussbaum, *Creating Capabilties*, 34.

need to brainstorm ways to minimize the barriers that are, a) associated with gaining coverage through Medicaid, and, b) associated with enjoying the benefits Medicaid. The former would likely be achieved through increased outreach and education programs in low-income communities, including shelters, schools, and places of employment. The latter, by minimizing the red tape associated with accepting Medicaid patients, increasing reimbursement rates for dentists, incentivizing dentists to accept Medicaid insurance plans, and above all, requiring states to provide dental coverage to adult patients using Medicaid.

Many dentists feel ethically obligated to give back to their communities. A dentist from New York states, "I can't in good conscience refuse to treat a patient because of who pays the bill, especially if an existing patient falls on hard times[57]". In addition, dental institutions often require a minimum number of community services hours for admission, as well as additional community outreach work while enrolled in school. These requirements (hopefully) foster values associated with giving back to their community as well as facilitate cultural consciousness and a better understanding of the multitude of issues that low-income Americans face in everyday life. Dental students often work in mutualism with low-income communities, where they serve as a free dental care for low-income individuals, and in turn gain valuable, hands-on patient experience. Despite this, dentists are in a difficult position, where is not only more attractive to accept new patients with private insurance, but also a hassle to treat those with Medicaid. On a national scale, we need to find a more systematic way of reaching out to those in need, educating about eligibility and access, and incentivizing dentists everywhere to provide quality, accessible care to all.

Alongside these more national, policy-based efforts, actions can be taken today in local communities to promote oral health, especially for adults. Many elementary schools and some Head Start programs are already doing this for children; by bringing in local dentists and dental hygienists to promote healthy dental practices and encouraging children to brush their teeth following school lunches,

[57] DuMoin, "Dentists not Impressed with Medicaid," (2008).

these institutions are instilling healthy oral habits at an early age. However, these programs are few and far between for adults. Many cities and communities have free dental clinics or host rotating clinics. However, waitlists and lines are extremely long, so these options are largely impractical for those who cannot afford to take time off of work. Nutrition, an important aspect of oral health and hygiene, is a logical avenue for intervention. Implementing adult nutrition programs would lead to decreased incidences of cavities and other minor dental issues. This, in turn, would decrease the number of dental complications that individuals face in the long-term, especially those associated with a lack of preventative treatment.

Above all else, it is imperative for individuals to realize that whether consciously or not, we hold negative stereotypes toward the poor. These stereotypes lead to social distancing as well as discrimination, which both serve to perpetuate the poverty of those already disadvantaged in society. This does not make for a bad person, but it does warrant introspection. If everyone were to engage in a close examination of their thoughts, recognizing when they were making decisions or judgements based on stereotypes rather than reality, it is hard to imagine that we would not be more accepting and compassionate as a whole.

> Caroline's is the face of the working poor, marked by a poverty-generated handicap more obvious than most deficiencies but no different, really, from the less visible deficits that reflect and reinforce destitution. If she were not poor, she would not have lost her teeth, and if she had not lost her teeth, perhaps she would not have remained poor. Poverty is a peculiar, insidious thing, not just one problem but a constellation of problems: not just inadequate wages but also inadequate education, not just dead-end jobs but also limited abilities, not just insufficient savings but also unwise spending, not just the lack of health insurance but also the lack of healthy households. The villains are not just exploitative employers but also incapable employees, not just overworked teachers but also defeated and unruly pupils, not just bureaucrats who cheat the poor but also the poor who cheat themselves[58].

We are actors in a system where fault cannot be attributed to any one individual, and where the best solution almost always has negative consequences. However, what we all can do, *and what we all must do*, is act towards and aim for justice and fairness according to the principles decided upon under the

[58]Shipler, "A Poor Cousin of the Middle Class," (2004).

Rawlsian veil. To step towards justice, we must minimize and overcome the barriers preventing low-income individuals, especially adults, from accessing quality dental care in this country on a national, localized, and individual level.

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