Oral Health Care and Accessibility in Utah

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Background

Nearly half of Americans are diagnosed with periodontal disease, of whom an estimated 40% suffer from moderate to severe periodontitis.(Eke et al., 2012) Periodontal disease is a broad term for conditions that cause inflammation and destruction of the gums and the structures surrounding the teeth, such as gingivitis and periodontitis.(Jared & Boggess, 2008) Periodontal diseases are caused by the invasion of bacteria from plaque. Periodontal disease has been associated with a host of adverse health outcomes including heart disease, increased risk for dementia, respiratory problems, and diabetes.(US Department of Health and Human Services, 2000)

Although periodontal diseases affect the adult population as a whole, pregnant women are especially vulnerable to oral health problems due to hormonal changes that occur in the body during pregnancy.(Wu, Chen, & Jiang, 2015) It has been shown that around 40% of women will develop new oral health problems during their pregnancies.(Jared & Boggess, 2008) Poor oral health during pregnancy has been associated with adverse birth outcomes, including preeclampsia, low birth weight, and preterm birth.(Jared & Boggess, 2008) Several researchers have hypothesized that inflammation in the mouth, such as gingivitis or periodontitis, may trigger an inflammatory response that may be the mechanism for various adverse pregnancy outcomes.(Wu et al., 2015) Some researchers have hypothesized that receiving dental care prior to conception may be more effective than receiving dental care during pregnancy in preventing adverse birth outcomes. (Boggess et al., 2005) In Utah, a study conducted using Pregnancy Risk Assessment Monitoring System (PRAMS) data found that individuals who did not receive a teeth cleaning in the 12 months prior to pregnancy had an increased prevalence of low birth weight babies.(Author, 2017, June 20)

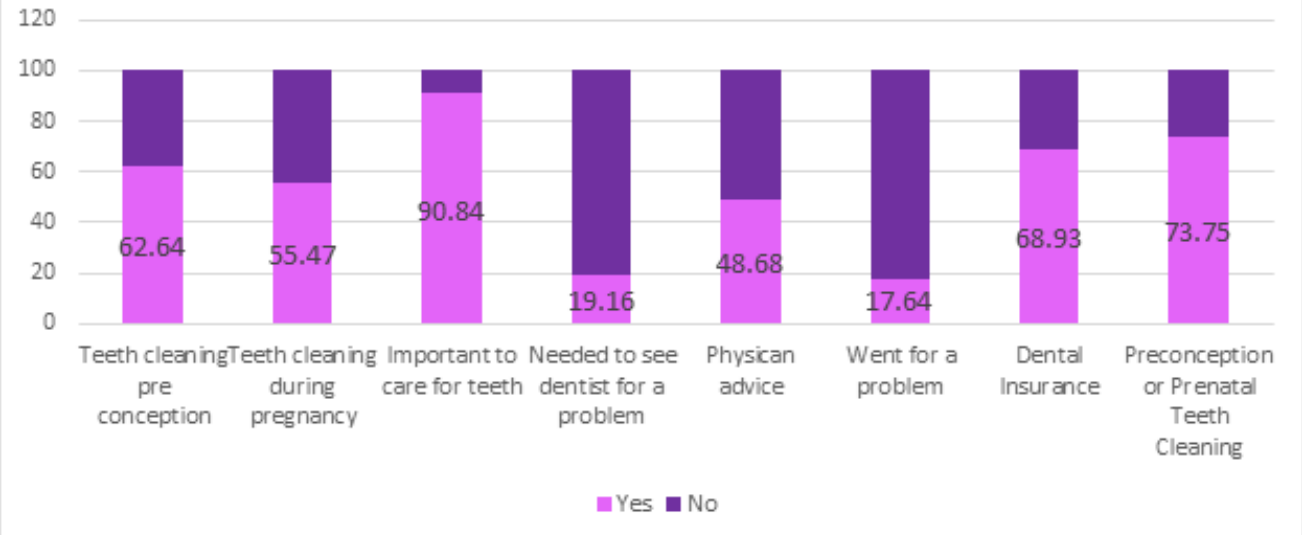
Given the evidence to date regarding the link between poor preconception and pregnancy oral health and adverse pregnancy outcomes, it is critical that women have access to dental care resources, not only during pregnancy but also prior to pregnancy. Currently, Medicaid only covers dental care for pregnant women. While many women receive dental care during pregnancy, receiving care during this time period may be too late to prevent adverse pregnancy outcomes. Periodontitis and other oral hygiene issues are highly preventable. More comprehensive dental health care is needed, specifically for individuals with Medicaid or lack of insurance. Providing more comprehensive care and educating women about the importance of dental care throughout their reproductive years could potentially improve adverse birth outcomes. By educating and emphasizing lifetime dental care, these negative birth outcomes, as well as other adverse health outcomes due to oral health, could be easily and inexpensively prevented or resolved.

Data

Utahns are accessing dental care at a higher rate than the national average. Based on a self-report survey conducted by the Centers for Disease Control (CDC), 74% of Utahns reported they had received a dental exam compared to the national average of 70%, Additionally, women in Utah are better at receiving dental exams than males: 75% of females received a dental exam within the past year, compared to 71% of males. Although Utahns are doing better compared to the national average, approximately of 25% individuals in the state are not receiving annual dental exams. Based on the Behavioral Risk Factor Surveillance System and when observing access by race, Latinos, who make up 13.7% of Utah's population, have the highest rates of non-compliance, with just over half (58%) of this population receiving a dental exam in the last year.

When considering the unique needs of reproductive-age women, the PRAMS data in Utah has recently started tracking dental behaviors among this demographic. According to the PRAMS survey from 2012-2013 (see Figure 1), 63% of women received dental care prior to pregnancy and 55% received dental care during pregnancy. While 91% of women said that they thought it was important to care for their teeth, this did not always translate into actually receiving care. One factor that encouraged women to receive a dental exam was if a healthcare provider told them that they should go to the dentist, although it is unclear if individuals were told about dental care during their dental visit or at a different time. Of those women who talked to a provider about the importance of oral health during pregnancy, 77% received a teeth cleaning. Of those who were not directly told by a provider that oral health care was important, only 23% received this oral care during pregnancy.
According to the PRAMS data, based on ethnicity, 42% of Hispanic women said that they had received a dental cleaning in the 12 months prior to pregnancy and 37% said they received a dental cleaning during pregnancy. Non-Hispanic women had higher rates, with 66% of women receiving a dental cleaning before pregnancy and 59% receiving this oral care during pregnancy. There are distinct differences between individuals who had received a teeth cleaning within a year and those who had not. Women who were not Hispanic, had a higher socioeconomic status, and had dental insurance received dental care both prior to and during pregnancy at a higher rate than individuals without these characteristics. These differences point to a potential lack of access and affordability within the state.
A vital factor in evaluating oral health care is having dental insurance. Nationwide, 66% of the population has insurance for dental health care. (National Association of Dental Plans, 2016) Of those with insurance, 32% of individuals receive it through public programs, such as Medicaid and Medicare. This number has increased from what it was in 2013. Based on the Utah PRAMS data from 2012-2013, among reproductive-aged women, 68.93% have dental insurance.

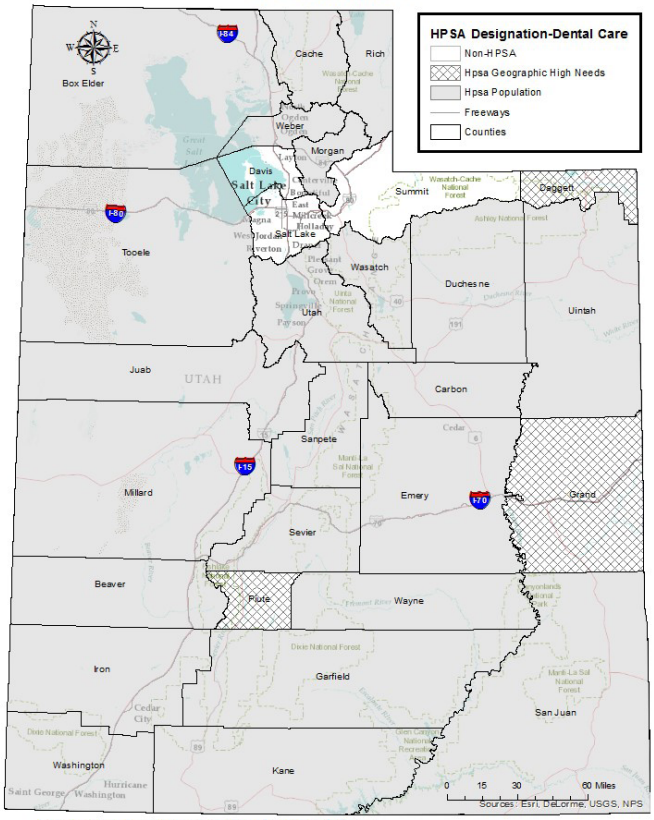
Figure 1. The proportion of women from Utah PRAMS 2012-2013 answering yes to the following questions regarding dental perceptions and behaviors



Dental health is an integral part of a healthy lifestyle, primarily intersecting with the physical, financial, and environmental domains of health. Physically, individuals who do not receive regular dental care have an increased risk for multiple adverse health conditions.(US Department of Health and Human Services, 2000) Reproductive-aged women potentially have an increased risk for adverse birth outcomes and infertility.(US Department of Health and Human Services, 2000) Financially, many people feel that they cannot afford dental care. One study found that one out of five individuals were not able to afford dental care. (Brown, Finlayson, Fulton, & Jahedi, 2009) Even among those with insurance, around 41% of individuals pay out of pocket for dental care.(Wall & Guay, 2016) This serves as a significant barrier for many individuals because, in many circumstances, dental care is lower than other needs on the financial priority list.

Environmentally, lack of access is a common problem, specifically for low-income individuals and those on Medicaid. Many dentists either will not see Medicaid patients or have limited openings for new patients. A 2012 survey conducted by the Utah Medical Education Council found that 150 of the 1,006 (15%) practicing dentists in Utah treat Medicaid patients. Additionally, much of Utah is considered a Health Professional Shortage Area (HPSA) (Figure 2), which considers the provider-to-patient ratio, poverty level in the area, water fluoridation, and travel time needed to access care. Although Utah has a similar distribution of dentists as the United States, with 67 dentists per 100,000 individuals, (US Department of Health and Human Services, 2015) rural individuals often have lower accessibility, as seen in Figure 2.

Figure 2. Health Professional Shortage Area Designation In Utah By County in 2017



https://datawarehouse.hrsa.gov/tools/analyzers/hpsafind.aspx

Data Sources: ESRI, HRSA

Resources and Recommendations

Nationally, interventions have traditionally been aimed at improving dental care in children. Regular dental care is provided for children on Medicaid or on Utah's Children's Health Insurance Program (CHIP). In addition, the Utah Oral Health Program aims to promote use of fluoride and sealants, prevent tooth decay in children, and encourage dental visits for children and adults. As seen in the PRAMS data, in order to encourage dental visits, it may be useful to utilize primary care providers for suggesting and encouraging an annual dental exam. As previously mentioned, affordability and coverage are large barriers to receiving dental care. Aside from pregnant women, Medicaid only includes emergency dental coverage for adults in Utah. Through expanding dental coverage to include annual exams and preventative care for Utah adults on Medicaid, health outcomes may improve. In addition to expanding coverage, dentists could be provided with financial incentives to treat low-income and Medicaid patients. Lastly, health literacy programs could be developed in order to educate individuals about the importance of good dental care in relation to overall physical health as well as oral health. Since many individuals do not understand the importance of dental care in relation to adverse health outcomes, education may motivate them to receive an annual exam. Women are often the gateway to a family's health, so by encouraging and empowering women to receive annual exams and maintain good oral health, providers and health care workers may be able to impact entire families.

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