Factors Affecting Access to Care and Oral Health During the COVID-19 Pandemic

Presented by:
Simona Surdu, MD, PhD
Oral Health Workforce Research Center
Center for Health Workforce Studies
School of Public Health, University at Albany, SUNY

National Oral Health Conference, April 13, 2022
Oral Health Workforce Implications from the COVID-19 Pandemic
Acknowledgements and Disclaimer

• This research was supported by the Health Resources and Services Administration (HRSA) of the US Department of Health and Human Services (HHS) under the Cooperative Agreement for an Oral Health Workforce Research Center (OHWRC)

• The authors wish to acknowledge the contributions of the Workforce Studies team at the Association of American Medical Colleges (AAMC) to the current research

• Co-authors: Margaret Langelier, MSHSA and Ellen O’Malley, PhD

• The content and conclusions of this presentation are those of OHWRC and do not necessarily represent positions or policies of the HRSA, SUNY, or ATD
COVID-19 pandemic had an impact on many different aspects of the health care sector, including the oral health workforce, dramatically affecting the ability of dental professionals to deliver oral health services.

By July 2020, about 99% of dental offices were re-opened, with 90% of offices at pre-pandemic staffing levels. Yet, a study of patients showed that only 23% of respondents recently visited a dentist during the same period.

Analysis of recent trends shows a steady decrease in utilization of oral health services among adults across all socioeconomic strata, with cost being the most reported reason for the decline.
Purpose of the Study

• The purpose of this study was to assess how the pandemic affected oral health status and utilization of oral health services among US adults.

• This research also aimed to highlight unique factors related to the COVID-19 pandemic that disproportionately affected vulnerable and underserved populations including racial/ethnic minorities, low-income people, unemployed individuals, uninsured families, Medicaid beneficiaries, and rural individuals.

• Incorporating the consumer perspective on access to oral health services is important in the development of effective policy strategies to address key access barriers and facilitators as well as oral health disparities.
Methods: Data Source

• OHWRC researchers developed a series of questions pertaining to need for, use of, and barriers to receiving oral health care for adults during the COVID-19 pandemic.

• These questions were included in the Consumer Survey of Health Care Access, which was fielded by the Health Workforce Research Center at the Association of American Medical Colleges (AAMC) in December 2020 and June 2021.

• The online survey was conducted using a national panel of about 1.5 million adults. The current analytic study sample include about 3,500 respondents who indicate a met or unmet need for dental care in the prior 12 months.

• This project builds on our previous research that used consumer survey data to evaluate the facilitators and barriers to access to oral health services in 2017-18.
Methods: Statistical Analyses

• **Descriptive statistical analyses**, including frequency distribution, cross tabulation, and chi-square test were used to estimate associations between study respondents’ access to oral health services and their characteristics.

• **Survey data were weighted** by age, gender, race/ethnicity, employment status, household income, educational attainment, and geographic region to better represent the characteristics of the US adult population as measured by the US Census Bureau.

• All analyses were conducted in SAS v9.4.
Key Findings

Utilization of Needed Dental Care, 2020-21

• Nearly half of respondents (46.6%) *always* received oral health services as needed and 33.5% only *sometimes* received care in the past 12 months.

• Yet, about *1 in 5 respondents (19.9%)* *did not receive any* needed dental care in the past year.

Consumer Survey of Barriers to and Facilitators of Access to Oral Health Services
Percentage of Respondents *Without Any Dental Visit* in the Last Year by Demographic Characteristics

- Respondents who were female, aged 18-34, and from underrepresented minority groups were more likely to report *not getting any needed dental care* than others in the past year.

Note: There was a statistically significant difference ($P<.001$) between respondents who received needed dental care and those who did not by gender, age, and race/ethnicity.
Percentage of Respondents *Without Any Dental Visit* in the Last Year by Socioeconomic Characteristics

- Adults who reported a high school diploma or less, household incomes <$50,000, and unemployment were more likely to report *not getting any needed dental care* than others in the past year.

Note: There was a statistically significant difference ($P<.001$) between respondents who received needed dental care and those who did not by education, income, and employment status.
Percentage of Respondents Without Any Dental Visit in the Last Year by Perceived Barriers to Dental Care

• Respondents who identified access difficulties related to dental cost, dental insurance or provider availability, inability to find time, information, or travel easily, and anxiety about going to the dentist were more likely to report not getting any needed dental care than others in the past year.

Note: There was a statistically significant difference (P<.001) between respondents who received needed dental care and those who did not by perceived barriers to obtaining needed dental care.
Respondents **Without Any Dental Visit** in the Last Year by Concerns about COVID-19 Pandemic

<table>
<thead>
<tr>
<th>Concern</th>
<th>Level of concern 1-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having enough money for you and your family's needs</td>
<td><strong>4.28</strong></td>
</tr>
<tr>
<td>Being able to continue with your children(s) education</td>
<td><strong>3.94</strong></td>
</tr>
<tr>
<td>Access to other (non-food) items (e.g., toiletries, cleaning supplies, paper towels, etc)</td>
<td><strong>3.88</strong></td>
</tr>
<tr>
<td>Access to enough food for you and your family</td>
<td><strong>3.84</strong></td>
</tr>
<tr>
<td>Being able to take care of your physical health</td>
<td><strong>3.80</strong></td>
</tr>
<tr>
<td>Being able to take care of your mental health</td>
<td><strong>3.67</strong></td>
</tr>
<tr>
<td>Having access to child care</td>
<td><strong>3.64</strong></td>
</tr>
<tr>
<td>Having access to the internet for things like work, school, medical visits, or socializing</td>
<td><strong>3.41</strong></td>
</tr>
</tbody>
</table>

Note: Respondents were asked to rate their concern about several issues since the start of the pandemic. Medium/high levels of concerns were associated with a lack of seeking dental care ($P<.001$).

- Respondents who had medium or high concerns about COVID-19 pandemic were more likely to report **not getting any needed dental care** in the past year than those with lower concerns.
- “**Having enough money**” was the main pandemic-related predictor for not seeking dental care when needed.
Percentage of Respondents *Without Any Dental Visit* in the Last Year by Access Barriers & Pandemic Concerns

- Adults who reported any access barriers, Medicaid or no dental insurance, and medium or high pandemic concerns were more likely to report *not getting any needed dental care* than others in the past year.

Note: There was a statistically significant difference ($P<.001$) between respondents who received needed dental care and those who did not access barriers, dental insurance, and pandemic concerns.
Oral Health Symptoms Lasting More Than One Day in the Last 6 Months, 2020-21 and 2017-18

- Proportionally less adults reported no oral health symptoms in the past 6 months in 2020-21 (37.6%) than in 2017-18 (57.8%).

- “Difficulty eating or chewing” (64% change), “jaw pain” (57% change), & 3+ symptoms (68% change) increased the most during the pandemic.
Oral Health Problems Experienced in the Last 6 Months, 2020-21 and 2017-18

- Proportionally less adults reported no oral health problems in the past 6 months in 2020-21 (26.8%) than in 2017-18 (41.0%).

- “Stained or discolored teeth” (25% change), “Broken or missing teeth” (22% change), & 3+ problems (27% change) increased the most during the pandemic.

### Oral Health Problems

<table>
<thead>
<tr>
<th>Oral Health Problems</th>
<th>No. of Oral Health Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>No oral health problems</td>
<td>0</td>
</tr>
<tr>
<td>Toothache or sensitive teeth</td>
<td>0</td>
</tr>
<tr>
<td>Broken or missing teeth</td>
<td>1</td>
</tr>
<tr>
<td>Stained or disordered teeth</td>
<td>2</td>
</tr>
<tr>
<td>Bleeding gums</td>
<td>3</td>
</tr>
<tr>
<td>Broken or missing filling</td>
<td></td>
</tr>
</tbody>
</table>

### Proportion Changes

- No oral health problems: 41.0% to 26.8%
- Toothache or sensitive teeth: 35.4% to 41.9%
- Broken or missing teeth: 21.0% to 25.7%
- Stained or disordered teeth: 19.3% to 24.2%
- Bleeding gums: 17.2% to 20.2%
- Broken or missing filling: 11.3% to 12.5%
- 1 problem: 28.9% to 35.2%
- 2 problems: 14.7% to 18.3%
- 3+ problems: 15.4% to 19.5%
Conclusions and Implications

- Associations of sociodemographic factors with access to dental care suggest that efforts to link underserved populations to oral health services remain important policy initiatives to reduce oral health disparities during the pandemic.

- Identification of difficulties related to cost and insurance status as well as concerns about financial implications of pandemic suggest that COVID-19 disproportionally affected the most vulnerable populations groups.

- Study findings also suggest that oral health status of adults declined during the pandemic compared to the pre-pandemic period. Oral health issues related to stress and lack of preventive services were particularly elevated.

- Current efforts to mediate financial and structural barriers should be amplified in order to improve access to dental care and overall health.
Thank You

• For more information, please email me at: ssurdu@albany.edu

• Visit us at: @OHWRC @OHWRC /company/center-for-health-workforce-studies