2021 KANSAS OLDER ADULT ORAL HEALTH SURVEY DATA TABLES

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Background Information

- A list of licensed long-term care facilities in Kansas was obtained from the Kansas Department for Aging and Disability Services. The sampling frame was limited to facilities with nursing beds. Long-term care hospital units and mental health facilities were removed from the sampling frame.
- The sampling frame consisted of 297 facilities with a total nursing facility bed count of 18,957.
- The sampling frame was stratified by county population density (frontier, rural, densely settled rural, semi-urban and urban). Within each stratum, the sampling frame was ordered by county name.
- To match previous surveys, a probability proportional to size sampling scheme was used to select 20 facilities. Nineteen (19) facilities agreed to participate and the one refusing facility was replaced by a randomly selected facility from the same sampling interval. Data are available for all 20 sampling intervals.
- A total of 374 residents received an oral health screening, representing 23% of the 1,657 nursing facility beds in the 20 facilities.
- Data analyses were completed using the complex survey procedures within SAS 9.4. The data were weighted to represent the nursing facility population within each sampling interval.
 - Cluster = nursing facility
 - Weight = number of nursing facility beds in sampling interval / # nursing facility residents screened in sampling interval
- Unless otherwise noted, all data presented have been adjusted for the complex sampling scheme.

QUICK FACTS

- ❖ A total of 374 nursing facility residents, ranging in age from 44 to 106 years, were screened. Almost 6-of-10 were female (57%), about half (55%) reported being enrolled in Medicaid, and most were non-Hispanic White (87%).
- ❖ In 2021, 19% of the nursing facility residents screened had no natural teeth (edentulous) compared to 30% of those screened in 2018-2019.
- ❖ Of the edentulous residents screened in 2021, 22% had no dentures; similar to the 2018-2019 results (20%).
- ❖ In 2021, 21% of the nursing facility residents screened had fewer than 20 teeth compared to 56% of residents screened in 2018-2019. Research has shown that having fewer than 20 teeth has a negative impact on a person's ability to eat.
- ❖ Of the dentate residents screened in 2021, 45% had untreated tooth decay compared to 21% of the dentate residents screened in 2018-2019.
- ❖ Almost half of the residents with teeth (42%) had substantial oral debris suggesting they are not getting the oral hygiene care they need.

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Table 1: Characteristics of the participating nursing facility residents by dentate status, 2021

| rable 1: Characteristics of | | s Participants | | articipants | · . | ticipants |
|--------------------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|
| Variable | (n | =72) | (n=302) | | (n= | =374) |
| Vallable | # Screened | Weighted Percent/Mean | # Screened | Weighted Percent/Mean | # Screened | Weighted Percent/Mean |
| Age | | | | | | |
| <65 years | 12 | 16.5 | 32 | 11.0 | 44 | 12.0 |
| 65-74 years | 14 | 18.9 | 73 | 24.3 | 87 | 23.3 |
| 75-84 years | 20 | 28.6 | 114 | 37.1 | 134 | 35.5 |
| 85-94 years | 23 | 31.5 | 71 | 24.3 | 94 | 25.6 |
| 95+ years | 3 | 4.5 | 9 | 2.6 | 12 | 2.9 |
| Unknown/Missing | 0 | | 3 | 0.8 | 3 | 0.6 |
| Range (years) | | 44-98 | | 45-106 | | 44-106 |
| Mean (years) | | 77.7 | | 77.3 | | 77.4 |
| Sex | | | | | | |
| Male | 25 | 35.6 | 131 | 44.2 | 156 | 42.6 |
| Female | 47 | 64.4 | 169 | 55.2 | 216 | 56.9 |
| Unknown/Missing | 0 | | 2 | 0.6 | 2 | 0.5 |
| Race/Ethnicity | | | | | | |
| White | 61 | 83.7 | 267 | 88.1 | 328 | 87.3 |
| Black/African American | 3 | 4.8 | 18 | 6.1 | 21 | 5.9 |
| Hispanic/Latino | 5 | 7.2 | 9 | 3.2 | 14 | 4.0 |
| American Indian/ Alaska Native | 2 | 3.0 | 7 | 2.3 | 9 | 2.4 |
| Native Hawaiian/ Pacific Islander | 1 | 1.3 | 0 | | 1 | 0.3 |
| Unknown/Missing | 0 | | 1 | 0.2 | 1 | 0.2 |
| Medicaid Enrolled | | | | | | |
| No | 27 | 37.1 | 89 | 28.8 | 116 | 30.4 |
| Yes | 35 | 48.4 | 168 | 56.2 | 203 | 54.7 |
| Unknown/Missing | 10 | 14.5 | 45 | 15.0 | 55 | 14.9 |

Table 2: Prevalence of edentulism (total tooth loss) by selected characteristics, 2021

| Characteristic | Percent Edentulous | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|----------------------------|-----------------------|-------------------------------|-------------------------------|
| All Participants (n=374) | 19.0 | 14.9 | 23.1 |
| Age | | | |
| <65 years | 26.0 | 10.5 | 41.6 |
| 65-74 years | 15.4 | 7.7 | 23.1 |
| 75-84 years | 15.3 | 10.1 | 20.4 |
| 85-94 years | 23.3 | 14.1 | 32.5 |
| 95+ years | 29.1 | 1.0 | 57.3 |
| Sex | | | |
| Male | 15.8 | 10.0 | 21.7 |
| Female | 21.5 | 15.2 | 27.8 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 18.2 | 13.6 | 22.8 |
| Hispanic or Non-White Race | 24.7 | 9.6 | 39.7 |
| Medicaid Enrolled | | | |
| No | 23.2 | 14.3 | 32.0 |
| Yes | 16.8 | 12.0 | 21.5 |

Table 3: Prevalence of substantial tooth loss (< 20 teeth) by selected characteristics, 2021

| Characteristic | Percent with Substantial Tooth Loss | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|----------------------------|---|-------------------------------|-------------------------------|
| All Participants (n=374) | 40.5 | 35.0 | 46.0 |
| Age | | | |
| <65 years | 47.1 | 32.0 | 62.3 |
| 65-74 years | 36.9 | 24.7 | 49.1 |
| 75-84 years | 37.6 | 28.7 | 46.6 |
| 85-94 years | 44.1 | 30.8 | 57.5 |
| 95+ years | 54.6 | 22.2 | 87.0 |
| Sex | | | |
| Male | 38.0 | 29.1 | 47.0 |
| Female | 42.3 | 36.6 | 48.0 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 40.1 | 34.5 | 45.7 |
| Hispanic or Non-White Race | 44.2 | 28.1 | 60.3 |
| Medicaid Enrolled | | | |
| No | 44.6 | 31.2 | 58.0 |
| Yes | 38.9 | 34.7 | 43.0 |

Table 4: Oral health of *dentate* nursing facility residents (n=302), 2021

| Variable | Percent Yes or Mean | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|---------------------------------------|---------------------|-------------------------------|-------------------------------|
| Untreated decay (%) | 45.2 | 39.0 | 51.3 |
| Root fragments (%) | 26.0 | 20.2 | 31.8 |
| Tooth mobility (%) | 31.1 | 22.7 | 39.6 |
| Substantial oral debris (%)* | 41.5 | 32.8 | 50.2 |
| Gingival inflammation (%) | 43.4 | 37.1 | 49.8 |
| Suspicious soft tissue lesion (%)* | 1.3 | 0.0 | 2.6 |
| Upper denture (%) | 9.6 | 6.1 | 13.2 |
| Lower denture (%) | 5.4 | 2.6 | 8.2 |
| Needs early or urgent dental care (%) | 56.3 | 49.4 | 63.2 |
| Needs urgent dental care (%) | 4.1 | 1.2 | 7.0 |
| Lower teeth present (mean) | 11.0 | 10.6 | 11.3 |
| Upper teeth present (mean) | 10.6 | 10.0 | 11.2 |
| Total number of teeth present (mean) | 21.6 | 20.7 | 22.4 |

^{*} Information on substantial oral debris and soft tissue lesions was missing for 1 participant

Table 5: Prevalence of untreated decay among <u>dentate</u> participants (n=302) by selected characteristics, 2021

| Characteristic | Percent with Untreated Decay | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|----------------------------------|------------------------------|-------------------------------|-------------------------------|
| All Dentate Participants (n=302) | 45.2 | 39.0 | 51.3 |
| Age | | | |
| <65 years | 55.5 | 38.5 | 72.5 |
| 65-74 years | 42.2 | 32.1 | 52.4 |
| 75-84 years | 42.0 | 32.6 | 51.4 |
| 85-94 years | 49.6 | 37.9 | 61.3 |
| 95+ years | 39.5 | 1.4 | 77.6 |
| Sex | | | |
| Male | 42.9 | 32.9 | 52.8 |
| Female | 46.9 | 38.0 | 55.9 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 42.6 | 36.3 | 49.0 |
| Hispanic or Non-White Race | 63.5 | 47.7 | 79.2 |
| Medicaid Enrolled | | | |
| No | 37.5 | 28.6 | 46.5 |
| Yes | 47.9 | 37.8 | 58.0 |

Table 6: Prevalence of root fragments among *dentate* participants (n=302) by selected characteristics, 2021

| Characteristic | Percent with Root Fragments | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|----------------------------------|-----------------------------|-------------------------------|-------------------------------|
| All Dentate Participants (n=302) | 26.0 | 20.2 | 31.8 |
| Age | | | |
| <65 years | 31.6 | 15.9 | 47.3 |
| 65-74 years | 26.5 | 16.3 | 36.7 |
| 75-84 years | 25.1 | 16.3 | 33.9 |
| 85-94 years | 25.0 | 14.8 | 35.3 |
| 95+ years | 28.6 | -7.5 | 64.8 |
| Sex | | | |
| Male | 24.3 | 15.8 | 32.7 |
| Female | 27.8 | 20.0 | 35.5 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 24.9 | 19.1 | 30.6 |
| Hispanic or Non-White Race | 35.3 | 21.0 | 49.6 |
| Medicaid Enrolled | | | |
| No | 23.2 | 16.4 | 30.1 |
| Yes | 27.7 | 19.9 | 35.6 |

Table 7: Prevalence of tooth mobility among *dentate* participants (n=302) by selected characteristics, 2021

| Characteristic | Percent with Tooth Mobility | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|----------------------------------|--------------------------------|-------------------------------|-------------------------------|
| All Dentate Participants (n=302) | 31.1 | 22.7 | 39.6 |
| Age | | | |
| <65 years | 34.3 | 5.0 | 63.5 |
| 65-74 years | 28.7 | 13.4 | 44.1 |
| 75-84 years | 28.9 | 17.3 | 40.5 |
| 85-94 years | 31.4 | 18.8 | 44.1 |
| 95+ years | 57.9 | 20.7 | 95.1 |
| Sex | | | |
| Male | 28.6 | 16.9 | 40.3 |
| Female | 33.5 | 21.5 | 45.6 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 29.8 | 20.8 | 38.7 |
| Hispanic or Non-White Race | 42.1 | 28.7 | 55.4 |
| Medicaid Enrolled | | | |
| No | 27.7 | 17.5 | 37.9 |
| Yes | 35.5 | 24.3 | 46.6 |

^{*} Compared to whites, non-whites have a significantly higher prevalence of tooth mobility.

[†] Compared to residents who have lived in a facility < 5 years, those that have lived in the facility for 5+ years have a significantly lower prevalence of tooth mobility.

Table 8: Prevalence of substantial oral debris among <u>dentate</u> participants (n=301) by selected characteristics, 2021

| 2021 | | | |
|----------------------------------|--|-------------------------------|-------------------------------|
| Characteristic | Percent with Substantial Oral Debris | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
| All Dentate Participants (n=301) | 41.5 | 32.8 | 50.2 |
| Age | | | |
| <65 years | 33.1 | 16.2 | 50.0 |
| 65-74 years | 49.7 | 36.2 | 63.3 |
| 75-84 years | 41.4 | 28.3 | 54.6 |
| 85-94 years | 37.9 | 20.2 | 55.6 |
| 95+ years | 37.3 | 2.8 | 71.8 |
| Sex | | | |
| Male | 41.6 | 30.0 | 53.2 |
| Female | 41.9 | 32.5 | 51.3 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 39.4 | 30.1 | 48.8 |
| Hispanic or Non-White Race | 55.9 | 40.1 | 71.6 |
| Medicaid Enrolled | | | |
| No | 34.4 | 18.9 | 50.0 |
| Yes | 45.3 | 36.1 | 54.5 |

^{*} Information on substantial oral debris was missing for one participant

Table 9: Prevalence of severe gingival inflammation among $\underline{\textit{dentate}}$ participants (n=302) by selected characteristics, 2021

| Characteristic | Percent with Gingival Inflammation | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|----------------------------------|--|-------------------------------|-------------------------------|
| All Dentate Participants (n=302) | 43.4 | 37.1 | 49.8 |
| Age | | | |
| <65 years | 53.0 | 30.1 | 75.8 |
| 65-74 years | 36.7 | 23.3 | 50.2 |
| 75-84 years | 43.7 | 34.5 | 52.9 |
| 85-94 years | 44.5 | 28.9 | 60.2 |
| 95+ years | 48.2 | 13.5 | 82.9 |
| Sex | | | |
| Male | 43.1 | 33.9 | 52.3 |
| Female | 44.3 | 35.2 | 53.3 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 41.0 | 34.0 | 47.9 |
| Hispanic or Non-White Race | 61.1 | 48.3 | 74.0 |
| Medicaid Enrolled | | | |
| No | 34.6 | 23.8 | 45.4 |
| Yes | 47.7 | 38.8 | 56.6 |

Table 10: Percentage needing early or urgent dental care among <u>dentate</u> participants (n=302) by selected characteristics. 2021

| characteristics, 2021 | | <u> </u> | |
|----------------------------------|---|-------------------------------|-------------------------------|
| Characteristic | Percent Needing Early or Urgent Dental Care | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
| All Dentate Participants (n=302) | 56.3 | 49.4 | 63.2 |
| Age | | | |
| <65 years | 70.3 | 53.6 | 87.1 |
| 65-74 years | 44.9 | 33.9 | 55.8 |
| 75-84 years | 57.3 | 45.9 | 68.7 |
| 85-94 years | 60.2 | 46.7 | 73.7 |
| 95+ years | 60.8 | 28.0 | 93.6 |
| Sex | | | |
| Male | 52.1 | 40.1 | 64.1 |
| Female | 59.6 | 51.4 | 67.9 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 54.4 | 46.8 | 62.0 |
| Hispanic or Non-White Race | 69.5 | 56.7 | 82.2 |
| Medicaid Enrolled | | | |
| No | 46.2 | 35.6 | 56.8 |
| Yes | 59.9 | 50.3 | 69.5 |
| | | | <u> </u> |

Table 11: Mean number of teeth present among <u>dentate</u> participants (n=302) by selected characteristics, 2021

| Characteristic | Mean Number of Teeth Present | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|----------------------------------|---------------------------------|-------------------------------|-------------------------------|
| All Dentate Participants (n=302) | 21.6 | 20.7 | 22.4 |
| Age | | | |
| <65 years | 22.3 | 20.6 | 24.0 |
| 65-74 years | 21.7 | 19.9 | 23.5 |
| 75-84 years | 21.3 | 19.8 | 22.7 |
| 85-94 years | 21.2 | 19.1 | 23.4 |
| 95+ years | 23.1 | 19.2 | 27.1 |
| Sex | | | |
| Male | 21.6 | 20.3 | 22.9 |
| Female | 21.5 | 20.7 | 22.4 |
| Race/Ethnicity | | | |
| White (Non-Hispanic) | 21.6 | 20.6 | 22.6 |
| Hispanic or Non-White Race | 21.2 | 19.2 | 23.1 |
| Medicaid Enrolled | | | |
| No | 21.7 | 20.1 | 23.2 |
| Yes | 21.5 | 20.8 | 22.3 |

Table 12: Oral health of *edentulous* participants (n=72), 2021

| Variable | Percent Yes | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|---------------------------------------|-------------|-------------------------------|-------------------------------|
| Has upper denture (%) | 77.6 | 63.8 | 91.3 |
| Has lower denture (%) | 77.6 | 63.8 | 91.3 |
| Has upper & lower denture (%) | 77.6 | 63.8 | 91.3 |
| Substantial oral debris (%) | 7.9 | 1.0 | 14.8 |
| Suspicious soft tissue lesion (%) | 0.0 | 0.0 | 0.0 |
| Needs early or urgent dental care (%) | 4.8 | 0.2 | 9.4 |
| Needs urgent dental care (%) | 0.9 | -1.0 | 2.7 |

Table 13: Oral health of *dentate and edentulous* participants (n=374), 2021

| Variable | Percent Yes | Lower 95% Confidence Limit | Upper 95% Confidence Limit |
|---------------------------------------|-------------|-------------------------------|-------------------------------|
| Has upper partial/full denture (%) | 22.5 | 18.1 | 26.9 |
| Has lower partial/full denture (%) | 19.1 | 16.2 | 22.0 |
| Substantial oral debris (%) | 35.1 | 27.2 | 43.0 |
| Suspicious soft tissue lesion (%) | 1.0 | 0.0 | 2.1 |
| Needs early or urgent dental care (%) | 46.5 | 40.7 | 52.3 |
| Needs urgent dental care (%) | 3.5 | 1.2 | 5.9 |

Table 14: Responses to the resident questionnaire by dentate status, 2021

| | Edentulous Participants (n=72) | | Dentate Participants | | All Participants | |
|----------------------|-----------------------------------|-----------------------|----------------------|-----------------------|------------------|-----------------------|
| Variable | | | (n= | 302) | (n | =374) |
| | # with Data | Weighted Percent/Mean | # with Data | Weighted Percent/Mean | # with Data | Weighted Percent/Mean |
| Q1: Dental insurance | | | | | | |
| No | 40 | 52.4 | 133 | 44.3 | 173 | 45.8 |
| Yes | 18 | 26.3 | 113 | 37.6 | 131 | 35.5 |
| Unknown/Missing | 14 | 21.3 | 56 | 18.1 | 70 | 18.8 |
| Q2: Medicaid | | | | | | |
| No | 27 | 37.1 | 89 | 28.8 | 116 | 30.4 |
| Yes | 35 | 48.4 | 168 | 56.2 | 203 | 54.7 |
| Unknown/Missing | 10 | 14.5 | 45 | 15.0 | 55 | 14.9 |
| Q3: Mouth pain | | | | | | |
| Seldom | 60 | 84.3 | 250 | 83.4 | 310 | 83.6 |
| Some of the time | 9 | 12.2 | 38 | 12.4 | 47 | 12.3 |
| Most of the time | 2 | 1.8 | 9 | 2.6 | 11 | 2.5 |
| Unknown/Missing | 1 | 1.8 | 5 | 1.6 | 6 | 1.6 |
| Q4: Dental care | | | | | | |
| Private office | 23 | 31.4 | 134 | 44.5 | 157 | 42.0 |
| Public dental clinic | 3 | 3.8 | 8 | 2.2 | 11 | 2.5 |
| Our facility | 6 | 8.1 | 84 | 28.3 | 90 | 24.5 |
| Hospital ED | 0 | 0.0 | 2 | 0.4 | 2 | 0.4 |
| I don't get care | 37 | 51.9 | 65 | 21.6 | 102 | 27.3 |
| Unknown/Missing | 3 | 4.8 | 9 | 3.0 | 12 | 3.3 |
| Q5: Dry mouth | | | | | | |
| Seldom | 37 | 50.8 | 178 | 60.3 | 215 | 58.5 |
| Some of the time | 20 | 28.0 | 90 | 29.2 | 110 | 29.0 |
| Most of the time | 14 | 19.5 | 32 | 10.0 | 46 | 11.8 |
| Unknown/Missing | 1 | 1.8 | 2 | 0.5 | 3 | 0.8 |
| Q6: Tooth pulled | | | | | | |
| No | 63 | 88.3 | 233 | 78.1 | 296 | 80.0 |
| Yes | 4 | 5.2 | 32 | 10.1 | 36 | 9.2 |
| Unknown/Missing | 5 | 6.5 | 37 | 11.8 | 42 | 10.8 |
| Q7: Limit foods | | | | | | |
| Seldom | 45 | 63.7 | 223 | 74.9 | 268 | 72.7 |
| Some of the time | 19 | 26.6 | 56 | 17.8 | 75 | 19.5 |
| Most of the time | 8 | 9.8 | 20 | 6.5 | 28 | 7.1 |
| Unknown/Missing | 0 | 0.0 | 3 | 0.8 | 3 | 0.7 |
| Q8: Brush teeth | | | | | | |
| No | 29 | 40.0 | 90 | 30.5 | 119 | 32.3 |
| Yes | 40 | 56.5 | 195 | 64.8 | 235 | 63.2 |
| Unknown/Missing | 3 | 3.5 | 17 | 4.6 | 20 | 4.5 |
| Q9: Others brush* | | | | | | |
| No | 17 | 57.6 | 50 | 55.5 | 67 | 56.0 |
| Yes | 7 | 23.5 | 29 | 32.6 | 36 | 30.5 |
| Unknown/Missing | 5 | 18.9 | 11 | 11.9 | 16 | 13.5 |

^{*} Limited to those that answered "No" to question 8