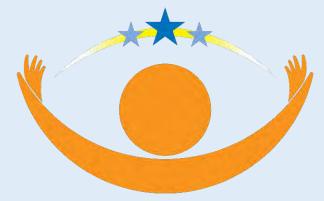
# **Feeling Good About Your Smile**: An oral health intervention for people with IDD

Noelle K. Kurth, Evaluator Kansas Disability and Health Program

University of Kansas Institute for Health and Disability Policy Studies



Disability and Health Program kansans with disabilities can be healthy

AUCD Annual Conference

November 19, 2019

## **Disclosures and Funding**

The author has no conflicts of interest to disclose.

This presentation and project is supported by Grant/Cooperative Agreement Number DD000006 from the CDC, National Center on Birth Defects and Developmental Disabilities (NCBDDD), Disability and Health Promotion Branch. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC, NCBDDD, Disability and Health Promotion Branch.

## Agenda

- Background
- Development of "Feeling Good About Your Smile" Intervention
- Implementation in Kansas
- Evaluation Results
- Next Steps

### Background

#### **Disparities Disease Prevalence**

| Condition        | Kansans with disabilities | Kansans without disabilities |
|------------------|---------------------------|------------------------------|
| Stroke           | 7.4%                      | 1.4%                         |
| Heart Attack     | 9.2%                      | 2.4%                         |
| High Cholesterol | 47.3%                     | 29.7%                        |
| Hypertension     | 51.1%                     | 26.7%                        |
| Asthma           | 16.2%                     | 6.7%                         |
| Diabetes         | 21.4%                     | 6.8%                         |
| Depression       | 42.1%                     | 4.0%                         |

Source: 2017 Kansas BRFSS, <u>http://www.kdheks.gov/brfss/Survey2017/DataTableList2017.htm</u> Kansas Disability and Health Program Kansans with disabilities can be healthy!

## **Background: Oral Health in Kansas**

|   | Kansans with<br>disabilities | Kansans without<br>disabilities |
|---|------------------------------|---------------------------------|
| No dental insurance <sup>*</sup>                          | 46%                          | 29%                             |
| Needed dental care in last year but did not get it $^{*}$ | 24%                          | 10%                             |
| Visited a dentist in the last year $^{st}$                | 54%                          | 72%                             |

|  | Kansans with IDD | All Kansans |
|--|------------------|-------------|
| Missing at least one permanent tooth due to decay or gum disease <sup>**</sup> | 44%              | 34%         |
| Painful aching <sup>**</sup>   | 40%              | 20%         |
| Uncomfortable to eat <sup>**</sup>   | 36%              | 17%         |

#### **Interventions:**

- Training for oral health professionals on working with people who have disabilities
- Feeling Good About Your Smile Workshops for Kansans with intellectual disabilities

\*Kansas BRFSS, 2017 ; \*\*Hall, Chapman & Kurth, 2012

### **Feeling Good About Your Smile Intervention**



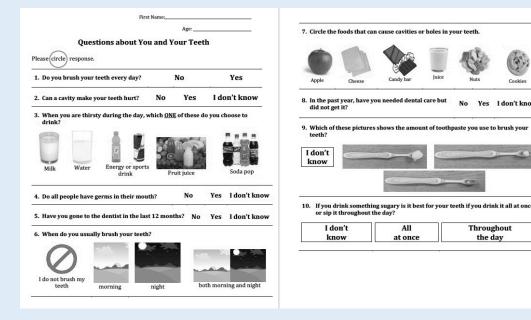
- Partnership with Oral Health Kansas
- 90-minute hands-on workshop is designed to improve oral health for people with intellectual/developmental disabilities
- Maximum participants in workshop = 10
- Inclusion of support staff is required
- A certified dental hygienist leads hands-on activities to teach participants about:
  - cavity-causing bacteria and how to remove them
  - how to choose tooth-healthy foods and snacks
  - causes of cavities and the best ways to prevent them

## **Implementation in Kansas**

- Registered Dental Hygienists (RDH) deliver workshops
- Trained by Oral Health Kansas: watch one, lead one with supervision
- 3 trained RDHs currently, 2 more to be trained in December
- RDHs and KS DHP coordinate with service providers to schedule workshops as requested
- 14 workshops in 10 locations (urban and rural), 2017-Present

### **Fidelity and Evaluation**

- Pre/post test
- Post includes satisfaction items
- Trial of a 3-month follow-up



|   | Feeling Good about Your S<br>Workshop Fidelity Cheel |                 |      |
|---|--|-----------------|------|
|   |  |                 |      |
| Date:   | Start Time:  | End Time:       |      |
| lgency:   | Location:  |                 |      |
| Number of Participants:   | Number of Assistants:                                | Trainer:        |      |
|   | Workshop Preparation                                 |                 |      |
| Trainer reviewed PowerPoint   | prior to workshop.                                   | Ye              | s No |
| Trainer checked supplies prior  | to workshop.   | Ye              | s No |
| Confirmed # participants and a  | assistants prior to workshop                         | Ye              | s No |
| Confirm that participants are eligible to participate in the workshop           |  | Ye              | s No |
| Notes:  |  |                 |      |
|   | Workshop Activities                                  |                 |      |
| Trainer arrives 30 minutes prior to workshop to set up                          |  | Ye              | s No |
| One set of materials set out for each participant/assistant pair                |  | Ye              | s No |
| Pre-test is given to each participant- name and age written on each test        |  | est Ye          | s No |
| Trainer used projector or lami  | nated slides of the PowerPoint                       | Ye              | s No |
| Trainer explained cavities and acid attacks to participants in plain language   |  | guage Ye        | s No |
| Activity to simulate acid attack  | ks completed with participants                       | Ye              | s No |
| Trainer discussed how drinking sugary drinks all at once is better than all day |  | alí day Ye      | s No |
| Trainer discussed that germs love sugar and what snacks that are good for teeth |  | d for teeth Ye  | s No |
| Every Day and Special Day Foo   | ods activity was completed with particip             | ants Ye         | s No |
| Trainer explained how acid att  | tacks are stopped- Brushing teeth AM a               | nd PM Ye        | s No |
| Activity to disclose food and plague on teeth completed with participants       |  | ants Ye         | s No |
| Activity to practice pea-sized a<br>participants                                | amount of toothpaste on index cards co               | mpleted with Ye | s No |
| How to correctly brush teeth is demonstrated                                    |  | Ye              | s No |
| No spitting or rinsing after brushing teeth is discussed with participants      |  | ts Ye           | s No |
| Activity to practice correct toothbrushing is completed with participants       |  |                 | s No |
| Trainer reviews the concepts taught and demonstrated during workshop            |  | hop Ye          | s No |
|   | rror cling that demonstrates steps to br             |                 | s No |
| Each participant receives a too   | othbrush and travel size tube of toothpa             | aste Ye         | s No |
|   | ch participant-name is written on each               |                 | s No |

#### **Trainer Fidelity Checklist**

## **Participant Demographics**

| Workshop Participants, n=150   | n   | %    |
|--|-----|------|
| Individual with IDD  | 114 | 76.0 |
| Support staff  | 36  | 24.0 |
| Participants with IDD, n=114   |     |      |
| Female   | 71  | 62.3 |
| Male   | 43  | 37.7 |
| Missing some teeth   | 22  | 19.3 |
| Visited a dentist in the last 12 months (n=104)                      | 86  | 82.7 |
| Needed dental care in the last 12 months, but did not get it (n=101) | 43  | 42.6 |
| Mean age = 38.8 years; Range = 16-77                                 |     |      |

### **Evaluation Results**

#### <sup>(n=114)</sup> 83.3% participants improved on at least one item between pre and post

| Behaviors   | Correct Response<br>on Pre | Correct Response<br>on Post |
|---|----------------------------|-----------------------------|
| Brush teeth at least 1x day   | 78.1%                      | 86.4%                       |
| Brush teeth am and pm   | 50.0%                      | 87.7%                       |
| Knowledge   |                            |                             |
| Do all people have germs in their mouth?  | 54.4%                      | 71.9%                       |
| Can a cavity make your tooth/teeth hurt?  | 57.0%                      | 70.4%                       |
| If you drink something sugary is it best for your teeth to drink it <b>all at once</b> or throughout the day? | 15.8%                      | 61.4%                       |
| Which picture shows the amount of toothpaste you use/will use to brush your teeth?                            | 50.9%                      | 58.8%                       |
| Which foods can cause cavities/holes in your teeth?   | 26.3%                      | 70.2%                       |
| When you are thirsty which ONE do/will you choose to drink? Those that chose water.                           | 35.0%                      | 61.4%                       |

### What participants have to say about Feeling Good...

- "I wish someone would have told me this before. Why didn't my dentist teach me all this?"
- "I learned how not taking care of my teeth can make other parts of my body sick."
- "I want all of my friends to take this class too."
- "I learned sugar is bad for my teeth."

### Conclusion

#### **Kansas Sustainability Plan**

- Train more dental hygienists
- Partner with more Community Developmental Disability Organizations
- Partner with County Health Departments

#### Interested in learning more?

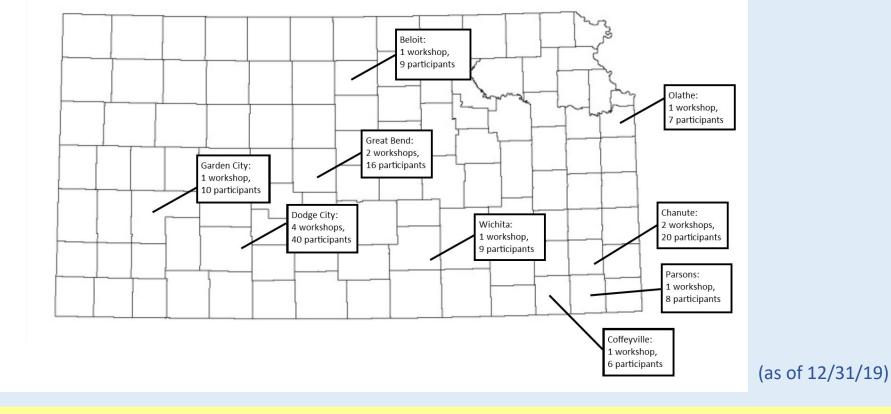
- For training inquiries: Oral Health Kansas, Kathy Hunt RDH KHunt@OralHealthKansas.org
- Kansas Disability and Health Program @ the University of Kansas Noelle K. Kurth, pixie@ku.edu; 785-864-7085



Kurth NK, Hall JP. (2019). Feeling Good About Your Smile: Implementation and Evaluation of an Oral Health Intervention for People With Intellectual Disability. *Inclusion 7*(3), 169-176. doi: 10.1352/2326-6988-7.3.169

(SLIDE ADDED POST-PRESENTATION per request of Lisa Sinclair)

#### Feeling Good About Your Smile Intervention in Kansas



**Kansas Disability and Health Program** *Kansans with disabilities can be healthy!*