Advancing Dental Public Health Skills Through Interdisciplinary Training

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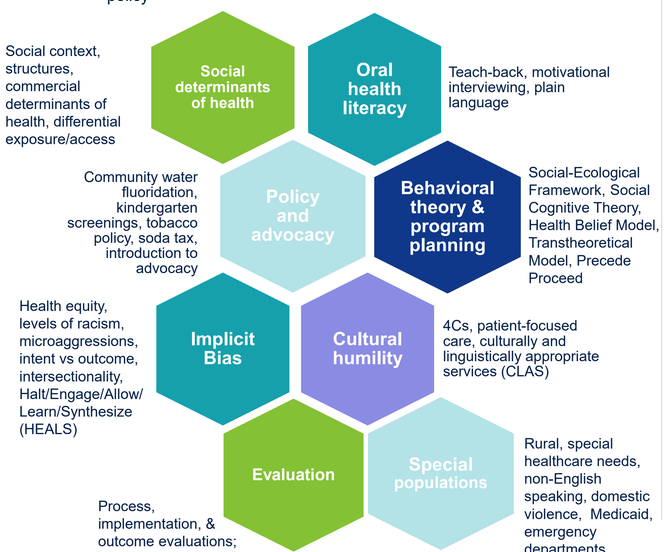
Background

- Dental care is a significant unmet need in the United States, with 60 million Americans living in dental health professional shortage areas.[1]
- In California, only 11% of dental providers provide care to over 100 patients enrolled in Medicaid per year.[2] Access to care for populations with special needs or who live in rural areas is especially difficult– with long travel and wait times (up to two years).
- UCSF created a new course, *Introduction to Dental Public Health*, to provide an interdisciplinary approach to equip dental public health (DPH) and pediatric dentistry (PD) residents with skills and knowledge to address oral health disparities and serve vulnerable populations.

Course Details

- This 10-week course explores public health concepts with real-world applications, applied discussion, and projects.
- Expert speakers from community organizations, academia, and health policy

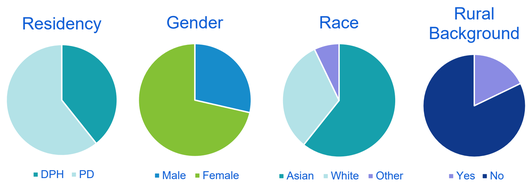


Evaluation methods

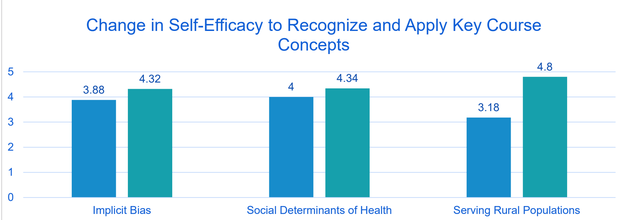
- We evaluated the impact of the course on topical and population course objectives.
- Evaluation surveys (N=28) were administered before and after course completion. Exit survey (N=15) was given upon program completion.
- Questions assessed resident confidence in addressing implicit bias, social determinants of health, and serving rural populations using a 5-point Likert scale. Additional Likert scale items and free-text questions assessed utility and satisfaction with the course.

Results

- 28 students took the course across 3 years (2021-2023)

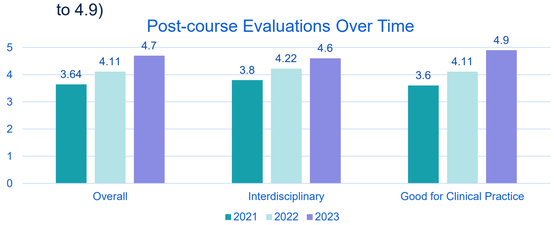


- From pre- to post-course, residents' confidence improved for addressing implicit bias (3.88 to 4.32), recognizing social determinants of health (4 to 4.34), and serving rural populations (3.18 to 4.8) on a 5-point scale



Results

- In the exit survey, 80% of program graduates report their new job to be working with underserved populations
- Across all three years, the course received a mean score of 4.15 overall, 4.14 for being interdisciplinary, and 4.15 for "value to my clinical practice"
- Over time, all domains improved, including overall course rating (3.64 to 4.9)



Student Feedback

- Favorite topics included: cultural humility, rural populations, water fluoridation, serving populations on Medicaid, and advocacy.
- The free-text question praised the participatory nature of the course, collaboration across specialties, breadth of real-world guest speakers, but requested more clinical examples.

> I really enjoyed the guest speakers and how they came from a wide range of backgrounds and provided us with insights on many topics.

> The interactive pattern of the course is the best part. It gives you a great practice at voicing your thoughts, getting feedback, and to know how others think about the same concepts.

> I enjoyed pairing up with residents from a different specialty for the final assignment.

Conclusion

- A new interdisciplinary dental public health course was able to improve PD and DPH dental residents' confidence to better serve vulnerable populations.
- Despite being accepted into a prestigious residency program, these dental residents were mostly unfamiliar with many aspects of dental public health, especially details about underserved populations and advocacy, supporting a need for courses like this.
- There is value in expanding dental public health training to additional disciplines.

Acknowledgements & Contact

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2- Nasseh K, Fosse C, Vujicic M. Dentists Who Participate in Medicaid: Who They Are, Where They Locate, How They Practice. *Med Care Res Rev*. 2023;80(2):245-252. doi:10.1177/10775587221108751

