

## **An Interdisciplinary Oral Health Promotion Intervention**

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**Introduction:** The purpose of this research was to test the impact of a health promotion program on older adults' oral health and nutrition knowledge and behaviors, and on 4<sup>th</sup> and 5<sup>th</sup> grade children taught by those elders. Older adults who taught 4th and 5th grade children these topics were compared with elders who did not teach. **Methods:** Volunteers in multiple senior centers (mean age 67.4) were assigned to control (n=54) or experimental (n=57) groups; 65.8% were women, 72% ethnic minorities. Of the 91 children who participated, 62.6% were female. The sample was primarily Hispanic (63%). Most (85%) were U.S. born. After baseline interviews and oral exams, experimental Ss attended 8 health classes on oral health and nutrition over 4 weeks. Those who completed all 8 sessions and volunteered subsequently taught children these topics in local schools, 6 sessions in 3 weeks (n=18 elders). Fourth and fifth grade classes in three rural Washington schools agreed to participate; classes made up the experimental group (n=53 children) and two were control group classes (n=38). Children in the control group were not given any intervention. Interviews and oral exams were repeated post-intervention (experimental Ss only) and 6 mos. later (all Ss). **Results:** Oral Health Self-Efficacy (SE) improved significantly among experimental elders compared to controls (time  $p < .0001$ , group  $p < .04$ ), but General SE improved only among non-teachers ( $p < .05$ ). Knowledge re: plaque and snacks improved immediately post-intervention and was retained at 6mos ( $p < .02$  and  $p < .004$  respectively) in experimental elders, due to gains among non-teaching elders. Knowledge re: removing plaque improved at post-intervention ( $p < .004$ ) but did not persist. Knowledge re: healthy ( $p < .004$ ) and unhealthy snacks ( $p < .01$ ) also improved among elders in both experimental groups, but control Ss showed no changes on any knowledge items. Self-reported brushing frequency was in all groups, but flossing was low; improving in the two experimental groups ( $p < .002$ ), not in controls. Both at the immediate and 6 month follow-up, experimental groups children knew more about fluoride's effect ( $p < .02$ ), plaque ( $p < .05$ ), and removal of plaque ( $p < .0001$ ) than before. Control group children showed no significant changes. The former could list more healthy snacks ( $p < .0001$ ) and unhealthy snacks ( $p < .001$ ) 6 months later, and reported increased flossing frequency (65% vs. 44%). They were also more likely to report better eating habits immediately after and 6 months later. **Conclusion:** Participating in a health promotion intervention improves elders' SE, health knowledge and flossing frequency, but the experience of teaching children this same information has little additional benefit. This may be because volunteer teachers knew more about oral health and nutrition before the intervention. These findings reveal that an intergenerational program can successfully improve children's oral health knowledge and behavior. Research supported by CDC Grant #U48/CCU009654