

Title of Intervention: The Rural Dental Health Program

Intervention Strategies: Group Education, Environments and Policies

Purpose of the Intervention: To encourage children to utilize dental services more appropriately

Population: Children in kindergarten through sixth grade

Setting: Primary: Schools in rural Juniata County in Pennsylvania; school-based; Secondary: Private dental offices; community-based

Partners: School district, the University of Pennsylvania School of Dental Medicine

Intervention Description: Children were randomly assigned for dental treatment in a school-based practice (SOLO or TEAM) or to private practitioners in the community (COMMUNITY). Simultaneously, five of the nine public schools attended by the children offered an enriched program of oral health education. All children participated in a school-based fluoride program and their oral health treatment was provided without charge.

- Group Education: The education intervention consisted of lesson plans that integrated information and principles of oral health into regular academic subjects.
- Environments and Policies: The education intervention provided a place in each classroom for children to keep their own toothbrush and dental floss for daily use. All children were provided fluoride tablets daily. Oral health treatment was provided from a school-based, mobile van that annually visited each of the nine schools. The TEAM group mode the staff included a dentist, a chair-side assistant and two expanded function dental assistants. In the SOLO mode, the staff included a dentist and chair-side assistant. Children assigned to these groups were treated according to their need of treatment. Parents were not involved in deciding when and what kinds of oral health care their children received. In the COMMUNITY group, treatment was provided by private dentists who practiced in the county. However, to obtain treatment, it was necessary for parents to make appointments and transport their children to practice sites. Treatment was delivered in response to parents who demanded oral health care for their children.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Teachers, dentists and dental hygienists with expanded functions, chair-side assistants
- Training: Not mentioned
- Technology: Not mentioned
- Space: Classrooms
- Budget: Not mentioned
- Intervention: Mobile dental services, fluoride tablets
- Evaluation: Printed questionnaires

Evaluation:

- Design: Quasi-experimental
- Methods and Measures:
 - The Health Practice Survey to measure participants' use of professional oral health services, home hygiene products, general health care practices and knowledge on information related to oral health and the institution of dentistry

Outcomes:

- Short Term Impact: Not reported
- Long Term Impact: Evidence indicates that children assigned to the school-based oral health care who also attended a school offering enriched oral health education used dental services on a more regular basis than children in the other groups. However, seven years after funding for RDHP ended, children

originally assigned to the community-based treatment utilized more professional services and showed a higher level of dental knowledge than children assigned to the school-based treatments.

Maintenance: Daily fluoride tablets were continued after the intervention.

Lessons Learned: Oral health education had a positive effect on children's utilization of dental services. Obstacles such as cost of care, difficult access to care, patient's perceived fear of treatment, and low perceived value of dental care were observed. The program not only had a direct effect on the children but also on the attitudes and behaviors of the teachers, which probably helped to encourage a higher level of compliance by the children.

Citation(s):

Bentley JM, Cormier P, Oler J. The rural dental health program: the effect of a school-based, dental health education program on children's utilization of dental services. *Am J Public Health*. May 1983;73(5):500-505.

Feldman CA, Bentley JM, Oler J. The Rural Dental Health Program: long-term impact of two dental delivery systems on children's oral health. *J Public Health Dent*. Fall 1988;48(4):201-207.