

Abstract

Purpose: A collaborative program was developed between a university dental school and a pediatric oncology center which implemented an oral assessment and fluoride varnish treatment educational program for pediatric oncology providers in order to prevent both acute and long term dental effects of cancer treatment in children.

Background: Chemotherapy and radiation place the child at high risk for developing oral problems both during and after childhood cancer treatment, yet preventive dental care is not considered a priority at this time.

Methods: This project consisted of an interdisciplinary collaborative educational program between a university dental school and an urban outpatient pediatric oncology center to educated pediatric oncology providers

Results: The results indicated that the pediatric oncology providers increased their oral health knowledge and current practice in oral assessment and fluoride varnish.

Implications: This project demonstrated that pediatric oncology providers can implement a preventive dental program, which may positively impact the acute and long-term dental problems of childhood cancer survivors.



Objectives

Outcomes:

- Increase knowledge and practice behavior of pediatric oncology healthcare providers to include oral assessment and fluoride varnish

- Pediatric cancer patients will receive oral assessment and fluoride varnish



Background

Significance of the Problem in Pediatric Oncology

Dental caries:

- Most prevalent infectious disease
- Strep mutans
- Transmitted from caregiver to child
- Preventable
- Immunocompromised
- Pain, fever, delay in treatment, increased cost (Carrillo, 2010; da Fonesca, 2004).
- Mouth is most frequent source of sepsis” (AAPD, 2008)
- 90% cancer patients develop oral problem (Chin,1998)
- Parents are overburdened with medical appointments
- Separation of Medicine and Dentistry

Synthesis of Evidence

- Six Surveys on “Non-dental Health providers Knowledge, Current Practice, Barriers to Referral and Attitudes toward Incorporating Oral Care into Practice” (dela Cruz, 2004; Glenn, 2004; Grant, 2007; Ismail, 2003; Lewis, 2000, 2009)
 - Non-dental providers have lack of knowledge and training in oral healthcare
 - Report barriers in referring young children for dental care
 - Overwhelming acknowledge importance of oral health
 - Willing to incorporate oral healthcare into practice
- Three Interventional Studies on “Oral Health Education Training for Non-Dental Health Care Providers” (Douglass, 2005; Schaff-Blass, 2006; Slade, 2007)
 - Providing non-dental providers with an oral health educational program can be successful in increasing their knowledge and practice behavior regardless of the specific type of educational delivery method used.

Implementation Framework

Prevention and Population Health Curriculum Framework

- Evidence Base for Practice
- Clinical Prevention services
- Health systems and health policy
- Community aspects of practice (Allan, 2004)



Methods

Pediatric Oncology Providers

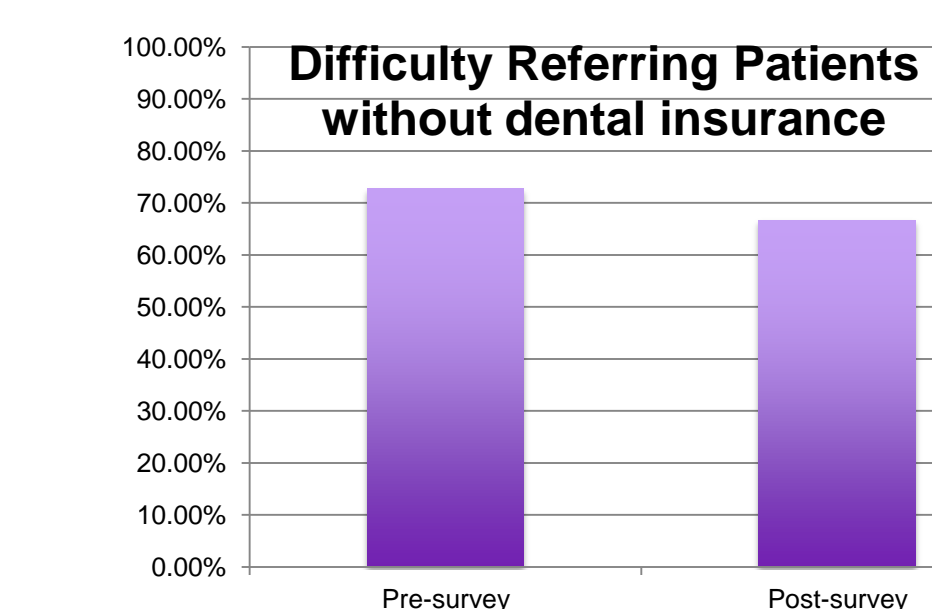
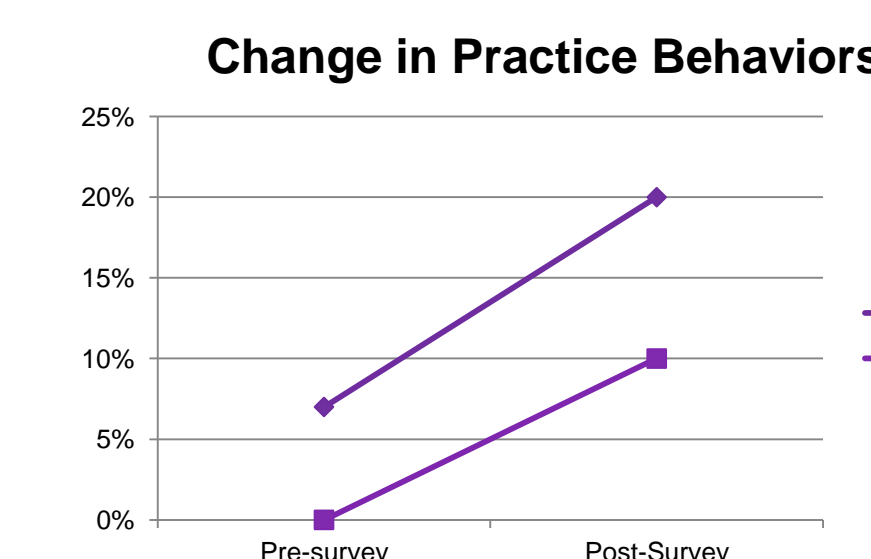
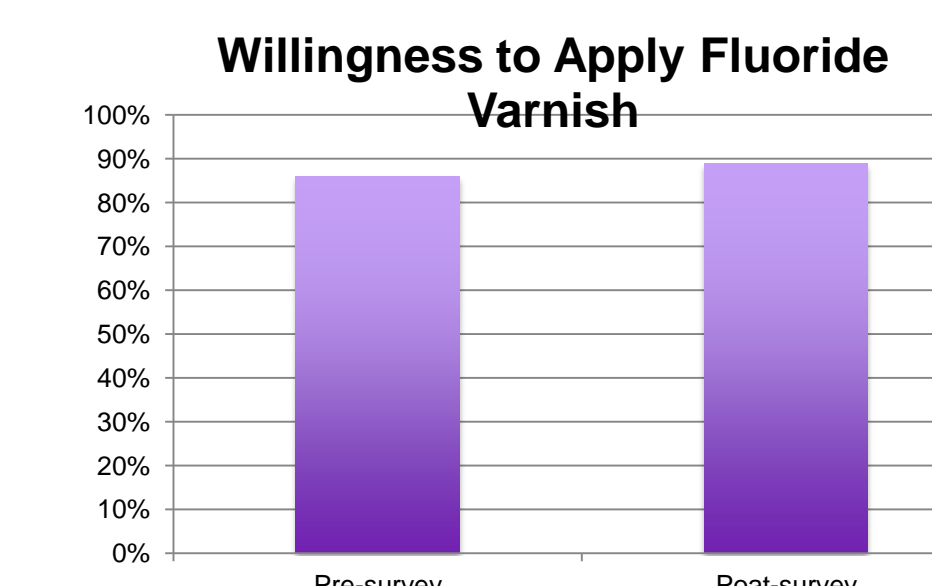
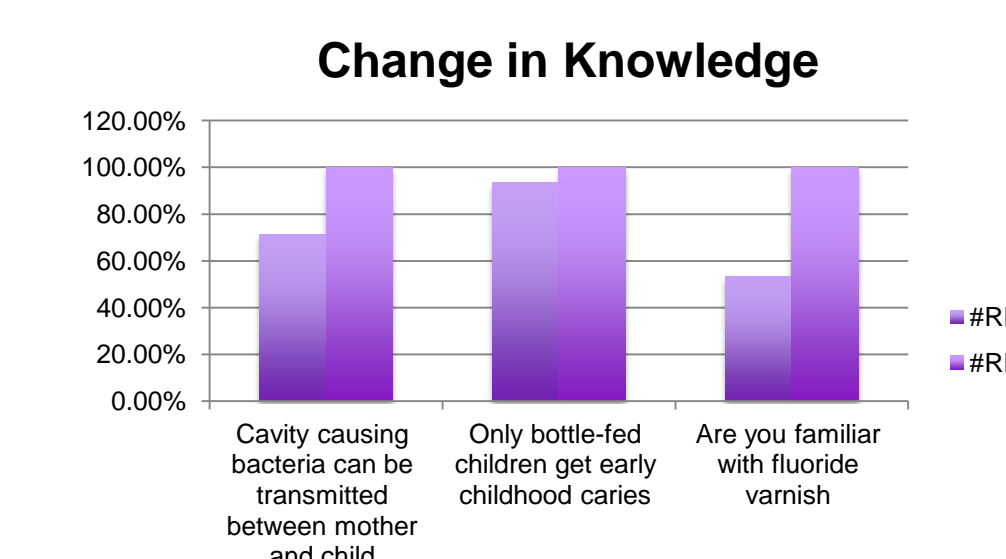
- completed a pre-survey assessing oral health knowledge, practice behaviors, attitudes toward incorporating oral health assessment and fluoride varnish into their practice

- attended an oral health educational intervention and fluoride varnish skills lab and

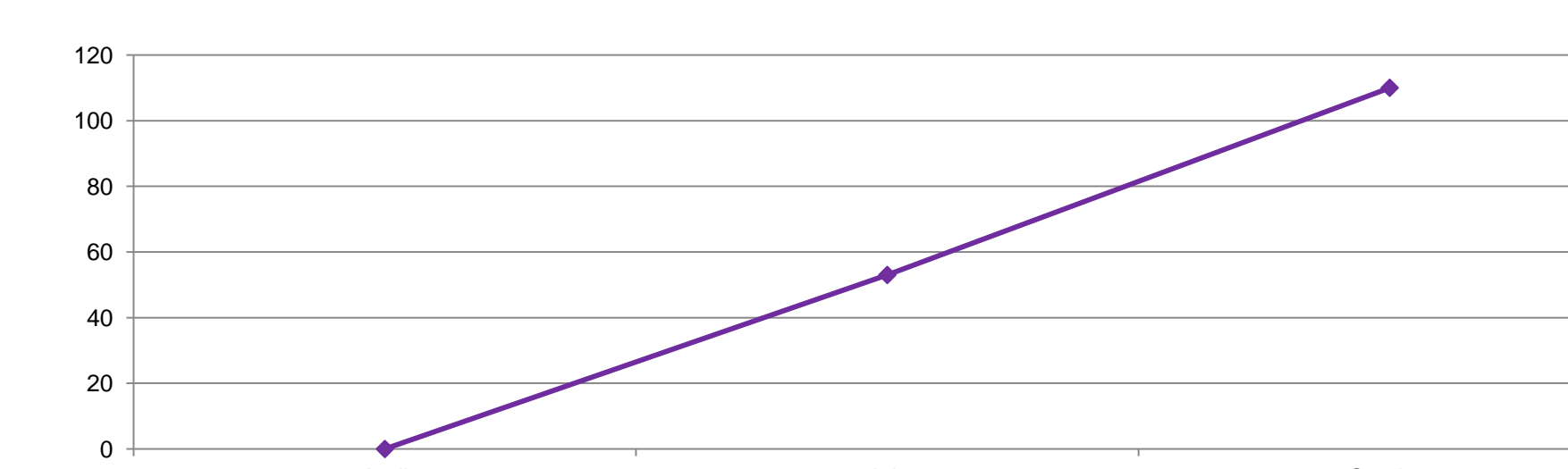
- performed an oral assessment and application of fluoride varnish on children being treated for cancer

Results

	N	MD	NP	Fellow	RN
Completed Pre-survey	15				
Attended Class	15	4	2	4	5
Attended Skills Lab	14	3	2	4	5
Completed in Class test	14				
Completed AAP certification	11	1	2	3	5
Completed Post-survey	10				



Number of Children Receiving Fluoride Varnish from Non-dental Providers



Conclusion

Conclusion

- Increased oral healthcare knowledge of pediatric oncology providers
- 10-15 oncology healthcare providers participated in an oral assessment and fluoride varnish education program.
- Children being treated for cancer received fluoride varnish
- 0 -110 pediatric oncology patients received fluoride varnish from April – October 2011

Implications and Significance:

- DNP can change practice, policy
- Inter collaboration between health professionals benefits both patients and professionals

Recommendations:

- Further research needed to develop pre-treatment protocols

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