

A NEW ORAL HEALTH CARE ACCESS POINT FOR UNDERSERVED CHILDREN IN PALM BEACH COUNTY, FLORIDA

Introduction

Early Childhood Caries (ECC) is one of the most prevalent health problems of infants and toddlers. It usually develops by repeated exposure of children's teeth to carbohydrates, such as sugar in milk, juice, or infant formula. (ECC) is a preventable disease at an affordable cost.

Dental caries can be prevented by a combination of community professional and individual measures including but not limited to the professionally application of fluoride varnish.

Children from moderate and poor income families suffer from dental caries that go untreated. Dental decay in young children can lead to poor nutrition, missed school days, needless pain, and medical complications. Childhood oral disease has significant health consequences that are detrimental to a child's well being. This goes unnoticed because of the historical separation of medicine and dentistry.

The purpose of screening and applying a fluoride varnish to pediatric clients is to reduce the incidence of baby bottle tooth decay or (ECC). The varnish application is a simple, safe, painless, and cost efficient way to decrease (ECC), when compared to thousands of dollars spent on a single hospital visit for the treatment of this disease. The fluoride is applied from prepackaged fluoride varnish using a small brush, much like an artist's brush. The varnish is hydrophilic, thus keeping the teeth absolutely dry is not critical for successful application. It has a likable taste and is less toxic to children because less of the product is swallowed during application so children do not become nauseated. They can rinse their mouths after one hour and resume brushing the next morning.

The early and frequent contact that most young children typically have with physicians presents a unique opportunity to evaluate their oral condition and perform basic preventive services. Pediatric health care providers may be the only ones that can provide preventive oral health education for families of young children who lack access to professional dental care.

This project can have a broad policy implication regarding dental screening, application of fluoride varnish, and oral health education as preventive measures to reduce the incidence of (ECC) beyond the dental setting. Routine dental care along with proper oral hygiene instructions in a non-dental facility by a register dental hygienist could result in decrease of dental caries and loss of teeth among underserved children.

Objectives

The pilot project was designed to increase access to preventative oral health services to underserved children in Palm Beach County, Florida with the expanded scope of hygienists created under Chapter 466.0235 of the Florida Statutes and the integration of activities from the existing oral health workforce.

Methods

•Sample:

The pilot study was developed with 100 underserved children ages 0 to 43 months in Palm Beach County, Florida, from two pediatrician offices that serve a large volume of Medicaid patients.

• Offices location:

Palm Beach Gardens, and Jupiter in Palm Beach Florida.

•Research Instruments:

- Data collected that included a survey developed on a computer using the Epi-Info software.
- An inform consent
- Instructions
- Referral information

•Personnel:

One Registered Dental Hygienist.
Pediatricians
Team Members

•Supplies:

Micro brush applicators
2x2 gauze squares
Gloves
Fluoride varnish
Protective glasses
Direct light source
Toothbrush

•Procedures:

•**Obtaining Inform Consent:** During physical exams, an informed consent was obtained from each child's guardian to proceed with dental charting, fluoride varnish application, preventive oral health education, and a dental referral provided by a registered dental hygienist.

•**Dental Charting:** After informed consent was obtained, the dental hygienist began the screening by lifting the upper lip of the child's mouth looking for presence of plaque, white and brown spot, gingival abnormalities as well as early/advanced /severe decay. After completion of this, she counted the number of teeth present in the mouth.

•**Application of Fluoride Varnish:** The dental hygienist began talking to the parents/guardian about the important of the application of fluoride varnish. Parents were involved in the process by assisting in holding the child in a knee-to-knee position. The dental hygienist applied the varnish which consisted of a thin layer of a pleasant tasting liquid with a slightly thickened consistency that came in a very small brush applicator that is apply to all surfaces of the teeth. Fluoride varnish instructions were given to parents/guardians.

•**Preventive Oral Health Education:** The dental hygienist provided patients with instructions regarding how to brush their teeth, and nutrition counseling.

•**Dental Referral:** Patients were provided with a dental referral with a list of community resources in the form of a dental resource guide.

Results

Children ages 0 to 43 months in Palm Beach County, Florida Type of Insurance	(n=100) %
Children with Medicaid	79
Children with Dental Private Insurance	7
Children without Dental Insurance	14

Children ages 0 to 43 months in Palm Beach County, Florida Gender	(n=100) %
Females	49
Males	51

Children ages 0 to 43 months in Palm Beach County, Florida Office Location	(n=100) %
Palm Beach Gardens Office	74
Jupiter Office	26

Children ages 0 to 43 months in Palm Beach County, Florida Clinical data	(n=100) %
Dental Screening	100
Fluoride Varnish Application	92
Patient Education	100
Dental Referrals	98

Children ages 0 to 43 months in Palm Beach County, Florida Treatment Urgency	(n=100) %
No Obvious Dental Problems	94
Needed Early Urgency	3
Urgent Dental Care	2

Conclusions

✦ This new health care access point, reached, screened and provides preventive oral health services to underserved children in Palm Beach County, Florida, that did not see a dentist until age 3 or later .

✦ More than 40 percent of children experience some form of tooth decay before reaching kindergarten. That is why provision of oral health care in a pediatric practice by oral health expert such as a registered dental hygienists is an example of how working together as a health professionals can improve children's oral health.

✦ An evidence based-business model with the utilization of a register dental hygienist that will perform dental screenings for (ECC), application of fluoride varnish, oral education, and proper referrals will be developed for pediatricians to follow to reduce the rates of (ECC) of underserved children in Palm Beach County.

✦ This pilot project would like to make a significant change and enhance the awareness of parents and children on the importance of oral health beyond the dental setting.

✦ Even though, medical providers like pediatricians, and family doctors, can expand their involvement in oral health prevention, they can never replace the care that a dental professional can provide.

✦ Pediatricians believe that they have an important role in promoting oral health, but they seem to be ambivalent about assuming greater involvement. Some of the reasons are, limited knowledge, lack of familiarity with basic health-related issues , and time constrain.

✦ Therefore, the importance of having a dental hygienist in a pediatric practice to provide preventive care services will increase early intervention and prevent dental diseases.

✦ Oral health is an integral component of a child's overall health and well-being. Without effective interventions, dental caries in young children can result in the loss of tooth structure and early tooth loss, inadequate tooth function, chronic pain, infection, medical complications, hospitalizations, impaired speech development, poor nutrition and impaired growth, inability to concentrate in school and missed school days.

Acknowledgments

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