An Innovative Model for Interprofessional Education: Pediatric Dental Professionals and Pediatric Nurse Practitioners

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March 12, 2011
ADEA
Goals

• Establish a pediatric dental and nurse practitioner (PNP) relationship that
  – Enhances the interprofessional education of dental students, residents, and PNP students
  – Encourages evidence-based practice through interprofessional case presentations
  – Increases collaborative scholarly publications among PNP nursing faculty, pediatric dental faculty, and students
  – Fosters the design and implementation of research studies that explore ways to improve the oral and systemic health of diverse pediatric populations
Interprofessional Education

- Interprofessional collaboration in practice starts with interprofessional education
- Professional socialization of future health care professionals
- Complexity of disease need common language
- Gain respect, reduce errors
- Referrals rely on relationships
- Team-based patient care
Interprofessional Education Collaborative (IPEC)

• Core competencies to guide curricula development at all health professions schools

• 1. Values and ethics for interprofessional practice  
  2. Roles and responsibilities for collaborative practice  
  3. Interprofessional communication  
  4. Interprofessional teamwork and team-based care
NYU Merger of Dentistry and Nursing

- Merger in 2005
- Educational synergies
- Administrative advantages
- Institute of Medicine recommendation for healthcare providers to be educated in teams
Nurses In The Dental Practice

• Explore possibility of nurse practitioners affiliating with dentists

• 30 to 40 million people visit a dentist—BUT NOT A PHYSICIAN—each year

• Dental patients would have access to the health promotion, diagnostic skills and therapeutic intervention provided by nurse practitioners
Presentation

• "The Road to Collaboration Is Paved With Good Intentions: Challenges Developing an Interprofessional Education Framework at New York University College of Dentistry," on Sunday, March 13, at 2:00
Team-Based Care For Pediatric Oral Health

• Dental caries is most common chronic pediatric health problem
• Oral health is greatest unmet health need among pre-school children
• Rate of caries in pre-school children is increasing
• Poor oral health effects nutrition, speech, socialization and learning
Team-Based Care For Pediatric Oral Health

- Non-dental pediatric providers may see pre-school children often
- Interprofessional Education Goals:
  - Identify oral health risk factors
  - Provide health promotion
  - Recommend appropriate interventions and referrals
Types of Inter-Professional Education

- Clinical
- Didactic (class room and online)
- Continuing Education
- Research
- Presentations
- Health Promotion
Challenges

- Schedules
- Space
- Funding
- Faculty time
- Location
Inter-Professional Programs at NYU Pediatric Dentistry

- Pediatric Nurse Practitioners
- Dietetics
- Masters in Social Work
- Newborn Nursery
- Dental Hygiene
- Dental Therapists
- Health Informatics
- Pediatric Medicine
Pediatric Nurse Practitioners (PNP) and Oral Health

- Nurse Practitioners are more likely to provide health promotion
- Skilled in anticipatory guidance
- Can help establish an dental home by 12 months of age
- Pediatric Residents and Dental Students benefit from learning the role of PNPs
- Dental providers participate in patient-centered care
Donna Hallas PhD, PNP-BC, CPNP

- Clinical Associate Professor
- Coordinator: Pediatric Nurse Practitioner Program
- Fellow: National Association of Pediatric Nurse Practitioners
- Research Focus: Improving Health Care Outcomes for Children and Adolescents
Pediatric Nurse Practitioners

• National Association of Pediatric Nurse Practitioners (NAPNAP)

• Role for PNPs: “to provide optimal health for children through leadership, practice, advocacy, education, and research”
Education and Credentialing: PNPs

• Current: Masters degree
• By 2015 entrance into practice Doctorate in nursing practice (DNP)
• Credentialing: National Certification
  – Pediatric Nursing Certification Board (PNCB)
  – American Nurses Credentialing center (ANCC)
Overview PNP Program

- PNP Scope of practice
- Recommendations for enhancing the role of the PNP in oral health screening, prevention, and referrals
- Designed interprofessional education experiences
• Assessment of the oral cavity
  – Evaluation of primary and secondary dentition
  – Common oral health concerns
  – Recommendation for the first dental visit
  – Recognition of malocclusions, dental caries, dental injuries
  – Recommendations for brushing and oral hygiene pacifiers and bottles
  – Recommendations for prevention of dental problems; focus on newborn, infant, toddler, and school-age children oral health needs and dental hygiene; and oral health and dental health issues for children with special needs such as cleft palates.
Collaborative Clinical Practice Sites

• Pediatric Dental Outreach Programs: Head Start
• Pediatric Dental Clinic
  – Collaborative evidence based case presentations
• Pediatric Primary Care Sites
PNP Student Outcomes for Outreach Program and Clinic

- The PNP students will perform oral health assessments through hands-on participation in selected dental care sites.
- The students will participate in reflective journaling to describe their experiences in collaboration with the pediatric dental residents and dental students.
Jill B. Fernandez, RDH, MPH

- Clinical Associate Professor in Pediatric Dentistry at NYU College of Dentistry
- Director, Global Pediatric Outreach & Prevention Programs

Grenada
Preparing for Collaborative Teamwork

- How can we prepare students for their future professional role as a healthcare provider?
- How can we develop knowledge, understanding, attitudes and skills necessary for effective collaborative teamwork?
Early Intervention in their professional training schools
Existing Interprofessional Collaboration

• Established model of interprofessional collaboration with nutrition interns for 6 yrs
• Interns rotate for a 2 wk period in the pediatric post graduate clinic & attend a community outreach rotation
• Provide nutritional counseling
• Present seminar to residents & faculty
  – New collaboration with MSW interns
PNP Students & Pediatric Dentistry -

- Interprofessional collaboration is an essential component in educating healthcare professionals to become effective team workers in the community
- PNP students & dental students working side by side in community outreach rotations
- Exploring interprofessional experiences
Health Promotion: Oral Hygiene for the Pediatric Patient

Course Outline (D1)

- Importance of primary teeth
- What is healthy?
- Risk factors for ECC
- Anticipatory guidance
- Oral health education
- Examining an infant & toddler
- Dental home

Didactic & Hands-on
Pediatric Dentistry for the New Dentist

Course Outline (D1)

- Providing oral health education
- Examining large numbers of children
- Understanding behavior management (Tell-Show-Do)

Off-site Rotation
Initial Clinical Experience

Course Outline (D2)

• Introduce dental students to pediatric dentistry as early as possible
• Provide positive first experience
• Clinically examine large numbers of children
• Differentiate between development expectations
• Social responsibility
Oral Health Seminar to PNP students

Lecture & Hands-on  Role Playing
Observation by PNP Student at Head Start
Charting caries

Performing knee to knee exam
Applying Fluoride Varnish
Assessing Patients

- PNP noticed distortion of facial features
- Diagnosis - hemangioma
- Most common benign tumor in infants
Behavior Management
Outcomes

• Over 1,400 dental students & 64 PNP students participated in this program
• Venue for dental students to have earlier contact with patients and other healthcare professionals
• Expose students to an alternative service delivery model
• Increase awareness of oral health needs of infants & children
Outcomes

• Improve student communication, diagnostic & treatment planning skills
• Cultivate partnerships between future healthcare professionals & Head Start
• Foster interprofessional relations
Dental Student Reflections on Interdisciplinary Experiences

• “Interesting working with a nurse practitioner, she was helpful in calming some of the anxious children”
• “Great working with the nurses, they were able to handle the crying children”
• “They were able to handle the children better.”
Dental Student Reflections on Interdisciplinary Experiences

• “It gave us an opportunity to work with other health professionals”

• “The nurses were useful in comforting the children. I would show them caries and educate them on what caries looked like.”

• “I enjoyed working with the nurses, they didn’t have the mindset of just doing the dental work and leaving. They were much more engaging with the children.”
PNP Student Reflections

• “Anticipatory guidance is so needed:
  – The parent of overweight child who would not cooperate in the dental clinic offered to take the child to McDonalds
  – The parent of underweight child who would not cooperate offered to give child a sticker”
PNP Student Reflections

• “I was surprised to see the number of children who presented with dental caries. The importance of educating parents in our practices and collaborating with dental professionals is evident”
• “Opportunities for collaboration include effective behavior modification strategies and reducing the child’s anxiety and fears”
Interprofessional Collaboration

- Nutritionists
- Pediatric Nurse Practitioners
- Social Workers
Neal G. Herman, DDS, FAAHD

- Clinical Professor (Pediatric Dentistry)
  New York University College of Dentistry

- Diplomate, American Board of Special Care Dentistry

- Director, Pediatric Dentistry Visiting Scholars Program

- Faculty, NYU Master’s Programs in Public Health and Global Public Health

Songea, Tanzania
Clinical Collaboration

• Interprofessional collaboration in the clinical setting – working with PNP’s in the pediatric dental clinic

• Case presentation as a teaching tool

• Case selection and presentation - clinical considerations
Case Presentation (CP) as a Teaching Tool

- Communication between healthcare providers and patients has been receiving increasing scrutiny, but less attention has been paid to the nature of communication among providers.
- CP provides a vehicle for the collaborative conduct of medical work.
- CP enables teaching and evaluation of clinical competence – mastery of case detail, clinical judgment, medical and patient management and conscientiousness.
- CP promotes negotiation of professional relationships.
- CP advocates reproduction of professional values.

Haber, RJ and Lingard, LA - J Gen Int Med 16: 308-14, May 2001
LEARNING ORAL PRESENTATION SKILLS – A RHETORICAL ANALYSIS WITH PEDAGOGICAL AND PROFESSIONAL IMPLICATIONS

Haber, RJ, Lingard, LA – JGIM Vol. 16; 308-14 May 2001

- Students and teachers had different perceptions of the purpose of oral presentations
- Students – rule-based, data storage activity governed by “order” and “structure”
- Teachers – flexible means of “communication” and method of “constructing” details of a case into a diagnostic or therapeutic plan
- Resulted in little guidance for students and dysfunctional generalizations sometimes resulting in worse communication
- CONCLUSIONS: students learn oral presentation by trial and error; developing effective communication skills may be delayed, and unintended professional values may be acquired.
Case Presentation – Promotes Critical Thinking

Smith (1977, 1981) found three kinds of instructor-influenced classroom interactions to be consistently and positively related to gains in

- critical thinking the extent to which faculty members encouraged, praised, or used student ideas
- The amount and cognitive level of student participation in class
- The amount of interaction among students in a course.

In a recent study, successful development of students‘ critical thinking skills was linked to an emphasis on cooperative exploration of knowledge and divergent thinking (Tsui, 2000).

The Journal of Higher Education, Vol. 73, No. 6 November/December 2002
Benefits of Case Presentation Format

- Effective medium for students / residents to learn how to:
  1. organize clinical information
  2. think through the meaning and relation of its different components
  3. present a succinct and accurate account of clinical findings and their interpretation
  4. use the format as a springboard for discussion if implications of the material presented

Engel, GL – NE Jour Med 284: No. 1, 20-24, Jan 7 1971
Limitations of the Case Presentation

- Patient is not present – discussion centers around disease and basic principles, no direct observation, communication (questioning) or examination
- “Individuality” of the patient is reduced
- Encourages indifference to the person, tendency to overemphasize laboratory work-up and diagnostic tools
- Cannot stand alone as the exclusive clinical teaching device.

Engel, GL – NE Jour Med 284: No. 1, 20-24, Jan 7 1971
Purpose of the Case Study

• **Impart information** about patients to peers, superiors and consultants
• **Provide an arena / showcase** in which claims to knowledge are made and epistemological assumptions are displayed
• **Serve as a linguistic ritual** where *presenters learn and enact fundamental beliefs and values of the medical world*
• **Platform** for professional socialization

Anspach, RR – J Health Soc Behav 29: 357-75 Sep 1988
Interprofessional Case Presentations

OUTCOMES

• Articulate literature search skills – utilize only highest quality studies
• Critically appraise textbook learning to real-world clinical care
• Perform evidence-based approach to practice
• Forge a collaboration between pediatric medical and dental practitioners – pediatric nurse practitioner students and pediatric dentistry post doctoral students
• Demonstrate leadership and communication skills to existing case-study experience
• Promote life-long problem solving and critical thinking
Evaluation of Case Presentor

- **Skill of presentation** – eye contact, appropriate A-V aids (clinical photos and radiographs), ability to elicit audience participation
- **Case history summary** – pertinent positives and negatives, relative lab data, clarity of the presentation
- **Knowledge of the case** – prognosis, complications, treatment, emotional aspects, handling of peer questions
- **Organization of the case** – problem list, treatment plan, logical sequence of procedures, preventive plan, home-care recommendations
- **References** – thoroughness, up-to-date

adapted from Greenberg, LW, Jewett, LS – Medical Teacher, Vol. 9, No. 3, 1987
The Clinic Rotation

The **goals** were to

- **Have the PNPs observe pediatric oral health care delivery first-hand**
- **Promote interaction** between medical and dental providers
- **Apply** oral health messages and strategies to their patients medical care (Anticipatory Guidance)
- **Reflect** on their experiences – how could PNP students and dental residents work collaboratively
Our Cases

• Each case presentation was a collaborative effort between one postdoctoral student in Program for International Dentists in Pediatric Dentistry and two senior students in the Pediatric Nurse Practitioner (PNP) Program.
• Each presentation showcased a case involving medical compromise as well as sophisticated dental management
• **Case 1** – 9y 6m old male child with Autism Spectrum Disorder, co-managed by team to treat dental caries in the primary dentition with Intermediate Therapeutic Restoration (ITR) and intensive fluoride therapy
• **Case 2** – a child with Ventricular Septal Defect requiring multiple dental restorations
How Did The Students Get Together?

- During clinic sessions, cases were identified that were suitable for joint presentation.

- PNP students and residents met to discuss medical and dental considerations.

- They worked and communicated on the presentation via direct discussion, email and phone.

- They met one last time before presentation to refine final touches.
Case Study: Ventricular Septal Defect

Collaborative PNP and Dental Case Presentation
Katie Shaw RN, SPNP
Tashea Gallimore RN, SPNP
May 5, 2010
Meeting a child with a heart problem

By: Shereen Riad
Special thanks to Dr. Herman.
Highlighted Case
Autism Spectrum Disorder (ASD)

Karyn Cherwinski
Erin Leech
ETIOLOGY

• First reported by Leo Kanner in 1943 who thought the children were of normal intelligence, but the product of cold, distant parenting
• Kanner studied a group of 11 children who exhibited social impairment and their insistence on sameness
• Now known as a neurodevelopmental disorder recognized as one of a spectrum of pervasive developmental disorders (PDDs)
INCIDENCE/PREVALENCE

• Increase in rates over the last 15 years
• Estimated to occur in 15-17 children in 10,000
• Occurs in all racial, ethnic, and socioeconomic groups
• Four to seven times more likely to occur in boys than in girls
• Cognitive impairment is reported for 40-62% of children
DIAGNOSIS

• Child has impaired communication skills and social interactions and one or more repetitive & stereotyped behaviors

• Typically becomes apparent in child by 3 years of age, but can be delayed
  – Most parents delay reporting developmental concerns until 21-25 months of age although they are aware of delays at 17-19 months of age

• Many children with autism are also mentally retarded

• Child must meet criteria for autistic disorder of the APA of the Diagnostic and Statistical Manuel of Mental Disorders (DSM-IV)
SCREENING

• Audiology screen should be completed to rule out hearing impairment as a reason for speech delay
• Lead screening
• AAP recommends screening for autism at the 18 month well child visit
  – Modified Checklist for Autism in Toddlers (M-CHAT): Series of questions the parent completes while at the visit.
  – If results point to autism, the child should be referred for formal diagnostic testing
DSM-IV CRITERIA

A total of 6 or more items from (1), (2), and (3), with at least two from (1) and one each from (2) and (3):

1. Qualitative impairment in social interaction, as manifested by at least 2 of the following:
   - Marked impairment in the use of multiple nonverbal behaviors, such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interactions
   - Failure to develop peer relationships appropriate to developmental level
   - Lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by lack of showing, bringing, or pointing out objects of interest)
   - Lack of social or emotional reciprocity
(2) Qualitative impairments in communication as manifested by at least one of the following:

- Delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication, such as gesture or mime)

- In individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others

- Stereotyped and repetitive use of language or idiosyncratic language

- Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level
(3) Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:

- Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
- Apparently inflexible adherence to specific, nonfunctional routines or rituals
- Stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, complex whole-body movements)
- Persistent preoccupation with parts of objects
DSM-IV CRITERIA (cont.)

• Delays or abnormal function in at least one of the following areas, with onset before age 3 years: (a) social interaction, (b) language as used in social communication, or (c) symbolic or imaginative play

• The disturbance is not better accounted for by Rett disorder or childhood disintegrative disorder
No one treatment works for every child.

Early, intensive, and sustained behavioral and educational interventions are associated with improved long-term outcomes.

A comprehensive treatment plan must include both education and behavior management and often pharmacologic treatment.

- Should define language, social, and educational goals, define and prioritize target behavioral symptoms for intervention, and provide for periodic assessment of the child’s functioning at home and school.
PHARMACOLOGIC TREATMENT

70% of children with ASD 8 years and older receive psychiatric medication

- **Atypical Antipsychotics**: Risperidone & aripiprazole are FDA approved to treat irritability in children and teens 6-17yrs. Risperidone is effective in decreasing severe tantrums, aggression, & self-injurious behavior.

- **Stimulants**: (Ritalin, Adderall) Used to decrease hyperactivity and impulsiveness and increase attention. Approx. 50% of children with ASD show a positive response.

- **Selective Serotonin reuptake Inhibitors (SSRIs)**: Used off label in ASD. Prozac has been shown to improve behavior, cognition, language, affect, and social skills in some children.
PHARMACOLOGIC TREATMENT

• **Anticonvulsants:** (Tegretol, Depakote, Lamictal) may also be useful for decreasing irritability and aggression

• May require sedation for medical and dental procedures, but many of these medications have paradoxical effects in autistic children

• PCPs may want to work with parents to give test doses of agents (chloral hydrate and Benadryl) at home prior to a medical or dental procedure

  • *No clear guideline for pharmacological treatment of ASD—depends on the child’s unique characteristics*
INTERVENTIONS

• Dietary modifications:
  – Replace sugar-containing drinks with water, dilute fruit juice, replace soda with sparkling water mixed with small amount of juice.
  – Eliminate sugary candy and treats- replace with fruits, vegetables, and fiber

• Increase exercise- jumping on a trampoline, swimming, walking, riding bikes, or playing chase games while reducing time spent in sedentary activities
WORKING WITH A CHILD WITH ASD

- Requires time and patience - allocate more time for appointment if ASD diagnosis is known ahead
- Attempt to speak with parent before appointment to determine ways to elicit child’s cooperation during the appointment
- Allow the child to bring transitional object to offer comfort and reduce anxiety in new environment
- Approach child slowly and minimize abrupt changes in approach to help with their aversion to touch
J.K.

- **History**
  - DOB: 10/15/01
  - PMH: Autism, ADHD
  - Meds: *Clonidine* 0.1 mg BID, *Seroquel* (transdermal) 120mg, *Adderall* 20 mg
  - Dental HPI: 12/30/09- pain in lower R back tooth,
    - 3/28/10- 3 caries noted, fluoride varnishing completed
  - Hospitalizations: ER visit in 2008-unknown
  - Behavior- uncooperative, (+) Bruxism
  - Education- Special Education
References


AUTISM

Nathalia Escossia
International Student
Pediatric Dentistry
April is Autism Awareness month so pass on this ribbon and let other people be aware.
• Complex developmental disability that impairs communication and social, behavioral, and intellectual functioning

• Incidence
  – about 0.2%
  – 4:1 (M:F) – But more severe in females

• Characteristics:
  – Distant
  – Aloof
  – Detached from other people or from their surroundings

• Dental Care Complications
  – Obsessive routines
  – Repetitive behavior
  – Unpredictable body movements
  – Self-injurious behavior
AUTISM - EARLY SIGNS

• Does not respond to name
• Acts as though he were deaf
• Does not smile socially
• Does not point or gesture by age one
• No babbling
• Talks but lacks social and communication skills
DENTAL TREATMENT

- Desensitization
- Positive reinforcement
- Physical restraint

- Couple with desensitization and get informed consent

- Sedation with the understanding that psychotropic agents could have unusual side effects
- General anesthesia when all else fails
Keep sentences short and simple

Music as an aid

Use parent / caregiver as helper in communication

TELL – SHOW – DO → to be more cooperative

Keep environment familiar
SPECIFICS IN DENTAL TREATMENT

✓ Same people present and same room

✓ Ask the parent/therapist to rehearse procedure at home/school prior to office visit

✓ Keep visits short and repetitive with particular attention to sound distraction

✓ Try to end visit on a positive note
Destructive oral habits

- Bruxism
- Tongue thrusting
- Self-injurious behavior such as picking at the gingiva or biting the lips
- Pica – eating objects and substances such as gravel or lead (cigarette butts, pens or paint)

Treatment: mouth guard can be tolerated
Dental caries

Risk increase in patients who have preference for:
- Soft, sticky or sweet food
- Damaging oral habits
- Difficulty brushing and flossing

Preventive measures such as fluorides and sealants
- Medicines – reduce saliva or contain sugar
  - Drink water often
  - Take sugar free medicines

Diet
- Encourage independence in daily oral hygiene
CASE REPORT - PATENT J.K

• 9 years 6 months old male Black American (DOB: 10/15/2001)

• Presented to NYU Clinic 2B for dental appointment (12/30/2009)

• Presented to NYU PG Clinic for dental appointment (03/29/2010)

• Ht: ?
• Wt: ?
• BMI: ?
PMH: Autism/ADHD

Seasonal Allergies

Takes medication:
- Clonidine 0.1 mg BID,
- Seroquel (transdermal) 120mg,
- Adderall 20 mg

Behavior - uncooperative
Intra-oral
Radiographs
INTRA-ORAL EXAM

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Report of mild pain, partially arrested caries, treat with Intermediate Therapeutic Restoration – fill with GI

Asymptomatic, partially arrested caries and evidence of internal resorption – treat therapeutically with fluoride

Small occlusal caries (arrested) – treat by stabilizing with fluoride

Bruxism – likely to continue for unknown duration, child unable to wear and retain mouthguard, will monitor continually at recalls to evaluate impact on permanent dentition

Preventive Plan – twice-a-day brushing, reduce carbohydrates in diet, use sugar-free medications where possible, frequent recall to dentist (every 3 months) for fluoride varnish applications


Student-Faculty Consultation
Interprofessional Collaborative Evidence-Based Practice Case Presentation – April 2009
Interprofessional Collaborative Evidence-Based Practice Case Presentation – May 2010

• Faculty-led discussion (facilitator)
• Student-Faculty interaction
• Formulate alternative treatment plans and preventive strategies
In Summary

- Donna Hallas
- Jill Fernandez
Outcomes

• Dental residents, students, PNP collaborative practice
• Dental residents and PNP students collaboration in evidence-based case presentations
• Dental, nursing faculty & student publications
• Dental & nursing faculty research projects
Dissemination

• Publications
• Invited Presentations at State and National Conferences
Invited Presentation

• Role of Pediatric Nurse Practitioners in Oral Health
  – Donna Shelley MD, MPH
  – Donna Hallas PhD, PNP-BC, CPNP

• American Academy of Pediatrics National Summit on Children’s Oral Health

• November 7-8, 2008
• Chicago, IL
Invited Presentation

• **NP Interventions to Reduce the Incidence of Childhood Caries**
  – D. Hallas and J.B. Fernandez

• Presentation for the

• Nurse Practitioner Association of New York

• Verona, NY

• September 25, 2009
Invited Presentation

• *Reducing the Incidence of Childhood Caries: PNP Interventions*
  – D. Hallas and J.B. Fernandez

• Presentation for the
• Greater NY Chapter of the National Association of Pediatric Nurse Practitioners
• NYC
• For March 26, 2010
Invited Presentation

• Advanced Oral Health Education and Interventions for Young Children
  – Donna Hallas PhD, PNP-BC, CPNP

• Presentation for
• American Academy of Nurse Practitioners
• 25th National Conference
• Phoenix, AZ
• June 26, 2010
Publications


Grant Received

- Samuel D. Harris Fund for Children’s Dental Health Grants Program - 2010
- Title: Interdisciplinary Strategies to Reduce the Risk of Early Childhood Caries: Implementation of a Postnatal Educational Program and Follow-up Interventions to Establish a Dental Home in the First Year of Life
Collaborative Research

Samuel D. Harris Fund

Growing Up Cavity Free

• Children’s Dental Health Grants Program
• Sponsored by the American Dental Association
• Interdisciplinary Strategies to Reduce the Risk of Early Childhood Caries: Implementation of a Postnatal Educational Program and Follow-up Interventions to Establish a Dental Home in the First Year of Life
Samuel D. Harris Grant

- Bellevue Hospital
- Post Partum Unit
- Study Participants
- Serves a diverse population
- Many of the mothers and babies are uninsured or underinsured
- Study Findings: Mothers very receptive to the educational intervention
Samuel D. Harris Grant

- Educational Intervention
  - Design
    - Randomized Controlled Trial for 3 months
    - Full educational intervention – Treatment Group
    - Routine Newborn discharge care – Control Group
    - Follow-up in the dental clinic at Bellevue or at NYUCD
Samuel D. Harris Grant

- The Intervention Focus
  - Care of the Newborn to prevent poor oral health care habits by mother and other caretakers
  - Use of Translator phones
  - Consent
  - Pre-test
  - DVD at bedside
Samuel D. Harris Grant

• Collaborative approach for study implementation
  • PNP students
  • Dental Students
  • Dental faculty
  • Nursing faculty

– Anticipated Outcomes
  – Quality Team Collaboration = Quality care
  – Improved oral health for high risk populations
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- Site: Bellevue Post Partum Unit
- Educational Intervention
  - Design
  - Study Participants
  - Collaborative approach for study implementation
- Anticipated Outcomes
  - Collaboration
  - Improved oral health for high risk populations
Curriculum Challenge Fund Grant

• Formalize interprofessional experience in the curriculum
• Use Podcasts to prepare all students for rotation
• Develop joint systematic assessment of pediatric cases using discussion board
• Working together, provide age appropriate behavioral interventions
Model for Interprofessional Education

- Twenty dental schools have associated PNP programs
- Outcomes (Readiness for interprofessional learning scale)
- Accreditation Organizations
- Curriculum review
Questions