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Teaching Pediatric Oral and Systemic Health Screening Assessments Using Interprofessional Education

Kathleen A. Kent, DNP, APRN, CPNP-PC

School of Nursing, Indiana University, Indianapolis, IN, USA

Carol A. Clark, DNP, APRN, FNP-BC

School of Nursing, Indiana University, Indianapolis, IN, USA

Abstract: Oral health is essential to systemic health at all ages and an important consideration when educating future oral and healthcare providers. Training that is limited to discipline-specific topics does not teach providers to assess conditions beyond their traditional scope of practice. Inter-professional education (IPE) can foster life-long professional collaboration.

Background: Dental caries, obesity and hypertension are common health conditions in children. Often undiagnosed and untreated, these chronic conditions result in adverse health effects into adulthood (Ahern and Dixon, 2015; Bonita, 2015; Goutman, 2016). To improve overall health it is important to identify these conditions as early as possible. Professional organizations such as the American Academy of Pediatric Dentistry and the American Academy of Pediatrics recommends early and frequent assessments (American Academy of Pediatric Dentistry 2015; Goutman 2016). In response to these guidelines, oral health and healthcare providers are expected to expand their scope of practice to provide screening assessments which have traditionally been viewed as outside their normal realm of responsibility. Currently, nurse practitioners are shouldering a new role, as oral health providers and advocates (US Department of Health and Human Services, 2014; Dolce MC et al, 2014; Jablonski et al, 2014). However, too little time is devoted to oral health in the nurse practitioner curriculum; and too few faculty champions embrace the belief that oral health and systemic health are intertwined (Golinveaux et al, 2013; Dolce et al, 2014; Rabiei et al, 2014; Jablonski et al 2014). As a result, while nurse practitioners believe they must be able to educate and counsel patients on oral health, many feel they are not adequately prepared to do these tasks effectively. Simultaneously, dentists are being asked to increase their scope of practice by screening for pediatric obesity and hypertension (Southerland et al, 2014). According to current literature, dentists and dental students believe it is within their scope of practice to monitor patients with a known history of a systemic condition, but in the absence of a diagnosis they do not believe that screening is beneficial (Anders et al, 2014; Tuthill et al 2014). With these changing responsibilities, interprofessional education (IPE) and practice are the basis for healthcare delivery in the future. However, experiential opportunities to learn collaboratively are lacking during professional training with the assumption these skills will somehow be acquired once in practice. If dentists and NPs are to collaborate in practice, they must learn about, from and with each other while in training.

Objectives: The objectives are to: 1) learn the responsibilities and scope of practice of the other profession, 2) collaborate to learn and perform oral examinations, analyze BP and BMI and determine if referrals are warranted and 3) to assess their perceptions concerning IPE prior to and following the exercise using a validated questionnaire.

Methods: In this experience, dental and nurse practitioner students learned skills outside their traditional education from one another; assessing children's oral health and screening for pediatric obesity and hypertension. Before the experience, all learners took a pre-test to assess

knowledge on this content, they then reviewed online didactic modules which provided foundational knowledge on oral health, hypertension and obesity. Students also reviewed selected literature related to the rationale and value of interprofessional education and practice. The experience consisted of an introductory session of professional roles of each discipline. Nurse practitioner and dental students were paired into examining teams that performed assessments on a panel of pediatric patients. Debriefing consisted of a knowledge post-test, completion of an IPE questionnaire and discussion of the experience.

Results & Discussion: Dental student post-test scores for non-dental content significantly improved after education and clinical experience with NP students. The NP oral health post-test scores equaled dental student scores after education and clinical exposure. All students rated this IPE experience favorably on a 1-5 scale. This IPE experience included **36 D4s** in D890 Pediatric Clinical Rotation III, **10 PNP**s in C550 Child and Family Wellness Assessment and **26 FNP**s in Y600 Clinical Reasoning & Diagnostic Process for a total of 72 students. Ninety percent of students strongly agreed or agreed that this experience provided opportunities to learn with and from one another. Also, 92% of students agreed or strongly agreed that following this IPE experience they had a deeper appreciation of collaborative patient-centered care. Based on statistical results, faculty determined this IPE event helped the students achieve the learning objectives. It also allowed the faculty an opportunity to pilot this in a structured environment that highlighted variables affecting outcomes. The faculty are working together to incorporate this IPE opportunity into dental and NP curricula.

Title:

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Keywords:

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Abstract Summary:

Oral health is essential to systemic health at all ages and an important consideration when educating future oral and healthcare providers. Training that is limited to discipline-specific topics does not teach providers to assess conditions beyond their traditional scope of practice. Inter-professional education (IPE) can foster life-long professional collaboration.

Content Outline:

Our poster includes:

1. Abstract
2. Background
3. Objectives
4. Methods
5. Results
6. Discussion

First Primary Presenting Author

Primary Presenting Author

Kathleen A. Kent, DNP, APRN, CPNP-PC

Indiana University

School of Nursing

Clinical Assistant Professor
Indianapolis IN
USA

Author Summary: With over twenty years experience in pediatric primary care as a pediatric nurse practitioner, Dr Kent has evaluated health care needs and managed acute and chronic disease states in pediatric patients in varied settings with patients from birth to young adulthood. As faculty at Indiana University since 2014, she coordinates and teaches in the pediatric nurse practitioner program. She earned her Master of Science in Nursing and Doctor of Nursing Practice from Rush University.

Second Author

Carol A. Clark, DNP, APRN, FNP-BC
Indiana University
School of Nursing
Clinical Assistant Professor
Indianapolis IN
USA

Author Summary: With over eighteen years of experience in primary care as a family nurse practitioner, Dr. Clark has managed acute and chronic disease states in patients across the lifespan. As faculty since 2008, she has coordinated and taught in the family nurse practitioner program She earned her Master of Science in Nursing from Indiana University and Doctor of Nursing Practice from Indiana University. She has presented on children's oral health care.