Results: The surveys were sent to over 280 graduates with a return rate of 53% (range 28% - 86% by university). Of those responding 95% were employed with 80% employed full-time. Thirty-two percent were employed in primary care settings with an additional 10% in school-based clinics. Fifty-three percent were employed in specialty practice in either inpatient or outpatient settings. They often cared for children with acute conditions (60%) and chronic health conditions (53%) irrespective of clinical setting.

Role functions varied by practice setting with provision of preventive health interventions, growth and development counseling, lifestyle behavior counseling, and initiation of referrals being performed more frequently ($p < .05$) by PNP in primary care or school-based settings. Provision of case management, staff development, policy and program development, writing for publication, participation in research, system change activities, delegation of care and supervision of students was performed more often ($p < .05$) by PNP in hospital settings.

Forty-six percent indicated they were interested in doctoral education with 22% indicating interest in a PhD and 78% indicating interest in the Doctorate of Nursing Practice.

Conclusion: Pediatric Nurse Practitioners are highly educated and skilled additional pediatric health care providers and should be utilized to their fullest potential.

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PRIMARY CARE OF CHILDREN WITH SPECIAL HEALTH CARE NEEDS (CSHCN): AN HIERARCHICAL INTERVENTION FRAMEWORK FOR PROVIDERS

P.J. Allen

*School of Nursing, Yale University,
New Haven, CT, USA*

Aims: Describe the primary health care needs of CSHCN and the role of the primary care provider in meeting these needs.

Method: Review the findings of the *National Survey of Children with Special Health Care Needs Chartbook 2005-2006*, USA, and pediatric care coordination literature. Propose a hierarchical intervention framework to address the overlapping

roles of primary care providers and pediatric specialty providers.

Results: CSHCN require health and related services beyond that required by children generally. An attempt to create "medical homes" for CSHCN has been only partially successful in meeting the goals of a community-based health care service system. A designated care coordinator in the "medical home", often a nurse, has been shown to increase care coordination and reduces fragmentation of services for CSHCN and their families.

CSHCN often have many health care providers involved in their care. Which of these providers should assume responsibility for providing coordinated, family-centered care that encompasses both primary care needs and specialty needs? A framework for determining 6 levels of primary care, including the knowledge base needed and skills needed for each level of care responsibility, has been developed to assist pediatric primary care providers and care coordinators determine which health care provider is responsible for comprehensive care.

Conclusion: CSHCN require both comprehensive primary health care and specialty care for optimal health. Fragmentation of care often results in health care needs not being met. A hierarchical framework for primary care would identify care responsibilities and foster comprehensive health care.

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WHY DO INFANTS SUCK ONLY ONE DIGIT/ DIGIT-COMBINATION OUT OF TEN?

E.J. Mobbs^{1,2}

¹Faculty of Medicine, The University of Sydney, Westmead, ²Perinatal & Infant Mental Health Service, Liverpool Hospital, Liverpool, NSW, Australia

Across the mammalian spectrum newborn mammals will suckling body part fixate when there is maternal nipple deprivation. Mammals other than human will body part fixate by sucking on parts of their anatomy other than the thumb or fingers if they are flexible enough to do so, for example tail, penis, toe. Those animals not flexible enough to fixate on a body part of themselves will fixate on a body part of an adjacent animal if there is opportunity to do so, notably on ears or genitalia.

The oral tactile imprinting behaviour of mammals is supported not only by maternal structure, the

stimulus feature of the nipple, but is also supported by function of feedback inhibition of lactation for those newborn mammals who fixate on one nipple only so that the breast tissue of the non-stimulated nipple ceases to function as in those human societies where it is thought normal to breastfeed on one breast only and also for many other mammals.

Freudian displacement theory of innate genetically based behaviour being displaced when the biological target is not available is thus supported. Oral tactile fixation or imprinting is the first emotional relationship in the development of mammals. Only problem solving human reared newborn mammals can survive when oral tactile imprinting is displaced. The behaviour or oral tactile imprinting demonstrates human evolutionary link to other mammals.

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HAVE YOU DIAGNOSED CELIAC DISEASE RECENTLY?: ATYPICAL PRESENTATIONS OF CELIAC DISEASE IN CHILDREN

P.J. Allen

*School of Nursing, Yale University,
Woodbridge, CT, USA*

Aim: Educate pediatric primary care providers on the varied presentation of celiac disease in children and the need for screening of children for this common autoimmune condition.

Method: Review of the current literature on the presentation of clinically silent or atypical celiac disease in children and the diagnostic procedure.

Results: Celiac disease is an autoimmune response resulting in intestinal mucosa inflammation, malabsorption, and numerous secondary symptoms and autoimmune diseases. Recent research has found a prevalence of celiac disease in approximately 1:70 and 1:200 people in the United States, Western and Middle Eastern countries. This condition remains undiagnosed or misdiagnosed in 95% of those affected.[i] It currently takes an average of ten years and numerous tests before celiac disease is diagnosed. Undiagnosed or inadequately treated celiac disease can result in unnecessary debilitating symptoms, life-threatening illness and gastrointestinal malignancies.

Children and adolescents with undiagnosed celiac disease may present with varied symptoms including, but not limited to, abdominal pain, diarrhea, constipation, weight loss, obesity, developmental

delays, learning problems, symptoms associated with attention deficit, depression, anxiety, skin lesions, anemia, osteoporosis, dental enamel dysplasia, and associated autoimmune conditions. The only treatment for this autoimmune disorder is the implementation of a life-long gluten-free diet.

Conclusion: Awareness of pediatric primary care providers of the varied presentation of celiac disease is necessary to increase the number of children screened. Serological screening by IgA antibody to human recombinant tissue transglutaminase (tTG IgA) is the screening test of choice. Small bowel biopsy and/or genetic screening verify the diagnosis.

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ROLE OF INTEGRATED WELL CHILD CARE PROGRAM IN IDENTIFICATION OF HEALTH RISK FACTORS IN CHILDREN UNDER EIGHT YEARS OLD

L. Mirhadian, S. Asiri, A. Pasha, N.M. Lakeh

Guilan University Medical Sciences, Rasht, Iran

Background and aims: Integrated well child care program is one of the most important changes in children growth monitoring. The aim of this study was to determine health risk factors of children under eight years old.

Methods: This is a descriptive study which obtained data from 1874 children's health records. Samples were chosen through cluster sampling which included eight health centers. Health risk factors assessed included :potential bacterial infection , icter , malnutrition or severe low weight , dysfunctional weight growth, severe low height, dysfunctional height growth, abnormal and unsatisfactory head circumference, nutritional problems, dental problems, developmental problems, incomplete vaccination, incomplete use of complements and abnormal laboratory tests. Also demographic characteristics such as sex, birth weight and age at health care received were assessed.

Results: Most common health risk factors respectively included : weight growth problems 56.8%, nutritional problems 22.3% and unsatisfactory head circumference 10.4%. A significant relationship between dysfunctional weight growth, nutritional problems, unsatisfactory head circumference and birth weight , age of health care received.