

## RESEARCH COMMENTARY COLUMN

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### **Making Connections: The Linkage Between Research and Practice – Evidence for Improving the Quality of Pediatric Nursing**

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GENERATING AND DISCOVERING new knowledge is critical for the development of evidence to improve pediatric nursing practice. The power of research is that it provides the evidence to develop best practices to enhance pediatric nursing care (Christian, 2010). Indeed, these lessons from research are translated and applied to pediatric nursing practice to improve the health of children and their families (Christian, 2012a,b). To that end, the purpose of clinical nursing research is to generate nursing knowledge to provide evidence to guide nursing practice (Polit & Beck, 2012). Moreover, translation of evidence into practice improves the quality of pediatric nursing care (Christian, 2011; Hockenberry & Wilson, 2011). Thus, it is essential that pediatric nurses recognize that best practices are grounded in research and then translated into pediatric nursing practice (Christian, 2012a). Identifying this linkage between research and clinical practice is integral for improving pediatric nursing practice, as well as the quality of care for children and their families.

In this issue of the *Journal of Pediatric Nursing*, nine articles use a variety of research methods to generate evidence for improving pediatric nursing practice, while enhancing the quality of lives of children and their families:

- A review of the available literature on physical activity to prevent obesity in preschoolers (2 to 5 years) yielded 14 studies that met the inclusion criteria and revealed a lack of research specific to preschoolers, as well as discrepancies regarding the definition and the appropriate amount of physical

activity, and the sedentary nature of preschooler's activities (Hodges, Smith, Tidwell, & Berry, 2013). Differences between parent perceptions of their preschool child's actual physical activity, childcare settings providing less than adequate amount of time for physical activity, as well as the safety concerns in relation to physical activity in the neighborhood environment were noted.

- The effectiveness of an adolescent health promotion and prevention educational program focused on exercise, nutrition, body image, self-esteem, and smoking among sixth-grade boys and girls ( $N=58$ ) was explored with a one-group, pre- and post-test design pilot study at a private middle school (Dowdy et al., 2013). Knowledge and beliefs about exercise, nutrition, and self-esteem improved significantly after the program, but were not sustained at 1-month follow-up; whereas, changes in exercise and nutrition behaviors were not significant at post-test, but significantly improved at 1-month follow-up.
- The mediating role of parental acceptance-rejection in the relationship between Korean American parental depressive symptoms ( $N=99$  families) and their children's (5 to 10 years) mental health was explored using a cross-sectional design study (Kim, 2013). For mothers ( $n=95$ ) and fathers ( $n=91$ ), the

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relationship between parental depressive symptoms and child psychosocial problems was mediated by parenting behaviors, with parental rejection a stronger mediator than parental acceptance. More specifically, fathers' rejection demonstrated a significant negative impact on their children's mental health.

- A cross-sectional, web-based survey was used to explore adolescent ( $\geq 13$  years) and adult patients' ( $n=61$ ) and their caregivers' ( $n=239$ ) perspectives about the burden associated with recombinant human growth hormone (rhGH) treatment (Kremidas et al., 2013). Results indicated that storage and refrigeration requirements of rhGH were the most burdensome aspect of treatment whether or not traveling was involved. Further, missed doses were associated with travel or being away from home.
- A descriptive quantitative study was conducted to describe the anthropometric and laboratory markers of insulin resistance (IR) relative to abnormal glucose metabolism, obesity, and Type 2 diabetes mellitus in early adolescents ( $N=150$ ) in middle school (Bindler, Bindler, & Daratha, 2013). Adolescents who were obese evidenced increased IR (HOMA-IR), high-sensitivity C-reactive protein, triglycerides, and blood pressure. Waist circumference and triglycerides were found to be predictive of IR, explaining greater than 35% variance in the model.
- A non-equivalent, 2-group, quasi-experimental design pilot study was used to determine the effects of oral motor stimulation on feeding behaviors of infants who were born with univentricular cardiac anatomy ( $n=18$ ), as compared to infants who did not receive the intervention ( $n=10$ ) (Coker-Bolt, Jarrard, Woodard, & Merrill, 2013). Findings revealed that hospital length of stay was significantly less for infants who received oral motor stimulation, although time to full-bottle feeding was not significantly different.
- An interpretive descriptive qualitative study was used to describe perceptions of adolescents (13 to 17 years) ( $N=10$ , with 22 interviews) with congenital heart disease (CHD) about quality of life (Shearer, Rempel, Norris, & Magill-Evans, 2013). Adolescents described quality of life as "how good your life is" and expressed an overriding sense of self as being "normal" and "similar to their peers". Most striking was the adolescents' ability to shift their CHD diagnosis between the foreground and background of their lives, depending upon situation and needs.
- An observational study was conducted at four pediatric extended care facilities to determine the hand hygiene practices of clinical and non-clinical caregivers of children ( $N=8$ ) with a cumulative 128 hours of observation (Buet et al., 2013). Of the documented

865 hand hygiene opportunities, adherence to hand hygiene was low, but significantly greater for clinical caregivers (61%), as compared to non-clinical caregivers (14%), indicating multiple opportunities for transmission of infection.

- A descriptive exploratory, quantitative pre- and post-test design study was conducted to identify comfort and worry about pediatric nursing clinical rotations among pediatric nursing students ( $N=100$ ) (Lassche, Al-Qaaydeh, Macintosh, & Black, 2013). The post-test results identified significant changes and improvement in students' comfort in relation to performing pediatric assessment, explaining interventions to children, and administering medications to children; while student worries remained in relation to causing pain to a child, helping children and families cope with painful procedures and with grief and crisis. With this knowledge, pediatric nursing faculty can improve nursing student confidence in their performance in pediatric nursing clinical rotations by incorporating strategies to enhance comfort and minimize worry.

Making connections between research and practice is central to improvement in pediatric nursing practice. By identifying this linkage between research and practice, pediatric nurses may incorporate the best evidence into the care of children and their families. Moreover, with quality improvements in pediatric nursing care, the quality of pediatric nursing practice is enhanced. To that end, research enriches pediatric nursing practice through the translation of the best evidence for practice – and making this connection is essential for pediatric nursing.

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