

Researchers call for an updated pain scale

Care providers underestimate pain during pediatric burn dressing change

Columbus, Ohio, USA (September 1, 2015) - Dressing changes have been identified as one of the major contributors to perceived pain during burn care, and so it is important that pain be assessed accurately. But a new study from the Center for Pediatric Trauma Research at Nationwide Children's Hospital suggests that pediatric burn pain assessment can vary not only based on patient pain intensity, but also nurse clinical experience.

A assessment tool called the Pain, Apathy, Activity, Crying, Unresponsibility Scale (PAACC) is widely used by nurses to rate pain in pediatric patients. It can be applied to pediatric patients of all ages, including the very young, so it provides a standard assessment for all patients in our pediatric burn center. This study found that nurses tended to underestimate both mild and severe procedural pain. Nurses who had less nursing experience demonstrated significantly higher accuracy than those with more experience.

Jennifer Brown MD is the study's senior author, medical director of the Center for Pediatric Trauma Research and affiliate faculty of the Center for Injury Research and Policy at Nationwide Children's Hospital stated, "This is concerning because it demonstrates that on a well-established burn unit that specializes in caring for pediatric patients, nurses may too often underestimate children's procedural pain for both mild and severe pain." Dr. Justin Chen, the study's lead author also noted concern that "even" burn nurses (over 10 years nursing experience) appeared to be more accurate in PAACC rating than more experienced nurses.

This study, available today online and in the September issue of *Burns*, is the first study to systematically evaluate PAACC rating accuracy among case providers. Developed in 1997, the PAACC scale was originally designed to measure post-operative pain in pediatric populations. The PAACC utilizes an easy-to-understand 0-10 metric and exerts a relatively low burden on medical staff. It has previously demonstrated a high level of inter-rater reliability and concurrent validity with other validated scales. But much of the previous research was not in clinical settings.

To learn more or for related injury prevention materials, visit the Center for Injury Research and Policy (CIRP) of the Research Institute at Nationwide Children's Hospital, www.nichd.org/cirp

and the Center for Pediatric Trauma Research, www.nichd.org/cptr

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The Center for Pediatric Trauma Research (CPTB) at Nationwide Children's Hospital conducts research to support global efforts in achieving the best outcomes for pediatric trauma patients. Using a multidisciplinary approach, CPTB researchers lead innovative projects to assess pre-hospital emergency medical services, acute medical and surgical management, rehabilitation, and family and community services that impact the short and long-term outcomes of injured patients. CPTB serves as a leader and a partner to translate cutting edge research findings to help patients, families, policy makers, and clinicians make informed decisions. www.nichd.org/cptr

Nationwide Children's Hospital - 01.09.2015 (EN)