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The assessment of pain and discomfort in individuals with mental retardation

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Abstract

This research was conducted to replicate and expanded the work of Bodfish et al. [Bodfish, J. W., Harper, V. N., Deacon, J. R., & Symons, F. J. (2001, May). *Identifying and measuring pain in persons with developmental disabilities: A manual for the Pain and Discomfort Scale* (*PADS*). Western Carolina Center Research Reports] by assessing the functional sensitivity of the Pain and Discomfort Scale (PADS) in patients with MR. We used the PADS to detect pain and discomfort during a dental scaling and polishing procedure. Subjects ($N = 28$) with cognitive and communication deficits were assessed at multiple baselines, during and after the procedure. The results indicated that scores on the PADS were significantly higher during the scaling procedure than during all other observations quantified by the PADS. We conclude that the PADS is a functionally sensitive measure that may lack specificity, but that may also represent the state of the psychometric art of assessing pain in patients who have MR.

Keywords: PADS; Mental retardation; Assessment; Pain

1. Introduction

Pain is one of the most common of all human experiences and one of the most difficult to diagnose. It is a subjective experience and cannot be assessed through direct measurement.

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There are many psychometric instruments available that translate subjective experiences of patients into meaningful data that can be used to assist health care providers with pain diagnosis and treatment. However, instruments such as the McGill Pain Questionnaire (MPQ; Melzack, 1975) and the Multidimensional Pain Inventory (MPI; Kerns, Turk, & Rudy, 1985) are inadequate and ineffective for use with individuals who lack written communication skills or the cognitive sophistication to convert their internal experiences into a standardized and expressed language.

The effective assessment and treatment of children and adults with Severe Mental Retardation (MR) or Developmental Disabilities has become a recent and important topic of debate among clinicians, researchers, and national organizations (American Academy of Child and Adolescent Psychiatry, 1999). More specifically, the assessment of pain and discomfort in these populations is frequently discussed in abstract terms and without quantifiable specificity. For example, the University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core (2002) recently published guidelines for oral hygiene among cognitively impaired adults. In a manner quite consistent with the state of the science, they describe a significant need for assessment of adults who clinicians perceived to be in pain, but provide few, if any, details on how such as assessments should be executed. Similarly, the International Association for the Study of Pain (1995) published guidelines, which included self-report, biological monitoring, and clinical observation of behavior for the assessment of pain in children, but absent stated applications to patients with MR.

Bodfish, Harper, Deacon, and Symons (2001), based on the research of facial expressions and body movements in infants, developed the Pain and Discomfort Scale (PADS) to assess pain in individuals without the cognitive capacity to convert internal experiences into expressed language. This instrument, which relies on facial expressions and body movements as indicators of acute pain and discomfort, was also designed to aid health care professionals to recognize and diagnose, and more effectively treat pain in patients with severe and profound communication difficulties. Bodfish et al. (2001) recently reported three validation studies of the PADS.

In the first, 22 adults with severe and profound MR were assessed with the PADS before and during acute medical procedures known to produce pain and discomfort (gastronomy-tube insertion or a toenail removal). The total scores of the PADS increased significantly during the medical procedures ($p < .01$) as compared to the baseline, and was interpreted by the authors as being sensitive to pain and discomfort in this population (Bodfish et al., 2001). In a second study and using a between subjects design, scores on the PADS for individuals with severe and profound MR without comorbid chronic medical illness were compared to scores for individuals which had severe and profound MR but also were diagnosed with known physical disabilities and chronic illnesses that are associated with pain (spasticity and osteoarthritis). Scores for the group of patients with painful chronic medical conditions and physical disabilities were significantly higher than scores in patients with severe and profound MR alone ($p < .01$; Bodfish et al., 2001).

In the last study, eight adults with profound MR who had medical conditions such as reflux esophagitis and osteoarthritis were assessed with the PADS before and after treatment for pain. In all cases there was a significant reduction in PADS score from