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(176) Understanding the co-occurrence of pain and depression in adults with multiple sclerosis

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While depression and pain are two of the most common problems experienced by persons with multiple sclerosis (MS), the prevalence of their comorbidity is not well understood. Prior studies have reported that rates of depression are high among persons with pain and vice versa, but there is an absence of studies describing the pain-depression comorbidity in a sample of persons with MS that is not limited only to those who are depressed or in pain. Thus, the purpose of the present study was to define this co-occurrence in a community sample of persons with MS. Participants (N = 161) with MS completed the Patient Health Questionnaire–9 for depressive symptoms and Numerical Rating Scale (0-10) for pain. Two definitions of depression (PHQ-9 >= 10 and meeting Major Depressive Episode (MDE) diagnostic criteria) and pain (presence of any pain and pain >= 3) were used for analyses. Pain was experienced by 73% of the sample, with 40% of the entire sample reporting pain >= 3. PHQ-9 scores >= 10 were reported by 22% of the sample, and 8% reported sufficient symptoms to meet MDE criteria. Of persons meeting depression criteria, 86%-100% reported experiencing any pain; 67%-77% of persons meeting depression criteria reported experiencing pain of at least moderate severity. Of persons experiencing any pain, 11%-34% met depression criteria; 15%-37% of persons experiencing pain of at least moderate severity met depression criteria. Taken together, the results show that pain and depression often co-occur, but that this co-occurrence is highest among the subset of the population that is depressed. Prevalence rates also vary significantly with the use of different criteria for pain or depression. The implications of having comorbid pain and depression relative to either condition alone is worthy of further exploration. Support provided by NIH/NICHD/NCMRR (P01-HD33988) and National Multiple Sclerosis Society (MB-0008).

(177) Pediatric Chronic Pain Screening Tool (PCPST): beauty in brevity?

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We adapted the Keele STarT Musculoskeletal Screening Tool for pediatric patients and created the Pediatric Chronic Pain Screening Tool (PCPST). The PCPST is designed to guide targeted treatment recommendations for pediatric chronic pain patients based on risk status (high, medium, or low) of poor outcomes using established biopsychosocial prognostic factors. The nine-item measure includes questions about the presenting pain complaint, disability, catastrophizing, fear, and depression. Among children (n=71) aged 8-17 who presented for initial evaluation at our tertiary care pain clinic we examined the cross-sectional distribution of scores and risk stratification to determine PCPST construct validity in relation to reference standard measures of pain-related psychosocial functioning. Scores were normally distributed and ranged from 0 to 9 with a Mean of 4.4 (SD=2.2). The PCPST stratified 38% of patients as low-risk, 25% as medium-risk, and 37% as high-risk. The PCPST risk strata differentiated clinical cut-offs for pain-related fear (68% of low-risk in low-fear group, 73% of high-risk in high-fear group) and depressive symptoms (81% of low-risk in low depressive symptom group, 80% of high-risk in high depressive symptom group). Lastly, PCPST scores were highly correlated with child functional disability (r=.54, p<.01), pain-related fear (r=.65, p<.01), pain catastrophizing (r=.69, p<.01), and depressive symptoms (r=.62, p<.01). Altogether, the PCPST shows great promise as a brief tool to screen for biopsychosocial risk. The robust overlap of risk stratification and clinical cut-offs with pain-related fear and depressive symptoms and high correlations with psychosocial questionnaires provide substantive evidence for the construct validity of this brief tool. The PCPST is a brief prognostic screening tool which demonstrates cross-sectional validity which may potentially aid in clinician decision-making in providing targeted interventions. Further research is required to determine predictive validity, use in monitoring patient progress, and the clinical effectiveness of stratified care approaches among this population.

(178) Older adults' perceptions of pain medications

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It is well known that chronic pain is experienced by over 50% of older adults and is challenging to treat. Published research shows that physicians are often hesitant to prescribe pain medications to elderly patients, and that older adults are often reluctant to take them, frequently utilizing risk-averse emotional heuristics in their decision process. The purpose of this research was to identify those emotional heuristics utilized by older adults in the decision on whether and how to take their pain medications. Participants in this study were an ethnically and socioeconomically diverse sample of eleven community-dwelling older adults (ages 63 – 86), all under a physician's care for moderate to severe persistent pain. They participated in semi-structured video interviews that focused on their daily pain experience and their daily pain management strategy, which included discussions on their perceptions and use of their pain medications and use of non-medication approaches. Qualitative data analysis was used to identify heuristics employed in the decision-making process regarding use of pain medications and to create a 30-minute DVD of participants that demonstrated the major emergent themes. Results show that regardless of physician recommendations for how and when to use pain medication, participants crafted highly individual processes for their pain management and use of pain medication. Emotional heuristics were very much in use, with the chief concerns being fear of addiction, fear of side effects and total medication (pain and nonpain medication) burden consumed each day. Most participants were active consumers of written, broadcast or internet information on pain medications. A key determinant of strategy was socioeconomic status, which determined the kinds of complementary, non-pharmacological interventions that were possible and utilized. These findings are considered with respect to how older adults manage their chronic pain and include recommendations for practitioner-patient assessment regarding pain management strategy.

(179) Characterizing "grit" or perseverance for long-term goals in patients with chronic low back pain

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"Grit" is a personality characteristic defined as "perseverance and passion for long-term goals." The 12-item Grit Scale assesses "consistency of interests" (e.g. "I become interested in new pursuits every few months.") and "perseverance of effort" (e.g. "Setbacks don't discourage me."). Researchers have reported grit as a predictor of success and achievement. We are collecting data to explore the relevance of grit in the field of pain. Our study includes healthy individuals, individuals who have recovered from an acute episode of low back pain, and individuals with chronic low back pain (low back pain for more than 3 months, with pain > 4/10 on average for past month). Each participant completes an extensive battery of medical assessments, pain-based and trait-based questionnaires (including the Grit Scale), and several quantitative sensory measures (including a cold water pressor task, heat pain thresholding, heat temporal summation, and conditioned pain modulation). The Grit Scale summary score ranges from 1 to 5. In twenty-two volunteer participants with chronic low back pain, the average grit-score was 3.84 (SD = 0.44). This score is higher than previously reported mean scores for adults older than age 25 (3.58), West Point cadets (3.76), and National Spelling Bee finalists (3.50). While it is interesting that volunteers with chronic low back pain score higher on the Grit Scale, additional data will be needed to understand other explanatory factors including age. We plan to further explore grit-scores in relation to other measures (such as acute heat and cold pain tolerance), and in relation to other back pain characterization factors (such as the use of opioid medication). (Duckworth et al, J Pers Soc Psychol, 2007.) Supported by a NIH NIDA K23 Grant.