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(192) Development and psychometric evaluation of an instrument to assess prescribers' perceptions of opioids - the Clinicians' Attitudes about Opioids Scale (CAOS)

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Attitudes and policies surrounding the long-term use of opioids for chronic non-cancer pain have vacillated over time. Following recent increases in opioid prescribing, there has been a concomitant escalation in rates of misuse and abuse, as well as concerns regarding the long-term efficacy and safety of opioids, all of which have contributed to many political, regulatory, and clinical debates. The present study was designed to develop a reliable and valid psychometric measure – the Clinicians' Attitudes about Opioids Scale (CAOS), which may be used to assess physicians' current and evolving beliefs regarding opioid use in patients with chronic noncancer pain in the rapidly changing opioid climate. We developed the questionnaire in 4 sequential phases with a nationally representative sample of physicians in 10 medical specialties: (1) literature review, (2) focus groups conducted with physicians (N = 14) to refine the content of the questionnaire (3) pilot testing of the candidate items (N = 251 physicians) and then subsequently revision, and (4) the formal survey was administered (N = 1,535), and the stability (test-retest reliability) of the assessment instrument was assessed (N = 250). Finally, a principle component analysis of the resulting 38-item CAOS was performed. Five domains were identified: (1) Impediments and Concerns, (2) Perceived Effectiveness, (3) Schedule II vs. III Opioids, (4) Medical Education, and (5) Tamper Resistant Formulations and Dosing, accounting for 17.74%, 11.56%, 5.61%, 4.70%, and 3.56% of the variance, respectively, with the total variance accounted for being 43.17%. The CAOS was found to be internally consistent (Cronbach's alpha = 0.87) and demonstrated reasonable stability over a 2-week period (reliability coefficients 0.62-0.79). The strong psychometric properties of this instrument should enable the monitoring of changes in opioid perceptions and practices as policy changes, formulations, and patterns of opioid use evolve, and comparisons across groups of prescribers.

(193) Review of opioid conversion recommendations from select clinical practice guidelines: all are not equal

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Clinicians often rely on published opioid analgesic conversion tables to convert between opioids or administration routes for patients with chronic pain. Sources of conversion tables include Full Prescribing Information (FPI) for a specific product, or clinical guidelines promulgated by learned societies or government entities. Concerns identified with conversion estimates include overestimating "equianalgesic" doses and failure to consider incomplete cross-tolerance, the likely pain trajectory, comorbidities, concomitant medicines, and inter-patient variability. Most conversion estimates are based on single-dose, relative potency studies, not conversion in ongoing care. There are conflicting recommendations in the literature and no uniformly-accepted conversion ratios. To raise awareness regarding the variability in currently-available oral opioid conversions, a review was conducted of selected guidelines issued by North American professional societies or federal and State government entities, and the source data cited by the guidelines. Our analysis focused on the suggested conversion ratios for oral opioids, the source data for the opioid conversion ratios, recommended dose reductions to account for incomplete cross-tolerance, considerations for supplemental analgesics during conversion, and patient factors when selecting an initial opioid conversion dose. This analysis found that variability exists in the recommendations for conversion ratios, incomplete cross-tolerance, and supplemental analgesia. In addition, the sources for the opioid conversion ratios in most guidelines are not well-controlled, multiple-dose trials in chronic pain patients. Therefore, it is imperative that practitioners are aware of these clinically-meaningful limitations and consider the reliability and applicability of these conversion ratios to the setting of chronic opioid administration. Likewise, legislators and regulators contemplating the use of conversion ratios in implementing pain policies should understand the unresolved variability and lack of bi-directionality in conversion tables. Efforts to determine scientifically-sound conversion recommendations should continue and, once determined, they should be widely available (eg, FPIs, websites). The authors are full-time employees of Purdue Pharma L.P.

(194) The prevalence and mediators of suicidal ideation in patients with chronic con-cancer pain

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There is growing concern regarding the epidemic of "unintentional" opioid-related overdoses. However, depression is a common comorbidty with chronic pain with prevalence ranging from 25% to over 80 % depending on the population sampled. There is a moderate level of published evidence suggesting a high prevalence of suicidal ideation (SI) in pain patients. Several risk factors identified as potential mediators include pain location (low back and diffuse), co-occurring insomnia, high pain intensity and long duration. Many of the studies have methodological weaknesses such as small sample size not allowing for stratification, retrospective study design or possible sampling bias. The specific aim of this study was to assess the prevalence of suicidal ideation and identify potential mediators in a large sample (466) of patients with chronic non cancer pain (CNCP). The study design was a retrospective chart review of 466 patients with CNCP treated in a behaviorally based pain program. Data collected included the Brief Pain Inventory, Beck Depression Inventory-Fast Screen for Medical Patients, demographics and results of an independent psychological evaluation. Results indicated a high rate of SI (20%). Logistic regression analysis revealed that history of sexual/ physical abuse (Beta=0.825; p<0.020; OR=2.657 [95% CI=1.447-4.877]), family history of depression (Beta=0.471; p<0.006; OR= 1.985 [95% CI= 1.234-3.070]) and being socially withdrawn (Beta=0.482; p< 0.001; OR= 2.226 [95% CI= 1/413-3.505]) were predictive of SI. These results are consistent with the interpersonal theory of suicide suggesting that social isolation is one factor in predicting suicidal ideation. Family history of depression and personal history of abuse may make certain patients more vulnerable to the effect of chronic pain and increase the risk of suicidal ideation. Developing sensitive measures of risk for suicide in this patient population is discussed. Future research needs to include prospective studies in the general population.

(195) Rethinking the fear avoidance model of pain: an empirical and theory-based evaluation

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Persistent pain and disability are commonly associated with musculoskeletal injury and can result in considerable personal suffering and societal burden. The Fear Avoidance Model (FAM) provides a theoretical account of how pain-related disability develops, and has inspired a large body of research that aims to mitigate the negative consequences of musculoskeletal injury. While the FAM is currently a leading theory of disability, several aspects of the model have yet to be considered in the literature. This critical review aims to address these aspects by synthesizing recent empirical findings and conducting a novel evaluation of model-relevant theoretical assumptions. Three lines of research are considered. First, recent longitudinal evaluations of the model are reviewed. These findings suggest limited support for the model's prospective sequential relationships and for the role of fear as a common conduit for different pain-related outcomes. Second, research testing the FAM's proposed mechanism for disability development is evaluated. Contrary to predictions, there is little evidence suggesting that fear-avoidance causes deconditioning. Finally, recent research exploring alternate, non-FAM, relationships is reviewed. This research suggests risk factors addressed within the FAM interrelate in a cumulative, rather than sequential, fashion. Together, these empirical findings suggest that the specific inter-relationships proposed within the FAM may not accurately portray the experiences of people living with musculoskeletal pain. The theory-based evaluation explores three FAM assumptions that may help account for the model's limited support. Specifically, this evaluation explores how the model's central emphasis on pain-related phobia may limit its validity and generalizability; how the model's implied co-presentation of chronic pain and disability make it difficult to explain the observed variance in these two states; and how the model's failure to integrate pain-related physiological mechanisms is at odds with a large body of biopsychosocial research. The benefits of exploring new models of pain-related disability are discussed.