

**(236) Catatonia presenting as acute post-operative pain***A Kokayeff; University of Michigan Hospital, Ann Arbor, MI*

Catatonia is a relatively common but rarely recognized condition with features that may be seen in up to 20% of hospitalized patients. Some of these features, such as immobility, mutism, unresponsiveness, bizarre behavior and impaired cognition are similar to the manifestations of delirium and medication over-treatment with opioids and benzodiazepines. The pain specialist must be able to recognize the features of catatonia and implement specific interventions in order to avoid potentially serious medical complications and the risk of incomplete recovery, particularly as the interventions for catatonia, delirium and overuse of sedating medication differ considerably. The University of Michigan Acute Pain Service was consulted to evaluate a 46 year-old man with "pain so bad he could not even talk" who had undergone a proctocolectomy, end ileostomy, and small bowel resection with primary anastomosis for treatment of ulcerative colitis refractory to medical management. On assessment, he was grimacing, grunting and was unresponsive though resisted passive movement of his arm. Review of the medical record revealed errors in recording and continuation of home medications including benzodiazepines, which likely contributed to his condition. Once catatonia was recognized and appropriate treatment was given, including higher doses of benzodiazepines, the patient began to recover and continued to improve throughout the hospital course. In this case, catatonia was mistaken for altered mental status due to uncontrolled post-operative pain. We will review the diagnosis of catatonia including its clinical features, prevalence, predisposing factors and treatment. We will present in table format the criteria distinguishing catatonia from other common causes of altered mental status that a pain specialist may encounter such as delirium, over-medication, and other psychoses.

**(237) Hours of tolerable pain: predictors among adults with sickle cell disease***Z Wang, R Molokie, M Ezenwa, M Suarez, Z Zhao, Y Yao, and D Wilkie; University of Illinois at Chicago, Chicago, IL*

Adults with sickle cell disease experience pain that often is unpredictable in its onset and duration, but little is known about the number of hours during the 24-hour day that they experience pain greater than their tolerable level (hours of tolerable pain). We determined the predictors of hours of tolerable pain from a set of 11 demographic and pain variables reported by outpatients with SCD. 218 adult outpatients (mean age 33.7 ± 11.3 years; 39% male; 98% African American; 73% SS, 18% SC, 9% other genotype) completed a computerized tool with items for current and past pain variables. The mean average pain intensity was 4.5 ± 2.9, tolerable pain intensity was 3.5 ± 2.2, and worst stomachache was 7.7 ± 2.5. 29% of patients reported that they endured small amounts of pain before taking medication, 47% tolerated moderate pain, and 24% tolerated a large amount of pain. For 55%, their pain was tolerable for only 0-6 hours, 17% for 7-12 hours, 6% for 13-18 hours, and 23% for 19-24 hours. Using regression analysis, more time with tolerable pain was found to be associated with lower pain intensity (Est = -0.255, Z = -4.387, p < .001), higher tolerance for pain (Est = 0.167, Z = 2.423, p < .02), past experience with enduring moderate pain without medicine (Est = 0.918, Z = 2.579, p < .01), and higher level of past worst stomachache (Est = 0.164, Z = 2.269, p < .023). Average pain intensity appears to be a clinically significant indicator of hours of tolerable pain. Helping patients with SCD to take their pain medicine with the onset of mild pain intensity may be an option for improving SCD pain control by increasing the number of hours that pain is less than the level reported tolerable by the patient.

**C. Ethical, Legal, Financial & Education****C01 Education - Professional and Lay****(238) A novel approach to public education about opioid safety***D Kalaoukalani and P Cowan; American Chronic Pain Association, Rocklin, CA*

Distribution of information to the public is important given the growing epidemic of preventable deaths attributed to prescription opioids, now outnumbering deaths caused by illicit drugs. A brief video format public service announcement (PSA) was created and studied to measure recall, likeability, future consideration, and other metrics representing impact of exposure. The PSA was tested in 8 National CineMedia movie theaters in the Cincinnati, Nashville, Washington D.C., and Charleston-Huntington demographic market areas. A sample of 300 adults exposed to the PSA was interviewed on six selected days of the month (Tuesday - Sunday). Respondents had to be Adults 25-54 years of age, attending a PG, PG-13 or R-rated film, and had to have been in their seats at least 20 minutes before the movie previews began. In terms of total recall, 61% of moviegoers recalled the ad either aided or unaided. Eighty six percent of moviegoers positively rated likeability. All (100%) of those recalling the ad agreed that "The main message of the ad was to properly manage, store, and dispose of opioid pain medication;" 98% agreed that "The ad makes me more aware of the dangers of sharing prescription pain medications;" 97% agreed that "The ad makes me more aware of the dangers of taking someone else's prescription pain medications;" and 97% agreed that "The ad makes me think about proper prescription pain medication storage." Eighty five percent of moviegoers recalling the ad said they were more likely to be more careful with their pain medication in the future. The brief video format of a PSA embedded into movie theater preview series appears to be an effective vehicle for reaching the public in a non-clinical setting. Funding sources to sponsor wider dissemination will be necessary for broader reach and may have positive wide spread public health implications.

**(239) Discriminative sensitivity of the KnowPain-12 pain management survey***D Gordon, J Loeser, D Tauben, T Rue, A Stogicza, S Chiu, and A Doorenbos; University of Washington, Seattle, WA*

Healthcare provider knowledge, attitude and performance surveys are commonly used yet little is known about the validity and reliability of these instruments. The KnowPain-50 has published psychometric properties<sup>1</sup> showing correlations with clinical behaviors, and appears to distinguish between physicians with different levels of pain management expertise, but is burdensome to complete. The purpose of this study was to investigate the reliability and validity of a reduced number of items (KnowPain-12). Phase I used a modified Delphi approach with a group of pain experts to determine face validity and reduce the KnowPain-50 to 12 questions (2 items per original subscale). Phase II used a convenience sample of pain specialists and health professionals generated from public directories. Between April 4 and September 16, 2012, 846 respondents completed the survey. Respondents included RNs (34%), physicians (23%), advanced practice nurses (14%) and other allied health professionals and students. Twenty-six percent of the total sample self-identified as "pain specialist." Pain specialists more often selected the most correct response to all knowledge assessment items than those who did not identify as a pain specialist, with the exception of one item predicting outcomes from back surgery. The Cronbach's Alpha for the KnowPain-12 was alpha = .67. Pain specialists scored significantly better (p < .0001) on the Know Pain-12 when compared to general health professionals. The KnowPain-12 appears to have adequate ability to discriminate between pain specialists versus others (AUC = .75). In summary, the KnowPain-12 is a brief survey that may be a useful measure the effectiveness of pain management education programs. Further work is needed to determine sensitivity to change. (1. Harris JM et al, Pain Medicine, 2007.) This work was supported in part by the National Institute of Nursing Research Grant # R01NR012450 and the National Cancer Institute grant #R42 CA141875.