



RESEARCH  
EDUCATION  
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### (152) Pain prevalence and pain management practices in a university hospital: a descriptive, point prevalence study

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Pain is both prevalent and severe in hospitals with subsequent delay in recovery and diminished quality of life. The aim of this descriptive, point prevalence study was to assess pain prevalence and pain management practices in a University hospital. Data were collected with the Icelandic version of the American Pain Society Patient Outcome Questionnaire and from medical charts. The time frame was the past 24 hours. Included were patients hospitalized for  $\geq 24$  hours,  $\geq 18$  years old, Icelandic speaking, alert, and able to participate. The response rate was 76.8%. Participants' (N=368) age ranged from 18-100, the mean age was 67.6 years (SD = 17.4) and 50.6% were women. The mean worst pain severity (0-10 scale) was 4.5 (SD=3.2), and 80.4% of patients reported pain in the past 24 hours ( $\geq 1$  on 0-10 scale). Severe pain ( $\geq 7$  on 0-10) was reported by 33.0% of participants. The mean worst pain severity of patients in pain was lower in men, 5.2 (SD=2.5) compared to women, 6.0 (SD=2.4),  $p < 0.05$ . Pain prevalence was higher in women (87.2%) compared to men (78.1%), in patients 18-74 old (86.8%) compared to 75 years and older (77.6%), and on surgical services (90.5%) compared to medical (76.3%),  $p < 0.05$ . The majority of patients (67.6%) received pain medications in the past 24 hours, and 34.4% used non-pharmacological methods to treat their pain, most often distraction (38.7%). Pain assessment with standardized methods was performed in 11.5% of participants, and in 37.2% the Pain Management Index was negative, indicating inadequate treatment. The pain prevalence was high in the hospital and a considerable proportion of patients had experienced severe pain in the past 24 hours. Standardized pain assessments were rare and pain treatment was insufficient in many instances. The pain management needs to be improved. The study was sponsored by the Icelandic Research Fund.

### (153) Use of both individuals filling prescriptions and population rates in assessing abuse potential of prescription opioids

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National surveys assessing nonmedical prescription drug use (NMPDU) provide population estimates. However, estimates of NMPDU relative to the number of individuals prescribed a drug is also informative. This study examines differences in rates per population and per unique recipients of dispensed drug (URDD) across different prescription opioid classes. Using two RADARS<sup>®</sup> System programs (Poison Center and Drug Diversion), rates of product mentions by intentional exposure cases and diversion incident reports from 1st quarter 2010 through 2nd quarter 2012 were calculated by year/quarter. Rates were calculated per population and URDD for seven prescription drug classes: hydrocodone, oxycodone, fentanyl, oxymorphone, buprenorphine, hydromorphone, and morphine. Using negative binomial regression models, we found that the average hydrocodone rate was more than 7 times higher than the average rate of other products (with the exception of oxycodone) per population ( $p < 0.001$ ). However, findings reversed when rates were calculated per URDD, with other substance rates being at least 2.5 times more likely than hydrocodone ( $p < 0.001$ ). Oxymorphone showed low population rates but the highest rates in both programs per URDD. Oxycodone has relatively high rates per URDD and per population. URDD rates are a useful supplement of existing estimates by providing perspective on the extent of NMPDU of a product relative to the number of prescriptions and may indicate new products with a high abuse potential more rapidly. The RADARS<sup>®</sup> System is part of Denver Health and Hospital Authority, a division of the state of Colorado. It is supported by subscriptions from pharmaceutical manufacturers.

### (154) Chronic pain in cancer and non-cancer patients in Turkey and the subjective impact on life

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Chronic pain is a widespread condition that places a considerable burden on society. We report the results of a survey designed to estimate the prevalence and explore the impact of chronic pain in Turkey. Chronic pain was defined as  $\geq 5$  on a 10-point Numeric Rating Scale. Data were collected using Computer Aided Telephone Interviews (CATI) and Face-to-Face (F2F) interviews. In the CATI phase, 8575 phone calls were made, and 5694 subjects completed questionnaires. Approximately 300 CATI subjects were to be included in the F2F phase. However, only 57 subjects agreed to participate, thereby necessitating boost interviews that identified 266 patients, thus increasing the sample size of the F2F phase to 323. The prevalence of chronic pain was 18%. Nearly 22% of patients were not taking any pain medication and 92% had never seen a pain specialist. Approximately 79% of patients thought their treatment was effective despite nearly half the patients reporting that their medication was sometimes inadequate to control their pain. Opioid usage for chronic pain was very low, and only 10% of patients with cancer pain were treated with strong opioids. Over half of all patients said the pain was sometimes so bad they wanted to die. Approximately 40% of patients were afraid of becoming addicted to pain medication. As a conclusion, chronic pain has a hugely detrimental effect on patients' lives. Development of pain management programs in line with WHO guidelines is required to improve the comfort and quality of life of patients suffering from chronic pain in Turkey.

## A09 Prediction of Outcome

### (155) Inducing temporal summation: the importance of relevant stimulus parameters

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Temporal summation (TS) is considered a perceptual manifestation of enhanced central excitability. Studies suggested that TS was elevated among patients in various chronic pain conditions, however the clinical relevance of detecting elevated TS has not been determined. The present study investigated whether magnitude of TS differed between: 1) anatomical sites, and 2) impulse frequency at different temperatures. We also investigated which TS parameter was associated with clinical pain intensity. Twenty nine subjects with unilateral chronic knee pain due to osteoarthritis were tested in a single session. TS was induced by repetitive phasic and tonic stimuli at different temperatures (48<sup>°</sup>, 3<sup>°</sup>, and 0<sup>°</sup>C). TS was induced bilaterally (involved and uninvolved sides) and in different anatomical sites remote (thenar eminence and forearm) and proximal to the knee (tibialis anterior). Patients completed the Brief Pain Inventory (BPI) to assess clinical pain intensity. The magnitude of summation was compared using repeated measures ANOVA, and paired t-test. No differences in the magnitude of summation were found between involved and uninvolved sides. The magnitude of summation among anatomical sites did not differ with 48<sup>°</sup>C stimuli, however 0 and 3<sup>°</sup>C induced higher summation in remote (i.e. thenar eminence) compared to proximal (i.e. tibialis anterior) sites. Differences between tonic and phasic stimuli at 48<sup>°</sup>C were found in all anatomical sites, where tonic stimuli evoked significantly higher slopes. TS was associated with the BPI at colder temperatures for local tonic stimuli ( $r_s$  0.46-0.54,  $p < 0.01$ ). These results suggest that relevant stimulus parameters have the potential to affect the magnitude of TS. Higher TS was associated with thenar eminence and tonic stimuli parameters, which could provide guidance for future studies. In addition, our cross-sectional study indicate that if interested in using TS to predict clinical pain intensity, the TS should be assessed using cold temperatures proximal to the site of pain.