

Pain in Older Persons

NEWSLETTER of the IASP® Special Interest Group on Pain in Older Persons

January 2009

David Lussier (Canada)
- Chair and Secretary,
Benny Katz (Australia)
- Vice Chair and Communications

Committees:

Paul Christor (USA)
Clinical Matters Co-chair
Giselle Pickering (France)
Clinical Matters Co-chair
Robert Yezierski (USA)
Scientific Matters
Patricia Schofield (UK) Education
Stephen Gibson (Australia) Meetings

Timely topics in pain research and treatment have been selected for publication, but the information provided and opinions expressed in this newsletter have not involved any verification by the International Association for the Study of Pain (IASP®) or the SIG on Pain in Older Persons of the findings, conclusions, and opinions stated in this publication. Thus, opinions expressed in this publication are solely those of its author(s) and do not necessarily reflect those of IASP or the SIG on Pain in Older Persons, or of the Officers or Councilors of IASP, or of the Officers of the SIG on Pain in Older Persons. No responsibility is assumed by IASP or this SIG for any injury, and/or damage to persons or property resulting, whether as a matter of product liability, negligence or otherwise, from any use or reliance on any methods, products, instruction, or ideas contained in this publication. Because of the rapid advances in the medical sciences, the publisher recommends independent verification of any diagnoses and drug dosages referenced in this publication.

Table of Contents:

Editorial.....	1-2
Getting to know your executive....	2-3
Assessment of Pain in Patients with Dementia.....	3-5
Clinical issues in opioid management for older adults with chronic non-cancer pain.....	5-8

Editorial

IASP has launched the 2008-09 Global Year Against Pain with its focus on cancer pain. The goal is to raise awareness, improve treatment, and foster support for people suffering from cancer-related pain. Media efforts have been initiated to educate health-care providers, government leaders and agencies, and the general public about this important issue. As with previous Global Years Against Pain, IASP chapters and individual members are encouraged to organize programs and events to highlight the issues associated with cancer pain. The SIG on Pain in Older Persons has responded with a fact sheet on **Cancer Pain in Older Persons**. It emphasizes that the majority of new cases and death from cancer occur in older people. Older people, particularly those in long-term care, are at higher risk of inadequate treatment of their pain. Effective pain management is a realistic goal. The fact sheet highlights the need for a proactive multifaceted assessment and comprehensive multidisciplinary treatment strategies, taking into consideration age-related changes and comorbid medical conditions. The fact sheet on Cancer Pain in Older People can be downloaded at:

www.iasp-pain.org/globalyear/cancerpain/factsheets/olderpeople

The efforts of Lucy Gagliese and her team who put together this fact sheet is gratefully acknowledged.

Other fact sheets on cancer pain are also available at:

www.iasp-pain.org/globalyear/cancerpain/factsheets

DISCUSSION FORUMS

The IASP Discussion forums are now operating. If you have not already done so, you are encouraged to register for the discussion forum on Pain in Older Persons at www.iasp-pain.org/source/eforums/index.cfm. The instructions are easy to follow. Once you have subscribed, you will automatically receive an email each time someone posts a message. You can view the discussion and participate via email, or if preferred via the website. You may also start a new discussion. I recently used the discussion forum to assist with the management of a very complex patient with a post-stroke central pain syndrome. Within a few days, I received several replies. Most communicated directly by email, while others opted for the online discussion. It was extremely helpful to have been able to gain the insights of other experienced clinicians from around the world regarding a situation that goes far beyond the boundaries of the current evidence-based literature. Thanks to the forum, my patient who had suffered with severe pain for many years had a very favorable outcome.

IASP WEBSITE

IASP is currently in the process of building websites for all its SIGs. Any member who is interested in being involved with the design and content of the webpage our SIG should contact Benny Katz: elderpainsig@connexus.net.au

THE NEWSLETTER

Stephen Gibson (Australia) is the member of the SIG executive featured in this newsletter. Stephen is chair of our Scientific Meetings Committee. This article gives you insights into Stephen's professional and personal life. We hope you enjoy reading it.

We also have two very interesting scientific articles. Bettina Husebo (Norway) discusses the assessment of pain in patients with dementia based on her PhD dissertation. The article focuses on the development, reliability, and validity testing of the Mobilization-Observation-Behavior-Intensity-Dementia (MOBID-2) Pain Scale.

The second article focuses on the controversial issue of opioid use in older persons with chronic non-cancer pain. Physicians are often hesitant in prescribing opioid analgesia in this setting for fear of misuse, addiction, adverse side

effects (particularly neurocognitive dysfunction), and concern regarding their efficacy. Andrew Cook and John Allchin (New Zealand) have undertaken a literature review, discussing the strength of the evidence base for each of these issues, and areas where further research is needed.

The online discussion forum at www.iasp-painorg/source/eforums/index.cfm is now available. Feel free to post a comment or commence a discussion regarding the content of the articles in this newsletter.

Getting to know your executive – Stephen Gibson

This is the second in a series of articles about the members of our SIG executive. Professor Stephen Gibson is chair of the Scientific Meetings Committee, responsible for organizing a seminar to coincide with the World Congress on Pain in Montreal in 2010.



Stephen Gibson

Stephen, tell me about yourself:

I live in Melbourne, Australia, with my very lovely wife, Lesley, and three children, Emily (aged 15), Thomas (12) and Annaliese (11). My interests include playing basketball with a team that started in high school. We are completing our 70th consecutive season in the Melbourne East Basketball Association (that is 35 years x two seasons per year) and are still in the top four of our C grade competition.

My other interests include collecting, and more importantly drinking, fine wine and fishing with the kids. My favorite books are the Foundations series from Isaac Asimov and most of the science fiction/fantasy genre. I am less interested in film, although will watch any drama or romantic comedy with interest...best films maybe Star Wars, Notting Hill, Pretty Woman, Cinderella Man, Howard the Duck, Flying High, etc. Favorite cuisines include Thai and Australian/Asian fusion.

Tell me about your professional life:

I am the Deputy Director of the National Ageing Research Institute (NARI) in Australia. I head the Clinical Research Division that has major streams of research into pain, dementia, depression, falls, stroke prevention, geriatric therapeutics, and music therapy (all with special reference to older persons). The team includes three senior research fellows, five research assistants, two research nurses, and

10 PhD students. I am also the Director of Research at the Caulfield Pain Management and Research Centre, where we have two post-docs and two research assistants examining novel treatments for neuropathic pain (phantom limb, CRPS, and spinal-cord injury). I am a registered psychologist and still maintain some clinical involvement through my placement at two major multidisciplinary pain clinics.

The older volunteers who participate in our research never cease to surprise and amaze me with their life stories, and I really enjoy making a contribution to improving the well-being and comfort of older persons and helping them to age well. The other aspect of my work that gives me great satisfaction is the mentoring of younger clinical researchers and PhD students involved in aging research. Although it is an essential part of my work, I would prefer to be spending less time dealing with administrative matters and more time writing peer-reviewed papers and undertaking face-to-face research.

What is your involvement with pain in older people?

The NARI pain laboratory was established in 1990 to investigate age-related changes in pain perception and underlying neurophysiologic pain mechanisms, the development of age-appropriate pain assessment tools, and evaluation of pain-management strategies specific for older persons. We have been publishing our work on age differences since 1990 and have generated more than 100 papers on this important topic. More recently, we have also been involved in implementing best-practice guidelines for pain management into the residential aged care sector, and it has been very rewarding to make a major improvement in pain care to this often neglected sector of the older population.

What is your vision for our SIG?

I would like to see the SIG become the pre-eminent group for knowledge on pain in older persons and hopefully attract an increasing number of members as the population demographics trend toward an aging society. Current initiatives—including the newsletter, the special information sheet on aging issues for each IASP Global Year topic, and the development of special seminar series to accompany the IASP World Congresses on Pain—are seen as immediate priorities. Over the longer term, we also need to be proactive in facilitating quality research on

pain and aging, and this could potentially include offering PhD scholarships, developing joint worldwide research projects on selected topics, or offering an exchange

program between different centers to improve expertise and interest in the important issue of pain and aging.

Assessment of Pain in Patients with Dementia

Bettina Husebo, PhD, MD
University of Bergen, Norway

Advanced age is associated with increased prevalence of dementia, often combined with pain¹. Although elderly persons tend to have more painful diseases, they have been found to report less pain². Thereby, they receive fewer analgesic drugs than their younger counterparts and patients without dementia in comparable painful situations³. One possible explanation for this challenge is that with impaired cognition, patients' ability to report pain decreases⁴. This leads to the interpretation by health-care professionals that elderly persons with dementia have less pain complaints than mentally healthy controls. Thus, when elderly adults in pain also have severe dementia and reduced communicative abilities, they are at high risk of not being properly diagnosed and treated for pain, which is a major challenge in nursing homes (NH)⁵. In response to the strong need for improvement in pain assessment and pain management in patients with dementia, several pain behavioral scales have been developed⁶⁻²⁰ and reviewed²¹⁻²⁴.

During my work since 1997, as a palliative care and NH physician at the Red Cross Nursing Home in Bergen, Norway, I recognized that existing scales do not systematically assess pain from the musculoskeletal system, and other types of pain, such as pain related to internal organs, head, and skin. Additionally, they do not differentiate between behavior that might be caused by pain and behavior related to dementia. These reflections inspired my PhD dissertation, and I found it most interesting and important to focus on research into the elderly and NH medicine, and to explore the issue of pain in patients with dementia. Initially, I am an anesthetist and an intensive care physician with experiences in palliative medicine at the Malteser Hospital, University of Bonn, Germany. Over many years, I learned much about the nature of pain, ethical decision making, and communication. This work was an important prerequisite for understanding the needs of the weakest elderly.

My dissertation, during the years 2004–2008, is about the development, reliability, and validity testing of the Mobilization-Observation-Behavior-Intensity-Dementia (MOBID-2) Pain Scale. The MOBID-2 Pain Scale is a two-part nurse-administered pain assessment tool for patients with dementia, assessing pain from the musculoskeletal system, as well as internal organs, head and skin¹². Moreover, the dissertation aims to demonstrate the complexity of the psychometric property testing of a behavioral pain scale in patients with dementia. A valid and reliable pain scale is a prerequisite for improving pain assessment and management. The complexity of this topic is expressed through several factors, such as the nature of

pain, different stages and diagnoses of dementia, staff conditions, the proxy rating process, ethical considerations, and behavioral disturbances in dementia (figure).

The importance of relating neuropathology to pain in dementia has been emphasised earlier²⁵. Clinical studies on pain include both the "demented elderly" and the "cognitive impaired elderly" patients, without more detailed information about the causes of their disorders. This is a key question, since if pain experience is related to the pathology, different types of dementia may influence the whole pain process^{26,27}.

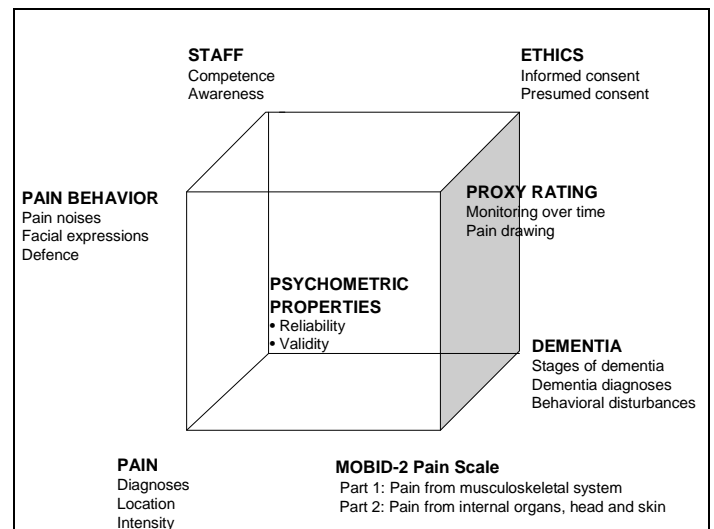


Figure: Complexity of the psychometric properties of the behavioral pain scale, the MOBID-2 Pain Scale Part 1 and 2, in patients with dementia as observed by nursing home staff

In the Mobilization-Observation-Behavior-Intensity-Dementia (MOBID) Pain Scale, the assessment of inferred pain intensity is based on the patient's pain behavior in connection with standardized, active guided movements of different body parts²⁸. The initial draft of the instrument was developed by an expert panel comprised of a registered nurse (RN), a licensed practical nurse (LPN), two physicians, two physiotherapists, and a clinical psychologist. All of them are experienced in pain assessment, examination of psychometric properties of assessment tools, and treatment and care of elderly, including cognitively impaired patients. The panel consensus for developing the instrument was as follows: 1) commonly used indicators of pain behavior should be applied; 2) active, guided movement items should be used, involving joints of all body parts (arms, legs, and trunk); 3)

the movements should be easy to perform by a LPN in connection with morning care; and 4) all items should be obligatory.

Based on their own clinical experience and survey of the literature²¹, three indicators of pain behavior were selected: pain noises, facial expression, and defense. These aspects of pain behavior were commonly included in staff-administered instruments²³. In the instruction, the LPN was encouraged to tick one or more of three boxes for each item when pain behavior indicators were observed. After that, the LPN was asked to rate the inferred pain intensity with a cross on the line on the 0–10 point Numerical Rating Scale²⁹ answering the question, “How intense do you regard the pain to be?”

The internal consistency and inter-rater reliability of pain behavior indicators and pain intensity scores were tested through bedside investigation as well as video recordings of 26 patients with severe dementia and chronic pain. Face validity was discussed by a focus group. Different aspects of construct validity were investigated.

The results suggested that registration of pain behavior indicators during standardized movements, as measured by the MOBID, can be used reliably to disclose pain intensity inferred by nurses in elderly persons with dementia. Internal consistency of the items was found to be high ($\alpha=0.90$). Inter-rater reliability of inferred pain intensity scores was high to excellent ($ICC=0.70-0.96$), but varied between poor to excellent for individual pain behavior indicators ($\kappa=0.05-0.84$). Extended testing of intra-rater and inter-rater reliability of the pain behavior indicators and pain intensity scores of the MOBID Pain Scale were performed by three external raters³⁰. They used the video recordings, concurrently and independently on days 1, 4 and 8. Facial expression of pain was most commonly observed, followed by pain noises and defense. Inter-rater reliability was highest for pain noises, followed by defense, and facial expression ($\kappa=0.44-0.92$, $\kappa=0.10-0.76$, and $\kappa=0.05-0.76$, respectively, on day 8). Of the movements, mobilization of arms and legs was rated most painful. Intra-rater and inter-rater reliability of the overall pain intensity scores was very good, $ICC(1,1)$ ranging 0.92-0.97 and 0.94-0.96, respectively. As opposed to observed pain behavior, reliability of pain intensity scores tended to increase on repeated assessment. It was suggested that the overall pain score was based more on interpretation of the most pain-provoking movement during assessment than on the total number of observed pain behavior indicators.

Arguments for construct validity were indicated, as the MOBID Pain Scale revealed significantly more pain than did pain scores during regular morning care. Video observation demonstrated higher pain intensity than bedside scoring. The pain-intensity scores were highly correlated with the number of observed pain behavior indicators. Finally, the overall pain intensity score was more associated with the highest pain score among the test items than with the mean score of all items²⁸.

In order to also assess pain from internal organs, head, and skin, an extended instrument, the MOBID-2 Pain Scale, was developed¹². It comprised the original MOBID, renamed MOBID-2 Part 1, and MOBID-2 Part 2, through

which pain behaviors related to internal organs, head, and skin are recorded. Monitored over time, caregivers' observations were registered on pain drawings and inferred into pain intensity. Finally, overall pain intensity was assessed, including all observations registered in Parts 1 and 2. Internal consistency of the comprehensive MOBID-2 was examined in 77 patients. Furthermore, inter-rater and test-retest reliability of pain behavior indicators, pain drawings, and pain intensity scores were tested. Arguments for face-, construct- and concurrent validity were added, correlating pain scores from nurses using MOBID-2 with physicians' clinical examinations and other pain variables.

Finally, the MOBID-2 Pain Scale was used in a cross-sectional study, exploring relationships between severity and diagnoses of dementia and the use of pain medication and other pain variables, using pain-intensity scores from MOBID-2 in 181 NH patients²⁶. Results indicated that patients with severe dementia have similar pain intensity, diagnoses, and locations compared to patients in other stages of dementia. Pain intensity measured by MOBID-2 scoring did not differ between diagnostic groups of dementia. Patients with dementia who received opioids were more likely to demonstrate higher pain intensity scores than mentally healthy controls receiving opioids. It was suggested that these patients received less pain relief than they needed. The isolated increase of opioids may be limited by the high prevalence of ICD diagnoses and opioid side effects. The patients' multi-morbidity and lack of communication require a comprehensive approach to pain assessment and treatment in a multidisciplinary perspective.

The study concluded that MOBID-2 Pain Scale lent credibility as a reliable and valid nurse-administered assessment tool for inferred pain intensity. It was suggested that patients with severe dementia and mixed dementia are at great risk of suffering from severe pain.

The development and validity testing of a behavioral assessment tool is not straightforward, because the pain scores are indirectly observed and inferred by proxies, in this case nurses^{31,32}. Future research should include extended testing of concurrent validity, comparing the MOBID-2 Pain Scale with other observational pain tools in patients with dementia. Future studies should also explore the prevalence of pain in Norwegian NHs, as the findings presented in this dissertation were based on data from only one NH. Implemented in a quality-improvement program, the use of the MOBID-2 Pain Scale may be an important contribution to improving pain assessment and treatment in NH patients. In a current post-doctoral grant, our research team focuses on the impact of pain and pain management on behavioral disturbances in patients with dementia, and we will systematically follow up with elderly persons with dementia in a multicenter study.

Bettina Husebo, PhD, MD
Department of Public Health and Primary Health Care
University of Bergen
Kalfarveien 31
5020 Bergen, Norway
Bettina.Husebo@isf.uib.no
Tel: +47-55-586735 Fax: +47-55-586130

References:

- 1 Miro J, Paredes S, Rull M, Queral R, Miralles R, Nieto R, Huguet A. Pain in older adults: A prevalence study in the Mediterranean region of Catalonia. *Eur J Pain* 2007; 11:83-92.
- 2 Brattberg G, Parker MG, Thorslund M. A longitudinal study of pain: Reported pain from middle age to old age. *Clin J Pain* 1997; 13:144-149.
- 3 Nygaard HA, Naik M, Ruths S, Straand J. Nursing-home residents and their drug use: a comparison between mentally intact and mentally impaired residents - The Bergen District Nursing Home (BEDNURS) study. *Eur J Clin Pharmacol* 2003; 59:463-469.
- 4 Huffman JC, Kunik ME. Assessment and understanding of pain in patients with dementia. *Gerontologist* 2000; 40:574-581.
- 5 Ferrell BA. Pain Evaluation and Management in the Nursing-Home. *Ann Intern Med* 1995; 123:681-687.
- 6 Abbey J. The Abbey pain scale: a 1-minute numerical indicator for people with end-stage dementia. *Int J Pall Nurs* 2004; 10:6-13.
- 7 Cohen-Mansfield J. The adequacy of the Minimum Data Set assessment of pain in cognitively impaired nursing home residents. *J Pain Sympt Manage* 2004; 27:343-351.
- 8 Cohen-Mansfield J. Pain Assessment in Noncommunicative Elderly Persons - PAINE. *Clin J Pain* 2006; 22:569-575.
- 9 Feldt K. The checklist of nonverbal pain indicators (CNPI). *Pain Manage Nurs* 2000; 1:13-21.
- 10 Fuchs-Lacelle S, Hadjistavropoulos T. Development and preliminary validation of the pain assessment checklist for seniors with limited ability to communicate (PACSLAC). *Pain Manage Nurs* 2004; 5:37-49.
- 11 Hurley AC, Volicer BJ, Hanrahan PA, Houde S, Volicer L. Assessment of Discomfort in Advanced Alzheimer Patients. *Res Nurs Health* 1992; 15:369-377.
- 12 Husebo BS, Strand LI, Moe-Nilssen R, Husebo SB, Ljunggren AE. Pain in older persons with severe dementia. Psychometric properties of the Mobilization - Observation - Behaviour - Intensity - Dementia (MOBID-2) Pain Scale in a clinical setting. *Scan J Car Sci* 2008; accepted for publication.
- 13 Keefe FJ, Block AR. Development of An Observation Method for Assessing Pain Behavior in Chronic Low-Back-Pain Patients. *Behav Ther* 1982; 13:363-375.
- 14 Lefebvre-Chapiro S. The Doloplus 2 scale - evaluating pain in the elderly. *Eur J Palliat Care* 2001; 8:191-194.
- 15 Mahoney AEJ, Peters L. The Mahoney Pain Scale: Examining pain and agitation in advanced dementia. *Am J Alzheimer Disease Dement* 2008; 23:250-261.
- 16 Morello R, Jean A, Alix M, Sellin-Peres D, Fermanian J. A scale to measure pain in non-verbally communicating older patients: the EPCA-2 Study of its psychometric properties. *Pain* 2007; 133:87-98.
- 17 Simons W, Malabar R. Assessing Pain in Elderly Patients Who Cannot Respond Verbally. *J Adv Nurs* 1995; 22:663-669.
- 18 Snow AL, Weber JB, O'Malley KJ, Cody M, Beck C, Bruera E, Ashton C. NOPPAIN: A nursing assistant-administered pain assessment instrument for use in dementia. *Dement Geriatr Cogn Disord* 2004; 17:240-246.
- 19 Villanueva MR. Pain assessment for the dementing elderly (PADE): Reliability and validity of a new measure. *J Am Med Dir Assoc* 2003; 4:1-8.
- 20 Warden V, Volicer L, Hurley AC, Rogers EN. Pain assessment in advanced dementia. *Gerontologist* 2001; 41:146.
- 21 Hadjistavropoulos T, Herr K, Turk DC, Fine PG, Dworkin RH, Helme R, Jackson K. An interdisciplinary expert consensus statement on assessment of pain in older persons. *Clin J Pain* 2007; 23:S1-S43.
- 22 Herr K, Bjoro K, Decker S. Tools for assessment of pain in nonverbal older adults with dementia: A state-of-the-science review. *J Pain Sympt Manage* 2006; 31:170-192.
- 23 Stolee P, Hillier LM, Esbaugh J, Bol N, McKellar L, Gauthier N. Instruments for the assessment of pain in older persons with cognitive impairment. *J Am Geriatr Soc* 2005; 53:319-326.
- 24 Zwakhaleh SMG, Hamers JPH, Berger MRF. The psychometric quality and clinical usefulness of three pain assessment tools for elderly people with dementia. *Pain* 2006; 126:210-220.
- 25 Scherder EJA, Sergeant JA, Swaab DF. Pain processing in dementia and its relation to neuropathology. *Lancet Neurol* 2003; 2:677-686.
- 26 Husebo BS, Strand LI, Moe-Nilssen R, Husebo SB, Aarsland D, Ljunggren AE. Who suffers most? Dementia and pain in nursing home patients: A cross-sectional study. *JAMDA* 2008; 9:427-433.
- 27 Scherder EJA, Slaets J, Deijen JB, Gorter Y, Ooms ME, Ribbe M, Vuijk PJ. Pain assessment in patients with possible vascular dementia. *Psychiatr-Interpers Biolog Proc* 2003; 66:133-145.
- 28 Husebo BS, Strand LI, Moe-Nilssen R, Husebo SB, Snow AL, Ljunggren AE. Mobilization-Observation-Behavior-Intensity-Dementia Pain Scale (MOBID): Development and Validation of a Nurse-Administered Pain Assessment Tool for Use in Dementia. *J Pain Sympt Manage* 2007; 34:67-80.
- 29 Jensen MP, Turner JA, Romano JM, Fisher LD. Comparative reliability and validity of chronic pain intensity measures. *Pain* 1999; 83:157-162.
- 30 Husebo BS, Strand LI, Moe-Nilssen R, Husebo SB, Ljunggren AE. Pain behaviour and pain intensity in older persons with severe dementia: reliability of the MOBID Pain Scale by video uptake. *Eur J Caring Sci* 2008; in press.
- 31 Boyer F, Novella JL, Morrone I, Jolly D, Blanchard F. Agreement between dementia patient report and proxy reports using the Nottingham Health Profile. *Int J Geriatr Psychiatr* 2004; 19:1026-1034.
- 32 Fisher SE, Burgio LD, Thorn BE, Allen-Burge R, Gerstle J, Roth DL, Allen SJ. Pain assessment and management in cognitively impaired nursing home residents: Association of certified nursing assistant pain report, Minimum Data Set pain report, and analgesic medication use. *J Am Geriatr Soc* 2002; 50:152-156.

Clinical issues in opioid management for older adults with chronic noncancer pain:

A review

Andrew J. Cook, PhD, & John Alchin, MBBS, FAFOM(RACP),
Pain Management Centre, Burwood Hospital, Christchurch, New Zealand



Andrew J. Cook, PhD



John Alchin, MBBS, FAF OM (RACP)

Introduction

Within a sea of public and professional controversy (Clark, 2008) the use of prescription opioids for treatment of chronic noncancer pain has continued to escalate. Opioid management of chronic noncancer pain is a complex and controversial issue. The dramatic growth in related publications reflects the many challenges and questions involved (Ballantyne and LaForge, 2007; Ballantyne and Shin, 2008; Fields, 2007; Hojsted and Sjogren, 2007; Katz, Adams, Benneyan et al., 2007; Martell et al., 2007; McNicol, 2007).

Part of the increased interest is attributable to significant increases in prescribed opioid use, particularly in the United States. Between 1980 and 2000, American prescriptions for opioids for chronic noncancer pain doubled from 8% to 16% of outpatient visits for musculoskeletal disorders (Caudill-Slosberg et al., 2004). Retail sales data show increases from 1997 to 2002 of 73% for morphine and 400% for oxycodone (Gilson et al., 2004).

Recent epidemiologic data on prescribed opioid use show no significant age-group difference between chronic regular users (at least several times a week for a month or more) and nonusers: 22.2 percent of regular users were age 61 and older, as compared to 25.3 percent of nonusers ($p=0.539$) (Hudson et al., 2008). Similarly, a majority of studies comparing characteristics of chronic pain patients (CPPs) on opioids to those receiving non-opioid treatment have failed to find age differences (Cicccone et al., 2000; Fanciullo et al., 2002; Fillingim et al., 2003), though a study of 200 veterans found an age association with opioid use (Breckenridge and Clark, 2003). However, a large population-based phone survey involving 19,150 American subjects interviewed between 1998 and 2006 found that regular opioid use (i.e., at least five days per week for at least four weeks) increased incrementally by age group, rising from 0.7% in the 18-39 group to 3.4% for those 70 and older (Kelly et al., 2008). This finding is similar to those of population-based surveys in Finland (Pitkala et al., 2002) and Denmark (Eriksen et al., 2006). The high incidence of polypharmacy amongst regular opioid users was another notable finding of the American survey, with 21% of regular users reporting concomitant use of 10 or more non-opioid medications (vs. 4.5% of non-users of opioids).

In a retrospective cohort study of the association between early opioid use for acute LBP and longer-term outcomes, older age was found to be associated with disability duration, increased medical costs, surgery within two years after onset, and "late" opioid use (≥ 5 prescriptions from 30 to 730 days). However, after controlling for age and other variables, receipt of higher amounts of morphine equivalent

in early treatment was incrementally associated with adverse outcomes for all of these same measures (Webster et al., 2007).

Efficacy

Individual predictors of opioid efficacy for chronic noncancer pain are poorly understood. Riley and Hastie (2008) note a research emphasis on predicting opioid misuse, with associated neglect of research on predictors of opioid efficacy.

Weak support for an association of younger age with better opioid response was provided in a randomized, placebo-controlled, crossover trial of opioids and tricyclics for chronic postherpetic neuralgia, though the mean age in this study was 71 (Edwards et al., 2006). Younger age and higher baseline pain intensity were associated with greater reduction in pain intensity and more pain relief after treatment with opioids. However, several methodological limitations were acknowledged.

Increased pharmacodynamic sensitivity to opioids has been clearly established for older adults (Forman, 1996; Hanlon et al., 2005), and clinical guidelines have suggested that opioids are probably underutilized in this population (American Geriatric Society, 2002). Increased plasma concentration from identical doses has been found, and use of shorter half-life drugs (e.g., hydromorphone, oxycodone) has been recommended to avoid toxicity and facilitate dose adjustment (Fine, 2004; Forman, 1996). Recommendations on the appropriateness of specific agents for older adults are reviewed elsewhere (American Geriatric Society, 2002; Hanlon et al., 2005). Age-related decline in areas of central pain regulation involved in descending pain inhibition is likely to contribute to diminished ability to manage the stress of persistent pain (Karp et al., 2008). Within the limbic system, there is a decline in opioid receptors, along with a reduction in serotonin receptor density and concentration and turnover of catecholamines.

In a recent study of the comparative short-term efficacy and tolerability of an opioid preparation (transdermal buprenorphine) for chronic pain across three age groups, equal or better outcomes were found for the age-65-and-above group (Likar et al., 2008). Won et al. (2006) studied the long-term effects of analgesics in a large sample of older adults in nursing homes. They found better functional status and social engagement for those taking long-acting opioids (3.3%) compared with non-opioids (and better functional status compared with short-acting opioids). Rates for side effects and adverse events were comparable or lower for those treated with opioids.

An examination of factors associated with severe breakthrough pain for CPPs on opioids found no age

difference between patients experiencing such episodes and those who did not (Portenoy et al., 2006). Only 15% of the study sample (Median age 47, range 21–81) were over age 60. Clinical data have been interpreted to suggest a tendency for opioid tolerance to be more prominent in younger than older patient patients, but a number of other possible explanations for observed differences have been noted (Agin and Glass, 2005).

Physician Attitudes

In a survey of geriatric and internal medicine physicians in a large urban academic medical centre, 37% reported hesitance to prescribe opioids because of concern about illegal diversion. Geriatricians were less likely to be concerned than IM physicians (adj OR=0.09, p=0.004). When concern about causing addiction was queried, 38% of IM physicians expressed concern in contrast to none of their geriatrician colleagues. There were no significant differences in prevalence of concern over regulatory scrutiny between specialties (Lin et al., 2007). Geriatricians appear to have similar levels of concern regarding opioid side effects when prescribing for persistent noncancer pain when compared to internal medicine physicians (Lin et al., 2007).

Opioid misuse and addiction

For a minority of CPPs, problems of opioid misuse or aberrant drug behaviors develop (Turk et al, 2008), though many physicians prescribe opioids without adequate understanding of these risks (Ballantyne and Mao, 2003). It has been our observation that physicians often demonstrate less concern about these risks when treating older adults with chronic pain. Is this practice consistent with evidence-based medicine? Though risk identification based on clinical experience and intuition is common, the few relevant empirical studies have suggested low accuracy for this approach (Turk et al, 2008).

There has been no large, prospective study to determine the risk of abuse/addiction among patients prescribed opioids for pain (Katz et al, 2007). However, available evidence suggests the risk of true iatrogenic abuse/addiction to be low (3.3%; 0.2% for no previous or current history of abuse/addiction) (Fishbain et al., 2008). Compared to the general population, patients with chronic pain are at least representative and at worst have 2–4 times the risk of opioid abuse disorders (Jovey, 2008). In clinical practice, aberrant drug behaviors are a common concern for the prescribing clinician. These generate concern over the potential for abuse/addiction, and for regulatory scrutiny.

No set of predictors has been identified to reliably determine risk for opioid misuse or abuse. In their recent review, Turk et al (2008) identified 15 studies related to this topic, with small, unrepresentative samples and poor psychometrics noted as common limitations. Though acknowledging that demographic variables were not consistently examined or reported in these studies, the authors reported that “younger age does seem to be a predictor for opioid misuse and abuse in CPP”. In contrast, a recent review of opioids in chronic low back pain concluded that patient demographics are not predictive of aberrant drug behavior (Schofferman and Mazanec, 2008). Interestingly, though Turk et al. (2008) note underrepresentation of women and non-whites in existing studies as limitations to conclusions that can be drawn on

demographics, they did not address the issue of age representation.

Of eight identified studies addressing predictors of substance misuse and abuse in CPP, seven evaluated age as a predictor or discriminating factor. Study designs include five retrospective case reviews (n=98 to 470) (Chabal et al., 1997; Michna et al., 2004; Michna et al., 2007; Reid et al., 2002; Wasan et al., 2007), a prospective cohort study (n=196) (Ives et al., 2006), and a large archival, longitudinal study of American veterans (n=15,160) (Edlund et al., 2006). The age range was reported for only four of these studies (26–84, 26–85, 21–85, and 21–89), and age distributions were not reported. Thus the number of participants within different age groups is unknown. Edlund et al. provide an age distribution showing 44.6% of their veteran patients age 60 and over. Six of these seven studies report younger age associated with opioid misuse or abuse, though the association was weak in some studies (Ives et al., 2006), and only indirectly evaluated in others (Wasan et al., 2007). In most studies, the relationship was evaluated only through grouped mean comparisons. With the limited reporting of age distributions and use of grouped data, generalizations regarding age as a predictor are tenuous. The Edlund et al. study provides the most interpretable age data, supporting a decreasing rate of opioid misuse (defined as recorded psychiatric diagnoses of dependence or abuse) by increasing age group among American veterans using opioids chronically for chronic noncancer pain. None of the studies indicated whether data screening occurred for analyzed variables. It is unknown whether data assumptions such as normality of distributions (uni and multivariate) were upheld. Significant skewedness of distributions (e.g., age) could have biased some statistical models and reported results.

Another approach to risk identification is through study of individuals treated for opioid abuse or addiction. With a large national sample, Cicero et al. (2008) found that 45% of patients entering treatment for opioid abuse reported pain as the sole factor in their initial use of opioids, and another 40-45% reported pain was at least a contributing factor. They suggest that patients at risk for opioid abuse can be identified by assessing pre- and co-morbid substance abuse and significant psychopathology (including depression, anxiety, bipolar disorder, and attention deficit disorder). However, this was a young sample (mean age 34.79±0.31), and findings cannot be generalized to older adults.

Risk Screening Questionnaires

Over the past 12 years, several self-report questionnaires have been developed to assist in risk identification for CPP being considered for opioid therapy (Adams et al., 2004; Butler et al., 2004; Coombs et al., 1996, Compton et al., 1998; Friedman et al., 2003; Michna et al., 2004; Webster and Webster, 2005; Wu et al., 2006) or being maintained on chronic opioids (Butler et al., 2007). Though a promising aid to clinical practice, to date these tools have limited empirical backing. Predictive validity has not been established for most, nor psychometrics well assessed. However, they provide a useful adjunct to other sources of information in some clinical settings (Passik, 2008).

What is known about the use of these screening questionnaires with older adults with chronic pain? A review of development and application studies suggests very little. Again, incomplete reporting of age data significantly limits interpretation. Of nine questionnaire development studies, age range is reported for six. A mean age with standard deviation is also reported for six studies (five of which also provide range). The upper age of the samples used to develop these measures, where known, ranges from 66 to 84. For all of the six studies with age dispersion data, 65 falls one or more standard deviation above the mean age, and for 50% it is more than two standard deviations above the mean. Unfortunately, additional age distribution data or normality statistics are not reported. Age is included as an assessment question in three of the nine questionnaires, though interestingly one of these does not provide basic age data for the study sample (Coombs et al., 1996). Though conclusions are difficult to draw based on the data provided, it appears that only two measures, the PMQ (sample age 48.8+/-14.1, range 17-84) and SOAPP (47.5+/-9.2, range 27-74), have included an adequate sample of older adults in their development to provide any confidence for use within this subpopulation. However, no comparative age data for these two measures is provided. Additionally, the limitations on predictive validity and psychometrics apply equally to this subgroup.

Side Effects

Adverse effects are common with opioids. Prevalence has been found to range from 25% to 100% in a meta-analysis of randomized clinical trials, resulting in dropouts for one in five patients (Moore and McQuay, 2005). Many opioid side effects reduce or resolve with continued use, while some persist (e.g., constipation) and others are more apparent after long-term use (e.g., immune and sexual dysfunction). Pharmacologic approaches to prevention or treatment include an opioid-sparing regimen (e.g., addition of an adjuvant analgesic), symptomatic treatment (e.g., use of a stool softener or anti-emetic), use of an opioid antagonist to directly reverse opioid effects (e.g., naloxone for respiratory depression), or changing opioid ("opioid rotation") (McNicol, 2007). Lower starting doses are recommended for opioid-naïve older patients (Hanlon et al., 2005). Although laxatives are widely recommended for patients on chronic opioids, this standard of care is often not met, even in controlled settings such as long-term care (Max et al., 2007). Recent evidence supports the use of mu opioid receptor antagonists (i.e., alvimopan and methylnaltrexone) for treating opioid-induced constipation (Thomas et al., 2008; Webster et al., 2008). Age distributions in these clinical trials was as follows: for alvimopan a mean age of treated patients ranging from 48.6±10.6 to 51.5±10.1, and for methylnaltrexone an age range of 34 to 93 with median 72.

A large retrospective inpatient study, including a mix of acute, chronic, and cancer pain, examined the association of age and other patient characteristics to parenteral opioid side effects (Cepeda et al., 2003). The incidence of nausea and vomiting decreased with age, while respiratory depression increased. A study of oral, sustained-release morphine in cancer pain found higher incidence of nausea, constipation, and CNS effects for patients over age 60 (Forman, 1996).

Opioids are common contributors to delirium. Risk factors for delirium include renal dysfunction, chronic high-dose opioids, premorbid cognitive impairment, dehydration, and use of other psychoactive drugs. Older age and comorbidities in turn increase risk for several of these factors. The route of administration and lipophilicity of the opioid are suspected factors in delirium, with more rapid receptor occupancy increasing the probability of cognitive changes (McNicol, 2007).

Though age differences in the neurocognitive effects of opioids have not been systematically studied, deficits across multiple cognitive domains have been associated with both acute and chronic use (Gruber et al., 2007). Long-term use appears to have greatest impact on executive functions, such as ability to shift cognitive set, response inhibition, and perseverative errors. Cherrier (2007) reported on an ongoing RCT comparing physiologic and cognitive effects of immediate-release oxycodone in healthy, pain-free adults in two age groups: 35 to 55, and over 65. Similar results were obtained for peak blood concentrations, pupil size, and cold-pressor tolerance. However, the older group had greater reaction time impairment and false positives on a verbal learning test at 60 minutes after dosing. Their performance remained significantly impaired at 300 minutes, while the younger group's cognitive effects appeared to diminish. Older adults may be more vulnerable to opioid effects for more demanding cognitive tasks and reaction times, and the drug effects may persist longer. This is consistent with neuropsychological decrements that occur as a result of normal aging, though it is unclear how much these non-clinical brain changes affect the experience of persistent pain (Karp et al., 2008).

Though chronic opioids result in significant hormonal modulation via the hypothalamic-pituitary-gonadal axis (Ballantyne and Mao, 2003), comparative age data are limited. In women, there appears to be a profound inhibition of ovarian sex hormone and adrenal androgen production with chronic use of sustained-action opioids. Possible consequences include contributions to opioid-associated depression, osteoporosis, and hyperalgesia. In opioid-consuming women over age 50, average hormone values were found to be 52% to 66% of those in control subjects, similar to rates for women age 30 to 50 (Daniell, 2008). Assessment of potential opioid impact on libido, drive, and mood is an important component of clinical management.

Conclusions

The evidence base for clinical management of opioids for older adults with persistent pain is still in its infancy. Physician reluctance to prescribe opioids due to concerns over misuse/addiction and regulatory actions have the potential to exacerbate the problem of under-treatment of pain in older adults (Agin and Glass, 2005; American Geriatric Society, 2002). There is no evidence to suggest increased risk for opioid misuse problems in older adults with persistent pain, and weak data to suggest reduced risk. A growing body of research supports opioid efficacy for chronic noncancer pain in this population. An increased risk of adverse effects, including neurocognitive changes, warrants caution and close monitoring in prescribing. More research is needed to address these important issues.

References

- Adams LL, Gatchel RJ, Robinson RC, et al. Development of a self-report screening instrument for assessing potential opioid medication misuse in chronic pain patients. *J Pain Symptom Manage* 2004;27:440-459.
- Agin CW, Glass PSA. Tolerance and aging: optimizing analgesia in pain management. *Anesth Analg* 2005;100:1731-1732.
- American Geriatric Society (AGS) Panel on Persistent Pain in Older Persons. The management of persistent pain in older persons. *JAGS* 2002;50: S205-S224.
- Ballantyne JC, LaForge KS. Opioid dependence and addiction during opioid treatment of chronic pain. *Pain* 2007;129:235-255.
- Ballantyne JC, Mao J. Opioid therapy for chronic pain. *NEJM* 2003;349:1026-1048.
- Ballantyne J, Shin NS. Efficacy of opioids for chronic pain: a review of the evidence. *Clin J Pain* 2008;24:469-478.
- Breckenridge J, Clark JD. Patient characteristics associated with opioid versus nonsteroidal anti-inflammatory drug management of chronic low back pain. *J Pain* 2003;4:344-350.
- Butler SF, Budman SH, Fernandez K, et al. Validation of a screener and opioid assessment measure for patients with chronic pain. *Pain* 2004;112:65-75.
- Butler SF, Simon HB, Fernandez KC, et al. Development and validation of the Current Opioid Misuse Measure. *Pain* 2007;130:144-156.
- Chabal C, Erjavec JK, Jacobson L, et al. Prescription opioid abuse in chronic pain patients: clinical criteria, incidence, and predictors. *Clin J Pain* 1997;13:150-155.
- Cherrier M. Neurocognitive effects of opioids in older adults. Paper presented at the 26th annual scientific meeting of the American Pain Society, May 2007, Washington, DC.
- Ciccione DS, Just N, Bandilla EB, et al. Psychological correlates of opioid use in patients with chronic nonmalignant pain: a preliminary test of downhill spiral hypothesis. *J Pain Symptom Manage* 2000;20:180-192.
- Clark ME. Understand appropriate long-term use of opioids – seventeen years and counting. *Clin J Pain* 2008;24:467-468.
- Coombs RB, Jarry JL, Santhiappillai AC, et al. The SISAP: a new screening instrument for identifying potential opioid abusers in the management of chronic nonmalignant pain within general medical practice. *Pain Res Manage* 1996;1:155-162.
- Compton P, Darakijian J, Miotto K. Screening for addiction in patients with chronic pain and “problematic” substance use: evaluation of a pilot assessment tool. *J Pain Symptom Manage* 1998;16:355-363.
- Daniell HW. Opioid endocrinopathy in women consuming prescribed sustained-action opioids for control of nonmalignant pain. *J Pain* 2008;9:28-36.
- Edlund MJ, Steffick D, Hudson T, et al. Risk factors for clinically recognized opioid abuse and dependence among veterans using opioids for chronic non-cancer pain. *Pain* 2007;129:355-362.
- Edwards RR, Haythornthwaite JA, Tella P, et al. Basal heat pain thresholds predict opioid analgesia in patients with postherpetic neuralgia. *Anesthesiology* 2006;104:1243-1248.
- Eriksen J, Sjogren P, Bruera E, Ekholm O, Rasmussen NK. Critical issues on opioids in chronic non-cancer pain: an epidemiological study. *Pain* 2006;125:172-179.
- Fanciullo GJ, Ball PA, Girault G, et al. An observational study on the prevalence and pattern of opioid use in 25,479 patients with spine and radicular pain. *Spine* 2002;27:201-205.
- Fields HL. Should we be reluctant to prescribe opioids for chronic non-malignant pain? *Pain* 2007;129:233-234.
- Fillingim RB, Doleys DM, Edwards RR, et al. Clinical characteristics of chronic back pain as a function of gender and oral opioid use. *Spine* 2003;28:143-150.
- Fine PG. Pharmacological management of persistent pain in older patients. *Clin J Pain* 2004;20:220-226.
- Fishbain DA, Cole B, Lewis J, Rosomoff HL, Rosomoff RS. What percentage of chronic nonmalignant pain patients exposed to chronic opioid analgesic therapy develop abuse/addiction and/or aberrant drug-related behaviours? A structured evidence-based review. *Pain Med* 2008;9:444-459.
- Forman WB. Opioid analgesic drugs in the elderly. *Clin Ger Med* 1996;12:489-500.
- Friedman R, Li V, Mehrotra D. Treating pain patients at risk: evaluation of a screening tool in opioid-treated pain patients with and without addiction. *Pain Med* 2003;4:182-185.
- Gilson AM, Ryan KM, Joranson DE, et al. A reassessment of trends in the medical use and abuse of opioid analgesics and implications for diversion control: 1997-2002. *J Pain Symptom Manage* 2004;28:176-188.
- Gruber SA, Silveri MM, Yurgelun-Todd DA. Neuropsychological consequences of opiate use. *Neuropsychol Rev* 2007;17:299-315.
- Hanlon JT, Guay DRP, Ives TJ. Oral analgesics: efficacy, mechanism of action, pharmacokinetics, adverse effects, drug interactions, and practical recommendations for use in older adults. In Gibson SJ, Weiner DK (eds.), *Pain in Older Persons*. Seattle, WA: IASP Press, 2005.
- Hogsted J, Sjogren P. Addiction to opioids in chronic pain patients: a literature review. *Eur J Pain* 2007;11:490-518.
- Hudson TJ, Edlund MJ, Steffick DE, Tripathi SP, Sullivan MD. Epidemiology of regular prescribed opioid use: results from a national population-based survey. *J Pain Symptom Manage* 2008, in press.
- Ives TJ, Chelminski PR, Hammett-Stabler CA, et al. Predictors of opioid misuse in patients with chronic pain: a prospective cohort study. *BMC Health Services Res* 2006;6:46.
- Jovey R. Pain and addiction: prevalence, neurobiology, and definitions. In Castro-Lopes JM et al. (eds.), *Pain 2008-An updated review: Refresher course syllabus*. Seattle, WA: IASP Press, 2008.
- Karp JF, Shega JW, Morone NE, Weiner DK. Advances in understanding the mechanisms and management of persistent pain in older adults. *Br J Anesthes* 2008;101:111-120.
- Katz NP, Adams EH, Benneyan JC, et al. Foundations of opioid risk management. *Clin J Pain* 2007;23:103-118.
- Katz NP, Adams EH, Chilcoat H, et al. Challenges in the development of prescription opioid abuse-deterrent formulations. *Clin J Pain* 2007;23:648-660.
- Kelly JP, Cook SF, Kaufman DW, Anderson T, Rosenberg L, Mitchell AA. Prevalence and characteristics of opioid use in the US adult population. *Pain* 2008;138:507-513.
- Likar R, Vadlau EM, Breschan C, Kager I, Korak-Leiter M, Ziervogel G. Comparable analgesic efficacy of transdermal buprenorphine in patients over and under 65 years of age. *Clin J Pain* 2008;24:536-543.
- Lin JJ, Alfandre D, Moore C. Physician attitudes toward opioid prescribing for patients with persistent noncancer pain. *Clin J Pain* 2007;23:799-803.
- Martell BA, O'Connor PG, Kerns RD et al. Systematic review: opioid treatment for chronic back pain: prevalence, efficacy, and association with addiction. *Ann Intern Med* 2007;146:116-127.
- Max EK, Hernandez JJ, Sturpe DA, Zuckerman IH. Prophylaxis for opioid-induced constipation in elderly long-term care residents: a cross-sectional study of Medicare beneficiaries. *Am J Ger Pharm* 2007;5:129-136.

McNicol E. Opioid side effects. Pain: Clinical Updates (International Association for the Study of Pain), 2007 Apr; 15(2):1-6.

Michna E, Jamison RN, Pham LD, et al. Urine toxicology screening among chronic pain patients on opioid therapy: frequency and predictability of abnormal findings. Clin J Pain 2007;23:173-179.

Michna E, Ross EL, Hynes WL, et al. Predicting aberrant drug behaviour in patients treated for chronic pain: importance of abuse history. J Pain Symptom Manage 2004;28:250-258.

Moore RA, McQuay HJ. Prevalence of opioid adverse events in chronic non-malignant pain: systematic review of randomized trials or oral opioids. Arthr Res Ther 2005;7:1046-1051.

Passik SD. Reducing the risks of opioids by screening and risk stratification. In Castro-Lopes JM et al. (eds.), Pain 2008-An updated review: Refresher course syllabus. Seattle, WA: IASP Press, 2008.

Pitkala KH, Strandberg TE, Tilvis RS. Management of nonmalignant pain in home-dwelling older people: a population-based survey. J Am Geriatr Soc 2002;50:1861-1865.

Portenoy RK, Bennett DS, Rauck R, Simon S, Taylor D, Brennan M, Shoemaker S. Prevalence and characteristics of breakthrough pain in opioid-treated patients with chronic noncancer pain. J Pain 2006;7:583-591.

Reid MC, Engles-Horton LL, Weber MB, Kerns RD, Rogers EL, O'Connor PG. Use of opioid medications for chronic noncancer pain syndromes in primary care. J Gen Intern Med 2002;17:173-179.

Rich BA. Ethics of opioid analgesia for chronic noncancer pain. Pain: Clinical Updates (International Association for the Study of Pain) 2007 Dec;15(9):1-4.

Riley JL, Hastie BA. Individual differences in opioid efficacy for chronic noncancer pain. Clin J Pain 2008;24:509-520.

Schofferman J, Mazanec D. Evidence-informed management of chronic low back pain with opioid analgesics. The Spine Journal 2008;8:185-194.

Thomas J, Karver S, Cooney GA, et al. Methylnaltrexone for opioid-induced constipation in advanced illness. NEJM 2008;358:2332-2343.

Turk DC, Swanson KS, Gatchel RJ. Predicting opioid misuse by chronic pain patients: a systematic review and literature synthesis. Clin J Pain 2008;24:497-508.

Wasan AD, Butler SF, Budman SH, et al. Psychiatric history and psychologic adjustment as risk factors for aberrant drug-related behavior among patients with chronic pain. Clin J Pain 2007;23:307-315.

Webster BS, Verma SK, Gatchel RJ. Relationship between early opioid prescribing for acute occupational low back pain and disability duration, medical costs, subsequent surgery and late opioid use. Spine 2007;32:2127-2132.

Webster L, Jansen JP, Peppin J, et al. Alvimopan, a peripherally acting mu-opioid receptor (PAM-OR) antagonist for the treatment of opioid-induced bowel dysfunction: results from a randomized, double-blind, placebo-controlled, dose-finding study in subjects taking opioids for chronic non-cancer pain. Pain 2008;137:428-440.

Webster LR, Webster RM. Predicting aberrant behaviours in opioid-treated patients: preliminary validation of the Opioid Risk Tool. Pain Med 2005;6:432-442.

Won A, Lapane KL, Vallow S, et al. Long-term effects of analgesics in a population of elderly nursing home residents with persistent nonmalignant pain. J Gerontol Med Sci 2006;61A:M165-169.

Wu SM, Compton PC, Bolus R, et al. The Addiction Behaviours Checklist: validation of a new clinician-based measure of inappropriate opioid use in chronic pain. J Pain Symptom Manage 2006;32:342-351.

Correspondence: Drew Cook
Pain Management Centre
Burwood Hospital
Private Bag 4708
Christchurch, NZ
Ph 64 3 383 6831
drewjcook@gmail.com

SIG Information

SIG on Pain in Older Persons statistics:

The SIG currently has **231** members representing **33** disciplines in **43** different countries.

Treasurer's report:

As of **December 31, 2008**, the SIG account balance was **\$11,978**.

The Pain in Older Persons SIG objectives are:

- to increase awareness and promote education about pain in older persons
- to provide an international and interdisciplinary forum for people interested in clinical and research questions on pain in older persons
- to develop/endorse best-practice guidelines for assessment and management of pain in older persons
- to promote discussion and research on pain in older persons, including:
 - senescence of pain perception
 - multidimensional assessment of pain and its consequences
 - pharmacological and non-pharmacological management of pain
 - uniqueness of the pain experience in patients with cognitive impairment
- to facilitate the development of international collaborative research efforts on pain in older persons

The Newsletter: *Members are encouraged to contribute to this newsletter. Please submit any suggestions, articles, or ideas to Benny Katz at: elderpainsig@connexus.net.au*