



SPS NEWS

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Improving Pain Management in a Veteran Administration Hospital: 3 years of Quality Improvement Outcome.

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Introduction: Pain management is a high volume, high risk and problem prone area that cuts across several areas of patient care, including patient rights, assessment, education, provision of care and staff education. Pain practitioners are often members of the institutional pain committees, which are often responsible for crafting policies and implementation plan to improve pain care in the institution. Are there lessons which can guide in improving pain related outcomes at the institutional level?

This report is focused on the quality improvement outcome following implementation of a pain management performance improvement in a Veteran Administration hospital in Jackson, Mississippi from 1999 to 2002. Plans for the implementation of the VHA pain management strategy were formulated by an interdisciplinary team, and approved by the executive medical board. A quality improvement approach using the Plan Do Check Act process was used.

Specific Outcome Questions; How much does pain related parameters changed on a hospital wide basis, following the implementation of a pain management performance improvement? The specific measures addressed were: 1) How much does the patients' pain intensity change using the 0-10 scale? 2) How much does the level of patients' satisfaction with the provided pain management change? 3) Are there any changes in the response time to request for better pain treatment as perceived by in-patients? 4) How much does the attitude and opinion of providers on common pain management myths change?

Instrument: Items taken from the American Pain Society (APS) patient outcome questionnaire were used to measure changes in pain levels and satisfaction (APS, 1995, Ward and Gordon, 1996). To measure changes in the basis for the attitude and practice pattern of the providers, items were adapted from previously published studies addressing similar issues (Fife et al., 1993, Levin et al., 1998).

Approach and Interventions: Problem identification was done using items from the American Pain Society Quality Improvement questionnaire, which was administered in a cross – sectional survey in the base year to a stratified random sample of patients. The questionnaire for providers were also administered in the base year for baseline information and problem identification. Problems identified included poor pain assessment, with no system wide mechanism for assessment or reassessment of pain, lack of patient education, lack of understanding on the part of patients regarding their rights to have pain evaluated and treated, and knowledge deficits among healthcare professionals relating to pain management.

This initial survey, which provided baseline data, involved 36 patients and showed that 94% expressed the need for pain treatment at some point during treatment at the medical center. 72% had experienced pain in the last 24 hours. 26% had current pain rated as 7 or greater. General activities following treatment for pain was better in 62%. The initial staff survey involved 50 staff employees with mean age of 41 years and mean practice duration of 14 years. Many employees correctly felt that pain medicines should not necessarily be saved for the future. However, many employees were indifferent when asked if patients got easily addicted to pain medicines.

Interventions: An interdisciplinary team consisting of representatives from different areas of care and services was formed. Membership was by invitation or nomination. Members were from pain control, primary care, (continued on page 4)

Mission Statement

The Southern Pain Society is a regional section of the American Pain Society and endorses and supports the mission and goals of the American Pain Society. The Southern Pain Society's missions are to serve people with pain by advancing research and treatment and to increase the knowledge and skill of the regional professional community.

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Editor's Desk

Ike Eriator, MD, MPH



Welcome to another issue of the Southern Pain Society Newsletter, your Newsletter. For this issue, I have had invaluable assistance from many people. The president, the previous editor and the administrator provided information and ideas that were central to the foundation and mission of SPS. The board members provided insights. Many contributors kept to the schedule. My anesthesiology residents and fellow at the University of Mississippi medical Center generously offered their time to help research some of the topics. I express my thanks to everyone.

This issue of our newsletter is rich. Take a look. From the presidential call to loftier heights through assessment of psychiatric symptoms in a pain practice to ways of improving your institutional pain practices. Look at the changes in billing and coding affecting pain. The scientific editor examined ethnicity and pain. What is new with regards to pain research and practice? Find some of the answers in the section dealing with News from the pain world.

Give us your feedback. Moreover, contribute to the upcoming issues. The deadline for the next issue is April 30. The theme for that issue will center on the use of complementary and alternative approaches in the management of pain. Share your experience, comments on issues and news item related to pain. It is your Newsletter. Be active, because that is the only way we can energize the newsletter!

Again, welcome. Warm regards and happy reading...

Newsletter Submissions

All submissions to SPS News should be typewritten and double spaced with title and name of author(s). The article should be copy-ready. Please include biographical information.

Submission Deadlines

Winter edition-November 1; Spring edition-February 1; Summer edition-May 1; Fall edition-August 1.

Please submit your articles to lpostal@southernpainsociety.org or to our editor ieriator@anesthesia.umsmmed.edu

President's Column

Daniel M. Doleys, PhD

Our knowledge of pain has expanded dramatically since the 1970's. The development of functional MRI and other technology has provided new insights into pain mechanisms and processing. Basic research has broached new vistas in unraveling basic neurochemical and physiological mechanisms. There is a developing appreciation that "pain", particularly in the neuropathic setting, in fact is a "disease". Hopefully, the days of considering it as a mere symptom or indication of some underlying pathophysiological process or worse, the trademark of individuals with a rather "weak constitution" are gone. The emergence of interest and research into genetic polymorphisms has propelled the current concept of "pain" as a combination of these genetic polymorphisms, physiological processing and psychological variables.

The growth in our understanding of pain and its mechanisms has been paralleled by an expansion of therapeutic options. Pain management in some arenas has indeed become "big business". Many treatments have well established track records and contain evidence based support while others seem to be the product of blatant assertion. Many unsuspecting patients and practitioners alike may have difficulty distinguishing between the two unless afforded the opportunity for education. It is for this reason that organizations like the Southern Pain Society came into existence and must continue to fulfill the obligation of appropriate and meaningful research, education and training. At best, this research, education and training is difficult to carry out on the large scale needed without sufficient corporate support. New guidelines and regulations have in many instances encroached upon the magnitude and type of support available.

Over the years SPS has found a way to meet the challenges it has faced. The newsletter, now in the capable hands of Dr. Eriator, has been a source of information to the membership and the meetings an opportunity to offer education and training on a regional basis. It is important that both of these endeavors continue to be strongly supported. Each of us as members of SPS and individuals interested in the advancement of pain research and therapy must continue to recruit new members, offer up contributions to the newsletter, involve ourselves as participants or faculty in the regional meeting, and exert whatever influence we may have to secure corporate membership to SPS and support of its annual meeting and associated activities. The 2007 meeting is being spearheaded by Dr. Ben Johnson, immediate past-president of SPS, and is scheduled for September 28 and 29 at the beautiful and entertaining Opryland Hotel in Nashville. Dr. Todd Sitzman, president-elect of Southern Pain Society promises an equally engaging meeting currently scheduled for the fall of 2008 in New Orleans.

As members of SPS, pain researchers and clinicians, as well as corporate supporters, there is much to do and much to look

forward to. I appreciate the opportunity to serve as the President of SPS for the next two years and hopefully will live up to the standards set by the previous presidents.

Billing and Coding Updates for 2007

Eddy Fraiefeld, MD

In our current environment of constant economic changes in medicine we face many challenges to getting appropriate reimbursement. Some of these challenges such as payor coverage for certain procedures are to some extent out of our hands, others such as Medicare's reimbursement rates I am sad to say often hinge on a political action we can all participate in. (Unfortunately many physicians don't and just assume someone else will.) There are however some things we can do in order to get correctly compensated. One of the simplest is to correctly code claims submitted for payment.

Every practice should prior to start of the New Year have reviewed impending code changes and corrected or added these to their billing system. This is also a good time to review and insure your "super bill" or other billing paper work is correct. This means you should review your CPT and ICD-9 codes as both systems develop yearly changes.

Correct coding for billing usually requires two pieces of coding information the "CPT code" & the ICD-9 Code. CPT is a registered Trademark of the American Medical Association and describes the service provided (E&M, procedure, etc). The ICD-9 Code is more correctly called the International Classification of Diseases, Ninth Revision, Clinical Modification or (ICD-9-CM). Originally developed by the World Health Organization as a method to develop mortality statistics, it is a code used to describe the disease state being treated. Correct coding requires a correct pairing of the CPT and ICD-9 code. For example, you would not code an epidural steroid injection for myofascial pain syndrome.

Changes in CPT for 2007

The "Initial" inpatient consultation codes have been deleted. Only one inpatient may be reported by consultant per patient per admission. Any subsequent encounters with the same patient are reported according to setting they occur in.

(continued page 11)

(continued from page 1)

oncology, mental health, physical medicine and rehabilitation, neurosurgery, nursing and administration. A pain specialist, and the chief of nursing service chaired the team. The team met on several occasions over a period of 6 months, and developed a comprehensive set of recommendations, which were approved by the executive leadership board of the hospital. The following activities were implemented:

- A comprehensive plan for the implementation of pain as 5th vital sign, pain assessment and electronic documentation. The Numeric rating scale, and the Wong-Baker (facial) pain rating scale (in cases where the numeric scale could not be used) were adopted as the standard for the hospital.
- Education - Improved providers knowledge and changed attitude towards pain and its treatment by
 - Organizing an informational Pain Fair for providers and patients with a display of multiple modalities used in the management of pain
 - Training 12 Pain Resource Providers (PRP) assigned to the various clinical areas to assist with pain related issues or concerns.
 - Regular pain conferences and town-hall meetings on pain management topics and problems.
- Education – Informing patient of their right to have their pain managed by;
 - Developing patient education flyer to heighten awareness of pain and to inform the patient of their right to have their pain managed
 - Developing a local twelve minutes video on pain and its treatment for patients and shown on hospital television daily.
- Developed general pain management policy for the hospital. A standard of care for pain management for the institution was developed (see table 1).
- Improved access to pain management through the Pain Clinic by deployment of a full time RN (Pain Nurse) assigned to the clinic and increasing days of operation from two to five days a week.

Outcome: Follow up measures were repeated annually by administering the questionnaires to at least 50 patients and providers for the next three years. The results showed that the proportion of patients who have been very satisfied with their pain control has risen from 27% in the base year (1999) to 59% three years later (figure 1). In the same time period, the proportion of patients with severe pain (7-10 on the scale of 1 – 10) has decreased from 26% to 12% (fig. 2). The waiting time to obtain pain medications for those in the hospital has decreased. The proportion of those who waited for 15 minutes or less has rose from 50% in 2000 to 89.5% in 2002

(fig. 3), while those waiting for over an hour have decreased from 17.8% in 2000 to 5.3% in 2002. Review of measures of staff performance showed that the proportion who believed that addiction to pain medication was uncommon had risen from 50% in 1999 to 73% in 2002. In general, the proportion of patients with severe pain decreased, while those with mild pain increased. The most significant change occurred in 2000 with the implementation phase. The graph also suggest that decrease in moderate pain occurred before significant changes in severe pain.

In this study, majority of patients (89.6) reported satisfaction with pain management in the base year (1999) and improvement in the level of satisfaction relating to pain management was one of the first changes noted (Eriator et al., 2005a).

Waiting time for pain medication was specifically monitored for inpatients and is a reflection of the attention paid to complaints of pain by such patients. Waiting time for pain medication was first measured in 2000. Improvements occurred by the end of 2000 and the trend continued to improve until 2002.

The initial survey done in 1999 also showed that 50% of the surveyed physicians and nurses felt that patients easily got addicted to pain medications. The proportion with this belief decreased to about 27% in the surveys of 2000 and 2002 (Eriator et al., 2005b).

This is a report of a quality improvement approach to improving care, as commonly practiced in many hospitals. It was not a planned scientific research work with the attendant inbuilt controls and limits. The hospital is the unit of analysis, and the report does not focus on individual patients.

Conclusion: The data reported here suggest hospital wide pain improvement programs when implemented in an interdisciplinary manner, using a multifaceted quality improvement approach can result in sustainable institutional decreased in pain intensity and improved patient satisfaction.\

Fig 1: Level of Satisfaction with Pain Control (Hospital wide Patient survey 1999-2002)

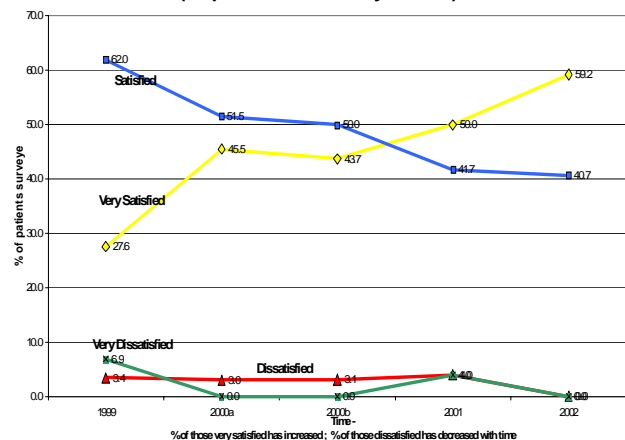


Fig. 2: Severity of Pain Reported by Patients
(Hospital wide survey 1999-2002)

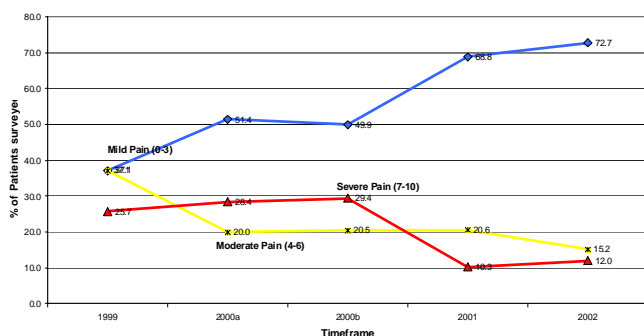
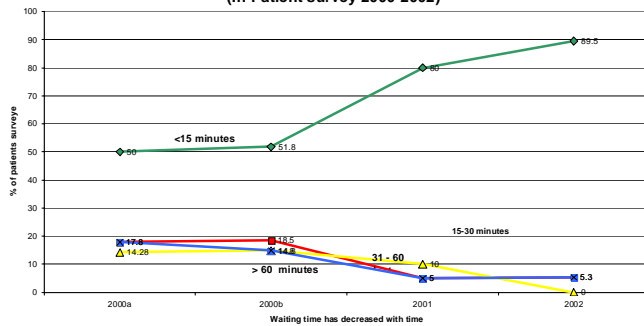


Figure 3: Waiting Time for Pain Medications
(In-Patient survey 2000-2002)



References:

American Pain Society Quality of Care committee; (Consensus statement): Quality improvement guidelines for the treatment of acute pain and cancer pain. JAMA 1995; 274: 1874 – 1880.

Du Pen, S. L., Du Pen, A. R., Polissar, N. et al.: Implementing guidelines for cancer pain management: Results of a randomized controlled clinical trial. J. Clin. Oncol 1999; 17: 361 – 370.

Ward, S. E. and Gordon, D. B.: Patient satisfaction and pain severity as outcomes in pain management: A longitudinal view of one setting's experience. J. Pain Symptom Manage 1996; 11: 242 – 251.

Fife, B. L., Irick, N. and Painter, J.: A comparative study of the attitudes of physicians and nurses towards the management of cancer pain. J. Pain Symptom Manage, 1993; 132: 132 – 139.

Levin, M. L., Berry, J. I. and Leiter, J.: Management of pain in terminally ill patients: physician report of knowledge, attitudes, and behavior. J. Pain Symptom Manage 1998; 15: 27 – 40.

Eriator, I, Gibson-McDonald, S. and Yagnick, H.: Hospital pain improvement program improves patients satisfaction and decreases pain level. The Journal of Pain, 2005a; 6(3), Suppl. 1 page S75, Abstract # 868.

Eriator, I. and Moheyuddin, S., Gibson-McDonald, S: Hospital Pain Improvement Program Improves Pain-related Myths held by Hospital Providers. Abstract # 125: American Academy of Pain Medicine (AAPM) 21st Annual Meeting, Palm Springs, CA, Feb., 2005b.

Table 1:

Standards of Care for pain Management:

Assessment:

Pain will be treated as the fifth vital sign for all patients.

The 0 – 10 Pain scale will be used. Patients who cannot use this scale will be offered alternative scales like the VAS, facial scale.

Pain assessment will include characteristics of the pain including location and intensity. Other physical and psychosocial characterizations are important and will be individualized for each patient.

Pain levels of 5/10 or above will be taken as a red flag.

Patient and family members will be involved in the assessment and establishment of treatment goals.

When pain is identified as a problem, individualized patient treatment goal will be established and regular reassessment done until the problem is resolved.

When pain is identified as a problem, the patient will be monitored regularly for the effectiveness and possible side effects of therapy.

Intervention:

If pain is 5/10 or more intense or unacceptable to the patient, there will be an intervention to reduce the pain. If no intervention is implemented, reasons for such will be documented.

Patients and their families will be educated about pain and its relief.

Side effects of therapy will be anticipated and monitored in a timely manner.

Pain that is not improving on reassessment requires further intervention.

Continuous pain should be managed with appropriately scheduled therapy, rather than prn.

Oral and intravenous routes are preferred over intramuscular administration.

Meperidine is generally not preferred for pain management.

Appropriate conversions are required when changing routes or switching analgesics.

Plans for post discharge will include management plan for persistent pain.

Documentation:

Results of pain assessment and reassessment will be a part of the hospital chart.

Progress notes should make clear the plan and rationale for pain therapy.

The Relationship Between Ethnicity and the Experience of Pain: A Brief Review of the Literature

Leanne R. Cianfrini, PhD Scientific Editor



There is a growing body of evidence that identifies race and ethnicity as important determinants of the pain experience. During the past few decades, investigators have attempted to better understand the well-documented ethnic differences in reports of clinical pain by performing laboratory studies of the verbal and

behavioral pain responses of African American and non-Hispanic White participants to a variety of pain stimulus modalities. Much of this research has been done in Southern university settings.

Laboratory studies consistently show that African Americans, in comparison with Whites, exhibit lower pain tolerance in response to heat, cold, and mechanical pressure stimulation. For example, Edwards and Fillingim (1) compared the responses of healthy African American and White young adults at the University of Alabama at Birmingham on measures of thermal pain threshold and tolerance, as well as on VAS ratings of the pain intensity and pain unpleasantness produced by suprathreshold thermal stimulation. The investigators found no group differences in thermal pain threshold levels or ratings of thermal pain intensity. However, African American participants displayed lower thermal pain tolerance levels and rated suprathreshold thermal stimuli as more unpleasant than did White participants.

Using a sample from a Birmingham, Alabama multidisciplinary pain treatment center, Edwards, Doleys, Fillingim, and Lowery (2001) reported that African American patients with chronic noncancer pain demonstrated lower tolerance for ischemic arm pain in comparison with White patients.

Campbell and colleagues at the University of Florida (3) examined responses to multiple pain tasks, including mechanical pressure, thermal, ischemic, and cold pressor stimulation, in healthy African Americans and non-Hispanic Whites. Their results revealed no significant differences in measures of pain threshold but did reveal sig-

nificantly lower tolerance for heat, ischemic, and cold pressor pain in African Americans. An article in press by Rahim-Williams et al (4) replicated this pattern of results, but added that Hispanic participants also demonstrated lower cold and heat tolerance than White participants, but did not differ from African Americans.

In summary, laboratory findings of enhanced pain unpleasantness ratings and lower pain tolerance responses to sensory testing among African American and Hispanic participants are consistent across pain stimulus modalities and seem relatively robust. Many investigators have suggested that pain tolerance levels and ratings of pain unpleasantness evoked by suprathreshold levels of stimulation primarily reflect the affective-motivational aspects of pain, whereas pain threshold levels and ratings of pain intensity load predominantly on the sensory-discriminative dimension. Thus, it appears that ethnic differences in pain responses are most evident on measures of the affective-motivational dimension of pain.

Several mechanisms or factors have been proposed to account for this effect, including genetic influences, cultural conditioning, socioeconomic status, access to medical/social support, and systematic differences in psychological distress or coping style, among others. For instance, it is well-known that cognitive interpretations (e.g. negative pain-related expectations) can increase individuals' vulnerability to stressors, and are associated with higher levels of pain and less adaptive responses to painful chronic illnesses. Therefore, it is important to examine the potential contributions of psychosocial factors to ethnic variations in pain responses.

Studies of healthy individuals, as well as patients with chronic illnesses, have shown that African Americans produce higher scores on measures assessing pain catastrophizing (e.g., feelings of helplessness, difficulty distracting oneself from thoughts about pain, and the anticipation of highly negative consequences from the experience of pain) compared to non-Hispanic Whites (5, 6). Substantive group differences have been found on the praying and hoping subscale of the Coping Strategies Questionnaire, with African Americans and Hispanics reporting higher scores relative to Whites on items relating to prayer (5). Hypervigilance to somatic sensations has also been found to differ between ethnic groups, with African Americans producing higher scores on the Kohn Reactivity Scale (3). However, these variables have not been found to consistently account for differences in pain responses between groups.

Ethnic identity, which has been defined as part of a person's self-concept that is derived from one's knowledge of or membership in a social group, has also been found to relate to pain sensitivity. In a new study, African Americans and Hispanics who reported a stronger ethnic identity or affiliation demonstrated lower cold, thermal, and ischemic pain ratings (4). Further analysis suggested that ethnic identity may even mediate some of the ethnic group differences in pain responses.

The understanding of ethnic group differences in pain percep-

tion would be advanced by further investigations of the biological, psychological, and sociocultural factors that account for the differences found between ethnic groups. Of course, it is still important to realize that pain is experienced by individuals and not by groups. One must also caution against generalizing the experimental results, which have been mainly conducted with healthy participants, to acute or chronic pain patients in clinical settings. However, if African American and Hispanic patients indeed report a greater affective clinical pain response as the laboratory studies suggest, this highlights important implications for pain treatment. For example, there are interventions that successfully reduce the frequency of catastrophic thoughts and may result in less severe pain reports (7). It is necessary to test the effects of cognitive-behavioral interventions that facilitate adaptive coping on ethnic group differences in pain responses. Given the increasing diversity of the U.S. population, attempting to understand ethnic differences in the experience of pain is imperative if clinicians are to provide optimal pain assessment and treatment to persons of all ethnic backgrounds.

References:

1. Edwards RR, Fillingim, RB. Ethnic differences in thermal pain responses. *Psychosom Med* 61: 346-54, 1999.
2. Edwards RR, Doleys DM, Fillingim RB, Lowery D. Ethnic differences in pain tolerance: clinical implications in a chronic pain population. *Psychosom Med* 63: 316-23, 2001.
3. Campbell CM, Edwards, RR, Fillingim RB. Ethnic differences in responses to multiple experimental pain stimuli. *Pain* 113: 20-26, 2005.
4. Rahim-Williams FB, et al. Ethnic identity predicts experimental pain sensitivity in African Americans and Hispanics. Article in press. *Pain* (2007), doi:10.1016/j.pain.2006.12.016.
5. Edwards RR, Moric M, Husfeldt B, Buvanendran A, Ivankovich O. Ethnic similarities and differences in the chronic pain experience: a comparison of African American, Hispanic, and White patients. *Pain Medicine* 6 (1): 88-98, 2005.
6. Cianfrini LR. Physiological and psychological mediators of ethnic group differences in laboratory pain sensitivity. Unpublished doctoral dissertation, University of Alabama at Birmingham, 2004.
7. Thorn BE, Boothby JL, Sullivan, MJL. Targeted treatment of catastrophizing for the management of chronic pain. *Cognit Behav Pract* 9: 127-138, 2002.

Assessing Psychiatric Symptoms in Pain Patients

Todd A. Smitherman, PhD, Donald B. Penzien, PhD, Morris Maizels, MD

Why Screen for Psychiatric Disorders? A considerable body of literature confirms that psychiatric disorders frequently co-occur with chronic pain conditions. Increased rates of anxiety and depressive disorders, in particular, have been found among individuals experiencing arthritis,¹ migraine or chronic tension-type headache,^{2,3} chest or back pain,^{1,4} fibromyalgia,⁵ and temporomandibular disorders.^{6,7} Although exact prevalence rates vary by study and pain condition, these studies generally suggest that individuals with chronic pain conditions are between two and five times more likely to suffer from an anxiety or depressive disorder than are individuals without chronic pain. These rates translate into high percentages of patients; depression alone is present in approximately 50% of pain patients presenting at specialty clinics and 25% of those in primary care settings.⁸ A much larger study by the World Health Organization found that patients experiencing persistent pain were 4 times more likely to have an anxiety or depressive disorder diagnosis, compared to those without chronic pain.⁹ Prevalence rates of comorbid psychiatric conditions are even higher among patients with multiple pain conditions.¹

A growing body of literature attests to the fact that comorbid psychiatric disorders are associated with chronification and transformation of disease, increased medical costs and disability, reduced quality-of-life, and a poorer prognosis for pain-related treatment.⁸ To take migraine as one exemplar pain condition, psychiatric comorbidity appears to be involved in the transformation of migraine to medication overuse headache¹⁰



and in the progression of headache frequency (i.e., from episodic to chronic to daily).^{11,12} Migraineurs with psychiatric comorbidity accrue, on average, over \$4,000 in additional medical costs each year, compared with migraineurs without comorbid psychiatric diagnoses.¹³ They report lower satisfaction with headache-related treatment, increased disability, and reduced quality-of-life.¹⁴

For some time, studies exploring psychiatric comorbidity in medical conditions focused almost exclusively on depression, a relationship that was accepted more or less uncritically despite conflicting empirical evidence.¹⁵ More recently, however, the relationship between mood disorders and various pain conditions has been confirmed, even after controlling for demo-

graphic variables, pain condition, and other medical problems.^{1,16} The preponderance of evidence indicates that, in general, depression is more likely to be a consequence of, rather than an antecedent to, chronic pain.¹⁷ Enhanced understanding of the depression-pain relationship has been paralleled by an increasing interest in other comorbid psychiatric conditions, such as anxiety and substance-use disorders. Anxiety disorders are the most prevalent class of psychiatric disorders in the population,¹⁸ so it not surprising that they frequently co-occur with numerous medical conditions.¹⁹ Accumulating research indicates that screening for depression alone is not sufficient and should be accompanied by screening for anxiety. Indeed, the negative impact of anxiety on medical-related disability persists even after controlling for depression,¹⁹ and the frequent co-occurrence of anxiety and depression further compounds disability and reduced quality-of-life.¹⁴

The literature reviewed above highlights the importance of early and accurate identification of comorbid psychiatric disorders in chronic pain patients. Although psychiatric screening entails extra time and resources, there are numerous reasons that such screening should be implemented more routinely in clinical practice. Addressing and identifying depressive and/or anxiety disorders may facilitate the doctor-patient relationship, suggest particular medication regimens or contraindications, provide insight into patient noncompliance and the experiencing of medication side effects, and/or indicate that more in-depth psychiatric or psychological services are warranted.

Guidelines for Psychiatric Screening There are numerous considerations and guidelines for physicians interested in implementing psychiatric screening in their practice. Selection of an appropriate screening tool is of utmost concern, as available screening measures vary considerably in breadth, depth, and psychometric properties. Multidimensional screening measures are often most useful as initial screening measures or when psychiatric symptoms are evident. Positive responses to such measures should be followed by administration of disorder-specific measures and/or careful diagnostic interview in order to confirm a suspected diagnosis (so as to avoid false positives). In patients who are reluctant to discuss psychiatric symptoms, we have found that asking about sleep and energy levels provides an easy transition to asking about a patient's mood. Informally asking about free-time activities, relationships, and life stress often provides information about anhedonia, social support, and other correlates of depression and/or anxiety. Psychiatric inquiry may also be facilitated by discussion of pain-related disability; in this context, psychiatric screening may occur in conjunction with administration of common pain-related disability measures, such as the Brief Pain Inventory.^{20,21}

Transdiagnostic symptoms must also be considered, as there are numerous symptoms that psychiatric disorders and chronic pain conditions have in common, such as disturbances in sleeping or eating, difficulty concentrating, fatigue, irritability, and muscle tension. Because most screening

measures do not address transdiagnostic symptoms, the astute physician must consider whether such symptoms are sequelae of the chronic pain condition, a suspected psychiatric disorder, or both. For example, a decrease in appetite may result from a temporomandibular disturbance, clinical depression, or an interaction between the two. Ongoing fatigue, sleep disturbances, and irritability are common in fibromyalgia, chronic low back pain, and other pain syndromes, as well as in depression and generalized anxiety disorder. These examples highlight the importance of considering symptoms shared by chronic pain and psychiatric disorders. Careful and thorough inquiry must be utilized so as to ensure accurate diagnosis and subsequent treatment.

Psychiatric screening is useful only when adequate follow-up services are available. In situations where resources are not available to provide sufficient follow-up assessment or treatment, referral to a mental health provider (preferably one experienced with chronic pain patients) is warranted. Such collaboration is helpful in establishing an accurate diagnosis and developing a comprehensive treatment plan. Although some clinics may be equipped to screen all patients for psychiatric disorders, in many cases this is not feasible. As a result, we recommend most intensive screening for individuals with longstanding or very frequent pain, multiple pain conditions, and those who are poorly responsive to standard pain management treatments; for other patients, brief verbal screening may suffice. Screening should focus on *both* depression and anxiety, preferably using instruments validated with medical patients. In unique situations, broader screening may be indicated (e.g., screening for substance abuse in patients who appear to over-use analgesics, screening for bipolar disorder in patients who display extreme mood swings). As a final guideline, any suspected psychiatric diagnosis should be confirmed by additional assessment (self-report measures, structured diagnostic interviews, and/or more detailed questioning) to ensure that the major diagnostic criteria are satisfied. As mentioned above, these latter recommendations for more intensive assessment may require referral to a mental health provider.

Recommended Instruments Readers interested in a more comprehensive discussion of available screening measures (including those of low- or no-cost and those available in the public domain) should consult Maizels, Smitherman, and Penzien (2006).²² A very brief overview will suffice here.

Depression. For depression, direct verbal screening about depressed mood and anhedonia may be as effective as longer screening instruments.²³ Such screening should include asking the following two questions: 1) "Over the past 2 weeks, have you felt down, depressed, or hopeless?"; and 2) "Over the past 2 weeks, have you felt little interest or pleasure in doing things?". Positive replies should merit further assessment, using validated self-report measures such as the Patient Health Questionnaire Depression Module (PHQ-9),²⁴ Beck Depression Inventory (BDI),²⁵ or the BDI-Primary Care (BDI-PC).^{26,27} Suicidal ideation, including any identified intent and/or plan, should always be assessed in patients reporting significant symptoms of depression.

Anxiety Disorders. Assessment of anxiety is a bit more difficult due to the numerous anxiety disorders that exist and significant varieties in presentation. Although no verbal screening questions have been validated for anxiety, we have found questions asking about being a chronic worrier, experiencing recurrent panic attacks, and reliving or being fearful of a past traumatic event as useful for identifying the core features of generalized anxiety disorder (GAD), panic disorder, and post-traumatic stress disorder, respectively. Such questions may be followed by more detailed questions about the severity, frequency, and course of symptoms, as well as questions about other anxiety symptoms (obsessions/compulsions, avoidance of feared situations, etc.). The Generalized Anxiety Disorder 7-item Scale (GAD-7)²⁸ has been validated for identifying GAD among primary care patients, and thus is likely to be of considerable use with chronic pain patients. The article by Maizels et al.²² describes other recommended disorder-specific anxiety measures.

Multidimensional Screening Instruments. Because of their utility in medical settings, the Patient Health Questionnaire (PHQ)²⁹ and Pain Patient Profile (P-3)³⁰ are recommended for physicians seeking brief, self-report screeners for multiple psychiatric conditions. The PHQ requires little physician time and assesses five categories of disorders: depression, anxiety, somatoform, eating, and alcohol-use. The P-3 was developed and normed specifically on pain patients; it is thus particularly useful for identifying significant depression, anxiety, and somatization among patients with chronic pain.

Summary Psychiatric disorders, particularly anxiety and depression, are commonly associated with numerous chronic pain conditions. This article briefly overviews the importance of identifying comorbid psychiatric disorders, reviews basic strategies and guidelines, and discusses some recommended screening tools.

References

1. McWilliams LA, Goodwin RD, Cox BJ. Depression and anxiety associated with three pain conditions: results from a nationally representative sample. *Pain*. 2004;111:77-83.
2. Breslau N. Psychiatric comorbidity in migraine. *Cephalalgia*. 1998;18(Suppl 22):S56-S61.
3. Lake AE III, Rains JC, Penzien DB, Lipchik GL. Headache and psychiatric comorbidity: historical context, clinical implications, and research relevance. *Headache*. 2005;45:493-506.
4. Gallagher RM, Moore P, Chernoff I. The reliability of depression diagnosis in chronic low back pain: a pilot study. *Gen Hosp Psychiatry*. 1995;17:399-413.
5. Arnold LM, Hudson JI, Keck PE, Auchenbach MB, Javaras KN, Hess EV. Comorbidity of fibromyalgia and psychiatric disorders. *J Clin Psychiatry*. 2006;67:1219-1225.
6. Gatchel RJ, Garofalo JP, Ellis E, Holt H. Major psychological disorders in acute and chronic TMD: an initial evaluation. *J Am Dent Ass*. 1996;127:1365-1374.
7. Manfredini D, Bandettini Di Poggio A, Cantini E, Dell'Osso L, Bosco M. Mood and anxiety psychopathology

and temporomandibular disorder: a spectrum approach. *J Oral Rehabil*. 2004;31:933-940.

8. Bair MJ, Robinson RL, Katon W, Kroenke K. Depression and pain comorbidity: a literature review. *Arch Intern Med*. 2003;163:2433-2445.
9. Gureje O, Von Korff M, Simon GE, Gater R. Persistent pain and well-being: a World Health Organization Study in Primary Care. *JAMA*. 1998;280:147-151.
10. Radat F, Swendsen J. Psychiatric comorbidity in migraine: a review. *Cephalalgia*. 2005;25:165-178.
11. Lipton RB, Pan J. Is migraine a progressive brain disease? *JAMA*. 2004;291:493-494.
12. Scher AI, Lipton RB, Stewart W. Risk factors for chronic daily headache. *Curr Pain Headache Rep*. 2002;6:486-491.
13. Pesa J, Lage, MJ. The medical costs of migraine and comorbid anxiety and depression. *Headache*. 2004;44:562-570
14. Lantéri-Minet M, Radat F, Chautart MH, Lucas C. Anxiety and depression associated with migraine: influence on migraine subjects' disability and quality of life, and acute migraine management. *Pain*. 2005;118:319-326.
15. Roman JM, Turner JA. Chronic pain and depression: does the evidence support a relationship? *Psychol Bull*. 1985;97:18-34.
16. McWilliams LA, Cox BJ, Enns MW. Mood and anxiety disorders associated with chronic pain: an examination in a nationally representative sample. *Pain*. 2003;106:127-133.
17. Fishbain DA, Cutler R, Rosomoff HL, Rosomoff RS. Chronic pain-associated depression: antecedent or consequence of chronic pain? A review. *Clin J Pain*. 1997;13:116-137.
18. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of the DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2005;62:593-602.
19. Sareen J, Cox BJ, Clara I, Asmundson GJG. The relationship between anxiety disorders and physical disorders in the U.S. National Comorbidity Survey. *Depress Anxiety*. 2005;21:193-202.
20. Cleeland CS, Ryan KM. Pain assessment: global use of the Brief Pain Inventory. *Ann Acad Med Singapore*. 1994;23:129-138.
21. Tan G, Jensen MP, Thornby JI, Shanti BF. Validation of the Brief Pain Inventory for chronic nonmalignant pain. *J Pain*. 2004;5:133-137.
22. Maizels M, Smitherman TA, Penzien DB. A review of screening tools for psychiatric comorbidity in headache patients. *Headache*. 2006;46(Suppl 3):S98-S109
23. Whooley MA, Avins AL, Miranda J, Browner WS. Case-finding instruments for depression: two questions are as good as many. *J Gen Intern Med*. 1997;12:439-445.
24. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression screening measure. *J Gen Intern Med*. 2001;16:606-613.
25. Beck AT, Steer RA, Brown GK. *Beck Depression Inventory manual (2nd ed.)*. San Antonio, TX: Psychological Corporation; 1996.
26. Beck AT, Guth D, Steer RA, Ball R. Screening for major depression disorders in medical inpatients with the Beck Depression Inventory for Primary Care. *Behav Res Ther*. 1997;35:785-791.

News from the Pain World

Kirk Kinard, MD and Ike Eriator, MD, MPH

Natural painkiller discovered:

Natural painkillers that are up to six times more potent than morphine has been identified in human saliva by French researchers. The compound, called opiorphin, appeared to work by preventing the breakdown of enkephalins. Enkephalins were discovered about 32 years ago and are known to produce analgesia by activating opioid receptors. By preventing the breakdown of enkephalin, opiorphin thus enhances the natural defense against pain. Animal studies suggest that a 1 mg/kg dose of opiorphin produces analgesia equivalent to a 3-6 mg/kg of morphine. For more information, see Wisner A. et al., Proc Natl Acad Sci USA, Nov. 13, 2006.

Now we know why some people do not feel pain!

Some people are born with congenital insensitivity to pain, but are otherwise healthy. An example was a Pakistani boy who used to walk on burning coals and cut his arms with knives. Researchers from four countries studied 3 related families, and mapped the condition to an autosomal recessive trait linked to chromosome 2q24.3. The mutation is in a gene called SCN9A. This gene is prominent in nociceptive neurons and is responsible for encoding a sodium channel protein important for the transmission of the pain sensation (see Cox, et al., Nature, 2006; 444: 894 – 898). This discovery is important in elucidating mechanism of drug analgesia and may open a frontier in the development of novel analgesics.

Glucosamine and Chondroitin for arthritis?

Osteoarthritis is associated with cartilage loss and affects about 20 million adults in the United States. Glucosamine is an amino sugar that probably plays a role in the formation and repair of cartilage, while chondroitin gives cartilage elasticity. Both are available as over-the-counter dietary supplements and are taken by an estimated 1 million people on a regular basis at a cost of about \$800 to \$1000 annually for each individual. Recent clinical trials have reported mixed results (Hampton, JAMA, 2007; 297: 351-2). The largest study to date is the NIH-funded multicenter double-blind phase 3 trial known as Glucosamine/Chondroitin Arthritis Intervention Trial (GAIT). In this study, treatment with glucosamine/chondroitin, alone or in combination did not reduce pain overall, though the combination appeared effective in the subgroup of patients with moderate to severe knee pain (Clegg, NEJM, 2006; 354: 795-808). While there is no consensus with regards to the efficacy of these supplements, there seems to be little doubt with regards to their safety and their popularity.

Methadone Alert

The FDA recently issued an alert concerning the use of methadone in the treatment of chronic pain. Methadone is an opioid (narcotic) medication that has application in the treatment of

painful condition as well as for detoxification and maintenance therapy in opioid abusers. Physicians with a valid DEA license can prescribe methadone for pain, but a separate license is needed to use it for detoxification and Methadone maintenance therapy. The use of methadone in managing chronic pain has increased in recent years. This recent alert was prompted by reports of death, cardiac arrhythmias, respiratory depression and several other life-threatening adverse events in such patients. Prescribers should carefully select doses, titrate slowly, avoid 40mg tablets and monitor patients closely, especially at the start of the therapy and when dose adjustments are made. (see <http://www.fda.gov/cder/drug/infopage/methadone/default.htm>).

Opioid Medicine Prescription and Abuse soars;

Pain is undertreated, and there have been movements from various fronts to help address this public health problem. In response, practitioners are treating pain more actively and are prescribing more opioids (Kuehn, B., JAMA 2007; 297: 249-51). Hydrocodone combined with Tylenol was the most commonly prescribed drug in the United States in 2005. It has held this post for the past 5 years. There were more than 100 million prescriptions of hydrocodone with Tylenol in 2005. The second and third most commonly prescribed drugs were atorvastatin (about 63 million) and amoxicillin (about 52 million). The abuse of prescription opioid medications also continues to rise. Opioid analgesic poisoning caused more documented deaths in 2002 compared to heroin and cocaine. In 2005, 9.5% of 12th graders surveyed reported non-medical use of vicodin in the previous year. A Canadian study (Fisher, B., CMAJ., 2006; 175: 1385) finds that in 2005, 37% of drug users reported illicit use of hydromorphone in the last 30 days. Twenty-two percent reported using morphine. The researchers felt that prescription opioid drugs have become the predominant form of illicit opioid use.

(Continued from page 9)

27. Steer RA, Cavalieri TA, Leonard DM, Beck AT. Use of the Beck Depression Inventory for Primary Care to screen for major depression disorders. *Gen Hosp Psychiatry*. 1999;21:106-11.
28. Spitzer, RL, Kroenke K, Williams JBW, Löwe B. A brief measure for assessing generalized anxiety disorder. *Arch Intern Med*. 2006;166:1092-1097.
29. Spitzer RL, Kroenke K, Williams JBW, and the Patient Health Questionnaire Primary Care Study Group. Validation and utility of a self-report version of PRIME-MD. *JAMA*. 1999;282:1737-1744.
30. Tollison CD, Langley JC. *P-3: An Overview of the Pain Patient Profile (TM)*. Minneapolis, MN: National Computer Systems; 1995.

(Continued from page 3) CPT Code 01995 has been deleted. It was commonly used for coding for "Bier Block for Pain Management". This procedure should be coded as an "Unlisted procedure, nervous system" or codes 64999.

The major changes have been in the "Radiologic Guidance Section" which was renumbered this year. To summarize the changes are:

- 76003 Changed to 77002- Fluoroscopic needle guidance
- 76005 Changed to 77003 " " " for spinal injection
- 76012 Changed to 72291- Fluoroscopic guidance for Vertebro/Kyphoplasty
- 76013 Changed to 72292- CT " " " " " "
- 76360 Changed to 77012- CT needle guidance
- 76393 Changed to 77021- MRI needle guidance

IDET now also has its own set of codes.

- 22526
 - Unilateral or bilateral Including fluoroscopic guidance
 - DO NOT report fluoro codes 77002 or 77003 Single level
- 22527- one **or** more additional levels

Please note the IDET codes are for **electrothermal** annuloplasty only. Any other technique for IDET such as RF , etc needs to use the CPT Category III codes

- 0062T any method, single level, includes fluoro
- 0063T 1 **or** more levels

Also please take care to note that the IDET codes have fluoroscopy bundled in. You cannot bill for it separately.

Changes in ICD-9 for 2007-02-21

2007 will see the implementation of a new set of ICD-9 codes for pain.

- **338** Pain, not elsewhere classified
 - *Excludes: generalized pain (780.96)*
 - *localized pain, unspecified type - code to pain by site*
 - *pain disorder exclusively attributed to psychological factors (307.80)*
 - Use Additional Code: to identify:
 - *pain associated with psychological factors (307.89)*

This section includes the following codes:

- 338.0 Central pain syndrome
- 338.1 Acute pain
- 338.11 Acute pain due to trauma
- 338.12 Acute post-thoracotomy pain
- 338.18 Other acute postoperative pain
- 338.19 Other acute pain

- 338.2 Chronic pain
- 338.21 Chronic pain due to trauma
- 338.22 Chronic post-thoracotomy pain
- 338.28 Other chronic postoperative pain
- 338.29 Other chronic pain
- 338.3 Neoplasm related pain (acute) (chronic)
- 338.4 Chronic pain syndrome
- Other significant changes for 2007 are the increasing Category II codes. Something we shall discuss at another opportunity.

2007 Election Results

Lori H. Postal, RNC, MS Executive Director

The results of the 2007 election are in.

Todd Sitzman, MD, MPH is President Elect.

John Satterthwaite, MD was re-elected as Treasurer

Jonathan Cole, PhD was elected Secretary

Ed Fraiefeld, MD and Joseph Holtman, MD, PhD were elected as at-large board members.

They began their 2 year terms in January.



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**The next Southern Pain
Society Annual
Scientific Meeting will
be held September 29-
30, 2007 at the Gaylord
Opryland Hotel in
Nashville, TN**