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Research on pain and pain management in Veterans Health Administration: Promoting improved pain care for veterans through science and scholarship

In late 1998, the Veterans Health Administration (VHA), one of the largest healthcare delivery systems in the United States, enacted its National Pain Management Strategy designed to provide a systemwide standard of care to reduce suffering from preventable pain. This overarching goal of the Strategy has elevated pain management to a top priority within the VHA and sparked innovation in planning and providing high-quality pain care to the >54 million veterans receiving healthcare at its facilities nationwide. An explicit component of the Strategy is a focus on pain-relevant research.

As evidence of the success of the Strategy in this regard, the number of pain-relevant investigator-initiated research projects that the VHA Office of Research and Development (ORD) has funded increased from about 10 in fiscal year 2000 to 47 in the most recent fiscal year. For further promotion of networking among investigators, increased investigator-initiated and collaborative research, and VHA research priorities, a Pain Research Working Group has been developed. At present, membership in this group consists of over 50 Department of Veterans Affairs (VA) and non-VA investigators. Face-to-face meetings and semimonthly conference calls among members have led to the development of several more focused groups of investigators who share interests in research on specific targeted areas. Cluster groups have currently developed in the areas of diversity; assessment of pain in persons with cognitive impairments; pain and psychiatric comorbidities; pain and polytrauma; and pain, opioid therapy, and substance abuse. Each of these groups has already developed specific projects such as conducting systematic reviews of the relevant theoretical, clinical, and empirical literatures and developing a research agenda.

Publication of this special issue of the *Journal of Rehabilitation Research and Development* was identified as an important outlet for dissemination of the findings and recommendations of these pain research cluster groups. Articles in this special issue focus on a broad range of VA investigative research. The multiple disciplines and perspectives of the contributors reflect the multidisciplinary and multidimensional nature of the field of pain management. The contributions include several scholarly reviews of particularly timely and important topics for the VHA. These reviews and conceptual articles are complemented by several original research reports that promise to significantly contribute to the existing evidence in key areas of investigation that are also particularly relevant to veteran care. Also important to note is that this special issue focuses on clinical or applied research with relatively direct implications for enhancing pain care. As my colleagues, Christine Elnitsky and Martha Bryan, and I emphasize in the accompanying guest editorial, basic laboratory science research represents an important and growing component of the VHA ORD pain-relevant research portfolio.

A quick scan of the issues' contributions reveals several interesting observations that may help clarify some of the central clinical issues confronting the field of pain management. Of particular note is the apparent focus on pain and psychiatric and medical comorbidities. Articles by Matthew Bair, Jillian Shipherd, Cheryl Villano, and their colleagues focus on depression and posttraumatic stress disorder (PTSD) as particularly high-frequency psychiatric comorbidities that have drawn considerable attention among both VA and non-VA investigators. These investigators are interested in understanding not only the epidemiology of these disorders but possible mechanisms that may account for their apparent coprevalence. Of particular note, Shipherd and her colleagues provided some of the first evidence, albeit from retrospective chart review, to suggest that PTSD treatment may positively affect pain severity.

Three additional articles report on medical comorbidities that are also particularly relevant to veteran care. Within the past decade, a high prevalence of hepatitis C virus (HCV) among veterans has gained considerable attention, and the VHA has implemented routine protocols for screening and treatment. In this issue, Amy Silberbogen and her colleagues offer data from two VHA facilities that further document a high prevalence of pain as well as depression, tobacco use, and alcohol use among veterans with HCV and recommend more comprehensive rehabilitative care for these veterans. Amy Janke and her colleagues similarly provide the most comprehensive review to date on the causal relationship between pain and overweight/obesity and discuss important implications for future research, practice, and policy. Given recent acknowledgment of the growing epidemic of obesity in the United States and among veterans in particular and VHA's recent efforts to provide the latest interventions to help veterans manage their weight, the review by Janke and her colleagues promises to provoke continued consideration of this important personal and public health concern.

Perhaps no contribution is more timely and relevant to the VHA than the article by Mike Clark and his colleagues that provides an innovative, practical, and meaningful conceptual framework for considering pain associated with polytrauma among

service members returning from Iraq and Afghanistan. The authors are in the best position to draw on their professional experiences as care providers for these returning service members in VHA and military treatment facilities. The authors briefly review the known epidemiology of pain and polytrauma in these service members, outline a comprehensive approach to characterizing the development of persistent pain problems, and articulate a comprehensive model that can inform clinical assessment and management of complex pain conditions in this population.

The development and evaluation of novel approaches to pain assessment and treatment are represented in two articles, in particular. Gabriel Tan and a group of distinguished colleagues representing multiple disciplines and perspectives offer what is arguably the most comprehensive review yet published on complementary and alternative medicine (CAM) approaches to pain management. The review covers the broadest array of CAM approaches and critically examines the evidence supporting the efficacy and utility of these approaches. Given evidence that veterans and nonveterans alike who suffer with persistent and disabling pain pursue CAM therapies for pain at increasingly high rates and a growing interest among some groups for improving access to these services in the VHA, this review is particularly timely and relevant and is likely to encourage continued controlled examination of the value of such approaches to pain care. Ron Girona and his colleagues, building on observations of the importance of improving functional outcomes as an important secondary, if not primary, outcome for pain treatment, offer preliminary data from a Rehabilitation Research and Development Service-funded program on the utility of actigraphy as an alternative to patient self-report as a measure of physical activity and overall functioning.

No other issue in the field of pain management is more controversial than the appropriateness of prescribing opioid medications for noncancer pain. On one hand, a complex array of patient safety and public health concerns has been raised about opioid use in this population. On the other hand, many patient advocates argue that improved access to opioid medications is necessary and appropriate to

provide optimal pain care and many argue that patients have the right to such therapies. In this context, scholars in the field of pain medicine have observed that lack of provider knowledge about appropriate use of these medications as well as dogmatic, stigmatizing, and ill-informed attitudes and beliefs about chronic opioid therapy may represent additional barriers to appropriate pain care and safe use of opioid medications. Craig Roth, Diana Burgess, and Maren Mahowald surveyed 72 medical residents and documented that residents expressed greater concern about providing opioids to patients with chronic noncancer pain relative to patients with cancer across a number of specific domains. These data further support educational efforts to address bias, distorted beliefs, and fears about the safe and effective use of opioids in the training of residents and, most likely, other prescribing providers.

Two articles in this issue specifically address pain management in the context of care for persons at the end of life. Robert Ruff and his colleagues provide quite compelling data that support a comprehensive rehabilitation approach to caring for persons with metastatic spinal disease at the end of life to promote optimal pain control and overall health-related quality of life. Victor Chang headed a multidisciplinary team of authors that provides a comprehensive review of important issues related to pain management in palliative care. Presentation of epidemiological data on the prevalence of pain among selected populations and settings is followed by a systematic review of the evidence supporting both pharmacological and non-pharmacological approaches for pain management in this context and ongoing investigations of additional novel, promising approaches. The article concludes with recommendations for future research in this area, including the potential value of technologies for facilitating research designed to develop and test quality indicators for pain control among persons with cancer.

Three articles authored by Martha Buffum and Katherine Jones and their colleagues address critical and challenging issues related to delivery of optimal pain care to elderly persons, including those with communication impairments secondary to dementia or other central nervous system disease. In the first of these articles, Buffum reports on a survey of 34 family

caregivers and documents respondents' concern about providers' ability to detect pain and provide adequate care, especially as patients transition from one setting of care to another. Not surprisingly, among several recommendations from the respondents was encouragement for enhanced communication between facility and family caregivers to improve reliable assessment and management of pain. A similarly complex issue is the selection of reliable and valid tools for pain assessment of elderly persons living in extended care settings. Jones and her colleagues provide data comparing the use of three commonly employed pain intensity scales and offer recommendations for practice and future research. This special issue concludes with an important article by Buffum and her colleagues in which they comprehensively review the existing conceptual and empirical literature on the assessment of pain among the cognitively impaired and provide additional recommendations for practice, policy, and research in this increasingly important area.

Ultimately, our hope is that the readers of this special issue will be impressed with the commitment of the VHA to conducting such rigorous investigation and scholarship in the area of pain management and the breadth of the current pain-relevant research portfolio. Investigators are encouraged to consider the importance of continued examination of the innumerable questions facing our field and to specifically consider contributing significantly to our understanding of pain and improving our methods for assessment and management of pain and pain-related disability. Finally, clinicians and policy makers may benefit from a thoughtful review and consideration of the contributions to this special issue as they work to improve pain care for veterans.

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