TBM

EBBP COLUMN

The future of pain research, education, and treatment: a summary of the IOM report "Relieving pain in America: a blueprint for transforming prevention, care, education, and research"

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ABSTRACT

The fifth column on Evidence-Based Behavioral Medicine is focused on the Institute of Medicine's (IOM) report entitled "Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research." The IOM has reported that chronic pain affects 116 million American adults, which is greater than the total of heart disease, cancer, and diabetes combined. It is recommended that data collection takes place at regular intervals using standardized questions, survey protocols, and electronic medical records with the aim of the identifying the following: subpopulations at risk; characteristics of acute and chronic pain; health consequences of pain, including death, disease, and disability; and longitudinal trends of pain. In addition, health education programs should be redesigned to include information about self-management, actions to prevent injuries at the individual and community level, advocacy for pain treatment, and support for improved prevention and control policies. Through teamwork between various professions, from physicians, nurses, and psychologists to physical therapists, pharmacists, and policy makers, advancements in pain awareness, education, research, and treatment should begin to materialize.

KEYWORDS

Pain, Team-based care, Interprofessional collaboration, Evidence-based behavioral medicine

The fifth column on Evidence-Based Behavioral Medicine (EBBM) is focused on two major pain publications: the Institute of Medicine's (IOM) guidelines entitled "Relieving pain in America: a blueprint for transforming prevention, care, education, and research" [1] and the Institute for Clinical Systems Improvement (ICSI) guidelines entitled "Assessment and management of chronic pain." [2] The IOM has reported that chronic pain affects 116 million American adults, which is greater than the combined prevalence of heart disease, cancer, and diabetes. The major recommendations for the end of 2012 aim to improve pain outcomes at the individual and public health levels. The overarching objectives to improve chronic pain assessment, treatment, and management are to develop plans of care based on a biopsychosocial model and public health approach to meet specific patient goals to improve patient function and quality of life. The plan of care should incorporate a multidisciplinary team including the patient as an active member and the primary care provider as the coordinator of additional pain specialists. The objective of the IOM and ICSI reports is to provide recommendations for transforming the way pain is understood, assessed, and treated. The purpose of this summary [3] is to highlight those recommendations so they can be easily identified and implemented by health care providers and policymakers.

SCOPE

Disease/condition(s)

Chronic pain

Note: Chronic pain is defined as persistent pain, which can be continuous or recurrent. The duration and intensity can adversely affect a patient's well-being, level of function, and quality of life.

Guideline objectives

- To improve education about pain for patients and health care providers
- To improve the assessment and reassessment of patients with chronic pain utilizing a public health approach and biopsychosocial model
- To improve effective design and implementation of interventions through translational pain research

Target population

Physiologically mature adolescents (16–18 years) and adults with chronic pain are the target population.

Clinical

- Chronic pain assessment should include determining the mechanisms of pain by identifying pain location, intensity, quality, and onset/duration; functional ability and goals; and psychological/social factors (e.g., depression or substance abuse).
- Treatment goals should emphasize improved function by developing long-term self-management skills (e.g., fitness and a healthy lifestyle in spite of persistent pain).
- Treatment and management plans should be patient-centered, multifactorial, and comprehensive. They should incorporate biopsychosocial factors and address spiritual and cultural issues. A multidisciplinary team approach, led by the primary care physician, should include specialty areas of psychology and physical rehabilitation.
- Medications should not be the sole focus of treatment and management of pain. They should be used in conjunction with other treatment modalities when needed to meet long-term therapeutic goals.

Biopsychosocial model

The biopsychosocial model maximizes treatment success. First, it utilizes a collaborative care model grounded in a team approach that considers the patient as a team member and solicits specialty consultation support. Second, the plan of care addresses the whole person, including physical and biological factors, psychological state and beliefs, and the family, social, and work environment.

The plan of care for all patients with chronic pain should address the following major elements:

- Set personal goals
- Improve sleep
- Increase physical activity
- Manage stress
- Decrease pain

Specific and measurable aims coupled with clearly delineated treatment elements provide patients with a framework for restructuring their lifestyle that has been substantially altered by chronic pain.

Cognitive behavioral strategies

Health care providers can employ a number of cognitive–behavioral strategies to assist patients manage their chronic pain.

- Ensure patient awareness in terms of the complexity of chronic pain and the necessity for a team-based approach for successful rehabilitation. Treatment is often comprised of stress management, physical exercise, relaxation therapy, and additional components/skills to improve patient function and quality of life.
- Encourage the patient to take an active role in the management of the pain. Research suggests that pain-related disability decreases in patients who assume an active role in their pain management.
- Prescribe time-contingent pain medications rather than “as needed” pain medications. Time-contingent medications disrupt the associations between pain behavior and pain medication.
- Reinforce wellness behaviors (e.g., increased physical activity through an exercise program or structured physical therapy).
- Enlist the family and other support mechanisms to reinforce gains of functioning.
- Assist the patient to return to work through a step-wise fashion, independent of level of pain.
- Given patient fear of movement or fear of pain due to movement, it is important to avoid reliance on sedative or hypnotic medications to treat the fear. If patient fear is excessive, relaxation strategies may be helpful or referral for more formal and intensive cognitive–behavioral therapy may be needed.

Pharmacological management

- An effective treatment plan is contingent on a thorough medical history.
- Define therapeutic goals prior to prescription and tailor medications to meet specific goals of each patient.
- Initial prescription(s) should be based on severity and type of pain.
- Patients should be aware of risks and benefits of prescribed and non-prescribed medications; side effects should be closely monitored and managed.

Public health approach

The biopsychosocial model should be integrated into a public health approach to the assessment and treatment of chronic pain.

- Assessing chronic pain at the population level will facilitate general awareness of chronic pain and its health consequences.
- A public health approach should emphasize prevention of chronic pain and the utilization of public health modes of communication, such as social media.
- Disparities in the experience of chronic pain across different subpopulations should be addressed through a public health approach to chronic pain. Specifically, reliable incidence and prevalence data should be collected for minority groups.

- Epidemiological data of chronic pain should be collected at regular intervals using standardized questionnaires, survey protocols, and electronic medical records.
- Translational pain research can be improved by enhanced NIH leadership that fosters interdisciplinary research and interprofessional care.

Level I core principles

- A written plan of care based on the biopsychosocial model ensures a comprehensive treatment approach.
- All patients with chronic pain should engage in physical activity to improve function and fitness.
- Goals to reduce pain and improve function should center on a cognitive behavioral approach organized by the primary care physician and multidisciplinary team.
- Medical decision-making for chronic pain treatment should consider the patient's ethnic and cultural background, age, gender, and spirituality.
- Self-management ensures patient participation in the care plan.

Level II core principles

Level II management of chronic pain is indicated when level I principles have been implemented without measurable progress toward a priori goals of comfort/pain control and function. Level II management should include an interdisciplinary team comprised of the primary care provider, a medical pain specialist, a behavioral health pain specialist, and a physical therapist trained in a biopsychosocial approach to chronic pain.

- A thorough biopsychosocial assessment of the patient with chronic pain should be carried out by the interdisciplinary team.
- A comprehensive plan of care should be developed with input from the patient and primary care provider.
- Surgery alone is not an efficacious chronic pain relief mechanism.
- Palliative interventions should be implemented when conventional and minimally invasive procedures have not met patient goals.

COMMENT

Given the medical, economic, and social burden of chronic pain, relieving chronic pain should be a national priority. The major recommendations for the end of 2012 center on the individual patient as well as specific populations. The overarching objectives to improve chronic pain assessment, treatment, and management are to develop plans of care based on a biopsychosocial model and public health approach to meet specific patient goals to improve patient function and quality of life. The plan of care should incorporate a multidisciplinary team including the patient as an active member and the primary care provider as the coordinator of additional pain specialists. Although incorporating a biopsychosocial model and public health approach into a plan of care may be time-intensive and require increased effort to coordinate a multidisciplinary team, the long-term benefits for the patient and the public in terms of function, quality of life, and economic burden will ultimately outweigh the short-term costs.

1. IOM (Institute of Medicine). *Relieving pain in America: a blueprint for transforming prevention, care, education, and research.* Washington: The National Academies Press; 2011.
2. ICSI (Institute for Clinical Systems Improvement). *Assessment and management of chronic pain.* Bloomington: Institute for Clinical Systems Improvement (ICSI); 2009.
3. Haynes R. Of studies, syntheses, synopses, summaries, and systems: the "5S" evolution of information services for evidence-based health care decisions. *Evidence-Based Nursing.* 2007;10:6-7.