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Effectiveness of Long-Term Opioid Therapy for Chronic Non-Cancer Pain Focused Review

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BACKGROUND: Opioids have been utilized for thousands of years to treat pain and their use continues to escalate. It is estimated that 90% of the patients who present to pain centers and receive treatment in such facilities are on opioids. However, in contrast to increasing opioid use and the lack of evidence supporting long-term effectiveness in chronic non-cancer pain, is the escalating misuse of prescription opioids, including abuse and diversion. There is also uncertainty about the incidence and clinical salience of multiple, poorly characterized adverse drug events, including endocrine dysfunction, immunosuppression, infectious disease, opioid-induced hyperalgesia, overdoses, deaths, and psychosocial and economic implications.

STUDY DESIGN: A comprehensive review of the literature.

OBJECTIVE: The objective of this comprehensive review is to evaluate the clinical effectiveness and safety of chronic opioid therapy in chronic non-cancer pain.

METHODS: A comprehensive review of the literature relating to chronic opioid therapy in chronic non-cancer pain. The literature was collected from various electronic and other sources. The literature that was evaluated included randomized trials, observational studies, case reports, systematic reviews, and guidelines.

OUTCOME MEASURES: Pain relief was the primary outcome measure. The secondary outcome measures were functional improvement and adverse effects. Short-term effectiveness was considered to be less than 6 months; long-term effectiveness was considered to be at least one year.

RESULTS: Given the complexity and widespread nature of opioid therapy, there is a paucity of qualitative and/or quantitative literature. The available evidence is weak for pain relief combined with improvement in functional status. Only one drug, tramadol, is effective for pain relief and improvement of functional status.

LIMITATIONS: This is a narrative review without application of methodologic quality assessment criteria. Even so, a paucity of literature exists concerning both controlled and observational literature for multiple drugs and multiple conditions of chronic non-cancer pain.

CONCLUSIONS: This comprehensive review illustrates the lack of literature on long-term opioid therapy; thus, opioid therapy should be provided with great restraint and caution, based on the weak evidence available.

[J Pain](#). 2009 Feb;10(2):147-59.

Research gaps on use of opioids for chronic noncancer pain: findings from a review of the evidence for an American Pain Society and American Academy of Pain Medicine clinical practice guideline.

[Chou R](#), [Ballantyne JC](#), [Fanciullo GJ](#), [Fine PG](#), [Miaskowski C](#).

Source

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Abstract

Chronic noncancer pain is common and use of opioids is increasing. Previously published guidelines on use of opioids for chronic noncancer pain have been based primarily on expert consensus due to lack of strong evidence. We conducted searches on Ovid MEDLINE and the Cochrane databases through July 2008 to identify studies that addressed one or more of 37 Key Questions that a multidisciplinary expert panel identified as important to be answered to generate evidence-based recommendations on the use of opioids for chronic noncancer pain. A total of 14 systematic reviews, 38 randomized trials not included in a previously published systematic review, and 13 other studies met inclusion criteria. Almost all of the randomized trials of opioids for chronic noncancer pain were short-term efficacy studies. Critical research gaps on use of opioids for chronic noncancer pain include: lack of effectiveness studies on long-term benefits and harms of opioids (including drug abuse, addiction, and diversion); insufficient evidence to draw strong conclusions about optimal approaches to risk stratification, monitoring, or initiation and titration of opioid therapy; and lack of evidence on the utility of informed consent and opioid management plans, the utility of opioid rotation, the benefits and harms specific to methadone or higher doses of opioids, and treatment of patients with chronic noncancer pain at higher risk for drug abuse or misuse. PERSPECTIVE: Currently, clinical decisions regarding the use of opioids for chronic noncancer pain need to be made based on weak evidence. Research funding priorities need to be set to address these critical research needs if the care of patients with chronic noncancer pain is to improve.

Prescription Drug Monitoring Programs and Death Rates from Drug Overdose

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Abstract

Objective. □ Drug overdoses resulting from the abuse of prescription opioid analgesics and other controlled substances have increased in number as the volume of such drugs prescribed in the United States has grown. State prescription drug monitoring programs (PDMPs) are designed to prevent the abuse of such drugs. This study quantifies the relation of PDMPs to rates of death from drug overdose and quantities of opioid drugs distributed at the state level.

Design. □ Observational study of the United States during 1999–2005.

Outcome Measures. □ Rates of drug overdose mortality, opioid overdose mortality, and opioid consumption by state.

Results. □ PDMPs were not significantly associated with lower rates of drug overdose or opioid overdose mortality or lower rates of consumption of opioid drugs. PDMP states consumed significantly greater amounts of hydrocodone (Schedule III) and nonsignificantly lower amounts of Schedule II opioids. The increases in overdose mortality rates and use of prescription opioid drugs during 1999–2005 were significantly lower in three PDMP states (California, New York, and Texas) that required use of special prescription forms.

Conclusions. □ While PDMPs are potentially an important tool to prevent the nonmedical use of prescribed controlled substances, their impact is not reflected in drug overdose mortality rates. Their effect on overall consumption of opioids appears to be minimal. PDMP managers need to develop and test ways to improve the use of their data to affect the problem of prescription drug overdoses.

[CDC Home](#)

[Morbidity and Mortality Weekly Report \(MMWR\)](#)

QuickStats: Number of Poisoning Deaths* Involving Opioid Analgesics and Other Drugs or Substances --- United States, 1999--2007

From 1999 to 2007, the number of U.S. poisoning deaths involving any opioid analgesic (e.g., oxycodone, methadone, or hydrocodone) more than tripled, from 4,041 to 14,459, or 36% of the 40,059 total poisoning deaths in 2007. In 1999, opioid analgesics were involved in 20% of the 19,741 poisoning deaths. During 1999--2007, the number of poisoning deaths involving specified drugs other than opioid analgesics increased from 9,262 to 12,790, and the number involving nonspecified drugs increased from 3,608 to 8,947.

Sources: National Vital Statistics System mortality data. Available at <http://www.cdc.gov/nchs/deaths.htm>.

Warner M, Chen LH, Makuc DM. Increase in fatal poisonings involving opioid analgesics in the United States, 1999--2006. NCHS data brief, no 22. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2009. Available at <http://www.cdc.gov/nchs/data/databriefs/db22.htm>.