Methadone Overdose Deaths Rise With Increased Prescribing for Pain

Bridget M. Kuehn

METHADONE WAS INVOLVED IN more than 30% of overdose deaths linked to the use of prescription painkillers in 2009, despite the drug making up only about 2% of painkiller prescriptions that year, according to a report from the US Centers for Disease Control and Prevention (CDC).

Methadone, which has been used successfully for more than 40 years as a treatment for heroin addiction, has been widely prescribed over the past decade for the treatment of pain. In 2009, more than 4 million prescriptions for methadone were written for pain patients, according to the CDC. As the number of methadone prescriptions for pain has increased, methadone overdose deaths have increased, noted CDC director Thomas R. Frieden, MD, MPH, in a press briefing. There are 5000 such overdose fatalities each year, more than the number of heroin and cocaine overdoses combined, he said.

"All the data suggest the increase is related to the use of methadone to treat pain," said Frieden.

CHEAPER, GREATER RISK

Increasing numbers of methadone deaths are part of a larger trend of growing opioid use, misuse, and abuse that has shadowed an effort by clinicians to more aggressively manage pain. Two characteristics of methadone have contributed to the drug's disproportionate role in painkiller-related overdose deaths: it is cheaper, and it carries greater risks than other drugs in this class.

The lower cost of methadone has led states and insurance companies to list it as the preferred opioid medication in their formularies, according to Frieden. The drug also has a long and sometimes hard-to-predict half-life, which can lead to toxic levels of the drug building up in patients and causing respiratory depression, according to the CDC report (http://tinyurl.com/7lgxzez). Additionally, the drug may interact with antianxiety medications, which are also often prescribed to patients with pain and also frequently abused.

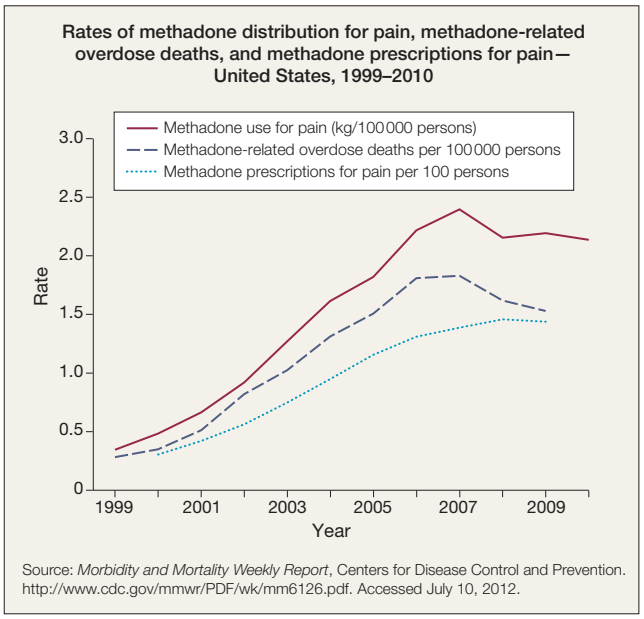
Lewis Nelson, MD, an emergency physician and medical toxicologist at New York University School of Medicine, explained in an interview that methadone is a difficult drug to use. Drug treatment programs, which operate under strict federal regulations, carefully control methadone induction for the first 1 to 2 weeks that a patient is in the program. Physicians using the drug to treat pain may know less about the drug's risks, Nelson said, and may give doses too rapidly, causing respiratory depression and death among some patients.

"Many physicians, who are well meaning, don't know how to use methadone," he said.

SOCIETAL COSTS

In Washington state, a Pulitzer Prize–winning investigative series documented how the state's decision to list methadone as a preferred painkiller to cut costs contributed to increasing numbers of overdoses among patients covered by Medicaid (http://tinyurl.com/c7gbb4b).

During the briefing, Frieden described the use of methadone as a cost-effective way to treat pain as "penny-wise and pound-foolish." He explained that although the drug itself is relatively inexpensive, it generates sub-



Source: *Morbidity and Mortality Weekly Report*, Centers for Disease Control and Prevention. http://www.cdc.gov/mmwr/PDF/wk/mm6126.pdf. Accessed July 10, 2012.

An increase in methadone overdose deaths has followed an increase in prescribing of methadone for pain, according to the US Centers for Disease Control and Prevention.

stantial societal costs from increased numbers of methadone-related emergency department visits and other consequences of overdoses.

Frieden said physicians should avoid using methadone to treat patients with acute pain or chronic noncancer pain, noting that there is limited evidence supporting such use. Instead, he said, physicians treating a patient with pain not caused by cancer should consider the full range of medications and other interventions. "Use opiates only when necessary, and use safer opioids," he said.

Nelson agreed that there should be more limited use of opioids for chronic noncancer pain. He explained that while the risks of such use may be tolerable in the short-term, the risks to individuals taking these medications over the long-term are substantial, with minimal evidence for benefit.

"I don't think methadone should be used for chronic [noncancer] pain," he said. "It's the least safe option."

Physicians and regulators may need to change their approach to long-acting opioid medications, said Nelson, who recently chaired the US Food and Drug Administration (FDA) Drug Safety and Risk Management Advisory Committee. He explained that the FDA cannot regulate the practice of medicine and is so far relying on pharmaceutical companies to educate physicians about proper use of opioids. However, he said physicians also need other sources of education about these medications and suggested that linking such education to Drug Enforcement Agency (DEA) registration may be necessary. During a press briefing in July, FDA Commissioner Margaret Hamburg, MD, indicated that the FDA was supporting proposed legislation that would link such education with DEA registration.

"These drugs must be treated with a healthy respect," Nelson said. □

Experts Question Recommendations for Universal Lipid Screenings in Children

Mike Mitka

RECOMMENDATIONS FOR UNIVERSAL lipid screening of children, presented late last year by a National Heart, Lung, and Blood Institute (NHLBI) panel, are drawing new criticism. The aim of the screening is to detect and treat abnormal cholesterol levels in childhood in hopes of reducing cardiovascular disease risk much later in life.

The recommendations, published in December 2011 and endorsed by the American Academy of Pediatrics, call for universal screening of 9- to 11-year-old children with a nonfasting lipid panel, plus targeted screening with 2 fasting lipid profiles of children ages 2 to 8 years and 12 to 16 years (involving between 30% and 40% of all children). Previous recommendations called for screening only children considered high risk using a nonfasting total cholesterol test.

Children who are identified as having abnormal lipid levels would then be treated mostly through lifestyle modification involving diet and exercise. Medical therapy, mostly with statins, would be an option for children with severely abnormal lipid levels and would affect less than 1% of children, other research has suggested.

CRITICS' CONCERNS

The critics, from the University of California, San Francisco (UCSF), argue the NHLBI screening recommendations were made without providing estimates of the health benefits, harms, and costs that might result from such screening. They also argue that the evidence used to justify such screening is not as strong as implied by the NHLBI and that the recommendations are based heavily on expert opinion. They also express concerns that the NHLBI panel members had conflicts of interest with industry that could have

Lifestyle modification through exercise and diet remains the front-line treatment for children with abnormal lipid levels.