When opioid treatment was extended to patients with chronic pain, we took a leap of faith; we believed that the established success of opioid treatment for acute and terminal cancer pain would be reproduced in the case of chronic pain. If only we could overcome “opiophobia”, we would improve the lives of chronic pain patients. Early support for the treatment came from reports of sustained analgesia, improved function and low addiction rates coming from select treatment programs (Portenoy and Foley, 1986). The inherent biases of anecdotal reporting were recognized, but it was apparent that carefully managed opioid therapy was helpful to certain patients. Randomized trials (RCTs), although they were conducted for short periods only (up to 8 weeks), demonstrated that opioids effectively relieve chronic pain, and showed improvements in measured function (Kalso et al., 2004). The RCTs confirmed the opioid responsiveness of chronic pain conditions, but provided little information about long-term efficacy or complications. On the basis of this evidence, and despite its limitations, opioid treatment was extended to more and more chronic pain sufferers. But the experience has not been an entirely happy one, and the limitations of current evidence in terms of assessing the broader role of opioids, outside the confines of carefully controlled, time-limited studies, are clear. To assess the broader role, we must turn to multicenter observational studies or to population-based epidemiological studies. Where better to turn than to Denmark? Not only does this country have the highest per capita consumption of prescription opioids worldwide – an estimated 67% of this being used to treat chronic pain – it also keeps among the most comprehensive health statistics. Denmark is not constrained by an unmonitored private sector, by privacy sensibilities or by HIPAA. Accordingly, it has produced influential studies and trials that are truly population based, and that in some cases have changed global practice (Overgaard et al., 1997). In this issue of Pain, Eriksen et al. report a survey of health related outcomes in a population of chronic pain patients using versus not using opioids (Eriksen et al., 2006). Although epidemiological studies cannot assess causation, they do reveal associations. The associations seen here might surprise and disappoint those who had hoped that opioid treatment when widely applied for the treatment of chronic pain would markedly reduce suffering and improve lives.

Caution about opioid treatment of chronic pain has long been based on fear of addiction. But as more is understood about addiction mechanisms, it becomes increasingly difficult to confidently identify addiction during opioid pain treatment. For example, we now know that addicts maintained on opioids can and often do function normally, even in the workplace (Dole, 1994). Also that problematic or compulsive opioid seeking when it arises during opioid treatment of pain is not necessarily caused by addiction, and could equally be caused by tolerance, withdrawal or inadequate analgesia (Weissman and Haddox, 1989; Cami and Farre, 2003). Since we have not found a means of definitively diagnosing or excluding addiction during opioid treatment of chronic pain, it surely becomes more important than ever to ensure that function is maintained and lives are improved.

Every six or seven years in Denmark, a cohort of adults is randomly selected from the Danish Central Personal Register and asked to participate in a Health and Morbidity Survey. Remarkably, a majority agrees, and through face-to-face interviews and postal questionnaires, including a quality of life assessment (SF-36), they provide a wealth of data that can be used by investigators to draw targeted information. In the survey from the year 2000, 10,066 individuals participated, 1,906 of whom were identified as suffering chronic pain. Eriksen et al., not limited as in many other countries to focused information such as emergency room databases, household surveys, workers compensation databases, insurance databases or national and state healthcare

1 HIPAA, the Health Insurance Privacy and Accountability Act protects the privacy of healthcare records in the United States.
provider databases, were able to draw upon this population-wide sample. They could, then, examine and analyze health and morbidity statistics from the community at large. They asked what factors were linked with opioid usage in the subset of patients reporting chronic pain, and found that opioid users reported significantly more moderate/severe or very severe pain, poorer self-rated health, and lower quality of life scores than opioid non-users. They also identified significant associations between opioid use and low levels of physical activity and employment, and high levels of healthcare utilization. Even after controlling for pain intensity – that most obvious of possible confounders – most of these associations persisted. Causation is not proven, and the possibility that the group of opioid users could be worse off without opioid treatment cannot be excluded. But it does seem that opioid treatment of chronic pain as currently provided, and when assessed across an entire population, is not achieving the key goal of improving pain, function and quality of life.

We know that there are patients whose lives are improved, even transformed, by opioid treatment, and no one wants to revert to withholding opioid treatment from those with chronic pain conditions. Yet there is a growing body of evidence, to which the Eriksen study should be added, which suggests that not all patients benefit, and that a cautious, structured and selective treatment approach will be the best way to preserve opioid therapy for those that do. The Eriksen study provides compelling evidence that opioids are not a panacea for chronic pain.

References


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2 In Denmark, chronic opioid treatment is usually initiated and maintained by primary care physicians. Being a liberal country with liberal drug regulations, opioid use is relatively free of stigma.