Impact of opioid-induced constipation on patients and healthcare resource use

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Introduction
Opioid analgesics are an essential component in the management of severe acute and chronic pain. Active management of mu-opioid receptors in the central nervous system is the primary mechanism of action of opioids for analgesia. However, effective pain management is complicated by opioid-induced constipation (OIC) and opioid receptor activation in the enteric nervous system. OIC is the most common and bothersome of the G3 side effects, as it does not abate over time with continued opioid use, and may be characterized by hard or lumpy stools, straining, a sensation of incomplete evacuation or a sensation of anal sphincter obstruction. Associated symptoms of constipation include abdominal discomfort and bloating.

Opioid-induced GI side effects can lead to physical and functional debilitation in patients with pain; however, the impact of these symptoms on patient-related outcomes has not previously been reported.

Objective
The purpose of this survey was to evaluate the impact of opioid-induced constipation (OIC) on healthcare resource use and work productivity in the United States (US) and three European Union (EU) countries.

Methods
Survey
The 2004 National Health and Wellness Survey (NHWS) was a comprehensive, cross-sectional survey of adults in the US and three EU countries (UK, France and Germany) using a carefully constructed sample, including over-sampling among those aged 45-65 years, to ensure proper representation. It assessed consumer healthcare attitudes and behaviors, with respondent information collected for over 70 conditions.

Inclusion criteria
NHWS respondents reporting opioid use(s) for at least 6 months were included in the analysis.

Statistical analysis
The t-test was used to compare means of all analysed outcomes in opioid-treated survey respondents with and without OIC.

Multiple regression analysis was performed to control for differences in age, gender, number of comorbid conditions, health insurance status and education.

Results
Participating demographics
Data from 2,430 respondents who reported opioid use in the 6 months prior to the survey were collected and used to analyse healthcare resource use and work impairment.

Baseline demographics for all populations analysed, according to OIC status, are presented in Table 1.

Baseline demographics were generally comparable in opioid-treated respondents who did and did not report OIC; the mean age was approximately 50 years, and the majority of respondents were female. The percentage of respondents educated to at least college level was slightly higher in respondents with than without OIC.

Differences in healthcare resource utilization observed in the overall population were apparent in both the US and the EU, except that visits to alternative care providers were not significantly different between OIC and non-OIC respondents in the EU.

Conclusions
The presence of OIC in survey respondents with chronic pain was associated with increased healthcare resource use in the US and EU populations studied.

OIC was also linked with limited work productivity and ability to perform regular activities, such as working around the house, shopping, childcare, exercising and studying.

Constitution associated with opioid use has the potential to increase patient visits to healthcare providers.

Data from the 2004 NHWS indicate OIC significantly impacts patient-reported outcomes and is a burden to both the individual patient and to general society.

References