Scottish Government Health Directorates Chief Scientist Office



FOCUS ON RESEARCH

USE AND MISUSE OF OPIOID PRESCRIBING ACROSS SCOTLAND - RATES, QUALITY, VARIATIONS AND EXPLANATIONS

Researchers

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Aim

This study aimed to describe opioid prescription rates across Scotland, and to explore indicators of appropriate/inappropriate prescribing in primary care, and of the level of problem use, seeking factors associated with variations in these

Project Outline/Methodology

Electronic GP prescribing data for opioids were linked to patient records using a unique person identifier (Community Health Index (CHI) number) and anonymised before analysis.

Prescribing linkage was conducted by three data sources: 1) Information Services Division (ISD), NHS Scotland - includes national, NHS board and individual level data; 2) Health Informatics Centre (HIC), Dundee - includes linkage to Scottish Morbidity Records for hospital outpatient attendances and admissions, including A&E in NHS Tayside and NHS Fife and 3) Generation Scotland: the Scottish Family Health Study (GS:SFHS) - a large general population-based cohort of extended families with detailed clinical data, including chronic pain.

Key Results

Prescribing of both weak and strong opioids increased steadily over the ten year period 2003-2012, the number of strong opioid prescriptions more than doubling. Over 948,000 individuals in Scotland were prescribed an opioid in 2012 (18% of the population). Codeine was the most commonly prescribed drug (>658,000 individuals), followed by Tramadol (>206,000) and >40,000 people were prescribed Morphine. There were variations in the rates of prescribing between the NHS boards. Patients in the most deprived areas were 3.5 times more likely to receive a prescription for a strong opioid than were patients in the least deprived areas. Over 78,000 patients received more than 365 standard daily doses per year (representing 8.3% of those prescribed an opioid). Prescribing was generally associated with reported chronic pain, and strong opioids were most likely to be used in the presence of severe pain. However, most people reporting severe chronic pain were not prescribed an opioid or indeed any other painkiller.

Conclusions

Opioid prescribing in Scotland is common and increasing, with variations in rate and quality partly explained by geographical areas, GP practices, age and sex of patients, and particularly deprivation. However, prescribing is generally appropriate and related to pain severity, and many individuals with severe pain are not receiving any prescription painkillers. We found indicators of good quality and potentially problematic prescribing that highlight the importance of promoting effective and appropriate guidelines/protocols. This project has identified the capability of utilising routine health care data to examine trends in opioid prescribing in Scotland.

What does this study add to the field?

This is the first comprehensive study of the extent of prescribing and of national and regional prescribing patterns. Data linkage using electronic prescribing records is feasible to examine both prescribing rates and explore indicators of possible problem use.

Implications for Practice or Policy

Most chronic pain presents and is managed in primary care and this study will help to determine where future interventions may be targeted (e.g. at those in deprived areas and with severe chronic pain), to optimise safe and effective person-centred prescribing for those with chronic pain.

Where to next?

Additional analyses on this dataset are planned to look in more detail at health service use and prescribing in the last year of life. Future studies should be designed to explore reasons for variation in prescribing patterns, and are likely to include qualitative and in-depth quantitative analyses.

Further details from:

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