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Opioids and persistent pain: Ineffectiveness, risks and best practice guidance

Opioid prescribing

Opioid prescribing for persistent pain has increased dramatically since the 1990's. There has been a trend towards prescribing stronger long-acting opioids and earlier escalation from 'weak' (e.g. codeine) to 'strong' opioids (e.g. morphine)[1].

Between 1998 and 2016[2]:

- Opioid prescriptions in England increased by 34% overall & by 127% after adjusting for morphine equivalence
- The number of **high dose** (> 120mg morphine equivalent dose(MED)) prescriptions increased by 581% from 3 to 23 per 1000 population.
- Fentanyl, morphine, and oxycodone, together accounted for more than 90% of high dose long-acting opioid prescribing in 2016. Oxycodone prescribing having increased the most since becoming available in 2000.
- There is considerable variation in opioid prescribing between different CCGs across England with a 6-fold variation in the number of opioid items prescribed and an 8-fold variation in MED per 1000 patients.
- Higher levels of GP practice-level opioid prescribing have been associated with larger practice size, more rural location and higher deprivation score.
- If every practice in the country prescribed high-dose opioids at the same rate as those in the lowest 10% it has been estimated that, over a 6-month period, 543 000 fewer high dose prescriptions could have been issued (from a total of 601 000) with a cost saving of £24·8 million.
- There is some evidence to suggest a slowing of the rising trend in opioid prescribing, but this is not consistent between geographical areas.
- Overall opioid prescribing in England started to plateau around 2014 and there was an overall slight decline between 2016-2017.

- However, beneath this trend lies a wide variation and the change in total opioid prescribing between 2016-2017 across CCGs in England ranged from a 10.5% decrease to a 3.5% increase

OpenPrescribing.net is a useful tool that's provide a current picture of opioid prescribing[3]. You can find out how opioid prescribing in your practice compares to national averages by visiting openprescribing.net it's free to access. You'll get graphs showing total opioid prescribing (morphine equivalent) per 1000 registered patients and you can also find out what proportion of this is high dose prescribing.

Ineffectiveness of opioids

Evidence for long-term effectiveness of opioids for people with persistent pain is limited[4,5,6]. Although opioids are effective analgesics for acute pain and pain at the end of life, the majority of people living with persistent pain do not obtain useful pain relief from opioids[7].

In fact, people with persistent pain who take opioids are more likely to report worse pain, poorer self-rated health, and lower quality of life than people with persistent pain who do not take opioids[8,9]. These data suggest that, for many people with persistent pain, opioid therapy does not fulfil the key goals of treatment, namely pain relief, improved functioning and improved quality of life.

Risks of long-term opioid therapy

At the same time, opioid therapy is frequently associated with side-effects that may worsen quality of life, including constipation, nausea, dizziness, sedation and confusion[4,5,10] and with an increased risk of serious harm including overdose, addiction, fractures and myocardial infarction[11,12,13].

Patients taking opioids long-term for persistent pain are therefore at risk of continuing medicines that may be harming more than helping them.

Best practice guidance on managing opioid therapy for persistent pain

Best practice guidelines from the United Kingdom,[14] United States,[15] and Canada [16] on the use of opioids for persistent pain are fairly consistent in their recommendations. Each of the guidelines advocate

- The use of non-opioid management strategies, where possible.
- Where opioids are prescribed for persistent pain, an opioid trial is recommended, with clear agreed goals for treatment.
- Patients should be reviewed within 4-6 weeks to assess their response in relation to treatment goals. Patients who do not achieve useful pain relief from opioids within 2-4 weeks are unlikely to gain benefit in the long term and continuing opioids in these patients is not recommended.

- For patients who obtain benefit in the short-term, this does not guarantee long-term efficacy and regular review is recommended, at least 6 monthly, to assess whether benefits continue to outweigh any adverse effects and potential harm.
- Tapering and stopping opioids is recommended if treatment goals are not met, even when there are no alternative analgesics

However, implementation of opioid guideline recommendations is low [17,18]. Lack of time and resources are potential barriers to guideline-concordant care[17,18] and the available time in routine GP appointments offers limited opportunity to undertake a comprehensive face-to-face review.

Studies of gradual reduction of long-term opioids in the context of multidisciplinary pain management programmes report that, overall, patients do not experience worse pain and may notice improved function and quality of life[19]. It seems that opioids are prescribed more often and for longer than would be expected given the evidence for their effectiveness for persistent pain[7,20].

Click here for a link to the guidelines from the Faculty of Pain Medicine (UK), "Opioids Aware".[14]

Opioid misuse and addiction

The terminology around problematic prescribed opioid use, including misuse and addiction, is confusing and often used inconsistently, so it seems useful to be clear about definitions:

Dependency

Dependence on opioids is highly likely in patients who have been taking prescribed opioids regularly for 6-months or longer. Signs that a patient is dependent or is developing problems with dependence on the opioids they take include:[21]

- Running out of a medicine early
- Making frequent requests for dose increases
- Reporting that a medicine that was working well previously is no longer working

Physical dependence

Physical dependence occurs due to biological changes associated with repeated use of opioids leading to tolerance (less effect from a given amount or dose) and withdrawal symptoms if the substance is rapidly reduced or stopped abruptly.

- Physical dependence alone does not mean that patients misuse or are addicted to opioids.

Psychological dependence

Psychological dependence is the when use of a drug is a conditioned response to an event or feeling (known as a “trigger”). Triggers can be emotional responses to events, certain people, places or anything a person associates with using the drug.

- The presence of physical and psychological dependence makes addiction likely but isn’t the whole story because addiction also has a behavioural component.

Opioid use disorder

The term “Opioid use disorder” is sometimes used to encompass the spectrum of misuse, abuse and addiction.

It has been estimated that opioid addiction occurs in around 8-12% of patients prescribed opioids for persistent pain and misuse in up to 30%. Addiction is an important risk and often the one that grabs the headlines but it is important to remember that the majority of patients who use opioids for persistent pain do not become addicted to them. Labelling patients inappropriately as ‘addicted’ to opioids when they are in fact simply displaying signs of physical dependence has the potential to adversely affect patient care and the clinician-patient relationship.

Misuse

Prescribed opioid misuse refers to the use of prescribed opioids in a way that is not consistent with what has been directed or prescribed, regardless of whether they cause harm or not. Misuse can lead to addiction but that is not always the case and they are not the same thing.

Abuse

Prescribed opioid abuse is the intentional use of a prescribed opioid for a nonmedical purpose, such as euphoria or altering one’s state of consciousness.

Addiction

The main characteristic that distinguishes addiction is the combination of psychological and physical dependence with compulsive behaviour that leads to a pattern of continued use regardless of the harm the drug (opioids) causes or may cause to themselves or others.

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