

Research Round Up- Opioid Drugs: A high risk prescribing area?

Introduction

The last research round up provided an overview of research, information, and guidelines around the involvement of the healthcare professional in the COVID-19 pandemic.

This month we will evaluate some recent research around prescribing opioid medications across various settings.

There has been concern over prescribing of opioids and the high risk of harm associated with their use for many years now. This is an area of active research and controversial opinions which has attracted much public and media attention. There are many emerging studies looking at how, why and how long opioids are prescribed. In this round up we will look at four different aspects of opioid prescribing practices in the UK that have had publications around them in the last few months.

Prescribing High Dose Opioids in Primary Care

The authors start this paper by looking at the current picture of prescribing of opioids in a primary care setting. They acknowledge that research shows that an increase in opioid prescribing for long-term pain conditions has led to more people taking opioids and taking these at higher doses that has been seen before. Supporting literature presented here reveals that high doses of opioids are associated with greater morbidity, mortality, and cost. Despite this, the prescribing of high-dose opioids remains relatively common in high-income countries. The authors, to investigate the phenomenon, conducted a systematic review of observational studies into opioid use in high income countries up to and including April 2019. Searching and quality appraisal of articles led to inclusion of 6 studies from the USA, Australia and the UK. These papers presented information on over 4million opioid users. They reported findings in the form of factors commonly associated with high dose opioid prescription in primary care. These ranged from concurrent prescription of benzodiazepines, depressive symptoms, increased visits to accident and emergency departments, unemployment and being male. All these factors came out as significant in the literature included. They conclude that patients prescribed high doses of opioids have a greater risk of harm. They identify key factors such as the co-prescription of benzodiazepines and the presence of depressive symptoms as a priority for consideration when managing people on high-dose opioids in primary care. They recommend that coordinated approaches to promote and monitor prescribing are necessary for safe prescribing practice.

Georgia C. Richards, Kamal R. Mahtani, Tonny B. Muthee, Nicholas J. DeVito¹, Constantinos Koshiari , Jeffrey K. Aronson , Ben Goldacre and Carl J. Heneghan (2020) Factors associated with the prescribing of high-dose opioids in primary care: a systematic review and meta-analysis. BMC Medicine 18:68 Retrieved from <https://link.springer.com/content/pdf/10.1186/s12916-020-01528-7.pdf>

Co-prescribing of Opioids with Gabapentinoids

Recent advances in the understanding and study of gabapentinoids in pain have led to an increase in their prescribing adjunct to or instead of opioid prescribing. There have been concerns around concomitant prescribing of these drugs and the potential for increased harm. This study sought to investigate national and regional prescribing rates and patterns over the period 2006–2016 and to

try to identify if there were any associated factors. Outcomes investigated were age, gender, sociodemographic data and co-prescription. Morbidity and mortality were assessed as were the incidence of drug related deaths after access to relevant and accessible database information. Findings proved enlightening in many areas. Firstly the increase in prescribing gabapentin in Scotland over that 10 year period is 4 fold whereas prescribing of pregabalin has increased 16 fold. Mean age for those receiving repeated prescriptions of gabapentinoids was reported as 58.1 years and 62.5% were female and had a higher chance of living in what were described as deprived areas. Related to this, 60% of this population were co-prescribed the gabapentinoid with either an opioid, a benzodiazepine or both. They also discovered that the age-standardised death rate in those who were prescribed in this instance was double the national average among the Scottish population. Worryingly some of the deaths due to concomitant use were seen in those for whom some of the combination of the drugs had not been prescribed but obtained via other routes. They conclude that concomitant use of gabapentinoids with benzodiazepines and/or opioids represents a potentially dangerous combination. They suggest that the contribution of this concomitant use to an increase in drug related deaths may be more related to illegal use and diversion rather than poor prescribing practice.

Nicola Torrance, Abirami Veluchamy, Yiling Zhou, Emma H. Fletcher, Eilidh Moir, Harry L. Hebert, Peter T. Donnan, Jennifer Watson, Lesley A. Colvin, Blair H. Smith (2020) Trends in gabapentinoid prescribing, co-prescribing of opioids and benzodiazepines, and associated deaths in Scotland. *British Journal of Anaesthesia*,

Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0007091220303731>

Opioid Substitution Prescribing in Substance Misuse

This mixed methods analysis of patient safety data aimed to gain an overview of incidents involving opioid substitution treatment. Its focus was on those prescribed either buprenorphine as a substitute for illegal or high dose opioids or methadone in a community setting. The outcome measure was harm (source and nature). The authors sought to identify themes that could be present which may lead to the elucidation of priority areas for service improvement.

The authors examined data from 2005-2015 which they obtained from the National Reporting & Learning System in England and Wales and identified 2284 reports of safety issues in patients prescribed opioid substitution therapy in a community setting. They identified that most cases of harm occurred if there was a failure in the delivery of care in 4 discreet areas: Prescribing, supervised dispensing, non-supervised dispensing and monitoring. Prescribing related incidents included wrong doses, incorrect strength, incomplete or incorrect prescriptions and contraindicated drugs. Monitoring incidents centred around poor record keeping and communication failures. Analysis of the reports revealed that most of the incidents of harm resulted from the 2 dispensing areas. They were able to subcategorise the incidents into two further themes; Staff related and organisational. Staff related incidents were identified as slip ups during the dispensing task or not following defined protocols. Organisational issues included poor working conditions and breaks in the continuity of care. Several other contributory factors were also identified suggesting failures in dispensing was multifactorial. The authors recommend that health care providers strengthen processes to mitigate against harm caused by unsafe opioid substitution. They suggest that prescribing education, the use of electronic prescribing, implementation of dispensing monitoring

systems and procedural and educational interventions for pharmacy staff could reduce the incidence of reportable safety issues.

Gibson, R., MacLeod, N., Donaldson, L. J., Williams, H., Hibbert, P., Parry, G., Bhatt, J., Sheikh, A., and Carson-Stevens, A. (2020) A mixed-methods analysis of patient safety incidents involving opioid substitution treatment with methadone or buprenorphine in community-based care in England and Wales. *Addiction*, <https://doi.org/10.1111/add.15039>.

Retrieved from

https://onlinelibrary.wiley.com/doi/full/10.1111/add.15039?casa_token=7zTk6RgxZ8AAAAA%3AOFZQ3lO493pNWvW-8xt07yPjh17yK59ls9KmfAh9HcSE66ltHBSdQgfCoiDKEAX8w1BuzVaxXl7oog

The Effect of an Opioid Review Clinic in a Primary Care Setting

This mixed methods evaluation of an opioid review clinic focusses on two General Practices in England and aimed to determine the impact of the service on opioid use, health and wellbeing outcomes and quality of life. The evaluation of the clinic took place over a period of 15 months. Patients referred to the review clinic had to have had a minimum of 3 opioid prescriptions in the three months immediately prior to referral. Participants in the service were interviewed and also completed questionnaires to allow the researchers to gather appropriate data and views from the service users. Data such as demographic information, opioid use, misuse and dosing, health and wellbeing, quality of life measures and pain scores were collected. Service providers were also interviewed to explore their experiences of and views on the impact of the clinic. Findings revealed that the median prescribed dose reduced over time from 90mg at baseline to 72mg at follow up, achieving statistical significance. Some service users managed to be weaned off their opioids completely. In general the attendees at the clinic achieved an improvement in their scores on the health and wellbeing and quality of life scores reporting increase confidence and self-esteem, ability to employ pain management strategies and reduced doses of medication required. The clinic was very well received by both service users and providers suggesting the benefit of such a service. Recommendations were that following further service development a randomised control trial could be conducted to establish more robust data to inform future service provision.

Lauren J Scott, Joanna M Kesten, Kevin Bache, Matthew Hickman, Rona Campbell, Anthony E Pickering, Sabi Redwood, Kyla Thomas (2020) Evaluation of a primary care-based opioid and pain review service: a mixed-methods evaluation in two GP practices in England. *British Journal of General Practice* 2020; 70 (691): e111-e119. DOI: 10.3399/bjgp19X707237 Retrieved from

<https://bjgp.org/content/bjgp/70/691/e111.full.pdf>

Conclusion

Opioid prescribing, whether alone or in combination can be considered a high-risk prescribing activity. Protocols and procedures should be in place and adhered to in order to minimise the risk of harm in all aspects of opioid prescribing. Central to safer prescribing and use are good education around opioid use, patient centred management, regular monitoring and review and good communication.