



Therapeutics Today

May 2021
Number 5

For personal use only. Not to be reproduced without permission of the NMIC.



Trends in strong opioid prescribing in Ireland. Opioid analgesics are effective for the management of moderate to severe acute pain, cancer pain and terminal pain, however there is a lack of evidence to support the long-term use of opioids in chronic non-cancer pain. Opioid analgesics are associated with harms including misuse, addiction and fatal overdose, and the use of opioids in the elderly is associated with an increased risk of cognitive impairment and falls. There has

been a dramatic increase in the use of prescription opioids in developed countries (e.g. United States, Australia, Canada and a number of European countries) over the last 20 years. There is a paucity of research on the use of strong opioids in Ireland, in which a recent Organisation for Economic Co-operation and Development (OECD) report demonstrated a higher level of opioid-related deaths than the OECD average. A repeated cross-sectional study which assessed prescribing trends for strong opioids in patients ≥ 16 years from 2010 to 2019 in Ireland, using the Primary Care Reimbursement Service (PCRS) pharmacy claims database, was recently published (*Pharmacoepidemiology and Drug Safety 2021; doi:10.1002/pds.5247*). The opioids included in the study were: morphine, morphine combinations, hydromorphone, buprenorphine, fentanyl, oxycodone, oxycodone and naloxone, pethidine, tapentadol, tramadol, and tramadol and paracetamol, tramadol and dextketoprofen combinations. The data was stratified by route of administration, age (< 65 years or ≥ 65 years) and gender. The measures of consumption included prescribing prevalence and defined daily dose (DDD)/1,000 population/day. The study population included 1,245,455 patients (34.4% ≥ 65 years) in 2010 and 1,219,749 patients (37.1% ≥ 65 years) in 2019. **There was an increase in the overall prescribing prevalence of strong opioids from 14.43% in 2010 to 16.28% in 2019.** The prescribing prevalence of strong opioids in patients ≥ 65 years was approximately twice that in patients aged 16 to 64 years; it increased from 20.3% in 2010 to 23.84% in 2019 in those aged ≥ 65 years. **The most commonly prescribed opioid was tramadol, which represented 63.9% of the total strong opioids prescribed;** there was a decrease in the prescribing prevalence of tramadol from 10.8% in 2010 to 8.47% in 2019. **The prescribing prevalence of oxycodone and tapentadol increased during the study period;** non-combination oxycodone showed a 2.1-fold increase from 2010 to 2019 and combination oxycodone-naloxone a 5.2-fold increase between 2011 and 2019, while the prescribing prevalence and DDD/1,000 population/day of tapentadol increased 8.8-fold and 9.9-fold, respectively between 2012 and 2019. The authors of the study concluded that **there was an overall increase in the prescribing of strong opioids in Ireland adults between 2010 and 2019, especially in older adults** and that continued surveillance of oxycodone, tapentadol and tramadol prescribing in particular is warranted.



Pharmacist-led interventions to reduce adverse drug events in older people living in residential care facilities.

The number of adverse drug events (ADEs) in residential aged care facilities (RACFs) is high for a number of reasons including potentially inappropriate prescriptions and polypharmacy. Various interventions have been used to improve medication safety in RACFs. There is a lack of evidence supporting the effectiveness of pharmacist-led interventions to prevent ADEs in this setting. A systematic review which investigated the efficacy and effectiveness of pharmacist-led interventions to reduce ADEs in older people living in RACFs was recently published (*British Journal of Clinical Pharmacology 2021; doi: 10.1111/bcp.14824*). The review included 23 studies which consisted of 7 single component and 16 multicomponent pharmacist-led interventions (most commonly medication reviews and education) that aimed to reduce ADEs in older people living in RACFs. The review found that eight of the studies reported a significant reduction in the incidence of ADEs with pharmacist-led interventions, 13 studies showed no effect and two studies showed mixed results. The pharmacist-led interventions that reported a significant reduction in ADEs included medication review and educational programmes (either as a single component or as part of a multicomponent intervention). Pharmacist interventions were effective in reducing falls rate, anticholinergic drug burden, infections, drug-drug interactions, cognitive impairment and delirium. The authors of the study conclude that their findings suggest that pharmacist-led interventions have the potential to reduce the incidence of ADEs in older people living in RACFs.



Use of aspirin to prevent pre-eclampsia. Pre-eclampsia complicates approximately 3 to 5% of all pregnancies, and is a serious morbidity and mortality risk to the mother and baby. A clinical update on the prescribing of aspirin to prevent pre-eclampsia was recently published (*Drug and Therapeutics Bulletin, April 2021;59(4):56-59*). A Cochrane systematic review and meta-analysis concluded that

there is high-quality evidence showing that aspirin reduces the risk of pre-eclampsia by approximately 18% (number needed to treat for one woman to benefit [NNTB] of 61) and the risk of preterm birth before 37 weeks gestation by 9% (NNTB of 61). These findings are further supported from the results of other large trials which showed that aspirin doses of 81mg and 150mg were highly effective in preventing preterm pre-eclampsia and in reducing the risk of preterm birth <37 weeks gestation. Aspirin has also been shown to reduce the risk of perinatal death and small for gestational age fetus. **Most international guidelines recommend offering aspirin to women at increased risk of pre-eclampsia based on their clinical history;** for example the National Institute of Health and Care Excellence (NICE) recommends that aspirin is offered to those with one high risk factor (e.g. hypertensive disease during a previous pregnancy) or two moderate risk factors (e.g. first pregnancy, age ≥40 years). A first trimester screening algorithm has been developed that combines clinical and ultrasound information with a blood test, which has been shown to be more sensitive at identifying those at risk of pre-eclampsia (this may not be available in all maternity services). Guidelines recommend starting aspirin before 16 weeks' gestation (some guidelines recommend from 12 weeks' gestation) until at least 36 weeks' gestation (some guidelines recommend continuing up until delivery); **it is important to encourage adherence to the aspirin regimen**, as evidence from a small study (n=220) found that 44% of women who demonstrated inadequate adherence (<90%) had a higher incidence of adverse outcomes. There is high quality evidence that low dose aspirin (75 to 100mg) is effective for the prevention of pre-eclampsia, and results from a large trial reported that 150mg of aspirin is effective, however there is some uncertainty about exclusively using the higher dose. Aspirin is not associated with teratogenicity, however aspirin is associated with an increased risk of bleeding. The Cochrane review (studies included mainly used doses of 75 to 100mg of aspirin) found that there was a 6% relative risk increase of postpartum haemorrhage (PPH) and a recent cohort study of women taking 75mg of aspirin during pregnancy also found a higher rate of PPH. The authors of the review conclude that use of aspirin (75mg to 100mg daily) in pregnancy (commenced at around 12 weeks until either 36 weeks or delivery) appears to modestly reduce the risk of pre-eclampsia, fetal growth restriction and preterm birth). They advise that aspirin should only be prescribed to women who have been assessed as having an increased risk of pre-eclampsia (e.g. those with maternal risk factors or identified through screening) due to the increased risk of PPH. **[Editor's note:** The National Clinical Programme for Obstetrics and Gynaecology has produced guidelines on the management of conditions in pregnancy available on www.rcpi.ie and www.hse.ie. Guidelines on pregnancy have also been published by the UK Royal College of Obstetrics and Gynaecologists www.rcog.org.uk]



HPRA Drug Safety Newsletter April 2021. The recently published Health Products Regulatory Authority (HPRA) Drug Safety Newsletter (DSN) included an update on "COVID-19 Vaccine Janssen® – European Medicines Agency (EMA) review of very rare cases of thrombosis in combination with thrombocytopenia following vaccination"

(*HPRA Newsletter April 2021 103rd Edition*). The newsletter can be accessed at www.hpra.ie



Updated Guidelines This is to inform our readers of 2 guidelines that were recently updated which may be of interest. The British Society of Gastroenterology updated their **Guidelines on the Management of Irritable Bowel Syndrome**, which are available on [https://gut.bmj.com/content/early/2021/04/27/gutjnl-2021-](https://gut.bmj.com/content/early/2021/04/27/gutjnl-2021-324598)

[324598](https://academic.oup.com/europace/advance-article/doi/10.1093/europace/euab065/6247378). The European Heart Rhythm Association updated their "Practical Guide on the Use of Non-Vitamin K Antagonist Oral Anticoagulants in Patients with Atrial Fibrillation" which is available on <https://academic.oup.com/europace/advance-article/doi/10.1093/europace/euab065/6247378>



Further NMIC learning module on HSeLand! The NMIC are pleased to

inform our readers that a further learning module is available on HSeLand (Health Services eLearning and Development). This learning module is on "Direct oral anticoagulants: a guide to prescribing in adults", which consists of the recent NMIC bulletin with an accompanying assessment of 10 MCQs. On successful completion of the assessment, you are eligible to receive a certificate of completion. This learning module has been approved for 2 external CPD credits by the Irish College of General Practitioners. You can access the learning module, following registration with HSeLand (www.hseland.ie), by typing "NMIC" in the search engine.