Research Round up February 2024- Anticipatory Prescribing

Introduction

Last month the research round-up provided you with an overview of articles looking at the prescribing of Pre-Exposure Prophylaxis (PrEP) therapy for the prevention of HIV infection. This month we will be looking at anticipatory prescribing. The first article is a systematic review of community anticipatory prescribing since 2017. The second article looks at the financial cost of anticipatory prescribing. Finally, our third paper looks at anticipatory prescribing in an inner-city hospice community.

Anticipatory prescribing in community end-of-life care: systematic review and narrative synthesis of the evidence since 2017

B. Bowers, B. Costa Pereira Antunes, S. Etkind, S. A. Hopkins, I. Winterburn, I. Kuhn, K. Pollock & S. Barclay. (2023) *Anticipatory prescribing in community end-of-life care: systematic review and narrative synthesis of the evidence since 2017*: BMJ Supportive and Palliative Care;13:e612-e623.

https://spcare.bmj.com/content/early/2023/05/24/spcare-2022-004080.abstract

This article, published in the BMJ Supportive and Palliative Care Journal is a systematic review of the evidence concerning the anticipatory prescribing of injectable medications in an adult population since 2017. This was to expand the evidence amassed since a previous systematic review conducted and published in 2017. The review was mainly to focus on use of these medications in end-of-life care with the aim of using the data to inform practice and guidance. Review questions related to current practice, attitudes of patients and caregivers, attitudes of community health professionals and impact on patient comfort and symptoms. The final review question was around cost-effectiveness. The systematic review was conducted in line with expected methodology and rigor using nine literature databases and the findings were reported as a narrative synthesis. The search period covered May 2017 to March 2022. Gough's Weight of Evidence framework was used to appraise included studies. In total 28 papers were included for narrative synthesis. The findings show that there are four main medications that are routinely prescribed at the end-of-life which are administered in the community and are usually prescribed by General Practitioners (GPs) or at the request of specialist palliative care staff. These were to relieve symptoms such as pain, nausea and vomiting, agitation and respiratory secretions. Prescriptions for anticipatory medication can be done between 0 and 1212 days before death but the median range was 14-22 days before death. The attitudes of patients, family and caregivers showed that these prescriptions were accepted by them even where limited information or explanations were given. There was a general appreciation for these medications being in place and reporting of better management of symptoms was seen. Healthcare professionals perceive that anticipatory prescriptions enable effective symptom control, helps prevent crisis hospital admissions and provide reassurance for everyone involved. The review found no evidence of robust clinical effectiveness or cost effectiveness but do concede that the medications are of relatively low cost but also state that many go unused. They conclude that anticipatory prescribing remains a recommended course of action at end-of-life despite the lack of robust evidence to support it and recommend urgent research is required to investigate clinical and cost-effectiveness.

The financial costs of anticipatory prescribing: A retrospective observational study of prescribed, administered and wasted medications using community clinical records.

L. Morgan, S. Barclay, K. Pollock, E. Massou and B. Bowers. (2023) The *financial costs of anticipatory prescribing: A retrospective observational study of prescribed, administered and wasted medications using community clinical records:* Palliative Medicine; 37 (10):15514-1561.

https://journals.sagepub.com/doi/full/10.1177/02692163231198372

This article, published in the Journal Palliative medicine aimed to identify the cost of using anticipatory medicines form the perspective of those used and those not used for patients in an end-of-life care setting in the community. They were looking at people cared for in their own homes and those in a residential care setting. The researchers employed a retrospective observational method of study and accessed GP and community nursing notes with ethical approval was from the South Cambridgeshire Research Ethics Committee. In total Injectable anticipatory medications were prescribed to 167/329 patients; complete records were available for 164 who were included in the analysis, and this was over the period May 2019 and March 2020. Eligible patients were aged 18+, lived in their own homes or in care homes for at least 1 day in the last month of life and died from any cause except trauma, sudden death or suicide. Patients died between 4 March 2017 and 25 September 2019 in any setting, including home, residential care, hospice or hospital.

Costs (GBP) were analysed both at patient-level and drug-level. Median anticipatory prescription cost was £43.17 (IQR: £38.98–£60.47, range £8.76–£229.82). Median administered (used) drug cost was £2.16 (IQR: £0.00–£12.09, range £0.00–£83.14). Median unused (wasted) drug cost was £41.47 (IQR: £29.15–£54.33, range £0.00–£195.36). Prescription administered and unused costs were significantly higher for the 59 patients prescribed an anticipatory syringe driver. There were wide variations in the unused costs of individual drugs; Haloperidol and Cyclizine contributed 49% of total unused costs.

The paper concludes that costs of prescribed and unused anticipatory medications were higher than previously reported but still remain at a modest amount. Usage of prescriptions was lower than previously documented. They suggest that there may be scope to reduce the quantity that is routinely prescribed without adversely affecting care. They suggest that further research is needed to investigate this possibility.

Anticipatory prescribing in community end-of-life care

C. Lee, T. Tammy Tran and J. Ross (2023) *Anticipatory prescribing in community end-of-life care:* BMJ Supportive and Palliative Care doi: 10.1136/spcare-2023-004270

https://spcare.bmj.com/content/early/2023/10/18/spcare-2023-004270.abstract

This article published in the BMJ Journal Supportive and Palliative Care aimed to conduct a critical review of the use of anticipatory medicines in the authors area of clinical practice. This was to determine if the current practices employed in this inner-city hospice were fit for purpose and in line with national guidelines. The researchers used a retrospective audit method to examine anticipatory prescribing practices at end-of-life over a three-month period. This information then informed and

update of local guidelines and supported teaching for all prescribers in the end-of-life service before a follow up audit was carried out after 18 months on guideline update to evaluate the impact of the work done. The initial audit included 76 patients who met the inclusion criteria and were prescribed analgesics, antiemetics, antisecretory and/or anxiolytic drugs. Of these included, 64% were administered on an as required basis at home. The commonest antiemetic was haloperidol at a significant cost of over £2000 a month. The review of case notes and documentation revealed some prescribing and administration issues which informed the guideline update and prescriber education. At the subsequent audit after 18 months, a reduction was seen in antisecretory, and antiemetic prescribing and a wider range of drugs used to suggest that prescribers were tailoring the drugs used to the individual patient rather than blanket prescribing. The authors conclude that the range of medications traditionally used in anticipatory situations should always be considered however a more patient centred approach to prescribing for need should be considered as this creates an individualised and cost-effective practice. They do recommend future research to evaluate the impact of this practice should focus on patients, caregivers, and healthcare professionals and to further this in other community settings.

Conclusion

Anticipatory prescribing has become established good practice in controlling distressing symptoms for patients dying in the community. The prescribing of injectable end-of-life anticipatory medications ahead of possible need is recommended best practice as is review of use and non-use at end-of-life. It is important to be more patient focussed and to consider cost-effectiveness as well as clinical need.