

Audit of the use of Hypnotic Medications in Mental Health Inpatient Units in Central Area, Betsi Cadwaladr University Health Board

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INTRODUCTION:

Insomnia is defined as a 'disturbance of normal sleep patterns commonly characterised by difficulty in initiating sleep and/or difficulty maintaining sleep'. We know that there are variations in sleep length and quality both for an individual night to night, and between individuals, however the majority of us will need between 7-9 hours per night to feel rested and refreshed.

Primary insomnia should be differentiated from insomnia with a clear cause such as substance abuse, physical and/or psychiatric comorbidities, as the management may be different. It is indicated by the WHO that 52% of people reporting a sleep problem have a well-defined mental health disorder.

Sleep disturbance can result in daytime fatigue causing distress and impairment in both social and occupational functional leading to a reduced quality of life. Hypnotic drug therapy should be kept for use only when simple non-pharmacological options such as sleep hygiene advice have been trialled and found to be ineffective, and the management of existing co-morbidities has been optimised. They should also only be used in people with insomnia who experience severe insomnia with significant interference with daily life and functioning.

The most commonly prescribed medications for insomnia are short-acting benzodiazepines and Z-drugs such as Zopiclone. In addition, up to 40% of people with insomnia will self-medicate with hypnotics available over the counter such as sedative antihistamines. One of the main issues with the use of benzodiazepines and Z-drugs is their propensity for tolerance development with prolonged use, leading to dependence and withdrawal on discontinuation. 'Rebound insomnia' is also a potentially unpleasant phenomenon for those who have managed to stop taking them. These risks can be lessened when restricting use to those with severe insomnia only, by using low doses and not continuing treatment beyond 4 weeks duration.

NICE recommend selecting the cheapest option when prescribing unless the patient experiences an adverse effect to the first-line treatment. Zopiclone is currently the cheapest in terms of acquisition costs for an adult dose (7.5mg) at £0.16.

We have noticed that inpatient psychiatric units across North Wales we do not follow a protocol when prescribing hypnotics, and therefore the advice and treatment we are giving to our patients is not always uniform and may not be evidence-based. We wanted to complete this audit to understand deficits in our prescribing practices and attempt to improve these for the benefit of our patients.

METHODS:

The first audit cycle reviewed the notes and medication charts and collected data of all inpatients in the Central area, i.e. the Ablett Psychiatric Unit and Bryn Hesketh Unit. The data was collected on 10/05/20 using the audit proforma (appendix 1). The standards followed were NICE TA77 Guidance on the use of zaleplon, zolpidem and zopiclone for the short-term management of insomnia.

RESULTS:

Of all 34 inpatients audited, 8 patients (24% of total inpatients) took a hypnotic to provide symptomatic relief of insomnia. 6 of these 8 patients (75%) used Zopiclone (first line treatment).

| Standard | Compliance (%) |
|---------------------------------------|----------------|
| Sleep hygiene advice | 0 |
| Sleep chart use in those on hypnotics | 38 |
| Stop/review date | 0 |
| Tolerance and withdrawal effects | 0 |
| Lowest purchase price medication | 83 |
| Hypnotic switching | 100 |

As can be understood from looking at the total figures, we are 0% compliant with giving (documenting) sleep hygiene advice for patients using hypnotic medications, 0% of the time we are writing a stop/review date on their treatment charts, and 0% compliant in documenting a discussion around tolerance and withdrawal effects. If something has not been documented, we have to assume that it has not happened.

Sleep chart compliance in those on hypnotic medication came out at 38%, interestingly these patients were all on Bryn Hesketh Unit, which appears to place all patients on a sleep chart regardless of whether or not they use a hypnotic agent. One other interesting point not reflected in the summary figures is that there is a patient on Dinas Female with a sleep chart who is not prescribed any hypnotics.

We have used the lowest purchase price medication (Zopiclone) in 83% of patients. Again, Bryn Hesketh is an anomaly because it is the only ward which used anything other than Zopiclone to treat insomnia.

We have been successful in avoiding switching from one hypnotic to another in 100% (all) of the patients whom are prescribed one, which complies with guidelines set out by NICE.

DISCUSSION:

Problem areas:

We have performed very poorly in giving out basic sleep hygiene advice to our patients. It may be that giving out this advice is time-consuming for nurses and medical staff, however there is nothing to say that written information for a patient to read would not be sufficient in the first instance. Bryn Hesketh require this information to be delivered in more 'creative' ways, due to their patients having dementia (see improvement needs).

A simple way of gaining objective evidence and monitoring insomnia is by the use of a 24 hour sleep chart. Bryn Hesketh have employed one per patient regardless of hypnotic medication prescription. Staff on Cynnydd Ward mentioned to us that they see their observations board as a 'sleep chart', in that they document during the checks when the patient is asleep and wakes up. We have considered that there may be a way to combine the two charts, thus saving staff time but ensuring that we are documenting our patients' sleep patterns.

Reasons for the choice of alternative hypnotic choice in place of Zopiclone at Bryn Hesketh are not clear, but may be related to the patient population at the unit (i.e. elderly, frail, organic mental illness). The prescriber may have been taking into account side effects or drug interactions. An alternative hypothesis would be that they have utilised the pharmacokinetics of the individual medications to their advantage. However, if prescribers wish to deviate from the gold standard, then these decisions should be justified and documented.

The mantra 'start low and go slow' is particularly important when looking at psychotropic drugs, and even more so in those populations more likely to develop side effects. Why the maximum dose of Zopiclone has been used in every patient prescribed it is a decision which is based on clinical presentation, however, we should all be aware of the need to review this on a regular basis, and stop when it is no longer required. NICE recommend no more than 4 weeks duration maximum. Unfortunately, some patients will be prescribed them on discharge and it can then be difficult for GPs to discontinue.

Similarly, discussions about tolerance and withdrawal effects were poorly documented, which corresponds to the suggestion by NICE that medical staff often fail to pass on this information to patients. It may be an important consideration for most people who are prescribed it, and you could argue that without knowing about this issue that a patient cannot make a truly informed choice.

Limitations:

NICE suggest using 3-6 months' worth of data however due to the Covid-19 outbreak and difficulties this would have caused in retrieving old volumes of notes, we used all current inpatients as a snapshot look at our prescribing of hypnotics. If we had looked retrospectively we may have been able to work out how long those patients discharged on hypnotics actually used them for.

Areas and suggestions for improvement:

The main areas where we have fallen down are giving sleep hygiene advice, use of sleep charts, giving a review/stop date, and having a conversation with patients about the risk of tolerance and withdrawal effects.

- We could either implement the use of sleep charts for every inpatient or consider designing a chart for both observations and sleep
- Formal training for staff on sleep hygiene or even CBT for insomnia
- Failing that, provision of visual aids or written information on sleep hygiene
- SALT team to provide appropriate visual aids for those with dementia experiencing insomnia
- Visual prompts on drug charts to ensure that prescribers provide a 'stop date' for hypnotics (in a similar way that antibiotics have these prompts)
- Creation of a protocol or guideline on hypnotic prescribing for BCUHB

Areas of good practice:

This audit has shown that of all inpatients, only 24% are prescribed a hypnotic which is lower than I would have expected. There is also 100% compliance with the recommendation that we do not switch from one hypnotic to another if the first one fails to treat.

CONCLUSIONS:

Sleep hygiene advice can revolutionise the sleep of a patient without the need for medication and increased pill burden. Many people would prefer to try these methods first and although many seem obvious many people do not follow basic sleep hygiene as they are not familiar with such a thing. Ensuring our patients are on a sleep chart will again reduce unnecessary prescription of psychotropic medication that comes with potential side effects and impacts on the quality of life of our patients

A stop or review date is a prompt for medical staff to ensure that we are not regularly prescribing these medications for longer than the suggested 4 weeks. Often without a review date patients are discharged on such medications and due to the tolerance and withdrawal effects they find it very difficult to come off them.

Increased compliance with the NICE guidelines in this area will ensure that our patients are receiving the gold standard care and ensure that we are not, as a Division, wasting budget that could be used elsewhere

ACTION PLAN:

- Present findings of audit to department in our weekly meeting
- Discussion with senior clinicians regarding the best method for encouraging use of the sleep chart
- Designing a protocol for BCUHB intranet in relation to MHLA prescribing of hypnotics
- Re-audit Autumn/Winter 2020