Prescribing In The Elderly Audit

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About three percent of hospital admissions are due to medication errors and this rises to about twenty eight percent in the elderly. Elderly people are more prone to side effects and drug toxicity to various reasons like decreased lean body mass, less body fat and water, decreased metabolism, polypharmacy, drug interactions, reduced hepatic and renal clearance. At the same time primary and secondary prevention do benefit older people and they should be used if indicated.

Audit Standards and Methods

A prospective audit was carried out at Blackpool Victoria hospital in about 180 patients aged over sixty five years. The standards were taken from the Sentinel audit in prescribing for the elderly which was carried out nationally in 1999. There were about eight standards and information was gathered from the prescription charts and case notes.

180 patients were prescribed 1367 Medications which amounts to an average of 7.59 tablets per person. The number of tablets varied from one tablet to a maximum of twenty one tablets. The average age of the audit population was 79 with maximum age of 91.

1) The Documentation of Frequency of administration instructions with `As required prescriptions (PRN)

All PRN medications should have their frequency of administration and maximum doses documented. In this audit 180 patients were prescribed 240 PRN medications. Out of these 47 medications did not have their frequency and maximum doses documented. ie about 20%.

Commonly used PRN meds includes antiemetics, Paracetamol, Tramadol, Cocodamol, Inhalers, Temazepam, Diazepam, Lorazepam, Oromorph and Intravenous Morphine.

2) The use of Generic Prescribing

All medications should be prescribed using the generic names unless there are variations in bioavailability with a particular preparation. In this audit Generic names were used for 1290 out of 1367 medications. An acceptable proprietary name was used for 15 out of 1367 medications (Theophylline and Diltiazem). Therefore non acceptable proprietary names were used for 62 medications (4.55%).

Some Non acceptable names used were Acupan, Kapake, Diclomax, Volterol, Telfast, Monomax, Besavar, Istin, Detrusitol, Losec, Lipitor, Coversyl and Imdur.

3) Documentation Of Allergy status on the prescription chart

All patients should have their allergy status documented on the prescription chart. In this audit allergy status of 79 patients were not documented. This constitutes about forty three percent of the total audit population.

4) Paracetamol usage

The maximum recommended dose of Paracetamol is 4 g per day. In this audit medications containing Paracetamol were prescribed to 54 out of the 180 patients. Out of the 54 patients 4 patients were prescribed 8 g of Paracetamol.
5) Long acting Hypoglycaemics

Long acting hypoglycaemics like Glibenclamide should not be used in the elderly due to the risk of hypoglycaemia. In this audit 50 patients had diabetes and two of those patients were on glibenclamide.

6) Stroke Prophylaxis In Atrial fibrillation

All patients with atrial fibrillation should be on appropriate thromboprophylaxis (Aspirin or warfarin). Thirty of the 180 patients had atrial fibrillation. Twenty four patients were on warfarin and the remaining six patients were not on aspirin or warfarin.

7) Use of aspirin in Angina

All patients with angina should be on antiplatelet agents. Fifty patients in this audit group had angina and all fifty of them were on aspirin.

8) Use of benzodiazepines

Benzodiazepines increase falls risk in the elderly and should not be used without any proper indication. In this audit population seven patients were on benzodiazepines and six of them had an appropriate indication.

Conclusion.

This audit demonstrates suboptimal prescribing in the elderly. It highlights target areas for improvement and illustrates areas of inadequacy. The results of the audit were fed back to the junior doctors and more teaching sessions were arranged for the foundation year doctors and medical students. The audit loop is going to be completed by a reaudit in 6 months.

References

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