

PILOT STUDY TO ASSESS THE NEED FOR PHARMACIST LED MEDICATION REVIEW IN A DIABETIC NEPHROPATHY OUT PATIENT CLINIC.

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PROBLEM: A report by Diabetes UK in 2003 highlighted that only one in three people with diabetes took all their medication. Medication review is important to enable patients to become involved in the decision making process, to improve their knowledge of their condition, its treatment and the importance of concordance. Due to the number of different medications prescribed for this group of patients, pharmacist input with the multidisciplinary team to review medication regimens is necessary to reduce side effects, maximise dose and detect adverse reactions.

PURPOSE: To review medication to ensure patients receive optimal treatment for their condition according to national guidelines to prevent or to treat diabetic complications. The review would also involve counselling patients to improve their knowledge and satisfaction with their medication.

DESIGN: One pharmacist attended the diabetic nephropathy clinic for half a day each week over seven weeks in 2003. The pharmacist interviewed patients prior to their meeting with the medical staff and took a drug history, assessed patients understanding and concordance to then make recommendations on a care plan for the medical staff to optimise the treatment regimen for the patient.

FINDINGS: Forty seven out of a total of fifty eight patients were seen by the pharmacist. The audit on whether national standards were being followed for medications showed that 51% patients were on aspirin which increased to 53% after intervention by the pharmacist, 10% were on clopidogrel, 6% were on warfarin. Reasons for patients not being prescribed antiplatelets included gastrointestinal problems, allergy, intolerance or it was felt to be too soon to initiate this treatment. 47% were prescribed an ace inhibitor, 23% were on an angiotensin 2 receptor antagonist, these figures did not alter after the clinic. Reasons for not being prescribed either of these drugs include previously reduced renal function or hyperkalaemia when these drugs were initiated or renal impairment was too advanced to risk their use. 58% of patients were taking cholesterol reducing medication, pharmacist intervention led to another 4% patients having their levels rechecked to assess the need for medication. Those patients not prescribed this medication had cholesterol levels in range or were over seventy years of age and there is no evidence of benefit in this age group. 16% patients still smoked but due to time constraints it was not possible to discuss smoking cessation with patients.

64% of the suggestions made by the pharmacist to reduce the risk of adverse effects were accepted and acted upon by the medical staff, 26% were classed as potentially serious situations if no action had been taken. Examples of suggestions accepted by the medical staff include;

- discontinuation of rosiglitazone due to worsening fluid retention
- identification dispensing error by community pharmacy causing too high a dose of simvastatin being taken by the patient.

An additional finding during the project was that previous recommendations made in clinic with regards to drug changes or dose changes were not acted upon by the General Practitioner.

CONCLUSION: During the review patients became involved in the decision making process. 42% patients needed counselling due to poor knowledge. Ongoing follow up and assessment is needed to assess whether patient knowledge was increased, was retained and concordance improved. Due to poor transfer of information between primary care and secondary care with regards to drug changes, it may be more beneficial for the review to take place in primary care and the pharmacist work on reducing the gap at the primary secondary care interface. Further research needs to be done to determine reasons for this poor communication and how to improve this.

RELEVANCE: The current national guidelines in the NSF and NICE provide the evidence base to enable clinicians to alter patients prescriptions to improve long term morbidity and mortality. This project highlights the pharmacist-patient relationship, in terms of improving patient knowledge and optimising their treatment regimen. Complicated regimens due to co-morbidity make concordance harder. By introducing a pharmacist to the team to concentrate on the medication issues and to collaborate with primary care, patients compliance, outcome and satisfaction will improve.