Medical Xpress

In-house pharmacists can help GPs reduce prescribing errors by up to 50 percent

February 20 2012

Medication errors are common in primary care but the number of mistakes could be reduced significantly if GPs introduced an in-house pharmacist-led intervention scheme.

These are the findings of a comprehensive study into sustainable ways of preventing patients from being harmed as a result of prescribing errors.

The research was led by Tony Avery, Professor of Primary Health Care in the School of Community Health Sciences at The University of Nottingham and funded by the Patient Safety Research Program of the UK Department of Health. The results are published on Tuesday 21 February 2012 in the Lancet - one of the world's leading medical journals.

The study involved at-risk patients in 72 general practices taking the drugs that are most commonly and consistently associated with medication errors.

The general practices were randomly allocated to receive either computerised feedback on patients at risk, or computerised feedback with support from a pharmacist to correct any errors detected. When followed up six months later the general practices receiving pharmacist support had significantly fewer prescribing errors.

Professor Avery, who is also a practicing GP in Nottingham, has called on the Department of Health and GP clinical commissioning groups to

develop a wider roll-out of the intervention scheme. He said: "Our study has shown remarkable reductions in prescribing errors from an approach that could easily be rolled out to general practices in England and the rest of the UK. Most general practices already have in-house pharmacists, but much of their time is spent controlling prescribing costs. What is needed is a commitment for these pharmacists to spend more of their time on patient safety. Not only would this help prevent unnecessary harm to patients, but it may also reduce the costs associated with dealing with prescribing errors, which sometimes require hospital admission".

How the study was set up

Dr Avery and his team, which involved the University of Manchester, the University of Reading, the University of Otago in New Zealand, and the University of Edinburgh, studied GP practices in Nottinghamshire, Staffordshire and Central and Eastern Cheshire, England.

Practices allocated to the simple feedback system received computerised feedback on patients at risk from medication errors and the practices were given brief written information on the importance of each type of error.

GPs allocated to pharmacist-intervention met with a pharmacist at the beginning of intervention period to discuss the problems identified from the computerised feedback and to agree on an action plan. The pharmacist then spent roughly two days a week for the next 12 weeks dealing with the problems and working to improve safety systems. In some cases, patients were invited into the surgery for a prescription review with the pharmacist, or a GP, or to have a blood test, with the aim of correcting medication errors.

The results of the study

Their results showed that GPs were almost 50 per cent less likely to make errors in the monitoring of older people taking ACE inhibitors or diuretics, 42 per cent less likely to make errors in prescribing non-steroidal anti-inflammatory drugs to patients with a history of peptic ulcer (including stomach ulcer), and 27 per cent less likely to make errors in prescribing beta-blockers to patients with asthma.

Professor Avery said: "We know that GPs are aware of the risks of the drugs most commonly associated with adverse events, but errors do occur and our study has shown an effective way of dealing with them. We believe that there is an urgent need to roll out this pharmacist-led intervention to general practices throughout the country to avoid unnecessary errors in the future."

Provided by University of Nottingham

Citation: In-house pharmacists can help GPs reduce prescribing errors by up to 50 percent (2012, February 20) retrieved 5 May 2024 from https://medicalxpress.com/news/2012-02-in-house-pharmacists-gps-errors-percent.html