

Pharmacists play vital role in improving patient health

September 4 2018



Credit: CC0 Public Domain

Pharmacists serving non-hospitalised patients, such as in general practices and community pharmacies, may achieve improvements in patient health outcomes according to the most comprehensive systematic review of the scientific evidence to date.

A team of researchers led by Professor Margaret Watson from the University of Bath, working with Cochrane, NHS Education Scotland, and the Universities of Aberdeen, Brunel, California and Nottingham Trent, reviewed 116 scientific trials involving more than 40,000 patients. They compared [pharmacist](#) interventions with the usual care or interventions from other healthcare professionals for a wide range of chronic conditions including diabetes and high [blood pressure](#).

Cochrane reviews assess evidence from as many studies as possible to draw the most reliable conclusions and are internationally recognised as the highest standard in evidence-based health care.

In this review, 111 trials compared pharmacist interventions with usual care. The review authors found that patients in groups that received pharmacist interventions had better outcomes when it came to reducing blood sugar levels and blood pressure, but for others, such as hospital admissions and death rates, the effect was more uncertain although the general direction of effect was positive.

Blood sugar control is measured using a figure called HbA1c. Overall, trials involving pharmacist interventions decreased patients' HbA1C by 0.8% compared with usual care. A 1% rise in HbA1c is associated with a 28% increased risk of premature death. Patients' blood pressure was about half as likely to be outside target ranges for individuals receiving pharmacist services, and was on average 5mmHg lower in these patients, a figure associated with a 34% reduction in stroke and a 21% reduction in ischaemic heart disease.

Professor Margaret Watson from the University of Bath, who led the review, said: "What is really important about this review is that it shows pharmacist services can achieve clinically relevant improvements for patients and could lead to benefits for some long term conditions, particularly diabetes and [high blood pressure](#)."

"We know that these types of long-term conditions are going to increase as the population ages.

"There has been huge government investment in placing pharmacists in general practices and elsewhere in the NHS. The results of this review indicate that trials of pharmacist services may produce improvements in patient health. As such, future investment in pharmacist services could be informed by the results of this review."

However, Professor Watson added: "Pharmacists are not a panacea, but they can increase capability and capacity within the healthcare system and help patients to improve their health.

"There are some caveats. Due to poor reporting of the details from some trials and overall low quality of evidence, we can't pinpoint the specific elements of a pharmacist service that is having an effect. So we would like to see much better detailed reporting in future trials."

Of the five studies that compared services delivered by pharmacists with other health professionals, no studies evaluated the impact of the [intervention](#) on the percentage of patients outside [blood](#) pressure or glycated haemoglobin target range, hospital attendance and admission, adverse drug effects, or physical functioning.

Professor Watson said: "This indicates that there is no evidence to suggest that interventions delivered by other health professionals, are more or less beneficial than those delivered by pharmacists."

The Cochrane researchers say that the evidence shows that pharmacists could make vital contributions and help the NHS to improve capability, capacity and most importantly patient health in the face of substantial challenges.

More information: Mícheál de Barra et al. Pharmacist services for non-hospitalised patients, *Cochrane Database of Systematic Reviews* (2018). [DOI: 10.1002/14651858.CD013102](https://doi.org/10.1002/14651858.CD013102)

Provided by University of Bath

Citation: Pharmacists play vital role in improving patient health (2018, September 4) retrieved 20 April 2024 from <https://medicalxpress.com/news/2018-09-pharmacists-vital-role-patient-health.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.