

Abstract citation ID: ckae144.887**Pharmacist care for hypertension management among patients with diabetes: a systematic review****Viktoria Gastens***V Gastens¹, S Tancredi¹, D Bonnan², B Kiszio³, C Del Giovane¹, RT Tsuyuki⁴, G Paradis⁵, A Chioleri^{1,5}, L Guénette², V Santschi³*¹Population Health Laboratory #PopHealthLab, University of Fribourg, Fribourg, Switzerland²Population Health and Optimal Health Practice, University Laval, Québec, Canada³La Source, School of Nursing Sciences, HES-SO University of Applied Sciences and Arts Western Switzerland, Lausanne, Switzerland⁴EPICORE, Department of Medicine, University of Alberta, Edmonton, Canada⁵School of Population and Global Health, McGill University, Montreal, Canada

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Background: Improving blood pressure (BP) control is of major importance among patients with diabetes, due to their high risk of micro- and macrovascular complications. Community-based models of care with the involvement of pharmacists and other nonphysician healthcare providers can help manage hypertension. We aimed to estimate the effectiveness of pharmacist interventions, alone or in collaboration, on BP among outpatients with diabetes and hypertension.

Methods: We conducted systematic searches of randomized controlled trials assessing the effect of pharmacist interventions on BP among outpatients with hypertension and diabetes compared to usual care. The outcome was the systolic and diastolic BP change or BP control. We performed a meta-analysis with random effects models and results are presented by mean difference along with relative 95% CI. We will perform subgroup analyses for the types and intensity (duration, frequency) of pharmacist interventions, patients' characteristics, and healthcare settings. The protocol was registered in PROSPERO (CRD42021279751) and published in an open-access peer-reviewed journal.

Results: Out of 2048 study records identified by electronic database searching, we included 9 studies, with 5067 participants, published between 2008 and 2022. These studies were conducted mainly in North America (n = 5; other regions: n = 4). The intervention was led by the pharmacist in 78% of the studies and in collaboration with other healthcare providers in 22%. Pharmacist intervention included patient education in 67%, healthcare providers education in 11% of studies and feedback to healthcare providers in 44% of the studies. Systolic and diastolic BP were reduced after pharmacist intervention by -5.6 mmHg (95% CI: -10.6 to -0.6) and -4.1 mmHg (95% CI: -7.1 to -1.2) respectively. Additional analyses will be presented at the congress.

Conclusions: Pharmacist interventions improve blood pressure control in hypertensive diabetic outpatients.

Key messages:

- Recent hypertension guidelines recommend pharmacist involvement in hypertension care management.
- This systematic review provide updated evidence on the effect of pharmacist interventions on hypertension management of patients with diabetes.