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Appointment with the Pharmacist May Be Beneficial

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MedPage Today Action Points

- Explain that a pilot study found patients who met with a pharmacist to discuss medication adherence and diet and lifestyle changes had improvements in HbA1c and fasting plasma glucose.
- Caution that the study was small and lacked a control group.

Review

When pharmacists take a more active role in patient care, disease outcomes are improved -- particularly for diabetes patients, a new study shows.

Diabetics who had an intensive consultation with a pharmacist regarding their medications, as well as subsequent follow-up, saw significant improvements in hemoglobin A1c and fasting plasma glucose, Erin Slazak, PharmD, of the University at Buffalo, and colleagues reported online in the *Journal of the American Pharmacists Association*.

The pilot study was small, with only 50 patients, and it lacked a control group, but Slazak said she and colleagues collected the data "because we wanted to show that we were having a positive effect on patient outcomes at the primary care level."

Adding a pharmacist to a patient's healthcare management team is not a new idea. Prior studies -- including the Asheville Project and the Diabetes Ten City Challenge -- have shown it improves disease outcomes and cost-effectiveness.

"There is an increasing body of evidence to support that pharmacists provide an effective and unique role in a collaborative disease management model," said Toni Fera, PharmD, of HealthMapRx and the lead investigator of the Diabetes Ten City Challenge.

"Medication adherence is critical to the management of chronic diseases, and pharmacists are uniquely trained to help patients understand why they need to take their medications," Fera said. "And it helps them overcome barriers that prevent patients from taking their medications appropriately."

Fera said there's "growing momentum" to include pharmacists in patient care. Medicare Part D plans, for example, allow pharmacists to provide medication therapy management services, which include a review of medications and proper use.

Some state-level programs exist, such as the one run by Slazak and colleagues.

Slazak said patients receive a one-hour consultation in which they bring in all their medication bottles -- prescription and nonprescription -- and have a thorough history taken. Pharmacists explain why each medication is relevant to treatment, and discuss necessary diet and lifestyle changes.

"We make sure the patient leaves with a solid understanding of why they're taking the medications they're taking," Slazak said.

She and colleagues will then make recommendations to the patient's physician regarding medications (in New York state, pharmacists don't have prescribing power, but in some states they can adjust medications

as necessary, without consulting the patient's doctor).

They'll also follow up with the patient, either over the phone or in person, on a monthly or weekly basis, depending on the patient.

In their study, Slazak and colleagues found significant reductions in hemoglobin A1c and fasting plasma glucose after both six months and one year, compared with baseline (A1c -1.1%, $P<0.0001$ and fasting plasma glucose -39 mg/dL, $P=0.003$; and A1c -1.1%, $P<0.0001$ and fasting plasma glucose -35 mg/dL, $P=0.005$, respectively).

There were no significant decreases in other metabolic parameters, including blood pressure and cholesterol.

"There are a lot of possible reasons for that, mostly because we're focused on diabetes," Slazak said. "And our program was fairly new at the time, so we weren't working as closely with the providers as we are now."

She said the relationship between pharmacists and primary care providers is key to this type of collaboration. While physicians may have heeded 50% of pharmacists' recommendations at the beginning of the study, Slazak said, they now heed more than 90%.

The program also tended to reduce costs. Geometric mean costs tended to decrease versus baseline at six-month ($-\$84$; $P=0.785$) and 12-month ($-\$216$; $P=0.414$) assessments, despite nominal increases in diabetes and total medication costs. None of the changes was statistically significant.

The researchers have since matched the 50 patients in this study, which was conducted between 2006 and 2007, with 50 controls, for a more complete report, but the data has not yet been published.

While programs like this one have been appearing around the country, Fera said remaining challenges included determining how to incorporate the pharmacist into the existing healthcare system and how to coordinate care and sharing of information among providers.

"It really hinges on having the pharmacist prove a cost-benefit ratio to a physician group or third-party payer," Slazak said.

A co-author reported relationships with Bayer, Cadence, Cubist, Forest, Optimer, Ortho-McNeil, Schering-Plough, and Wyeth.

Primary source: Journal of the American Pharmacists Association

Source reference:

Monte SV, et al "Clinical and economic impact of a diabetes clinical pharmacy service program in a university and primary care-based collaboration model" *J Am Pharm Assoc* 2009; 49: 200-08.

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