

Pharmacists key to detecting chronic kidney disease in at-risk patients

January 26 2016

January 26, 2016 (Ottawa): Pharmacists who screened at-risk patients for chronic kidney disease (CKD) found previously unrecognized disease in 1 of every 6.4 patients tested, according to a study to be published in the January/February 2016 issue of the *Canadian Pharmacists Journal*.

"It was actually surprising for us," says the study's primary author, Dr. Yazid Al Hamarneh, a [pharmacist](#) and the scientific officer for Consultation and Research Services in Alberta's SPOR (Strategy for Patient-Oriented Research) SUPPORT Unit. "We knew that we would find unrecognized cases, but not that many."

The study is one of the first to provide concrete evidence of the benefits of allowing community pharmacists to order laboratory tests and see [patients' test results](#).

CKD is a serious illness defined as reduced [kidney function](#) or signs of [kidney](#) damage lasting more than three months. It affects an estimated 1 in 10 Canadian adults, according to a 2013 study in the *Canadian Medical Association Journal*. But it is often missed because patients in the early stages may have no symptoms. Undiagnosed CKD can lead to life-threatening long-term effects, mainly cardiovascular disease—heart disease and stroke. Without changes in lifestyle or medication, as required, patients may eventually develop kidney failure and need dialysis or a kidney transplant. (See Background: What is CKD?)

The study tested a new online decision-making tool, called the "[CKD Pathway](#)", to help primary care providers decide which patients to test, identify cases, and give affected patients appropriate lifestyle advice, medication, or a referral to a nephrologist (kidney specialist). (See Background: What is the CKD Pathway?)

"We worked closely with our end-users—primary care physicians, pharmacists and nurses. It took about a year to develop the pathway and was launched one year ago," explains Dr. Brenda Hemmelgarn, a nephrologist involved in the pathway, who is also a co-author of the study.

In the study, pharmacists at 55 community pharmacies across Alberta identified patients at risk of CKD based on recent prescriptions and lab test results. Those who had risk factors outlined in the pathway were sent for blood and urine tests for kidney function, unless they had recent test results (in the previous 12 months) on file. The pharmacists used the online CKD pathway to analyze test results and determine whether patients had CKD.

Of 720 at-risk patients screened during the study, 39% had CKD. Of those with CKD, 60% had already received a diagnosis, but 40% (16% of the total screened) had no record or knowledge of a previous CKD diagnosis ("unrecognized" CKD).

The pharmacists' role in screening those at risk of CKD was possible only because pharmacists in Alberta have been able to order, interpret and view lab tests since 2012. (See Background: How are pharmacists' practices changing?)

Dr. Hemmelgarn comments, "Pharmacists as front-line care providers are in a unique position to identify high-risk patients for CKD, do targeted screening through blood and urine tests, and identify the

presence of CKD. They have a unique position in Alberta to participate in care of patients with chronic disease at the community level." Kidney disease is usually managed in primary care, with nephrologists like Dr. Hemmelgarn seeing only the most severe cases, amounting to about 5% of CKD patients.

Dr. Al Hamarneh points out that, in Alberta, patients with certain chronic conditions can meet with their pharmacist to put together a comprehensive annual care plan, or receive a standard medication management assessment. (See Background: How are pharmacists' practices changing?) These occasions give pharmacists a chance to screen patients for CKD as well as other diseases and conditions.

Knowing a patient's CKD status is important for pharmacists, as certain medications are contraindicated for patients with kidney problems, Dr. Al Hamarneh says. Pharmacists may need to review or adjust medication for affected patients.

"When it comes to pharmacists providing such clinical services, it's not taking patients away from family physicians," emphasizes Dr. Al Hamarneh. "Pharmacists see patients with chronic diseases frequently. If the pharmacists are providing those clinical services, they can bring those patients back to their physicians." In the case of CKD, pharmacists can encourage patients with CKD to visit their family physician, or to get a physician if they don't have one. "It's working collaboratively to get the best results for the patient."

Provided by Canadian Pharmacists Association

Citation: Pharmacists key to detecting chronic kidney disease in at-risk patients (2016, January 26) retrieved 23 April 2024 from <https://medicalxpress.com/news/2016-01-pharmacists-key-chronic-kidney-disease.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.