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PHARMACIST-LED INTERVENTIONS MAY HELP PREVENT CARDIOVASCULAR DISEASE

NOVEMBER 28, 2019 - With their expertise in the safe and effective use of medications, pharmacists can help in the management of chronic diseases. A review and analysis published in the British Journal of Clinical Pharmacology indicates that initiatives—such as patient education, medication review, and physical assessments—led by pharmacists can make important contributions to the prevention of cardiovascular disease.

To assess the potential of pharmacists to help prevent cardiovascular diseases in general practice, Abdullah Alshehri, of the University of Birmingham, in the UK, and his colleagues searched the medical literature for relevant randomised controlled clinical trials.

The team identified 21 trials with a total of 8,933 patients. Pharmacist-led interventions included patient education, medication review and counselling, physical assessment, assessing adherence, lifestyle modification, and medication management (such as prescribing, adjusting, monitoring, and administering therapy, and identifying drug-related problems). The most frequently used pharmacist-led interventions were medication review and medication management.

Patients receiving pharmacist-led interventions experienced significant reductions in their systolic blood pressure (by an average of -9.33 mmHg); Hemoglobin A1c, a measure of blood sugar levels (by an average of -0.76%); and LDL-cholesterol (by an average of -15.19 mg/dl). Pharmacist-led interventions also helped patients correctly follow their prescribed medication regimens.

"The evidence presented in this review provides an important message to health systems and policy makers regarding the effectiveness of general practice–based pharmacists' interventions," said Alshehri. "The significant reductions in blood pressure, blood glucose, and blood cholesterol reported in this meta-analysis, if sustained in clinical practice, could have significant implications for managing hypertension, diabetes and dyslipidaemia that could prevent cardiovascular morbidity and mortality."

Alshehri noted that the findings support a greater involvement of pharmacists in general practice. "This will benefit health organisations by providing cost-effective care associated with greater control of patients' conditions and their medications," he said.

Full citation: *"Impact of the Pharmacist-Led Intervention on the Control of Medical Cardiovascular Risk Factors for the Primary Prevention of Cardiovascular Disease in General Practice: A Systematic Review and Meta-Analysis of Randomized Controlled Trials." Abdullah Alshehri, Zahraa Jalal, Ejaz Cheema, M Haque, Duncan Jenkins, and Asma Yahyouche. British Journal of Clinical Pharmacology. Published Online: November 28, 2019, DOI: 10.1111/bcp.14164. URL Upon Publication: http://doi.wiley.com/10.1111/bcp.14164*

NEW COCHRANE REVIEW ASSESSES DIFFERENT HPV VACCINES AND VACCINE SCHEDULES IN ADOLESCENT GIRLS AND BOYS

AUGUST 16, 2019 - New evidence published in the Cochrane Library today provides further information on the benefits and harms of different human papillomavirus (HPV) vaccines and vaccine schedules in young women and men.

HPV is the most common viral infection of the reproductive tract in both women and men globally (WHO 2017). Most people who have sexual contact will be exposed to HPV at some point in their life. In most people, their own immune system will clear the HPV infection.

HPV infection can sometimes persist if the immune system does not clear the virus. Persistent infection with some 'high-risk' strains of HPV can lead to the development of cancer. High-risk HPV strains cause almost all cancers of the cervix and anus, and some cancers of the vagina, vulva, anus, penis, and head and neck. Other 'low risk', HPV strains cause genital warts but do not cause cancer. Development of cancer due to HPV happens gradually, over many years, through a number of pre-cancer stages, called intra-epithelial neoplasia. In the cervix (neck of the womb) these changes are called cervical intraepithelial neoplasia (CIN). High-grade CIN changes have a 1 in 3 chance of developing into cervical cancer, but many CIN lesions regress and do not develop into cancer. HPV-related cancers accounted for an estimated 4.5% of cancers worldwide in 2012 (de Martel 2017).

Vaccination aims to prevent future HPV infection and the cancers caused by high-risk HPV infection. HPV vaccines are mainly targeted towards adolescent girls because cancer of the cervix is the most common HPV-associated cancer. For the prevention of cervical cancer, the World Health Organization recommends vaccinating girls aged 9-14 years with HPV vaccine using a two-dose schedule (0, 6 months) as the most effective strategy. A three-dose schedule is recommended for older girls ≥15 years of age or for people with human immunodeficiency virus (HIV) infection or other causes of immunodeficiency (WHO 2017).

Three HPV vaccines are currently in use: a bivalent vaccine that is targeted at the two most common high-risk HPV types; a quadrivalent vaccine targeted at four HPV types, and a nonavalent vaccine targeted at nine HPV types. In women, the bivalent and quadrivalent vaccines have been shown to protect against pre-cancer of the cervix caused by the HPV types contained in the vaccine if given before natural infection with HPV (Arbyn 2018).
This Cochrane Review summarizes the results from 20 randomized controlled trials involving 31,940 people conducted across all continents. In most studies, the outcome reported was the production of