

## Contribution of pharmacists in cardiovascular disease prevention journey

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**Statement of the Problem:** Cardiovascular disease (CVD) is the primary cause of death worldwide causing 29.6% in 2010. In the UK, CVD was the second cause of mortality, responsible for 27% deaths in 2014 and 48% of all deaths in Greece in 2012. CVD is a result of risk factors such as hypertension, dyslipidemia, overweight/obesity, stress, smoking, physical inactivity and diabetes. CVD prevention consists of two stages: Primary and secondary. Pharmacists, one of the most accessible healthcare professionals, do not have a clear role in the existing pathways. In our view, there are three prevention stages: Primary, secondary and tertiary. The primary prevention constitutes enhancing awareness and initial screening of the public for CVD risk factors (obesity, lack of exercise, alcohol misuse and tobacco use) in order to estimate their CVD risk. Pharmacists could offer services such as weight management, alcohol brief intervention, smoking cessation and health checks. Secondary prevention is the management of post-diagnosis risk conditions (diabetes, hypertension and dyslipidemia) in order to prevent the incidence of a CVD disease. At this stage, pharmacists could provide services with a view to optimize medicines to improve medication adherence and to offer lifestyle advice. Tertiary prevention is the linkage between prevention and treatment for those who already suffered a CVD episode with a view to decreasing the risk of a secondary episode or mortality.

**Methodology & Theoretical Orientation:** A qualitative study utilizing semi-structured interviews with UK and Greek pharmacists was undertaken to explore their current and future roles in CVD prevention. The conceptual framework used was based on the results of the literature search conducted on the pharmacist's role in CVD risk factors and conditions. The interview schedule, which included 28 questions in three sections, was designed based on the proposed CVD prevention pathway. Purposive sampling was used, obtaining 40 participants in total for both countries.

**Results:** The analysis identified the following themes; role recognition and priority services. Both UK and Greek pharmacists played a role in secondary prevention, after risk conditions have been diagnosed. They are eager to monitor patients' blood pressure or blood glucose when necessary, and provide lifestyle advice when they dispense the prescribed medications to them. Furthermore, in Greece it was identified that pharmacists had an appetite to initiate CVD prevention services. Pharmacists were willing to start a weight management programme to help their clients to reduce their CVD risk. Therefore, a weight management service was designed and is currently being evaluated.

**Conclusion & Significance:** This study identified UK and Greek pharmacists' perspectives on their role in CVD prevention. Pharmacists' role is mainly focused in secondary and less in primary and tertiary CVD prevention. However, in Greece, pharmacists recognized a potential role in primary prevention and early screening of CVD. There is a need of more work targeted in tertiary prevention to reduce complications and the chance of a secondary or a third CVD episode as well as premature mortality.

### Biography

Reem Kayyali completed her Pharmacy Degree at Nottingham University; MSc in Bio-pharmacy at King's College London and; PhD in the Management of Thalassaemia. She was awarded the Maplethorpe fellowship for two years at King's College London. After that, she worked for four years as a Research Fellow at University College London Medical School. In 2006, she joined Kingston University and now is an Associate Professor and the Director of Research and Enterprise in the School of Life Sciences, Pharmacy and Chemistry. Her current research interests are focused on "Medicines optimization, public health and technology enabled care".

Aliko Peletidi completed her Pharmacy Degree at Kingston University London. She then completed her MSc at University of Patras in Clinical Pharmacology. Currently, she is pursuing her PhD about the role of pharmacists in cardiovascular disease prevention.

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