

## Public Knowledge and Awareness of Cardiovascular Diseases and the Expected Role of Community Pharmacists in the Prevention and Management of Cardiovascular Diseases in Penang, Malaysia

Azmi Sarriff\*, Arwa M. Amin and Hamza Mostafa

School of Pharmaceutical Sciences, Universiti Sains Malaysia (USM), 11800 Minden, Penang, Malaysia

\*Correspondence: E-mail: azmi@usm.my

### ABSTRACT

*This study was carried out to estimate the current knowledge and awareness of cardiovascular diseases (CVDs) and its risk factors among the general public in Penang, Malaysia and to explore public perception of the role of community pharmacists in the prevention and management of CVDs. Four hundred and fifty-six members of the public were given a self-administered, structured questionnaire. The questionnaire was in three languages (English, Malay and Chinese). Those who were illiterate or with prior experience/knowledge in the medical field were excluded from the study. The knowledge and the awareness scores were computed as continuous variables, and then categorized into three levels (poor, moderate and high). The analysis of the results revealed that 46%, 43% and 9% of the respondents had poor, moderate and good knowledge of CVDs and its warning symptoms, respectively. Public awareness of CVD risk factors was better than their knowledge of CVDs and its warning symptoms; in which 37%, 35% and 28% had poor, moderate and good awareness, respectively. Males were more knowledgeable than females. Education level also associated, positively, with knowledge. The majority of respondents gave favorable responses on the role of community pharmacists in identifying and preventing CVD risk factors in the community. This study provides insights into the limited knowledge and awareness of CVDs and its risk factors among the public in Penang, Malaysia and it shows the extended clinical role of community pharmacists in public health and preventing non-communicable diseases. Extensive awareness programs targeting those with limited knowledge are required.*

**Keywords:** Cardiovascular disease, Knowledge, Awareness, Risk factors, Community pharmacist, Malaysia