KEY MESSAGES

Cardiovascular risk mapping in Netherlands and Australia: a comparative analysis

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Policy context

Lifestyle-related chronic illnesses (such as diabetes mellitus and cardiovascular disease (CVD)) are predicted to rise alarmingly in Australia and worldwide over the next few decades; posing challenges that will need to be met by effective preventive medicine strategies and primary health care services planning. Chronic disease risk analysis is a key area of interest for APHCRI and the Radboudumc Department of Primary and Community Care. The Radboudumc Department of Primary and Community Care is a well-known and active research Centre analysing large longitudinal primary health care and chronic disease data in the Netherlands. This visiting fellowship provided a unique opportunity for me to build international research relationships and collaborations in primary health care research. It also enhanced my international profile as well as that of the National Centre for Geographic and Resource Analysis in Primary Health Care (GRAPHC), a spatial modelling service to support policy relevant research in primary health care and build research capacity for PHC. This opportunity had a great impact on translating evidence-based research findings into the development of policy to enable geographic targeting of preventive interventions. The APHCRI/ Radboud University Medical Centre visiting fellowship also provided an opportunity to access international primary health care data and allowed me to undertake a comparative study of geospatial analysis of cardiovascular risk. This was an important opportunity to develop my leadership in chronic disease risk mapping and gain further knowledge in the area of chronic diseases risk assessment and innovations in primary health care methods. The finding could help preventive interventions to be targeted at the right place, in the right time, to the right people. It also provides an innovative tool to help address the alarming rise of CVD in the Australian and Dutch communities.

Key messages

> GP practice data, as real life data, are important primary health care data which could be used to estimate absolute CVD risk over next five or 10 years for individuals

> There were spatial variations of CVD risk across Dutch and Australian Communities

> Lifestyles data also vary across the Dutch and Australian neighborhoods

> Linking population lifestyle and built environment characteristics with CVD risk pattern across communities provided a comprehensive picture of risk profile at neighborhood and individual CVD level

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