Australian National University

Research School of Population Health Seminar Series

MAE SEMINAR

Prevalence of modifiable cardiovascular disease risk factors in the Australian Defence Force

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Thursday 20th August 2020, 13:00 – 13:15

Zoom Link Meeting ID: 989 2327 2351 Password: 037507

Dr Olivia Williams is an MAE scholar completing her field placement with the Directorate of Health Policy, Department of Defence. She is a GP, with over 10 years' experience in military medicine and a particular interest in preventative healthcare and musculoskeltal injury. She is currently completing advanced fellowship training with the Australasian Faculty of Public Health Medicine and is passionate about encouraging evidence based health policy and practice within Defence.

Abstract

Background: Ongoing health and fitness requirements should lower the prevalence of cardiovascular disease (CVD) risk factors in Australian Defence Force (ADF) members compared to the general population, however occupational demands may negatively influence some risk factors. There is currently limited data on the prevalence of modifiable CVD risk factors in ADF members.

Methods: This is a retrospective cross-sectional study of data collected during routine health examinations of ADF members in 2018. Measures for body mass index, waist circumference, blood pressure, blood lipids, cigarette smoking and physical activity were categorized according to Australian Institute of Health and Welfare (AIHW) definitions. Prevalence for risk factors was compared between different demographic groups within ADF, and with the Australian general population using AIHW data.

Results: The study included 7602 individuals (aged 18-74 years, 73% male). Amongst the services, Army had the highest prevalence of daily smoking (24%, p<0.001) compared to Navy (19%) and Air Force (17%); and lowest insufficient physical activity (38%, p<0.001, vs Navy 56% and Air Force 58%). Navy had the highest prevalence of increased waist circumference (61%, p<0.001, vs Army 50% and Air Force 55%). When compared to the general population, unexpected findings included higher prevalence of high blood pressure in ADF females aged 18-34 (21% vs 4.9%, p<0.001) and 34-44 years (22% vs 13.8%, p<0.001) and in ADF males aged 18-34 years (23% vs 10.2%, p<0.001). ADF males had higher prevalence than the male general population of overweight (52% vs 42%, p <0.001) but less of obesity (27% vs 33%, p<0.001).

***Conclusions*:** Prevalence of CVD risk factors in ADF members differed from the general population, and between groups within ADF. This study identified concerns regarding CVD risk factors within the ADF, allowing targeted health promotion and policy interventions to ensure optimal force capability, and to focus future research.

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