

Initiating an Australian Deployment Health Surveillance Program

Susan Treloar BSocStud (Hons), MSW, MSc, PhD, Alexander McFarlane MB BS (Hons), MD, Dip. Psychother, FRANZCP, Niki Ellis MB BS, DipOccHealth, FAFPHM

This first issue of the new *Journal of Military and Veterans' Health* publishes a significant paper in the history of deployment health surveillance. The paper by Associate Professor Scott Kitchener and colleagues from the Centre for Military and Veterans' Health describes a small but seminal Australian pilot project that has informed the foundation and development of the Centre's Deployment Health Surveillance Program (DHSP). The pilot project was designed on this scale to test various aspects of the proposed surveillance methodology and it was recognized from the outset that scientific outcomes would not be forthcoming. It included Australian Defence Force (ADF) personnel operationally deployed as part of Australia's commitment to the International Force East Timor (InterFET), a peace-keeping operation, and a sample of currently serving personnel who did not deploy on InterFET. The outcomes needed were information on the logistics, efficiency and feasibility of various data sources, including the testing of data collection from the multiple sources needed to effectively monitor health and well-being and identify predictors of future health outcomes for deployed personnel.

The InterFET pilot project was the first step towards implementing the vision for the DHSP which is to "provide a systematic, prospective and ongoing means of assessing and understanding the health effects of operational deployment on ADF personnel." The program has been commissioned by the Director General Defence Health Services (now Head, Defence Health Service) based on government policy espoused by the (then) Minister for Defence Personnel. With major commitments from both the Australian Department of Defence and the Department of Veterans' Affairs, the DHSP is now established.

The very nature of deployment health surveillance research means that it is intended to provide information for Defence policy-makers, not just within the boundaries of Defence health services, but more generally, for it is likely that many aspects of deployment outside the purview of health services may affect health and well-being. These factors may

include operational tempo as well as factors specific to each deployment. We need to remember that effects of deployment may be positive as well as negative and allow for data collection that can embrace the possible benefits as well as the risk factors. On the topic of benefit, deployment health research needs to benefit serving personnel and veterans and in this sense our DHSP differs from other longitudinal epidemiological research conducted for purely scientific purposes. Substantial facilitative two-way interaction between the stakeholders and researchers is necessary for the research to be relevant and meet the needs of Defence and Veterans' Affairs policy-makers, managers, practitioners and the men and women who have served in the ADF. Particularly important is the need for empirical data from the DHSP to inform preventive interventions by the Australian Defence Force to avoid or minimize future illness and disability during service and post-discharge.

Conceptual and methodological challenges abound in this field. As in all longitudinal epidemiological research, the lead time to development and diagnosis of some adverse outcomes such as cancers and mortality is often long, and yet short-term answers are needed. Questions arise about how quickly one should respond to a short-term trend that may change over the longer-term, perhaps being a chance finding or a temporary effect of deployment. One of the basic difficulties all health researchers face is that clinical records are not kept with research in mind. Translating protocols for public health surveillance to a military health surveillance research program is not necessarily straightforward and we are fortunate to have the opportunity to learn from the experiences of other countries as well as our own pilot project.

Logistical problems can have scientific implications in terms of the ultimate power and impact of bias on the study being able to answer the research questions. The InterFET Pilot Project identified several important factors that are critical to the long-term success of a deployment health surveillance program but continue to pose challenges. In general

terms these factors are: the accessibility and utility of Defence health records; ability to successfully contact the relevant service personnel and locate them once they leave the Defence Force; ability to motivate participation from a population that is mobile, busy, and often actually deployed at the time of study in possibly remote and difficult physical and geographical settings, and also subjected to many other military demands for survey completion; and study access to chronologically accurate and complete data on exposures and interventions that may affect health and well-being.

The DHSP is now underway, with a current project investigating the health of service personnel deployed to the Solomon Islands. Projects are about to start based on deployments to Bougainville and other operations in East Timor, including some war-like operations, and a major study of deployments in the Middle East Area of Operations is under consideration for a possible start in 2008. While the program is being established on a deployment-by-deployment basis, we aim to develop a prospective, programmatic approach to data collection. The goal is to establish a database that will include health record data that proves to be valid and reliable,

and clinical measurement and self-report data at particular time points. The database will span multiple deployments and exposures. This variety of exposures is important in cohort research. Stratification of the data according to deployments and combinations of deployment will allow important research questions to be answered. These questions essentially hinge on whether specific deployment factors or overall deployment experiences are predictors of aspects of short-term and longer-term health and well-being, and mortality. The InterFET pilot project identified some likely obstacles and cleared the course for Australian DHSP research to proceed. There will be further challenges but with commitment to the DHSP by all stakeholders we are extremely optimistic about what can be achieved.

Authors' affiliations: Centre for Military and Veterans' Health, The University of Queensland (Treloar and Ellis); University of Adelaide Node, Centre for Military and Veterans' Health (McFarlane)

Contact author: Susan Treloar BSocStud (Hons), MSW, MSc, PhD, Centre for Military and Veterans' Health, The University of Queensland, Mayne Road, Herston, QLD, Australia 4006

Email: s.treloar@uq.edu.au

Centre for Military and Veterans' Health



CMVH is an internationally- unique academic, military, government and community partnership dedicated to seeking innovative solutions to military and veterans' health issues through:

Research

Collaborative research projects with business, industry, community and government

Education

High quality professional training courses for military and veterans' health practitioners and allied professionals

e-Health

Technological applications for improving health care delivery

Communication

Facilitated forums for debate and collaboration amongst medical, military, veterans and political and policy making representatives and the general public



Centre for Military and Veterans' Health
Mayne Medical School Building, Herston Road Herston QLD 4006
Web: www.uq.edu.au/cmvh Email: CMVH.enquiries@uq.edu.au
Telephone: 07 3346 4873 Facsimile: 07 3346 4878

Advancing knowledge about the health issues of Australia's defence personnel and veterans

