

### 100 Years of Military Dietetics

Derek Moore

#### Abstract

Modern military dietetics commenced in 1917, when American Red Cross dietitians worked with the United States forces serving in France, during World War One. Dietitians first served in the Australian Armed Forces in World War Two, when it was realised that dietetic expertise would be needed in the larger military hospitals being established around Australia, early in that conflict. The dietitians had important clinical and food service roles in these hospitals, such as Concord in Sydney and Heidelberg in Melbourne.

This poster will discuss the evolving roles and responsibilities of military dietitians, over the past century.

#### Biography

*Derek is an Accredited Practising Dietitian with over 40 years dietetic experience in hospital, community health, private and public health settings. Public health roles have included those of consultant to the former Food & Nutrition Program at Deakin University and Executive Officer with the Victorian Division of the Australian Nutrition Foundation.*

*Member of the RAAF Specialist Reserve since 1982. He established dietetic services at the former No. 6 RAAF Hospital, RAAF Laverton and at the Defence Force Health Centre, Victoria Barracks, Melbourne. Consultancy roles to Air Force Health Services, RAAF and Tri-Service Catering, including the Defence Catering Working Group in Canberra.*

*Reserve training roles included RAAF Health Services nutrition training, plus Catering training, initially at RAAF Wagga and subsequently at the ADF School of Catering at HMAS Cerberus.*

*Member of the Australasian Military Medicine Association, Dietitians Association of Australia, Diabetes Australia and the Coeliac Society of Australia.*

*Currently in private practice at Glen Waverley and Werribee, in addition to Reserve service.*

### A Case of Crohns Disease Vs No Crohns Disease

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#### Abstract

**Introduction:** we report a case of young pilot who developed features of Crohns disease

**Case Report:** This 31 year old copilot presented beginning January 2015 with complains of severe recurrent attacks of lower abdominal pain along with nausea and vomiting aggravated mainly by work related stress.

CT scan showed segmental colon diverticular disease associated with wall thickening, fat stranding, inflammatory fluid and peritoneal thickening suggestive of diverticulosis.

Colonoscopy showed illeocecal valve inflammation. Multiple biopsies from the site were taken and their histopathology showed (evidence of ileitis of variable intensity with edema and congestion in areas with dense chronic cell infiltrate of lymphocytes and plasma cells. Polymorphs are mild with patchy cryptitis. No granulomas. The features are of terminal ileitis of variable intensity with polymorphs and cryptitis. No granulomas.)

Colonic mucosal biopsy showed intact flat surface epithelium, normal crypt density with normal crypt morphology and mild reduction in mucin production. The lamina propria showed variable chronic inflammatory cell infiltrate of lymphocytes and plasma cells with congestion. Polymorphs are mild with patchy cryptitis. The features of skip lesion type with could be consistent with Crohns disease.

**In Summary** active inflammation in terminal ileum-illeocecal valve consistent with Crohns disease.

His P-ANCA is also elevated. 1:40 (<1:10). His WBC was 10.4 Hb 14.7. ASCA IgA 64 RU/ml (normal less than 20.) Stool calprotectin 177 borderline)

Based on above findings he was started by Gastroenterologist on Pentazon, Mebevirine, and simethicone.

Recently he has started complaining of pain in multiple joints

This copilot was grounded as his disease will be progressive and will require lifelong treatment. He was advised to be unfit for field duties and to remain at work near hospital locations.

Discussion: Crohns diseases usually occurs between age 15 and 30 but can occur in any age group(1) and is associated with transmural pattern of inflammation. Other pathological features can be skip leisions ,crypts inflammation cryptitis or crypt abscess.

Non caseating granulomas are present in 50 % of cases and are most specific to Crohns disease

Risk factors attributed are smoking and stress at work.<sup>3</sup>

Prognosis and complications:

Crohns disease is chronic disease with no cure and is characterized by episodes of flaring up of symptoms followed by subsiding.

The disease can recur and in others life can be asymptomatic with weight maintainance. There is small increase of bowel risk cancer with the disease

Therapy consists of steroids, immunotherapy and anti tumor necrosis factors.Surgical treatment is indicated if medical therapy fails or stenosis or fistulas develop.<sup>3</sup>

Aeromedical decision making is disqualifying for class1 category and for other categories is based based on several factors.<sup>4</sup>

### Biography

*Dr Mohammed Siraj Abdul Hameed MD after completing his residency in Public Health/Aviation medicine from Canada in 2003 is a practicing public health/aviation medicine specialist and participant research physician with ongoing research programs at the Armed forces Aeromedical center Dharan. He is also in the advisory board to Aeromedical Research group at the center.*

*He is currently supervising pre diabetes screening survey in air force community as well as backache survey.*

*He is also active in clinical practice and medical boards for the pilot community being referred at the Center.*

### References:

1. [https://en.wikipedia.org/wiki/Crohn%27s\\_disease](https://en.wikipedia.org/wiki/Crohn%27s_disease)
2. Jantchou P, Monnet E, Carbonnel F. Service de Pédiatrie, CHU Saint Jacques, Besançon. Gastroenterologie Clinique et Biologique [2006, 30(6-7):859-867]

3. Klotz C, Dhooge M, Oudjit A, Barret M, Beuvon F, Chaussade S, Coriat R, Abitbol V. AP-HP, hôpital Cochin, service de gastro-entérologie, 75014 Paris, France. Presse Medicale (Paris, France : 1983) [2015, 44(4 Pt 1):411-417]

4. <http://www.wpafb.af.mil/shared/media/document/AFD-130118-045.pdf> (p 265-266)

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## Damage Control Surgery and Combat-Related Maxillofacial and Cervical Injuries: A Systematic Review

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### Abstract

Damage control surgery involves rapid assessment, life-saving resuscitation, and abbreviated surgery for a patient with severe injuries. Traditionally the concept of damage control surgery has been restricted to penetrating abdominal injuries, but more recently it has been expanded to areas outside of the abdomen including the maxillofacial and neck regions. However, we know of little evidence that, when applied to injuries to the face and neck, it changes outcomes. We systematically reviewed published papers to identify those that discussed damage control in the context of combat-related trauma of the face and neck. We identified three papers that discussed the principles of managing combat-related maxillofacial injuries, all three of which were review articles that advocated the use of damage control principles in facial injuries either in isolation or as part of a multisystem approach. Anecdotal experience and opinion indicates that the concept of damage control is applicable when managing combat-related injuries of the face and neck, but no outcomes were confirmed. Further studies are required to validate the concept

### Ettie Rout – First World War Safe Sex Advocate

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*1 Auckland University of Technology*

#### Abstract

Censored by the New Zealand cabinet, referred to in the House of Lords as the “most wicked women in Britain”, and hailed as the “guardian angel of the ANZAC’s” Ettie Rout and her fervent conduct to prevent the spread of venereal disease (VD) can be hailed as one of the earliest health promoters among New Zealand Expeditionary Forces (NZEF).

Born in Tasmania in 1877, Ettie Rout moved to New Zealand with her family in 1884. A intrepid cyclist, “eccentric even by the high standards of eccentricity”, a socialist and zealous follower of health and physical theories. She was a fearlessly independent woman with a clear vision for the sexual health well before her time and the acceptance of such matters by general society.

Ettie Rout establishing the New Zealand Volunteer Sisters who’s primary responsibility was to provide alternative entertainment for soldiers to distract them from participating in vice during periods of leave.

Arriving in Egypt around the time the Gallipoli veterans arrived, the work of the sisters were predominantly based with the YMCA attempting in averting soldiers interests from the Wazz brothel district in Cairo. Her efforts are well documented.

Challenging the advice printed on leave passes and given to soldiers, she preferred direct action and made available a “prophylactic kit” containing condoms, Condy’s crystal and ointments. Initially this was met with outrage from conservative elements at home. But later, endorsement, addressed one of the every present issues, that of, the sexual health of military men on leave.

A 1919 NZEF memorandum estimated that 12,000 to 13,000 men contracted venereal disease (VD) during the First World War. The loss of effectiveness of these men and the shame associated with contracting the “clap” and being returned home and segregated, weighed heavily of both the NZDF and the affected soldiers, officers, as well as officials back in New Zealand. It is clear that Ettie Rout’s tenacious efforts to counter the effects of VD greatly reduced the infection rates.

#### Biography

*I have been a member of the New Zealand Defence Force (NZDF) and hold the rank of Major in the RNZAMC. I currently serve in the NZ Army Reserve.*

*I commenced my practice as a paramedic and ambulance sector manger in 1990, gaining my Advance Care certificate in 1996. I am trained as an Intensive Care Paramedic and am employed by Auckland University of Technology as a Programme Leader and Senior Lecturer. I hold a BHSc (Paramedicine), a Grad Dip in Emergency Management and a Post Grad Cert in Education. I am currently studying in a master’s programme.*

*I currently serve on the National Governance Board and Clinical Governance Committee of St John New Zealand.*

*With the pending regulation of the pre hospital care sector, I am strong advocate for members and the development of the Paramedic profession. I have 32 years of service with both St John and the NZDF.*

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### Long Term Use of Antidepressants in the Australian Veteran Population

**Dr Kerrie Westaway<sup>1</sup>, Mhairi Kerr<sup>1</sup>, Dr Nicole Pratt<sup>1</sup>, V Tammy leBlanc<sup>1</sup>, John Barratt<sup>1</sup>, Natalie Blacker<sup>1</sup>, Professor Elizabeth Roughhead<sup>1</sup>**

*1 University Of South Australia, Adelaide, Australia*

#### Abstract

**Objectives:** Antidepressants are most beneficial for people with severe depression and only provide modest benefit for people with mild to moderate depression.<sup>1</sup> When an antidepressant is used to treat a single episode of depression, continuation is recommended for at least six to 12 months.<sup>2</sup> In people with two prior episodes and functional impairment, it is recommended that antidepressants are continued for at least two years.<sup>3</sup> The aim of this study was to determine the number of veterans who have been continuously dispensed the same antidepressant for two or more years, a time period beyond which treatment is recommended for single episode of depression.

**Methods:** A retrospective, longitudinal study, using the Australian Government Department of Veterans’ Affairs administrative claims database, was undertaken involving veterans aged 18 years and over who were supplied the same antidepressant for two years up to June 2015. Veterans using

amitriptyline only were excluded as it is commonly used to treat other disorders including neuropathic pain, nocturnal enuresis, urinary urge incontinence or for migraine prevention. All other antidepressants were included. Results were stratified by those not receiving regular (2 or more claims) psychiatry services.

**Results:** There were 17226 persons who were supplied the same antidepressant over a two year period. Of these, 24% had a claim for two or more psychiatrist visits in the two year period, 2% had a claim for one psychiatrist visit and the remaining 74% had no claims for psychiatry services.

Of those not having regular psychiatry claims, 53% were veterans and 47% dependents. 75% of veterans and 96% of dependents were aged 65 years and over. 70% of veterans and less than 1% of dependents were listed as DVA mental health clients. 8% of veterans and 6% of dependents had a claim for a mental health care plan. Duration of antidepressant use was at least three years for the majority, with 15% having been supplied antidepressants continuously for ten or more years.

**Conclusion:** The results of this study indicate there are a significant number of veterans, not actively seeing a psychiatrist, who have been dispensed the same antidepressant for two or more years. This suggests it may be appropriate to re-evaluate the need for continued use of antidepressants in some veterans.

### Biography

*Kerrie Westaway has worked in the Sansom Institute, School of Pharmacy and Medical Sciences, at the University of South Australia since January 2013. She currently works as the medical writer for the Department of Veterans Affairs' Veterans' Medicines Advice and Therapeutics Education Services (Veterans' MATES) initiated in 2004. The Veterans' MATES program which is delivered nationally, aims to improve the use of medicines and related health services in the veteran community.*

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## Re-experiencing Trauma as a Predictor of Suicide Risk Among Vietnam Veterans with Posttraumatic Stress Disorder

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Dr Sarah McLeay<sup>3</sup>, Dr Andrew Khoo<sup>1,5</sup>, Mike Dent<sup>1</sup>, Dr Mark Boschen<sup>6</sup>

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### Abstract

**Background.** Posttraumatic stress disorder (PTSD) is a severe psychiatric condition that can develop following exposure to a traumatic event, characterised by symptoms of persistent re-experiencing of the trauma through memories or dreams, avoidance of reminders of the event, and emotional numbing, as well as hyperarousal (APA, 2013). Rates of PTSD are significantly higher among current and former military populations due to the higher likelihood of exposure to traumatic events during combat. The Australian Defence Force has reported a 12-month PTSD prevalence of 8.3% among currently serving personnel, compared to 5.2% of the general Australian population (2010 ADF report). Although PTSD has been demonstrated to be a significant risk factor for suicide attempts (O'Toole et al., 2015; Pompili et al., 2013), to date, no studies have been performed in the Australian Vietnam veteran population to determine if specific PTSD symptom clusters can be used to predict suicide risk.

**Methods.** A retrospective cohort study of Vietnam veterans who attended day programs at an outpatient psychiatric facility from 2007 to 2014 was performed. Ethics approval for the study was obtained from the Department of Veterans' Affairs (E012/008) and Griffith University (PSY/17/12/HREC). Available data included participant age, education, employment, marital status, years of service, symptoms of depression and anxiety (as measured by the Hospital Anxiety and Depression Scale), and suicide attempt history. All participants had



been assessed for a diagnosis of PTSD by registered psychologists using the Clinician Administered PTSD Scale for DSM-IV (CAPS-IV). Stepwise multivariate logistic regression analysis was performed to determine if the re-experiencing symptom severity scores (cluster B) more strongly predicted suicide risk than the other CAPS-IV symptoms of avoidance & numbing (cluster C) and hyperarousal (cluster D). After determining the most predictive cluster, demographic and psychological variables were added to the model followed by stepwise backward removal of non-significant variables to exclude the effects of potential confounders on suicide risk.

**Results.** Records from 107 Vietnam veterans were available for analysis. Mean service time was 10.4 years (standard deviation (SD), 9; range 1-44 years), and age ranged from 42-77 years (mean±SD, 61.7±4.2). Twenty-two patients had reported attempting suicide in the past. Results of the regression analysis demonstrated that the re-experiencing symptom cluster was more significantly associated with suicide risk than avoidance & numbing or hyperarousal clusters ( $p=0.032$ ). This association was independent of potential confounding variables including age, education, employment, marital status, years of military service, as well as depression and anxiety symptoms. The final regression model predicted an increased odds of suicide attempts of 6% (95% confidence interval: 0.5–12.5%) for each 1 point increase in the re-experiencing cluster score.

**Conclusion.** The re-experiencing cluster score determined as part of CAPS-IV evaluation of PTSD may be a useful predictor of suicide risk in the Vietnam veteran population.

### Biography

*Dr Madeline Romaniuk is a Senior Clinical Psychologist & Project Leader of the Veteran Mental Health Initiative at the Gallipoli Medical Research Institute. She holds a Visiting Research Fellow position at Queensland University of Technology as well as Adjunct Senior Lecturer at the University of Southern Queensland. Dr Romaniuk completed an Honours degree in Behavioural Science in 2008 and went on to complete a Doctorate in Clinical Psychology, which focused on psychometric assessment. In addition to research, Dr Romaniuk has worked as a therapist since 2009 in a variety of settings including public and private hospitals, community government services, NGOs, and private practice. Dr Romaniuk specialises in the assessment and treatment of veterans and ADF personnel suffering PTSD and associated comorbidities as well as the psychological adjustment process of leaving military service and reintegrating into civilian life.*

### References:

American Psychiatric Association (2013). Diagnostic and statistical manual of mental disorders: DSM-5. Washington, D.C.

2010 ADF mental health prevalence and wellbeing study report.

O'Toole et al. (2015). Journal of Psychiatric Research, 65:30-36.

Pompili et al. (2013). The Journal of Nervous and Mental Disease, 201(9):802-812.

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## The NHMRC CRE for Integrated Systems for Epidemic Response (ISER)

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### Abstract

The urgent nature of epidemic infectious diseases bring specific challenges in disease control. Epidemics can cause immediate health, social and economic impacts, and require complex cross-sectoral and global response as illustrated by the 2014 Ebola epidemic. Travel and globalisation mean that infections spread rapidly around the world, so that global solutions are required for epidemic control. Recent developments in artificially engineered pathogens (dual-use research of concern) pose an added complexity to global biosecurity. Global systems, thinking and capability in biosecurity has lagged behind quantum changes in science, leaving us more vulnerable than ever to infectious diseases epidemics. This Centre addresses critical systems

gaps in epidemic control.

The NHMRC Centre for Research Excellence, Integrated Systems for Epidemic Response (ISER) conduct applied systems research, enhance collaboration and build capacity in health systems research for epidemic control. We bring together experts in field epidemiology and epidemic response, military experts, international law and risk science experts, and government and non-government agencies involved in epidemic response. The ARM Network for epidemic response is central to the CRE, with the co-founders all being part of the CRE. This Centre is international, with partners in Australia, New Zealand, USA, China, Malaysia and Indonesia who work together to solve global problems in epidemic response. A pillar of the CRE is ISER Academy, which is a think-tank and convenor of important dialogue, capacity building and generation of ideas, between all stakeholders and sectors involved in epidemic response.

ISER is conducting research in three main areas: 1) Epidemic response, control and prevention, 2) Epidemic intelligence and risk analysis and 3) the establishment of the ISER academy, a think tank of epidemic experts and stakeholders for the purpose of sharing information, collaboration and developing solutions. This presentation will outline the work of ISER, the initial results of early research efforts across the three main research areas, collaboration opportunities for military personnel interested in bioterrorism, biosecurity and epidemic response research careers, and future directions for research conducted by ISER.

### Biography

*Dr David Heslop is an Associate Professor at the School of Public Health and Community Medicine, an active General Practitioner and Occupational and Environmental Medicine practitioner, and retains active advisory roles for specialist CBRN medical response capability in the Australian Defence Force, and was Senior Medical Officer for Special Operations Engineer Regiment from 2012-2015. He has had direct responsibility and experience in planning and delivering health systems in remote and austere contexts. He is a chief investigator on the NHMRC CRE for Integrated Systems for Epidemic Response. His academic teaching and research touches on complexity science, agent based and deterministic modelling, emergent complex adaptive systems phenomena, test and evaluation of systems, policy research, epidemic modelling, exotic and emerging infections, disaster preparedness and response, organisational resilience in health care, development of robust socio-technical systems in health care, and the modelling, simulation*

*and investigation of public health interventions and their support systems.*

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## The Size of the Problem

**Dr Natasha Pavlin<sup>3</sup>, Leah Rowlands<sup>2</sup>, FLTLT Tom Van Dantzig<sup>4</sup>, SQNLDR Karyn Charles<sup>4</sup>**

*1 Medibank health solutions, Canberra, Australia*

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### Abstract

Australia, like many other first world countries has a growing problem with obesity. Recent national data show that 60% of all Australian adults are overweight or obese as are one in four Australian children.

Defence Members are not exempt from this issue. In recent times the entry criteria for recruiting has changed to the figures below:

BMI	Body Fat percentage required?		
25–29.9	Overweight	Acceptable	No
30–32.9	Overweight	Acceptable	Yes

Applicants are acceptable irrespective of body fat percentage, however, the body fat percentage is to be measured and recorded on Form PM 166—Entry Level Medical Examination. Successful competition

Excerpt from Health Manual Volume 1, 2016

For those Members who at entry point are already overweight or perhaps obese there seems to be a cascade of health issues to follow. A frequent sequence of events we observe:

1. The Member trains hard at Recruits - loses weight and increases fitness
2. The Member develops overuse injuries in part due to this hard training when not fit and when relatively heavy for their musculoskeletal system - shin splints, plantar fasciitis, Achilles tendonitis/itis, compartment syndrome, stress fractures
3. The Member requires medical downgrade and rehabilitation

4. The Member regains weight whilst injured
5. Health problems are exacerbated and physical fitness is harder to recover

For some Members this cycle is repeated over and over throughout their Service Career.

For those at the other end of their Service who are medically discharged due to weight issues, we can see a trend with recurrent periods of medical downgrade throughout their career and a slow, steady increase in their BMI over time; with associated injuries and comorbidities.

What can be done about this?

At present it seems we struggle to intervene in a healthy way. The focus on BMI and the MEC system fosters a crash dieting culture and adoption of a variety of weight-loss fads which promotes weight yo-yoing.

On Tindal RAAF Base in Katherine NT we have a unique opportunity to do better. Many of our Members live on Base and eat many of their meals at the Mess. We have access to excellent PTI and Physio support and top class exercise facilities. We have begun to develop a multi pronged approach to support the Members of Tindal to maintain healthier weights and to reduce injury. Tindal Health Centre Staff are motivated to support Health Promotion and education activities as well as individual programs and monitoring. We plan to begin a pilot program this year entitled Fit For Flight and hope lessons learnt may be applicable more broadly.

### Biography

*Leah has been a physiotherapist at RAAF Tindal Health Centre for the last six years. She has an intimate knowledge of many of the Members' Health Needs and especially those with recurrent stress and sporting injuries has been a key part of their rehabilitation.*

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