

Trauma Teams in Action

by

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Abstract

Trauma Teams in Action is a portfolio of research and is comprised of three studies: systematic review, cross sectional survey and phenomenological study. Study one examines 25 years of relevant literature up to December 2006 that focused on the education and professional development of civilian trauma team members and the teamwork practices employed in civilian trauma teams. Only 12 studies were included in the results of the review highlighting the lack of quality studies into the topic. It did however provide a basis of knowledge to inform the development of a cross sectional survey. Of the 12 included studies, five related to trauma team training. In particular, information pertaining to course content and delivery methods used, for example the use of simulation. The remaining seven studies provided details of teamwork management practices. Results highlighted details regarding the use of a formed team as opposed to ad-hoc team formation, and the use of a tiering system to provide optimal care to all trauma patients by the most appropriate sized and manned trauma team. Knowledge relating to optimally sized teams, and the use of a horizontal team approach was also identified. Finally, this component of the review identified knowledge relating to the role of the leader and fact that trauma teams with a dedicated team leader were more successful than those teams who did not have an identified team leader.

A cross sectional survey (Study Two), examined the current education and professional development of health personnel in the Australian Defence Force (ADF) for the development of trauma/resuscitation team skills. Details related to deployment history and teamwork practices (team composition, scope of practice and team management style utilised) of the participants. The study involved 128 respondents from the Royal Australian Navy and the Royal Australian Air Force Health Services Branch completing an online survey. The study was limited due to difficulties in having Army personnel not being able to participate, but useful information about the education and deployment of Australian Defence Force trauma teams was provided. The study highlights that the majority of respondents who reported that they had completed trauma training and deployed as a member of a trauma team had served in the ADF for longer than 10 years. The study also provided details of the large variety of courses completed by both permanent and reserve personnel, and highlighted the fact that this may reflect inconsistencies in the training provided. Of the 80 respondents who had completed formal trauma training only 38

respondents subsequently provided details of the deployments they had been involved in as a trauma team member. As the study identified issues relating to the number and variety of courses completed, consideration of strategies to ensure consistency of training should be further examined. The outcome of the study identified that respondents feel that they were well prepared to work as members of a military trauma team in a conflict/humanitarian situation. However, the study also indicated there should be more emphasis on multi-disciplinary training and more focus on teamwork skills.

A hermeneutic phenomenological study (Study Three), examined the lived experiences of six Australian Defence Force Nursing Officers working as members of trauma teams. The interviews provided a unique opportunity to share participants' stories and experiences. Six major themes were identified from the interviews. These included; Telling their stories; The role – Who we are and what we do; The environment – Is it so different?; Training- Will it ever fully prepare you?; Working in teams – There's no 'i' in team; and Leadership – Will the real leader please stand up. The participants provided details of their stories and their want for their stories to be told. Information of the role(s) that the participants held with details regarding the uniqueness of being a military nurse and the need to feel a valued member of the team was reported on. The participants also provided details of the environment in which they work. This included details of both the physical environment in regards to the need to work with less and the fact that in the environments in which they are required to work, the need to have a place for everything and the challengers relating to the areas in which they work. The psychosocial environment they had encountered and which included details of the horrors of the environment and the ways in which they cope when placed in these situations was also provided. Details of the training undertaken by the participants, in particular the need to prepare them for uncontrollable environments was spoken of, as too, the training conducted in the field. The theme regarding working in teams provided information about the team and who made up these teams and the need to get to know the team members was spoken of. Finally, details relating to the issue of leadership was identified with information pertaining to the role of the leader in the team discussed by the participants. This study has provided a unique opportunity to gain a deeper understanding of a usually closed section of the nursing profession, that of the military nurse.

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Declarations

Statement of Originality

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I certify that no part of this work will, in the future, be used in a submission for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Ethics Approvals

Research procedures reported in this thesis received the approval of the Australian Defence Human Research Ethics Committee Approval 559–09 dated 26 November 2009 as well as from Australian Defence Human Research Ethics Committee Approval 626–11 dated 9 November 2011, and the University of Adelaide Human Research Ethics Committee Approval H-048-2011 dated 28 April 2011.

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List of abbreviations

A&E.....	Accident and Emergency
ACLS.....	Advanced Cardiac Life Support
ADHREC.....	Australian Defence Human Research Committee
ADF.....	Australian Defence Force
ALS.....	Advance Life Support
AMAC.....	Advanced Medical Assistant Course
AME.....	Aero Medical Evacuation
APLS.....	Advanced Paediatric Life Support
ARA.....	Australian Regular Army
ATCC.....	Advanced Trauma Care Course
ATLS.....	Advanced Trauma Life Support
ATNC.....	Advanced Trauma Nursing Course
ATNM.....	Advanced Trauma Nursing Management
BARS.....	Behaviourally Anchored Rating Scale
BLS.....	Basic Life Support
BMAC.....	Basic Medical Assistant Course
CCISP.....	Care of the critically ill surgical patient
CINAHL.....	Cumulative Index to Nursing & Allied Health Literature
CMC.....	Clinical Managers Course
CRM.....	Crew Resource Management
CRN.....	Critical Response Nurse
CSM.....	Company Sergeant Major
CY.....	Code Yellow
DOs.....	Dental Officers
DSTC.....	Definitive Surgical Trauma Course
ED.....	Emergency Department
EDs.....	Emergency Departments
EMSB.....	Early Management of Severe Burns
EMST.....	Early Management of Severe Trauma
ENP.....	Emergency Nurse Practitioner
ETCC.....	Emergency Team Coordination Course
FNC.....	Field Nursing Course
HDU.....	High Dependency Unit
HSB.....	Health Services Branch
IDC.....	Indwelling catheter
IED.....	Improvised explosive device
ILCOR.....	International Liaison Committee on Resuscitation
IRA.....	Irish Republican Army
JHC.....	Joint Health Command

LCDR	Lieutenant Commander
LSS	Life Support Skills
MARC	Military Advanced Resuscitation Course
MBBS	Bachelor of Medicine/Bachelor of Surgery
MEDICS	Medical Assistants
MIMMS	Major incident medical management and support
MOU	Memorandum of Understanding
MOD	Modified
MO	Medical Officer
MOs	Medical Officers
NBCD	Nuclear, Biological and Chemical Disaster
NHS	National Health Service
NO	Nursing Officer
NOs	Nursing Officers
PHTLS	Pre Hospital Trauma Life Support
RAAF	Royal Australian Air Force
RAN	Royal Australian Navy
RANR	Royal Australian Naval Reserves
RAP	Regimental Aid Post
RESUS	Resuscitation
RN	Registered Nurse
RNs	Registered Nurses
RRTC	Rural and remote trauma course
TLSP	Time for life saving procedures
TNC	Trauma Nurse Coordinator
TNCC	Trauma Nursing Core Course
TR	Trauma Response
UK	United Kingdom
UN	United Nations
US	United States
USA	United States of America
USNS	United States Naval Ship
WWI	World War I
WWII	World War II
Yrs	Years