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Preparing British Military nurses to deliver nursing care on deployment. An Afghanistan study

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SUMMARY

Background: This paper forms part of the first British Armed forces qualitative nursing research study undertaken on deployment.
Aim: To provide an analysis of the impact and effectiveness of the pre-deployment educational preparation and clinical placements provided for military nurses.
Theory & methods: A Constructivist Grounded Theory was utilised with data collected through semi-structured interviews with 18 nurses based in Camp Bastion Hospital, Afghanistan during 2013.
Results: Initial coding indicated 21 educational preparation and clinical placement categories that influenced the delivery of nursing care. Analysis of these elements led to the identification of four major clusters: Military Nursing Care; Military Nurse Education; Unique Hospital Environment and Clinical Placements.
Discussion: Educational preparation consists of completing deployable operational nursing competencies, specialist training and individual tailored courses. This strategy was viewed as proving the appropriate academic requirement. However, training would be enhanced by introducing a formalised military preceptorship programme focussing on fundamental nursing skills. Caring for children was a particular concern, and it was emphasised that educational courses must be combined with a standardised clinical placement policy.
Adequate clinical exposure can be challenging as nurses are not routinely exposed to War Zone levels of trauma in the UK. Clinical placements need to be standardised and harmonised, and located in areas where nurses cared for patients with similar injury patterns to those witnessed on deployment. Current NHS Trust placements can reduce the opportunities for employment in suitable clinical environments and diminishing the openings for collective military training. Better use should be made of clinical rotation programmes, including high dependency units, elective surgery, medical assessment units, paediatrics, and outreach teams such as burns and plastic surgery and pain management. Practice Educators should be utilised to provide education, mentorship, supervision and continuing personal development in the operational arena. The paper considers post-Afghanistan future options.

Introduction

British Armed Forces serve in Afghanistan with the International Security and Assistance Force (ISAF), and in particular with American colleagues. Soldiers (in this paper the general term for Royal Navy, Army and Royal Air Force personnel) have to constantly face advancements in military technology, including witnessing horrendous forms of death to friends, colleagues and the local population. In Afghanistan since 2001, there have been 453 British Armed forces deaths as a result of hostile action, 614 seriously or very seriously injured personnel and 7,238 aero medical evacuations (Ministry of Defence, 2014).

The British Armed Forces aspire to provide a capable workforce, able to undertake their military duties, wherever they may serve. It is therefore essential that soldiers are provided with excellent nursing care. Collectively, defence nurses form the critical mass of registered healthcare clinicians and are the largest single speciality within the Defence Medical Services (DMS) (Development, Concepts and Doctrine Centre (DCDC), 2013). Nurses are utilised from point of wounding and then throughout the rehabilitative pathway. In Afghanistan, the major hub for medical activity is Camp Bastion Hospital, which contains multi-national British, American and Danish clinical staff under British command. This hospital provides care to ISAF, Afghanistan National

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Security Forces (ANSF) and local nationals of all ages including captured persons (CPers) (Simpson et al., 2013).

There has been few qualitative research studies assessing the effectiveness of the military nurses' operational role (Kiernan et al., 2013). This paper presents the first qualitative Defence nursing research undertaken on deployment; in this instance at Camp Bastion Hospital, Afghanistan in 2013. The mental health nursing care is covered in a separate paper (Finnegan et al., 2014).

Operational Nursing Care

All nurses, whether military or civilian, and whatever discipline or place of employment, share common foundations. Trust, care, and compassion are intrinsic to all duties, and nurses must have the theoretical competencies to be safely employed within their designated scope of practice, underpinned by academic training, ethical commitment, social accountability and registration is maintained. The primary differences between military and civilian nurses' are the requirement to be an autonomous practitioner, working in hostile, unpredictable and challenging environments where flexibility is a necessity. In this paper, reference to military nurses is personnel who are serving as a Regular or Reservist in the British Armed Forces. References to defence nurses include MOD civilian employed colleagues and the wider nursing community that supports Armed Forces personnel.

Common Injuries

The military patient population are predominately young men, serving in the Army. Defence nurses routinely provide care to patients with minor injuries and medical problems such as gastroenteritis. The signature serious injury patterns of the Afghanistan conflict is poly-trauma damage, with orthopaedic problems including amputations and associated wounds including burns (Jansen et al., 2012). These serious injury patterns are dynamic; changing as either the means of delivery such as Improvised Explosive Devises (IEDs) improve or personal protection gets better. The increasing effectiveness of medical and surgical care has resulted in more casualties surviving that previously would have died. From 2006 to 09, 25% of seriously injured soldiers were categorised as "unexpected survivors," in comparison to the British National Health Service (NHS) hospitals rate of approximately 6% (Hodgetts, 2012). There are associated extra demands with nursing severe poly-trauma injuries. This has resulted in certain aspects of operational healthcare being classed as exemplary, in particular: care provided to casualties; training of staff; design of field hospitals, and rehabilitation for injured personnel (Care Quality Commission, 2012). The consequence of nursing this unique patient population is that the War Zone Hospital Ward is matchless in the type of casualties needing care, and defence nurses require a wide range of clinical competencies including wound care and pain management.

Paediatrics

Approximately 10% of all Intensive Care Unit (ICU) admissions are paediatric casualties (Inwald et al., 2013). The mechanism of injury is similar to adult admissions with penetrating head trauma, severe burns or multiple injuries, caused by IEDs and gunshot wounds. In Inwald et al.'s study (2013), the level of care required is reflected in that 73% were mechanically ventilated, 14% required inotropic support and 11% died. Of the 16 patients with predicted mortality >50% by Trauma Injury Severity Score, seven survived. No paediatrician is deployed at Bastion hospital. Specialist advice is received from the Birmingham Children's Hospital, United Kingdom (UK) paediatric intensive care retrieval service (Arul et al., 2012). Coalition soldiers admitted to Bastion are usually evacuated within 24–72 h to the Queen Elizabeth Hospital in Birmingham, UK. There is no equivalent rearward evacuation chain for locals, resulting in longer admissions.

Nursing Educational Development

There is a paucity of robust information and research about health professional education (Frenk et al., 2010), although research has indicated that an increased emphasis on bachelor's degree education for nurses could reduce preventable hospital deaths (Aitkin et al., 2014). In the military, the workforce planning and manning requisite, including post registration education and then specialist cadre requirement, are defined to provide sufficient numbers of nurses to meet the estimated operational necessity. That is the number of nurses from different specialities that are essential to provide the correct level of support to British Armed Forces troops; allies and potentially the local population.

Educational delivery within the British Armed Forces is via a Department of Healthcare Education (DHE) that provides support to military pre-registration nurse training and supplies a post registration BSc (Hons) in Defence Healthcare Studies. This is in line with UK Nursing and Midwifery Council guidelines (Nursing and Midwifery Council, 2010). This supports the DMS nursing educational programme which is four fold.

The British Armed forces recruit student nurses who complete either adult or mental health nurse training; delivered at Birmingham City University in conjunction with the DHE. In a study by Bell (2013), military students were classified as high achievers, and identified themes subsumed under the headings of image, ethos, environment, discipline, support, welfare and a civilian versus military way of thinking.

Once qualified, military nurses undertake a period of NHS preceptorship and work towards completion of a clinical proficiency requirement defined within the Defence Operational Nursing Competency (DONC) document (Ministry of Defence, 2010). The DONC is in the format of a workplace learning booklet, graded at Levels 2, 3 and 4. The first edition was based on Bloom's et al. (1956) Taxonomy, whilst the DONC re-write, which will be published in August 2014, is based on Benner's (1984) Novice to Expert continuum. The framework provides an architecture for professional advancement, proof of competence and credentialing and selection for specialist advance practice (See Table 1).

There are financial awards linked to successful completion of the respective levels. This is a similar appraisal structure to the Knowledge Skills Framework (Department of Health, 2004). The expectation is that nurses will achieve the entry level grade 2 within one year of qualification or recruitment and ensures a common benchmark to be achieved before nurses are deemed proficient to deploy. DONC specialist competencies, skill sets and knowledge are graded at levels 3 and 4, and are aligned to clinical experience and post graduate training. Specialist training and Masters/Higher level Degrees are provided by civilian Universities and supported by the DHE. Finally, the role for every deployable nurse is assessed and educational requirements indicated. Once a nurse has been identified for mobilisation, then their personal profile is evaluated and bespoke courses such as Advanced Life Support (ALS) is either provided internally or external suppliers are sourced.

Educational evaluation is draw together in a concentrated 2-week pre-deployment programme. This Mission Specific Validation (MSV) Hospital Exercise (HOSPEX) is completed in a replica Camp Bastion Hospital based within the Army Medical Services Training Centre (AMSTC) in York, UK. Clinical simulation can be utilised to improve patient safety, especially in conjunction with adverse-event reporting and analysis (Gaba, 2007). Staff work through scenarios in real time, and involves macrosimulation. Whilst no empirical studies have been undertaken to ascertain if this military educational model is effective, it has been cited as being an innovative and invaluable resource (Hayes and Ryan, 2011). Anecdotally it does appear to offer a level of consistency to ensure personnel are assessed as fit for task and able to deploy.

Of note, Service needs can place constraints on the way nurses attempt to maintain basic skills competence and access Continuing Professional Development (CPD), because the workforce is geographically spread, may be deployed and undertaking a number of roles in order to develop militarily (Clifford, 2007).