Entering a new paradigm: emergency nursing into the 21st Century*

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Two National Audit Office reports were published in February 2010. The first was highly critical of emergency healthcare delivery in England and highlighted the ways in which staffing and resource allocations could be areas that could have a negative impact on morbidity and mortality. The second report highlighted the significant positive impact that current military emergency care is making with focused training and development of all professionals contributing to the care delivery strategies. This article evaluates the two publications and emphasises on the contribution that appropriately educated, prepared and trained emergency nurses could make within the NHS context.

Key words: major trauma; specialist ED nurse; military nursing

Introduction

The National Audit Report (NAO), Major Trauma in England HC213 (2010a), is damming. It highlights deficiencies in the treatment of patients suffering major trauma in the English context, but the finding could easily be extrapolated across the other countries of the UK. Even more damming is the stated fact that numerous studies highlighting the risks to patients and the deficiencies in their care have been undertaken since 1988! That so little has been done to address the problems associated with morbidity and mortality (20% higher than the USA), while truly disappointing should give the Emergency Department (ED) services across the UK a greater impetus to refocus, concentrate and devote themselves to solutions that are intent on meeting the needs of the patients who have suffered major trauma. These solutions should be innovative, bold and original acknowledging the full range of resource available to the ED community. This may well mean enabling ED nurses to play a more inventive, imaginative and progressive role in the delivery of the care so needed by this group of patients. A second NAO Report (NAO, 2010b), Treating injury and illness arising from military operations HC294 (2010), was highly complementary about the manner in which service personnel were treated from the point of wounding through to rehabilitative care. This paper explores the potential for appropriately educated and trained members of the nursing profession to formally take on leadership roles in the acute trauma situation.

Specialists versus Generalists?
The ED nurse or the nurse that works in ED

NAO HC213 (NAO, 2010a) states that ‘... hundreds of people who suffer serious injuries are dying due to poor care’. Clearly, there is a need to address the manner in which ED care is delivered. Professional practice requires its practitioners to be both responsible and accountable for their practice and, in
doing so, is built on the foundation of competence and accountability. The role of the practitioner must continue to expand in light of experience, developing expertise and in search of excellence. There is little new in thinking with regards to the ED nurse although action based on contemporary evidence is clearly required in light of the two NAO reports. In her two papers of 1997 Sbaih was suggesting that there were in fact two types of nurse engaged in ED work. The differentiation that she makes is that there are nurses who are clearly identifiable as ED nurses, and there are nurses who happen to work in an ED setting but are not as readily identifiable as ED nurses. The distinction is important if in response to the NAO reports there is to be a real and tangible improvement in the delivery of trauma care, and if ED nurses are to play a significant part in the necessary moves that will enable these advances.

Sbaih (1997a,b) suggests that the ED nurse is one who understands the totality of ED nursing work and one who understands the maxims and nuances that underpin such work. She further proposes that ED nurses ‘...act in patterned and motivationally coherent way’ and that they use a particular language and method of working that identifies them as ED nurses. What is clear is that competence is maintained by actively ‘... seeing, hearing, asking and clarifying’ in a professional, focused manner, and that certain strength of character and perhaps personality were essential in what makes the ED nurse.

The need in addressing the damning NAO HC213 (NAO, 2010a) report, therefore, is to identify the ED nurses within our ED communities and enable them to formally take on roles that they could competently fulfil. By this we mean formal identification and formal preparation and not the ad hoc view that when it gets busy ED nurses ‘A’ can take on additional duties that they are not readily prepared for, but ‘because they know their stuff’ they can cope. This is not good enough and if real role and function are to be effectively managed then formal recognition is essential. Indeed, it could be argued that it is required given the findings of the NAO HC213 (NAO, 2010a) where statements like ‘I think there’s very good evidence now that if we carry on as we are, with the sickest people in the hospital being looked after by the most junior doctors, you get poor outcomes’ tell the story in stark form. By contrast, military ED practice is consultant led with ED nurses playing a full and recognised part in the challenges of trauma care. If the lessons are to be extrapolated appropriately then it is clear that there is a need to identify, train, educate and enable the civilian ED nurse in a similar fashion. The other major difference in military practice is that skills and equipment are embedded at the point of wounding so that early interventions are timely and concentrated.

**Theory, practice and care in nursing**

If the ED nurse is to be enabled in order to ensure the best outcomes for the trauma patient then preparation of the ED nurse must acknowledge that there must be foundations of knowledge and skills that are required. One without the other is not an option if the concerns of the NAO HC213 (NAO, 2010a) are to be addressed. It is essential to bear in mind that experience is not simply exposure over time. The age old quote from Kant (1999) still holds true in this respect ‘Experience without theory is blind, but theory without experience is mere intellectual play’. A more recent example of this problem within the nursing profession comes from Kramer (1974) when reporting on the progress of a new undergraduate programme of nursing study that was made up of primarily theoretical preparation, she made the observation that while the neophyte nurses in question were very well prepared in terms of theory they could ‘analyse and synthesise but could not catheterise’. They simply did not have the tactile skills or the practical experience at the requisite level. Nurses work in a relatively controlled environment and these nurses were overwhelmed by their realisation that they could not function at the level that their preparation should have allowed them to. What then is the implication for the ED nurse? Their environment is one of unpredictability, challenge and extraordinary circumstance. A paralysis of function here could be even more disastrous and the reality shock, as experienced in Kramer’s example, much greater and with potentially greater consequences for those ED patients requiring timely and highly skilled interventions that have a sound theoretical basis.
Patchy provision across the UK

As stated earlier, ED services in the UK must concentrate and devote themselves to solutions that are intent on meeting the needs of the patients who have suffered major trauma. Within the UK, however, trauma management and the education and training of emergency nurses is highly variable.

According to the Trauma Audit and Research Network (2010) trauma is the leading cause of death among children and young adults in the UK. They acknowledge, however, that there are variations in the success of treatment in different hospitals.

In a report on trauma care, the National Audit Office (2010a) found the death rate in England for major trauma patients to be 20% higher than in the United States. In addition, the report highlights unacceptable variation in major trauma care in England depending upon where and when people are treated. Criticising trauma provision in England, National Audit Office (2010a) maintains that:

‘Current services for people who suffer major trauma are not good enough. There is unacceptable variation, which means that if you are unlucky enough to have an accident at night or at the weekend, in many areas you are likely to receive worse quality of care and are more likely to die. The Department of Health and the NHS must get a grip on coordinating services through trauma networks, on costs and on information on major trauma care, if they are to prevent unnecessary deaths.’ (p. 3)

The poor quality of trauma care is not limited to England, with other parts of the UK lagging behind USA, Canada, Australia and European countries, where regional trauma centres have been instigated. This variation in trauma care needs to be urgently rectified if preventable deaths and poor care are to be avoided. At present, the sickest trauma patents are often seen by inexperienced, junior clinical staff. Too often, trauma patients are allocated to an admitting nurse irrespective of the nurse’s clinical skills or experience. Whilst this may be a good learning experience for the nurse, this situation may contribute to unnecessary deaths.

To address the problem of poor trauma care, the Trauma Audit and Research Network and the National Audit Office (2010a) have both suggested quality improvement initiatives. These initiatives fall into the following broad categories:

- Improved pre-hospital communication and transfer to appropriate centres
- The establishment of specialist trauma centres
- Trauma network initiatives
- Appropriate education and training for all staff involved in major trauma care

Current research supports these initiatives, for example, in a study into trauma provision, Davenport et al. (2010) maintain that high estimates of preventable death rates have renewed the impetus for national regionalisation of trauma care. Institution of a specialist multi-disciplinary trauma service and performance improvement programme was hypothesised to have resulted in improved outcomes for severely injured patients. By performing a comparative analysis of data from the Royal London Hospital (RLH) trauma registry and Trauma Audit and Research Network (England and Wales), 2000–2005, the authors conclude that institution of a specialist trauma service and performance improvement programme was associated with significant improvements in outcomes that exceeded national variations. In addition, Tan et al. (2005) maintain the need for auditing trauma service provision in order to track and highlight poor trauma care and make recommendations for future improvements.

Of course, appropriately equipped and staffed trauma centres means that clinical staff will have the requisite knowledge and skills to deal with any major trauma. However, at present, there is no consistent approach in the preparation of emergency clinical staff within the UK. According to Buchan and Edwards (2000) this lack of coherency is particularly obvious in the training of senior emergency nurses and ED nurse practitioners. Although regional in-service training and education is valuable, there needs to be a nation-wide ED nurse educational programme that is competency based, can equip nurses with necessary core skills and offers consistency. The NI report highlighted that many EDs in UK do not have specialist multi-professional teams providing care, and some can only provide a limited range of services.

It is hoped that the development of trauma networks and educational programmes improve the current variability in UK trauma care.
Preparing the ED nurse for role and trauma leadership

Benner (1984) explains that experience is critical. In emphasising the fact that experience is not simply exposure over time she highlights that it is the ‘...refinement of preconceived notions and theory through encounters with many actual situations that add nuances or shades of difference’ (p. 36). She further makes the important distinction between the value of theory and its application to practice. Theory is that which can be ‘...made explicit and be formalised but practice is always more complex and presents many different realities than can be captured by theory alone’ (p. 36). This observation is fundamental to our thinking and informing the development of education and training for disaster healthcare professionals.

Clearly, expert input of the educational professionals is essential, but in itself it is simply not enough. The need for the bridge that links this experience to the realities of the field (ED practice) is essential. In this professional educators and practitioners must be able to inform such a link through personal detailed experience and multiple exposures to the field and professional educational strategies. Benner (1984) refers to the application of the clinical dialogue and the fact that it is this application over and above the application of theory alone that makes for a meaningful result. In the same way the application of theory can be applied to the disaster situation, both in simulation and when faced with the realities of the field. As Benner (1984) states, the ‘...theory guides clinicians and enables them to ask the right questions’.

If one looks at the model below (Figure 1) then clearly there are the constituent component parts. We contend that the novice and advanced beginner would be able to function in a lower order manner by simply following the components in a sequential and methodical manner. In contrast, the proficient and expert practitioner perceives situations as wholes rather than in terms of discrete separate parts, and performance is guided by maxims (maxims are guiding general principles and strategies developed following significant experience within the domain, and the construction of schema for solving complex domain specific problems). The proficient and expert practitioner understands the situation as a whole because they perceive its meaning in terms of long-term goals.

The proficient and expert practitioner has learned from experience what typical events to expect in a given situation, and more importantly how to amend, adjust and modify plans in response to events as they unfold. Through increasing experience and associated knowledge construction in context, there is a developing holistic understanding of the domain of practice that the practitioner engages with, while all the time improving the practitioner’s decision-making skills in line with ensuring appropriate and novel solutions to complex and multi-faceted situations. In my profession this could well describe the role and function of the consultant nurse.

The proficient and expert practitioner utilises maxims, those higher order principles and guiding rules of conduct to inform practice. These maxims reflect nuances of the situation that are commonly unintelligible to novice and advanced beginner practitioners (or the nurse who works in ED) as they mean one thing at one time and something quite different at another. The point is that it requires substantial experience and expertise within the domain to firstly recognise and understand the significance of the nuances of the situation, and to secondly develop maxims to guide practice as a consequence of the data. This then is the domain of the ED nurse.

Therefore, when a series of apparently unconnected phenomena begin to materialise in an ED situation it requires experience and expertise to recognise them collectively as hallmarks of an emerging problem or set of problems (Kelley and Sewell, 1988).

Military nursing in the 21st Century

The 21st Century has seen unprecedented advances in the delivery of advanced medical interventions in the most challenging, austere and non-permissive environments across the globe. It is against this backdrop that the clear and evident need to ensure that those professionals charged with the delivery of this type of healthcare are prepared for their role in the fullest of terms. The lessons are there for the ED community and nurses must also be at the forefront of applying these lessons from conflict into the civilian ED practice.
Innovations in the delivery of high calibre healthcare in this most challenging environment has seen new terminology being utilised in the realm of defence medicine. The ‘unexpected survivor’ (Hodgetts and Mahoney, 2009) is a new term in the parlance of defence medicine and has come into being because personnel with massive life threatening injuries are being saved by timely interventions and the utilisation of new technologies. Civilian practice can and must take note of these innovations and incorporate best practice. Again, Hodgetts and Mahoney (2009) emphasise this when asserting that ‘...military pre-hospital care encompasses a wide range of clinical capabilities from individual first aid through to specialist, multi-disciplinary teams’. The need for forward and focused interventions at the point of wounding are essential in the modern battlespace and lessons identified from recent conflicts have shown such interventions to be very effective (Brodie et al., 2007; Beekley et al., 2008). With the advent of the combat application tourniquet, novel haemostatics and robust fluid replacement strategies (including adult intraosseous infusion systems) coupled with sound analgesia protocols there now exists the realistic chance of survival from injuries that in the past would have been considered unsurvivable. The fundamental difference between civilian and military...
practice that makes this possible is the fact that within the military system care starts at the time of injury with skills and equipment embedded at the point of wounding (Hodgetts and Mahoney, 2009). In the light of these advances and innovations in the delivery of high calibre healthcare in austere and challenging environments the rationale for battlefield advanced trauma life support has been thoroughly revised (Joint Services Publication, 2008). With this backdrop providing core thinking, the ED community must build on these revolutionary factors. The ED community must invest and provide practitioners with knowledge, skills and the analytical capacity to function at the highest level.

Within military healthcare contexts there is also an increasing need for suitably educated and skilled practitioners. This is the case across the spectrum of conflict from peace keeping operations through to focused military interventions. The preparedness of practitioners is therefore paramount across a range of complex environments. Given the complexity of military deployments it is critical that preparedness engenders necessary understanding of not only the delivery of high levels of clinical care in demanding situations but also an understanding of the socio-cultural environment within which such operations take place.

Possible solutions

The ED community must act to promote the management and synthesis of knowledge through a critical understanding of the complex nature of healthcare in austere environments. The delivery of high standards of health care in such environments requires the practitioner to have analytical skills and the ability to transfer complex theoretical knowledge into comprehensive and appropriate patient care, sometimes within demanding time constraints.

With the role of health care practitioner in the delivery of healthcare in austere environments becoming more complex, it is essential that there is access to appropriate and specific high-level education. The provision being proposed will ensure practitioners are facilitated to meet these demands effectively and efficiently. Education and training form part of the clinical governance agenda adopted by NHS and indeed military health care providers and such providers have to ensure that staff are educated to an appropriate level so that care is clinically effective and based on current evidence.

Conclusions

If nurses are going to play a more innovative, progressive and pivotal role in the delivery of major trauma care, then they need to be well educated, well trained and linked with an appropriate trauma network. In addition, collaborations with pre-hospital personnel and other trauma providers will ensure nursing is at the forefront of timely and effective trauma care.

References


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