The Pre-Hospital Emergency Care Course (PHEC) A TA Initiative

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SUMMARY: The Pre-Hospital Emergency Care (PHEC) course is a 3 day course run by BASICS Education for the Royal College of Surgeons of Edinburgh, Royal College of Nursing and the NHS Ambulance Service. PHEC teaches and examines the care of medical, trauma, paediatric and obstetric patients in the *pre-hospital* environment. 243 (The Wessex) Field Hospital has held two of an intended ongoing programme of PHEC courses and they have proved suitable for medical and dental officers, nurses and combat medical technicians. We believe the courses to have a valuable role in the ongoing training of CMTs as well as medical and nursing officers. Furthermore, being nationally recognised qualifications we hope the courses will have a positive effect not only on personnel retainment but on recruitment. Demand for places has far exceeded availability and we believe will continue to do so as these courses are not only highly relevant to TA service but to civilian career progression. Furthermore, as the humanitarian role of the armed forces becomes more and more important the PHEC course will become increasingly relevant to regular army personnel not only during their service but also after leaving the forces. The ultimate beneficiaries will be our patients.

Introduction

The Diploma of Immediate Medical Care of the Royal College of Surgeons of Edinburgh (DipIMC, RCSEd) was introduced in 1988 in order to encourage and assess a high standard of medical practice by doctors working in the pre-hospital environment. At the same time it was recognised that there were many others working outside hospital who, since they were not registered medical practitioners, were unable to take this examination. As a consequence of this, following widespread discussions, a proposal was put to the Royal College of Surgeons of Edinburgh to establish a multidisciplinary course the aim of which would be to improve the care of those injured or taken seriously ill in the immediate care environment. It was also intended that a major component of the course would be to emphasise both a multidisciplinary approach and the capabilities of the various emergency services involved in providing care of this kind. The first PHEC Course was held in April 1993 at the National Training Centre of the Scottish Ambulance Service. Since that date, 22 courses have been held and both the course and the accompanying manual have developed following comments by both students and instructors. The course and manual are now updated annually, most recently in December 1995 when, for example, a new lecture on burn care was introduced. The course is now recognised by the British Association for Immediate Care (BASICS), the Royal College of Nursing Accident and Emergency Nursing Association and the Ambulance Service, as well as by the Royal College of Surgeons of Edinburgh.

The PHEC Course

The PHEC Course is an intensive course taking place over three days; approximately six weeks before the course each candidate receives a copy of the 228 page course manual and is expected to be reasonably familiar with it when the course commences.

Fig 1. Advanced Airway Skill Station.

The course programme is as shown:

DAY 1

0900	Assemble	
0905	Course administration	
0910	Course Introduction	(lecture)
0920	Pre-hospital care	
0950	The assessment of the problems faced in Pre-hospital Emergency Care	(lecture)
1015	Kinetics and Mechanisms of Injury	
1050	Coffee	
1115	Adult Basic Life Support	(lecture)
1135	Adult Basic Life Support	(skill stations)
1245	Lunch	
1345	Patient Assessment	(lecture)
1415	Airway Management in Emergency Situations	(lecture)
1435	C Spine and Head Injury Management	(lecture)
1515	Tea	
1530	Video presentation	
1545	Adult Airway (basic) and Patient Assessment	
1625	Limb stabilisation	
	Fluid replacement	(skill stations)
1710	Video presentation	
1725	Skill stations continued (see 1545 and 1625)	
1845	Finish	
1900	Supper	
2000	Breathing and Ventilation	(lecture)
2030	The Collapsed Patient	(lecture)
2100	Trauma moulage	(demonstration)
2130	Close	

DAY TWO

0815	ACLS Guidelines	(lecture)
0835	Cardiac Emergencies and the Immediate Management	(lecture)
0900	Megacode	(demonstration)
0915	ACLS	
	Spinal Stabilisation	(skill stations)
1015	Coffee	
1030	ACLS	
	Spinal Stabilisation	(skill stations)
1130	Video presentation	
1145	Emergency Management in special situations - Obstetrics	(lecture)
1215	Emergency Management in special situations - Paediatrics	(lecture)
1300	Lunch	
1345	ECG Recognition	
	Adult airway (advanced)	
	Patient transport	(skill stations)
1600	Tea	
1615	Shock	(lecture)
1645	Management of pain in pre-hospital situations	(lecture)
1715	Multiple casualty situations	(skill stations)
1845	Finish	
1900	Supper	
1945	Optional skill stations with instructors	
2030	Close

Fig 2. Managing a Pre-Hospital Cardiac Arrest.

DAY 3

0815	Extrication	(lecture)
0835	Burns	(lecture)
0845	Practical skills	
	Paediatric Basic Life Support	
	Should we resuscitate	(skill stations)
1100	Coffee	
1120	Examination	
1300	Lunch	
1345	Examination	
1515	Tea (with faculty meeting)	
1615	Results	

Faculty

The course is taught by a minimum faculty of eight with, in addition, an administrative assistant. This allows two instructors per skill station when four are being run simultaneously. Two extra faculty members are present on the third day to allow four pairs of examiners and two markers. The faculty is provided by BASICS Education and selected from a pool of appropriate people. Examiners are selected from course candidates who perform exceptionally well and who also have both an aptitude for teaching and experience in immediate care. Doctors with appropriate experience and teaching skills may be selected as examiners without having completed a PHEC course if they hold the Diploma in Immediate Medical Care. A representative of the Royal College of Surgeons of Edinburgh is customarily present on day 3.

Although a pool of 'military' faculty members will be acquired as courses proceed, the faculties will remain predominantly civilian in order to ensure consistency and external validity.

Assessment

The assessment is searching and wide ranging being composed of the following parts:

written:	multiple choice paper
	triage exercise
	short answer paper
	slide paper
clinical:	trauma moulage
	megacode (ACLS demonstration)

Candidates are marked using the standard Royal College of Surgeons of Edinburgh system. Any candidate with a borderline fail on either of the clinical elements may be asked to resit that component of the examination. Borderline fails in both the clinical components cannot be retaken and a clear fail in either clinical component is not remediable. All candidates are discussed by the faculty at the end of each day in order both to identify "high flyers" (and thereby potential instructors) and also, and more importantly, to identify any candidate who is struggling with all or part of the course. With the provisos given above regarding the clinical components, the overall pass mark is 60%. All candidates have a "mentor" from the faculty who is also responsible for giving them their result: the results of each section are given to each candidate individually as well as the overall result. Each candidate has an opportunity to discuss them should he wish.

PHEC and the Army

The first 'Army' PHEC course was held at the Duchess of Kent's Military Hospital (DKMH) Catterick in March 1995 for 10 CMT 1s and 7 registered nurses: the pass rate was 82.34%. Shortly after this 219 Field Hospital (now 243, The Wessex, Field Hospital) held its first PHEC course in July 1995. Twenty four candidates took part, 4 medical officers and 20 nurses (officers and other ranks). The course was held in civilian dress in order to encourage cooperation and team leading in all candidates irrespective of rank. Two candidates failed (pass rate 91.7%). A second PHEC course (for 243 Field Hospital) was held in January 1996 for 25 candidates (3 medical officers, 1 dental officer, 20 nursing officers and 1 CMT 1). Four candidates failed (pass rate 84%), the single combat medical technician successfully completed the course. 243 (The Wessex) Field Hospital has further PHEC courses scheduled for November 1996 and November 1997.

Conclusion

We believe that the PHEC course is ideally suited to the

Army Medical Services, both territorial and regular and hope to provide one course a year (for our unit) after our initial more intensive programme. PHEC is the only course which teaches and assesses the whole range of pre-hospital medical skills (BATLS and Pre-Hospital Trauma Life Support (PHTLS) are confined to trauma care) and yet it is suitable for medical, dental and nursing officers as well as combat medical technicians. Indeed we believe it may be particularly appropriate for CMTs as it provides a level of advanced skills and educational achievement which fits into the "vacuum" following successful attainment of CMT 1 status.

As a civilian course recognised by nursing and medical professional organisations places on PHEC courses are highly sought after (approximately 3 candidates per place for our courses) and we hope will have a positive effect not only on recruitment but also on retainment. Nurses who successfully complete the PHEC course are entitled to UKCC continuing education points.

There can be no doubt that it can only be to the advantage of the TA medical services if we can provide qualifications that are not only appropriate to our military services but also valuable for career progression in civilian life. We are aware of a number of requests from employers to TA members that they obtain a place on one of our courses.

A considerable amount of interest in PHEC courses has also been shown by a regular personnel and we believe that PHEC is not only highly relevant to the rapidly changing role of the Army but to its members on their return to civilian life.

243 Field Hospital will by November 1996 have the largest number of PHEC trained individuals of any organisation in the United Kingdom: professionals trained and assessed in the management of pre-hospital medicine and trauma. Our present and potential patients can only benefit.

I would like to thank Brigadier K Stephens late RAMC and W02 T Nuttall, Duchess of Kent's Hospital for their assistance.