Abstract

In December 2015 a team of Oxford Brookes Paramedic Science lecturers attended the Turkish Paramedic Associations third international rally, a paramedic practice competition, and congress. They were invited to attend as representatives of the United Kingdom, alongside colleagues from Canada and Germany to share knowledge of paramedic education, practice and research with Turkish colleagues to enhance patient care. Attendance at these events provided an opportunity to learn about the culture and practice of other paramedics. As a team they were highest placed out of the international competitors and performed the highest-rated advanced life support in an event held on the beach next to the sea.

The conference themes were of interest to Turkish colleagues whose Emergency Medical Services are facing many similar challenges to those experienced in the United Kingdom; demand for ambulance responses is increasing and the current model of vocation training is moving to one based in higher-education. Following this event SPIRES, Student Paramedic International Rally of Emergency Simulations will be established to showcase paramedic education and practice internationally student paramedic competition and conference.

Introduction

In early December 2015 a team of Oxford Brookes Paramedic Science lecturers represented the University at the 13th Turkish International Paramedic Congress and Rally in Antalya, Turkey. This four day event featured a three day conference during which Turkish national and international speakers presented about paramedic professional developments within their country, highlights on research and plans for future improvement. Alongside the conference was a one day international rally, where national and international teams competed against each other in a range of simulated scenarios.

International Paramedic Rally

The rally competition was held one day prior to the conference; it involved four clinical scenarios during which international and Turkish teams’ practice was assessed during a competition to determine the best team. With fifty teams competing in the rally, it required a huge amount of organisation and lasted from early morning until late night. Each scenario was sited in an unusual part of the venue where teams encountered simulated patients with a variety of moulage injuries. At each a judging panel assessed the team’s performance and awarded points based upon specific treatment aspects and overall management. There was also considerable interest from conference delegates and bystanders who independently judged the performance of each team.

It was a thoroughly enjoyable to participate in the rally and each member of the team had an amazing experience. Whilst there were four team members, using response equipment brought with us from England, only three people participated in each scenario. There were several people watching, including student paramedics from Turkey or even just holiday makers at the hotel! Due to working commitments we were not able to practice as intensively as the Turkish teams, many of whom spent several hours preparing for the Rally.

As a Turkish language competition we needed an interpreter to provide translation into English; this did cause some challenges and disruption to the scenarios whilst we waited for information and the assessors attempted to understand our actions. Each scenario had several differences from our practice in England; the defibrillators used had manual paddles which we were unfamiliar with and required use after a few-minutes of familiarisation to their operation. For those of us in paramedic education this lack of training and potential for dangerous use of live defibrillators seemed an opportunity for some improvements to be made. Adjusting rapidly to equipment which
was different and unfamiliar for use during the rally posed another challenge, but added to the experience.

We started with the first scenario, a cardiac arrest on the beach. The initial information allowed us to determine that the patient had collapsed but no further details were provided. Following a brief period of resuscitation the patient demonstrated a return of spontaneous circulation; the scenario had been designed with additional complexity, during our management it became apparent the patient was bradycardic, hypotensive, hypothermic and hypoglycaemic. The second scenario required management of a patient found responsive but lying next to a swimming pool. It became apparent she was suffering from a suspected supraventricular tachycardia but there was no 12-lead ECG available. This could not be reverted into a sinus rhythm with vagal stimulation or adenosine administration; she required sedation and cardioversion.

This provided an interesting insight in to the scope of practice possessed by Turkish paramedics. Whilst it is rare for Turkish paramedics to have completed a higher-education degree they are able to sedate and administer a wider range of drugs than Health Care and Professions Council registered paramedics. The third scenario was a patient suffering from traumatic injuries having fallen on a building site from height. He remained responsive but confused, complained of neck pain and difficulty in breathing and had a compound tibia and fibular right leg fracture. This required decompression of a tension pneumothorax and movement on to an orthopaedic stretcher, before moving onto the final incident. The fourth scenario was a major incident caused by a bus crash requiring management of the scene and triage of several patients.

Participating in these scenarios provided an interesting opportunity to meet and discuss paramedic practice with Turkish and international colleagues. Following completion of the rally there was an award ceremony, as a team we were delighted to be awarded with individual medals and a trophy for being the best team for the cardiac arrest scenario.

**Turkish Prehospital Services**

The Republic of Turkey is a transcontinental country linking Europe with Asia and has a population of approximately 75.8 million people (United Nations 2015), it’s capital is Ankara where over 10 million of its population live. Unlike the United Kingdom, with an overall ageing population, Turkey’s population tends to be younger and only 6% of the population are older than 64 years of age.

This population variation provides Turkey’s healthcare provision to provide a different service, based upon a different etiology of cases seen, to that of the United Kingdom, with the focus upon pre-hospital treatment followed by transportation to a hospital. The Turkish health care system is administered by the Turkish Ministry for Health who control and direct overall operation of the Countries ambulance response. Turkey uses a 340 million Euro budget to maintain its Country wide ambulance provision. Further financial support comes from the National Social Security system, Social Aid and Solidarity trust and the traffic assurance foundation.

Turkey has an established Emergency Medical System (EMS) with it contemporary model originating in the early 2000’s from a Franco-German model of emergency care with doctors and Nurses the prime responders dispatched to emergency situations from around 600 ambulance stations. Recently pre-hospital services have moved towards an increasingly structured model of standardised national access following an Anglo-American model of emergency care provision and since 2005, supported by the Turkish Ministry for Health, Emergency Medical Technician and Paramedic roles have been developed. Supporting this change has been an expansion in the pre-hospital workforce, number of ambulance stations and a single point of access to EMS via the 112 call system.

Much like the United Kingdom Turkish EMS systems have performance measured through a response time target. The expected response time for a rural settings that an ambulance is expected to arrive in less than 30 minutes whilst in non-rural settings it’s expected to be less than 10 minutes. For life-threatening emergencies the activation time for ambulances is up to 2. Each 112 call center has a supervising physician and they make the decision about whether or not an
ambulance will be dispatched; this means that the majority of 112 calls do not receive an ambulance response.

Currently it is estimated that 30,000 paramedics work in Turkey with over 9000 trainees undertaking an associate program at one of 95 Universities offering paramedic development.

Turkey’s paramedics work to National guidelines that are published by the Ministry for Health following European Resuscitation Council and American Heart Association protocols. Turkish Paramedics practice is not autonomous and some interventions require permission from a supervising physician in the 112 call center. The wages for Turkish paramedics are funded centrally by the Ministry of Health as these are above average and there are high-levels of employment- many people wish to become a paramedic. In some areas Turkish paramedics work a 24-hour shift pattern, meals and uniform are frequently provided although sometimes individuals choose to replace issued equipment for items that are seen as more comfortable e.g. safety boots for trainers.

There is a similar discussion around education in Turkish paramedics familiar to the United Kingdom. Current models of training for a Turkish paramedic follows a modular approach, undertaking a 40 day certificated course which consists of basic life support, advanced life support, trauma management, disaster medicine, driver training and ambulance team work. At the conference Sinan Nural, Chairman of the Turkish Paramedic Association, suggested that Turkey should move towards undergraduate education programmes with specific specialisation for its paramedics.

Familiar to United Kingdom paramedics it was proposed this would improve their patient assessment and management skills, address areas of wider development such as enhanced critical decision making ability. Mr Nural is advocating for a more focused University approach to education and training so that the level of practice for Paramedics reflects their education and experience within the Paramedic role needed for the future health care in Turkey. Furthermore he suggests that ongoing education and development to strengthen the profession is needed to further establish Paramedics as a profession.

It was of particular interest for many of the Turkish educator’s and paramedics in attendance to discover more about United Kingdom, Canadian and German approaches to paramedic development and education. We noticed that from our international colleagues that United Kingdom paramedic education direction, particularly the establishment of undergraduate pre-registration pathways and postgraduate specialist education were seen as advanced in comparison to their experiences. There is no regulatory body for paramedics in Turkey which was seen as moving Turkish paramedics’ development towards autonomous practitioners and professionalisation.

There was concern expressed at the conference of injury experienced by Turkish paramedics, one particular source has been injuries resulting from unsecured loose equipment. Most ambulances are converted commercial vehicles, with few being specifically designed to store equipment, as a result it can be damaged or result in a preventable injury occurring.

It is clear paramedics in Turkey face many of the education, professional and developmental issues experienced by United Kingdom counterparts. There is a demand from Turkey to collaborate with professional organisations and higher-education institutes to develop the Turkish paramedic workforce, these are areas the College of Paramedics and United Kingdom Universities could use their experience to support such development.

Conclusion
Attendance at the 13th Turkish International Paramedic Congress and Rally provided an opportunity to share ideas, collaborate and learn about other cultures of paramedic practice. It provided a fantastic opportunity to jointly share experiences and learn from one another to help paramedics develop internationally as a profession. We would recommend attendance at the
event, which will provide a fantastic learning and cultural experience, for any paramedic practicing in the United Kingdom.

Inspired by this event, Oxford Brookes is hosting the first Student Paramedic International Rally of Emergency Simulations (SPIRES) in June this year. This event will bring student paramedics together from across the globe to share their experiences, compete in a competition rally as well as discuss current issues in practice. Sharing of ideas in this is essential for the progression of the profession in addition to developing further opportunities for students to undertake placements abroad, improve their knowledge and skill-set and introduce innovative ideas. For more information please visit….

Reference
College of Paramedics PEEP Report( 2013)
https://www.collegeofparamedics.co.uk/downloads/090813_-_PEEP_Executive_Summary.pdf

