

Emergency Medicine – Merging with Other Specialities: An Update

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INTRODUCTION

The Emergency Medicine Division of the University Hospital of the West Indies (Mona campus) is staffed by six consultants, five of whom are trained emergency medicine physicians, two chief residents who are fully trained emergency physicians, DM Emergency Medicine programme residents, non-programme residents, senior house officers, specialist emergency medicine nurses, non-specialist nurses, emergency room technicians, patient care assistants, administrative and janitorial staff. The development of emergency medicine in Jamaica as a specialty has been documented previously (1–3). The faculty has engaged in various courses over the years and, at present, members are trained in a wide range of specialty areas inclusive of research methods, sexual assault examination, sports medicine, trauma (4) and sonography. This has led to related publications, some of which appear in this issue of the West Indian Medical Journal. Other special endeavours include creation of protocols for emergency management of specified conditions and implementation of the Emergency Severity Index triage system in 2007. The consultants are Advanced Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS) instructors and one is a Paediatric Advanced Life Support (PALS) instructor.

The medical director, Dr Jean Williams-Johnson, was a Fullbright scholar (2010) and has collaborated with investigators from Wayne State University to perform international multicentre research on hypertension (5, 6). Of note, she was a principal investigator for the Jamaican arm of the landmark CRASH trial which examined the use of tranexamic acid in trauma patients (7). Dr Nicole Hart completed a Trauma fellowship at the Toronto General Hospital, Dr Rhonda Hutson is a trained sexual assault examiner and Dr Simone French is a trained sonographer who was named director of the Prehospital Emergency Medical Services Unit (PHEMS) in 2010. This entity, which has existed since 1995, trains pre-hospital care providers.

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DM programme

The postgraduate training programme in Emergency Medicine was started in 1997 under the guidance and vision of Professor Archibald McDonald. The curriculum has undergone changes with the introduction of parts 1 and 2 examinations and the introduction of formal rotations in ear, nose, and throat (ENT), radiology and ophthalmology. There has been a reduction of time spent out of the department so that at least six months each year are spent in the Emergency Department. Ultrasound training and research methods have now become a formal part of the training programme. The residents do research work as a compulsory part of the programme, which has resulted in two full publications (8, 9), eight abstracts (10–17) and two papers accepted for publication in this issue, all in peer reviewed journals.

The residents continue to benefit from overseas Emergency Department elective experiences such as at the Jackson Memorial Hospital in Miami, Florida, the Hartford Hospital in Hartford, Connecticut, the Detroit Receiving Hospital in Michigan, the Hennepin County Medical Center in Minnesota, all in the United States of America (USA), the Toronto General Hospital and St Michael's Hospital in Toronto, Canada. The Hennepin County Medical Centre had entered into a formal agreement with The University of the West Indies (UWI) which allowed the residents to have a hands-on experience once they were USMLE (United States Medical Licensing Examination) certified, with the hospital covering any state malpractice insurance costs for the residents.

There are thirty-four graduates to date, mainly scattered all over Jamaica, at the major hospitals (Figure) as well



Figure: Location of DM Emergency Medicine graduates in Jamaica.

as in the Cayman Islands, Turks and Caicos, Bermuda and The Bahamas. Dr Nicole Dawkins is the Senior Medical Officer of Health at the St Ann's Bay Regional Hospital. Other DM graduates head the Emergency Departments of Spanish Town Hospital (Dr Bisasor McKenzie), Mandeville Regional Hospital (Dr Janice Miller), Annotto Bay Hospital (Dr Kurdell Espinosa), May Pen Hospital (Dr Andrea Johnson-Nanton), Cornwall Regional Hospital (Dr Carol Thompson), Kingston Public Hospital (Dr Hugh Wong), St Ann's Bay Regional Hospital (Dr K Myint) and the University Hospital of the West Indies (Dr Jean Williams-Johnson).

There has been expansion of the postgraduate training sites to the Spanish Town Hospital, and the Emergency Department at the Cornwall Regional Hospital is certified for postgraduate training in the last two years of the programme. Currently, there are three residents in the programme *via* Spanish Town Hospital. Training of residents began in Nassau, Bahamas, at the Princess Margaret Hospital in 2008. To date, there have been four graduates from that programme. Mona has oversight responsibility for the training site in Nassau.

The University of the West Indies has appointed DM graduates as associate lecturers: two in Spanish Town, one at Kingston Public Hospital (KPH), three at the Cornwall Regional Hospital (CRH), five at the University Hospital of the West Indies (UHWI) and one as senior lecturer at the UHWI.

The role and the impact on two other areas need to be mentioned, *ie* the training of nurses in emergency medicine and the addition of a clerkship in the MB BS Programme for medical students.

Emergency nursing programme

The Emergency Nursing Course began in 1996 with seven nurses in training. To date, 192 nurses have been trained and are employed both locally and internationally. Nurses are enrolled from various islands in the Caribbean including The Bahamas, St Kitts and Nevis, Antigua, and Dominica and locally from most parishes. Once training is completed, the graduates return to the hospitals from which they came. Opportunities to branch out to other overseas institutions are possible. Some emergency trained nurses have moved on to become charge nurses, clinical nurse managers, educators and nurse practitioners.

Undergraduate training

A five-week rotation in emergency medicine has been a formal part of the medical student curriculum for fourth year students since 2004. Emergency medicine is unique, providing the opportunity to examine patients presenting with a wide range of mild, moderate and high acuity illnesses. Undifferentiated patients with complaint-based presentations are managed by the students under close supervision by residents and consultants. These students are distributed

between the Mona campus and the Cornwall Regional Hospital which has three full time emergency medicine consultants for teaching. They gain an appreciation of the value of good, history taking and examination in the evaluation of patients with possible emergent or urgent conditions and become skilled at how to select appropriate investigations and correctly interpret the results to the patients' benefit. They are taught procedures which are essential to the practice of medicine and are taught how to perform and interpret electrocardiograms, arterial blood gases, radiographs and many other skills and procedures. Furthermore, they learn basic and advanced cardiac life support skills and trauma management.

At the end of the clerkship, they are assessed by a written (MCQ) examination, a clinical (OSCE) component, Powerpoint presentations, a procedure card and attendance record. Recently, with the high intake of students, each rotation can have as many as forty students. This has created challenges in delivery of content. Undaunted, the faculty has responded with the recognition that the students highly value the interaction, and have consistently recorded a high level of satisfaction. It is a point of pride that all of the consultants are consistently rated 4.5–5 on a five-point scale on the evaluation form submitted by each student at the end of the clerkship to the Dean's office. This is reflected in the fact that all consultants were cited for excellence in teaching at The UWI Teaching Awards in 2010.

Research

The Emergency Department can be regarded as a clinical laboratory. Research opportunities are provided for important collaborations and communication. Several courses on research methods including the Research Methods Workshop conducted by the Department of Community Health and Psychiatry have been attended by several of the emergency medicine consultants. There is also a monthly research meeting in the department which facilitates sharing and strengthening of research ideas and information.

The theme of this issue of the journal – “Emergency Medicine in the Region: Merging with Other Specialities” – speaks to collaboration which is evident in the content. Partnerships with persons from various areas including non-Jamaican emergency physicians, anaesthetists, surgeons, radiologists, pharmacologists, biostatisticians and social scientists yielded the papers included in this publication. The Emergency Medicine Division contributes significantly to the research output of the Department of Surgery, Radiology, Anaesthesia and Intensive Care.

This special edition of the Journal highlights the significant contribution that the Emergency Medicine Division is making in the arena of research which is vital to the advancement of the specialty. In this issue, Watson *et al* (18) looked at compliance with universal precautions and Dasgupta *et al* (19) assessed the extent to which emergency physicians comply with asthma guidelines. The management

of painful crises in sickle cell patients is examined by Augier *et al* (20) while French *et al* (21) examined the role of point-of-care ultrasound in evaluation of patients with potential ectopic pregnancies. The public health potential of emergency department based research to inform best practice is explored by Brody *et al* (22). Emergency physician burnout is explored by Hutchinson *et al* (23). Collaborative work with Detroit University examining the health beliefs of three racially similar but culturally divergent groups in regards to hypertension is presented (24). This rich offering of research provides important information to guide clinical management and inform policy decisions. We are informed to viewpoints on trauma in the developing world (25) and new approaches to improving compliance in hypertensive patients (26). We are also provided opportunities to review unusual presentations in the case reports on primary spontaneous tension haemopneumothorax (27), Horner's syndrome (28) and an unusual case of hip pain (29).

It is clear that emergency medicine in Jamaica has matured and contributes significantly to nation building through the provision of trained personnel to staff emergency departments, the teaching of undergraduate medical students, postgraduate training in emergency medicine, teaching of emergency room nurses and emergency medical technicians as well as the growing body of important research work.

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