ELECTIVE (SSC5b) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

I am strongly interested to pursue a career in emergency medicine. Nevertheless, I realised my exposure to paediatric patients in the ED was minimal, which led me to undertake this elective whereby I hope to gain a better insight into emergency care for children.

The paediatric ED in the RLH is a 24/7 service dedicated for children 16-years and under requiring urgent or emergency care. It is one of the busiest paediatric ED in the U.K., attending to nearly 35,000 patients per year (1). Patients can access this service directly, by primary care referral, or by ambulance. Initially, patients will be triaged by the nurses. The triage nurse will assess, perform necessary first aid, and determine whether the patient would be seen by the ED doctors, urgent care doctors, or escalated to the resuscitation bay.

Over the last 2 weeks, I had many opportunities to clerk and present my findings to the doctors. I learned and developed skills that will get a child to co-operate, such as incorporating play during history taking and examination, and using words appropriate to the child's age. I felt more confident and comfortable interacting with children after each consultation. Furthermore, I appreciate the importance of obtaining history from both the parents and the child, which allowed me to gain a better understanding of the problem.

I encountered a wide range of problems presented by children at the ED. This includes, but not limited to, musculoskeletal injuries, abdominal pain, rashes, swollen eye, fever, and burns. Injuries appeared to comprise a large proportion of workload in the RLH paediatric ED. This is comparable to most U.K. ED whereby 70% of children attendance were attributed to injury (2). Majority of these are caused by accidental trauma which occurred during play. I developed skills in obtaining a detailed history of the mechanism of injury. This helped to determine whether the injury is compatible with the history, and to ensure that the injury did not occur from physical abuse, which would otherwise require safeguarding referral. I learned to examine injured limbs, interpreting and presenting results of x-ray scans. This experience has certainly enhanced my confidence to manage patients with traumatic musculoskeletal injuries when I start working as a doctor.

I discussed all the patients I clerked, and formulate management plan with the doctors. The feedback I obtained allowed me to identify important information that I missed, and to develop my clinical judgement and decision making skills. I encountered my first paediatric burn patient, a 2-year-old boy who spilled hot tea over himself. I learned to determine the total body surface area of burn using the palmar method, to assess burn depth and to identify indications for discussion with the burn specialists. I also clerked a 12-year-old boy who presented with a 2-day history of itchy, burning rash, signs of fever, cough, dyspnea and chest pain. He previously saw an urgent care doctor, who recorded findings of wheals and diagnosis of viral allergic reaction. However, the rash worsened despite taking chlorphenamine and he re-attended to the ED. When I reviewed the patient with the ED doctor, I learned that I missed the presence of newly-developed erythema multiforme. This prompted me to learn about the underlying infective and drug-related causes of erythema multiforme, and its potential to involve the mucous membrane which may then warrant hospital admission.

It was interesting to note that the presentation to the ED varies from minor complaints to major illnesses. For instance, I saw an 8-month old baby with a 2-week history of uncomplicated nappy rash, which was subsequently triaged to see the urgent care doctors. This portrays one of the current challenges facing paediatric emergency care. The record of children attending U.K. ED is ever-increasing, with over 4.5 million attendances in 2010/11 compared to 3 million attendances in 2006/7 (3). It is estimated that 15-40% of attendances could be avoided, as majority was due to minor illnesses that requires little or no intervention, and can be safely managed in primary care. These attendances reflect that parents are often worried, and unsure of how to or cannot access a more suitable service. Various local initiatives have been taken to address this issue, one known as the "DIY Health" delivered by Bromley-by-Bow Health Partnership. This project aims to educate and empower parents to manage minor ailments, and to know when and how to access the appropriate health services (4). Nevertheless, this allowed me to value the role of a triage nurse, and the responsibility of the ED doctor to perform a comprehensive assessment, to determine which patients require further treatment and monitoring in the ED, and which can be treated and safely discharged home.

I also participated in the injury follow-up clinic led by a paediatric ED consultant. One of the case, which I found interesting, was a 2.5-year-old boy who fell on outstretched hand (left) after falling from the bed. He presented to the ED a week before, but was thought to suffer from sprain after a normal X-ray of the hand. During the follow-up clinic, his mother reported that he was still in distress and did not use his left arm. Examination of the hand was normal. The consultant decided to examine his elbow and pain was elicited. This prompted the consultant to order an elbow X-ray, which demonstrated supracondylar fracture. It emphasized to me the importance of examining the joints above and below a suspected injured area. Subsequently, a plaster cast was applied to immobilise the arm and allow healing. I observed this procedure, and witnessed the difference that play specialist made to calm children during procedures.

Furthermore, I attended a psychosocial meeting held at the paediatric ED. The meeting was attended by social worker, safeguarding nurse, child and adolescent mental health service (CAMHS) care co-ordinator, school nursing team leader, domestic violence team, and doctors. Example of cases discussed in the meeting included victims of physical assault, patients who attempted suicide and children living with carers who presented with acute mental illness or substance misuse. This increased my awareness of the role of the ED and different healthcare professionals to protect the wellbeing of children at risk of harm.

With my interest to work in developing countries in future, I explored and compared the difference in children presentation to the ED between the developed countries and the developing world. In developing countries, a larger proportion of child ED attenders are sicker, present with poor health, neglect and severe malnutrition. I learned that different triage tools, such as the South African Triage Scale, would be more applicable in developing countries, as it maximises the efficiency and quality of emergency care in low resource settings (5).

I thoroughly enjoyed this elective placement. I improved my clinical and communication skills, and feel more prepared to deal with paediatric patients in an urgent or emergency care setting. I also developed a better understanding of the delivery of paediatric emergency care service. This experience has strengthened my aspiration to pursue emergency medicine as a career. I would like to express my gratitude to the paediatric ED team for facilitating my personal and professional development.

Bibliography

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5. International Federation for Emergency Medicine. 2012 International Standard of Care for Children in Emergency Departments. West Melbourne : International Federation for Emergency Medicine, 2012.