

PAUL DHILLON and **HARITH ALI**
describe surgical care in a war zone.



*The Emergency hospital,
Kabul, Afghanistan.*

A WEEK IN

'Emergency'

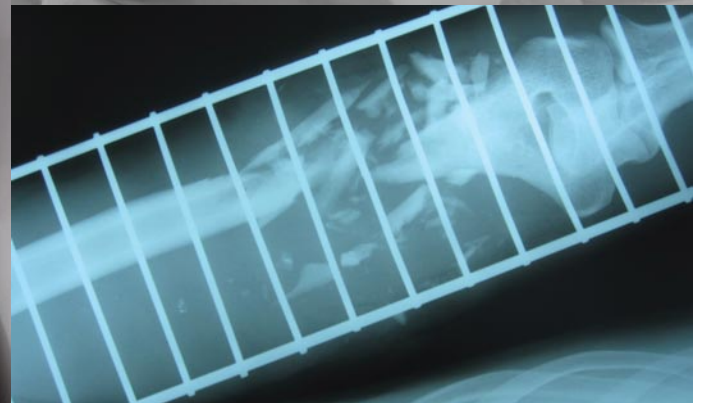
Many medical students aspire to work with non-governmental organisations at some stage in their medical careers. We were not immune to this desire and this led us to Kabul, Afghanistan, to participate in the activities of the Italian NGO Emergency in the summer of 2010.

When thinking of Afghanistan, news headlines and images of war come most readily to mind. For the past few years, and in some parts of the country for decades, this has been an accurate picture of the turmoil that occurs daily across the country. However, this has not always been the case. Afghanistan was a nexus for the meeting of people from the Middle East, South Asia, East Asia and Central Asia. The Khyber Pass, Silk Road and Alexander the Great are iconic historical places and people intimately tied to Afghanistan and its narrative. However, years of occupation and war, coupled with the lack of a stable central government and enforcement of the rule of law, have led to a nation that is unstable and unsafe through wide swathes of its territory. Currently, there is limited access to emergency surgery throughout the provincial and district hospitals; this is where Emergency fills a vital need.¹

Emergency

Emergency is an independent NGO, founded in 1994, that provides free healthcare to civilian victims of war and poverty, and works to promote a culture of solidarity, peace and respect for human rights.² The medical activities operated by Emergency are designed, built and run by international personnel, who provide training for local staff. This organisation has worked in 15 countries to date. First, it aims to guarantee treatment to anyone in need of assistance, without any discrimination as to race, colour, sex, religion, social origin or political opinion. Second, it provides high quality assistance, employing standardised therapeutic and work protocols already tested in emergency situations. Third, it aims to train national staff thoroughly, with the intent of transferring all the health facilities to the local health authorities as soon as self-sustainability can be achieved.

Emergency has been active in Afghanistan since 1999 and the Surgical Centre in Kabul opened in 2001 in an abandoned and bombed out nursery school near the city centre. The centre was temporarily closed after a raid by armed Taliban but reopened with



Clockwise from left: Nine children were brought to the hospital after a rocket attack while they were playing in their backyard; Child undergoing respiratory physiotherapy; Shattered fragments of bone following a bullet injury.

the coalition invasion in November 2001. Since Emergency started operations, they have treated over 2,659,223 people across the country.¹ Emergency is staffed in the majority by national staff, with nurses and surgeons from Italy and across the world serving the organisation in their working language of English.

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A day in the life

So what is a day like in the Emergency hospital in Kabul? Each day begins similarly to what one would expect in any surgical team that was admitting from the previous day: a morning round of patients that were admitted during the previous 24 hours along with plain film radiology or CT scan summaries. In the absence of mass casualty events in the city, there would be approximately 10-12 admissions per day. We had to keep in mind that most of Afghanistan is essentially an active war zone, and the admission criteria were such that only patients

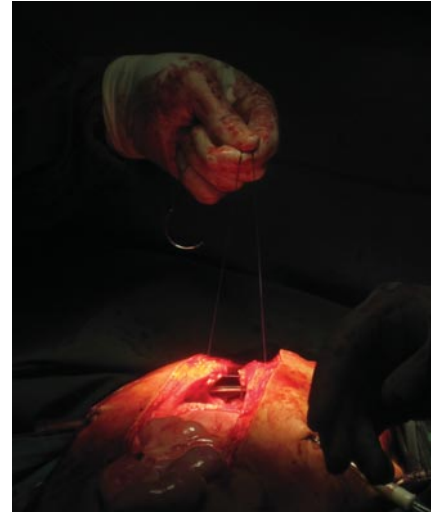
with bullet, mine, shell, knife, and rocket injuries were admitted, skewing what was seen of the total burden of surgical cases in the country.

After discussion of the cases among the surgeons, anaesthetists and international nursing staff, the team would split. One half commenced a ward round of the entire hospital including both adult and paediatric wards. The hospital consisted of 100 beds divided among five wards, one of which was dedicated to paediatrics.

The other half of the team would proceed to one of the two surgical theatres and commence the day's theatre list and any emergency cases that presented to the hospital. Wards were simple but immaculately kept by the cleaning staff, which illustrated that quality medicine and surgery can be provided in an austere and limited resource environment.

An eye-opening experience

Our first ward rounds were eye opening in terms of learning about the relative simplicity with which basic war trauma is managed in surgical terms. War trauma is assumed to be dirty, and therefore uncomplicated wounds are simply debrided and left open for a period of five days, before undergoing delayed primary closure. Seeing many of these large and extensive wounds for the first time impressed on us the ability of the body to withstand large amounts of physical trauma. Radiology that



From left: Thoracotomy closure post stab wounds to the anterior chest wall and abdomen.

was reviewed during the ward round was impressive and unlike any we had ever seen in Ireland. The destruction and shattering of bone by bullet is difficult to imagine without having seen it in person. In the theatre it was intriguing to see the wide variety of cases that were operated on by the general surgeons. Whereas in Ireland, and most of the developed world, surgeons tend to sub-specialise, here there was one international general surgeon supported by eight national surgical staff who operated on orthopaedic, vascular, neurological and general cases. Brooks *et al.* found that there was a paucity of technical hands-on experience with specialist registrars in England, such that they are involved with a median of only two blunt and one penetrating trauma laparotomy per annum.

The majority will neither observe nor be involved in an emergency thoracotomy throughout the five years of their training.³ This situation was reversed in Kabul, where in one 24-hour period we witnessed three emergency thoracotomies. Interesting cases aside, the sheer volume of trauma patients was something we had never witnessed before. Having nine children arrive to the hospital after a rocket attack while they had been simply playing in their backyard is not a pleasant experience. It was admirable to see the Italian and Afghani national staff working together to manage the multiple casualties in this particular case. All of the children survived; however, a different outcome was noted when patients arrived and the message that was transmitted to the staff included the words 'brain out'.

Although this experience was an extreme one, it gave us a clear idea of what it entails to work with a medical NGO in a war environment. On paper it seems to be an interesting and exciting environment to work in. However, a difficult aspect of this endeavour is the fact that international staff will spend three to six or more months away from family and friends, with limited rest, and in a dangerous environment. In the current situation there were severe limitations on the staff's movement, with activities in both work and social spheres limited to the hospital compound and a quick walk across the street with a guard to the staff housing facility.

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Nevertheless, the exposure to trauma and the ability to provide care of a high standard to populations that would not otherwise have access to such care, is not only fulfilling in an emotional and educational sense, but also provides a beneficial service to the children and adults we serve.

References

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3. Brooks AJ, Ramasamy A, Hinsley D, Midwinter M. Military general surgical training opportunities on operations in Afghanistan. *Ann R Coll Surg Engl.* 2009;91:417-9.