MAIL360

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Orthopaedic surgeons and the response to disasters overseas

Dear Sir,

I was pleased to read of the work of orthopaedic surgeons from the high-income countries supporting the day-to-day work of those in low- and middle-income countries.[1,2] There is also another way that the skills of the orthopaedic surgeon can be brought to benefit the most vulnerable and this is in the response to sudden onset disasters overseas.

Earthquakes are the most common reason for requesting surgical teams from overseas. It is important to understand, though, that severe injury to the head, chest, abdomen and often pelvis will either have been successfully treated by the local surgeons or will lead to the death of the patient by the time an overseas team arrives. What such teams will be primarily dealing with is limb injury. Orthopaedic surgeons therefore have a crucial role to play and when working alongside a plastic surgeon can make a real difference to the disability that so often compounds the mortality that follows these incidents.

However, to do this work the surgeon needs to be appropriately trained and experienced. For example, a study of the surgical interventions in Haiti[3] has shown a significant variation in amputation rates between foreign teams treating similar injuries and at similar times after injury. The same study also revealed minimal record keeping, so it cannot be gauged which team's approach was best. Each team's treatment was based on their own preference, which meant that the risk of amputation as a primary treatment was significantly greater when treated by a team from one country. Given the major disadvantage of amputation in low and middle-income countries, this difference in practice is not without potential for significant avoidable harm.[3]

The experience of Haiti coming on the back of similar natural disasters in Pakistan and elsewhere, has led the World Health Organization and Global Health Cluster to establish a Foreign Medical Teams Working Group of which I am the current chair.[4] This group is looking to establish a minimum data set and uniform reporting to facilitate research and the establishment of best surgical practice as well as registration of teams and a commitment to certain standards. In particular, recognition that surgeons must only carry out procedures in another country that they are licensed to perform in their own country.

One interesting issue that has arisen in discussion is the conflict between current surgical training and its increasing specialisation in the richer countries, and the need for surgeons in low- and middle-income countries, particularly during disaster, to deal with the non-earthquake surgical conditions that will present to foreign teams. It remains unresolved but any team must also have the capacity to deal with the acute abdomen and perform a safe Caesarian section.

In the UK, the value of surgical teams supporting the local response has been recognised at Government level. The Humanitarian Emergency Response Review of the Government's Department for International Development[5] has made specific reference to the value of surgical teams in the response to sudden onset natural disaster. This has led to the establishment of the UK International Emergency Trauma Register[6] that in association with the British Orthopaedic Association and other academic institutions is producing a training curriculum for those willing to respond. This chimes with an EU funded European project to establish a pan European curriculum for the training of teams that will respond both within and outside of Europe.

There is a worldwide push now to ensure that those in greatest need receive treatment of the highest standard. The specialty of orthopaedics must take its place at the heart of this.

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