The Kurdish refugee crisis — what have we learned?

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THE RESPONSE

The Disaster Unit of the Overseas Development Administration (ODA) responded to the Kurdish refugee crisis in March 1991, with the early dispatch and air dropping of material aid by the RAF. Their chief medical adviser was seconded to coordinate inputs in Turkey and later on the Turkish/Iraqi border. The Minister for Overseas Development herself made an on-site assessment of the scale of the problem in Iran.

The international section of the Department of Health instructed its adviser on emergency medicine to explore the feasibility of an NHS response to the crisis. Teams in Manchester, Edinburgh, London, Oxford and Salford confirmed their willingness and ability to respond. The Medic 1 team of accident and emergency doctors and nurses from Edinburgh worked in the safe haven camps on the Turkish/Iraqi border as part of the wider relief effort to the area.

The South Manchester Accident Rescue Team (SMART), meanwhile, after consultation with the ODA, made contact with the Iranian embassy in London and received a request for a medical team on the Iran/Iraq border. With ODA financial support SMART sent a team of six A&E physicians, six nurses, six paramedics and 7.5 t of supplies and equipment to Tehran. The team arrived at 3.00 a.m. local time on Friday 3RD May 1991. The customs warehouse was testimony to the folly of dispatching aid without someone to accompany it to its final destination. With no-one who could recognize it, vouch for it and sign all the papers, it lay by the tonne, sitting on shelves or rotting on the tarmac.

The Iranian Red Crescent forwarded the team to Bakteran where it was felt most medical help was needed. In Bakteran other foreign workers were complaining they were being held in the towns and only allowed to visit the refugee camps after long waits for papers and then only for day trips. However, these teams all appeared to be assessors of some kind. The South Manchester Accident Rescue

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Team met no other direct providers of medical care. The director of Bakteran Provincial Hospital met with the team and appeared to know exactly what the medical needs of the refugees were. Having assured himself that the team had the appropriate medicines and was self-sufficient in food, water and shelter, he made arrangements with the local Red Crescent for the team and its supplies to be taken to a border camp at Nowsud. He provided all the necessary papers and very early the next day three 4-wheel drive vehicles and two trucks complete with drivers transported the team up the mountains to Nowsud.

THE CAMP

Nowsud was devastated during the Iran/Iraq war and this once prosperous town is now derelict. It had been captured by Iraq then returned to Iran at the end of the war. No Iranians live there now and the remains of their dwellings provided little shelter for the Kurdish refugees. The whole area was mined by the Iraqis which made living and working there extremely hazardous.

There had been an Iranian doctor who visited the camp and worked from a small tent. He had not visited the camp for several days. A queue of women with very sick babies were waiting anxiously by this tent when the team arrived. Two of these babies had meningitis.

The team split into three groups of two doctors, two nurses and two paramedics. One group was to provide clinical care whilst one rested and the other ran the camp. The team lived in tents among the Kurdish people. The Iranian authorities supplied adequate food and water to the camp but there was, as yet, no sanitation.

The team immediately established a 24-h continuous service. A tent was cleared and prepared as a temporary hospital for the in-patient management of the most sick and another tent prepared as a clinic.

THE WORK

Within an hour of arriving the work pattern was established, which ran until the team's departure. The duty team of six split into a hospital and a clinic team. A clinic ran from 8.00 a.m. until 8.00 p.m. It usually took until midnight to process the remaining patients already in the clinic. The tent was crowded and it was difficult to work in the heat. There were no chairs or beds and everything was done on the floor or crouching down. Between 150 and 200 patients a day were seen in the clinic.

The team worked 4-h shifts during the day and for 8 h from midnight until 8.00 a.m. Very sick patients were referred to the adjacent hospital tent where they could receive continuous medical and nursing care. Intravenous therapy with fluids and antibiotics was required for these cases. Although unusual to administer in such an environment it was possible to deliver good quality emergency medicine in these unusual circumstances. Relatives helped to control the i.v. drip rates as

per instructions and helped with the general nursing care. Normal standards of care were maintained, particularly with regards to note keeping, drug rounds and the hand-over of patients between shifts.

Between midnight and 8.00 a.m. emergencies were seen in the hospital tent and the occasional non-emergency was referred to the morning clinic.

All the refugees had diarrhoea to some degree (hardly surprising in a camp of up to 20000 people with no sanitation). The complete absence of toilets meant the paths were used or people risked the land mines in the unmarked areas. Simple gastroenteritis was treated by supplying clean water from supplies held by the team. Chronic diarrhoea was treated as amoebic dysentery with metronidazole. Toxic, bloody diarrhoea was treated as bacillary dysentery with ampicillin.

A large number of patients appeared to have typhoid. This responded to chloramphenicol but many were very ill and required prolonged in-patient care. Meningitis was widespread but responded well to intravenous chloramphenicol and ampicillin. One small baby may have had tetanus. Streptococcal throat infections were common and poliomyelitis and chickenpox were seen in some of the children. It was not thought to be a malaria area but a significant number of the refugees had come from endemic areas, and many developed signs and symptoms consistent with malaria which resolved after chloroquine.

Dehydration in small infants was a common accompaniment of fevers and diarrhoea. Oral rehydration therapy was poorly tolerated by these children and intraperitoneal infusions ineffective. Intravenous fluid replacement provided rapid and effective rehydration. Surgical cut down onto a vein was frequently required, but there was no complications applying these techniques in this environment. Intraosseous infusion was used with similar success.

After several days of working alone in the camp, the ICRC were able to establish contact. Arrangements were made for a Red Cross team to work alongside the British team, and take over when they eventually returned home. They were joined by a Swedish physician and two Dutch nurses. The Swedish doctor was a specialist in infectious diseases and supported the initial diagnostic assessments and confirmed that the disease profile matched that of the other camps in the area.

Malnutrition was seen in those babies whose mothers had stopped lactating during the long walk over and these were given dried milk from the team's supplies.

Some patients had injuries from Iraqi bombs. Some had burns. Military activity in Iraq accounted for some but tent fires were equally devastating. With no electricity in the camp, lighting was with oil lamps and cooking over open fires. The children were at particular risk from these injuries. Snake bites and scorpion stings were a constant hazard. Both these were painful and patients required overnight treatment.

Most of the children and many of the adults had scabies. Although not life-threatening this common infestation produced a lot of misery and the application of benzyl benzoate brought welcome relief.

The whole area had been mined by the Iraqis. This limited movement although the Iranian military were helpful in identifying particularly dangerous areas. Several exploded during the team's time there, when children strayed off recognized routes, either to search for ever diminishing firewood or simply to play.

Tracer bullets regularly lit up the sky and bombs fell and exploded into the night. One evening a missile appeared to go over the camp.

The numbers of Red Cross workers continued to increase and by the time the team left, water was being run into the camp and toilets installed.

The Red Crescent supplied a large clean hospital tent which could house both the clinic and in-patient services. When the severe illness was contained and the Red Crescent team were happy to continue alone, the U.K. team left and arrived home 2 weeks and 1 day after leaving the U.K.

THE RESULTS

The mortality rate in the camp was reported to be at least 5–10 babies a day and an unknown number of adults prior to the team's arrival. There were no further recorded deaths after the team started its work. This was only achieved by the capability to provide on the spot, 24-h intensive therapy, and emphasizes the importance of ensuring advisers and public health specialists are accompanied by clinical specialists in emergency medicine.

THE LESSONS

Each disaster is different and one must not plan for the next solely on the experience of the last (Redmond, 1989; Redmond *et al.*, 1991). The Kurdish refugee crisis, however, has reinforced our view that victims of disasters are best served when those who wish to help recognize and adhere to the following principles.

The sooner aid is dispatched the more lives will be saved and the more suffering will be relieved.

The initial response to any disaster is always local (Gunn, 1988). When this is overwhelmed outside foreign help may be requested. Uninvited teams merely add to the confusion and increase the burden of local coordination agencies.

Having received an official invitation, foreign teams must do what the local agencies are asking for and not what they assume is required. There must be command and control if effort is not to be wasted and lives therefore lost. Cooperation at all levels is required and volunteers must appreciate that if they are not simply to add to the burden of the disaster they must ensure their activities, if required can be coordinated with those of others. The first step for British teams should be liaison with the ODA.

The initial rapid dispatch of a small number of very experienced personnel will ensure that the appropriate aid for that disaster is dispatched in sufficient quantities to the right place.

Medical supplies alone are not enough. They must be accompanied by those who know how to use them, to guide them through their precarious path to those for whom they were intended.

The impact of basic medical care on desperate people must not be underestimated, and an apparently overwhelming situation can respond to the systematic application of good clinical care.

Emergency medicine and public health medicine are neither mutually exclusive nor independent of each other. They depend upon each other. Emergency physicians can stem the flow of disease and death until public health physicians have tackled the source.

Teams should draw heavily from those already experienced in out of hospital care and must be self-sufficient in food, water, shelter and equipment.

The larger relief effort will be enriched by the integration of teams from the NHS whose experience can only add to the pool of knowledge on their return.

Much greater cooperation between countries can take place on scene. In Turkey it was agreed that Medicine sans Frontieres would coordinate the response to the children and German workers would do any surgery that was required. The development of supportive roles by different countries would prevent expensive duplication and so release more money for the victims and improve the effectiveness of the response.

THE FUTURE

In August 1991, the Minister for Overseas Development announced an important new initiative to enhance the British Government's response to disasters. The lessons of the past have not gone unheeded. The crucial role of the ODA as the central U.K. liaison agency for aid to foreign countries will be reinforced and the Disaster Unit of the ODA will have more direct involvement with the dispatch of teams.

When aid from Britain is requested, the ODA will obtain its own on the spot assessment immediately. The true needs of the area will be assessed and communicated directly to the ODA, by satellite phone if necessary.

The Disaster Unit has commissioned a register of the whereabouts and availability of skilled and experienced teams, in medical, nursing, paramedical and other disciplines capable of responding quickly to foreign disasters. This will enable teams tailored for each disaster to be drawn together from across the U.K.

Medical teams will be part of the multidisciplinary disaster relief response, dispatched by the ODA to work under their overall coordinator who will ensure their activities complement those of other nations and agencies.

The identification of appropriate personnel will be followed by regular training programmes to ensure teams are adequately prepared and equipped.

The NHS can supply skilled experienced clinical staff but for limited periods. The cost of a frequent turnover of NHS staff needs to be measured against the impact of clinical doctors, particularly in the early phases. Doctors who are free to respond for prolonged or indefinite periods are most unlikely to have an active clinical practice and therefore may be limited in their clinical experience and skill.

The best response will be one where the long-term strategy of public health physicians is supported in the early stages by the life saving skills of NHS clinicians.

REFERENCES

- Gunn S. W. A. (1988) The co-ordination of governments and the relief agencies In: *Medicine for disasters* (eds Baskett, P. & Weller, R.) pp. 145–151, Butterworth and Co, London.
- Redmond A. D. (1989) The response of the South Manchester Accident Rescue Team to the earthquake in Armenia and the Lockerbie air disaster. *British Medical Journal* **299**, 611–612.
- Redmond A. D., Nightingale P. & Watson S. (1991) The South Manchester Accident Rescue Team and the earthquake in Iran. *British Medical Journal* **302**, 1521–1523.