FIELD REPORT

Humanitarian Medical Response to the Syrian Arab Republic (April 7, 2013 to April 23, 2013)

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Abbreviations:
ED: emergency department
GOTG: Gift of the Givers
NGO: nongovernmental organization

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Event onset date: March 2011
Location of event: Syrian Arab Republic
Geographic coordinates in latitude, longitude: 35° 59' 0" North, 36° 23' 0" East
Dates (or times) of observations reported: April 7, 2013 to April 23, 2013
Response type: Humanitarian Medical Response

Abstract: The Syrian Arab Republic is entrenched in a deadly civil war, plunging the country into a state of chaos. With 3.2 million refugees abroad, 7.6 million internally displaced persons, and more than 200,000 killed, humanitarian assistance and international intervention are in dire need.

This report outlines the response to the Syrian humanitarian crisis by a South African-based nongovernmental organization (NGO). It describes the experiences of a health care worker, the patient profiles, and the lessons learned in a war zone.

Responding to a nation in need is of paramount importance. In order to maximize the benefit conferred, the team should always attempt to implement measures that leave a lasting legacy.

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Introduction

The Syrian Arab Republic has a long and illustrious past. With the rise and fall of numerous civilizations, its capital Damascus is one of the oldest inhabited cities in the world.[1] With an estimated population of 18 million and a low gross domestic product per capita, ranking it 159 in the world, Syria was already a relatively poor country prior to the war.[2] It is a small country, the size of Washington State (USA), but less than one-quarter of that is arable land[3] (Figure 1[4]).

In 2011, there was growing unrest amongst the population against its leadership. Peaceful protests were met with brutal government opposition. Syria was also experiencing its worst drought in history at this time, and the rumblings of dissatisfaction had now reached a boiling point. Civil war erupted.

At present, more than 13 million people are in need of urgent humanitarian assistance, 7.6 million have been displaced within Syria, and there are 3.2 million Syrian refugees abroad.[5] More than 200,000 have been killed in the war thus far. Also of note, according to the Ministry of Health (Damascus, Syria), 711 out of 1,921 primary health care centers and 37 out of 92 hospitals have gone out of service since the onset of the crisis in March 2011.[5]

In response to the plight of the Syrian people, the Gift of the Givers Organization (GOTG; Pietermaritzburg, South Africa) mobilized a medical team consisting of 52 medical volunteers and 12 journalists. The organization is a South African-based nongovernmental organization (NGO) and is the largest on the African continent having already responded to humanitarian crises in 41 countries.

The authors were fortunate to be amongst the medical volunteers on the mission, and after an adventurous journey through southern Turkey and northern Syria, the team reached the small town of Darkoush in the Idlib province (GPS coordinates: 35° 59' 0" North, 36° 23' 0" East).[6] Dr. Imtiaz Sooliman, the team leader and head of the NGO, had already visited the area earlier,

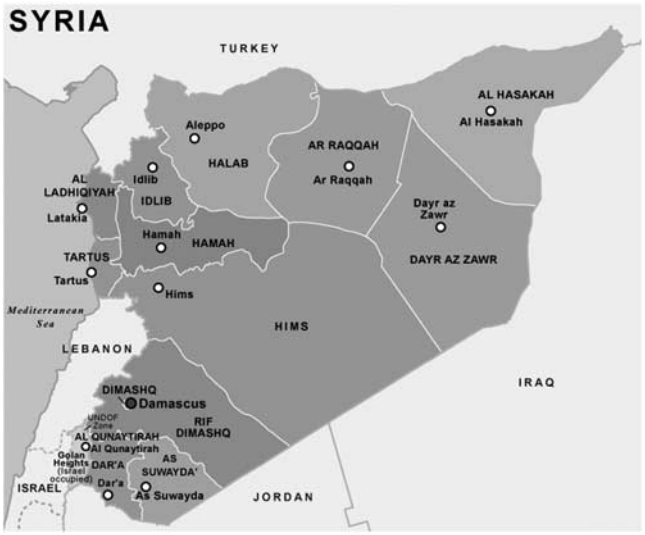

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Figure 1. Map of the Syrian Arab Republic.[4]

assessed the situation, and had been in constant communication with the locals of Idlib to prepare for the team's arrival. During the assessment visit, he had also identified sites for the construction of a hospital and a primary health care center.

Using local manpower and funding from GOTG, the team was pleasantly surprised to find a fully functional 60 bed hospital upon arrival. Two operating rooms, a recovery area, female and male wards, and an emergency department (ED) were all ready and waiting. All of this had been built from the rubble and fully equipped in less than 12 weeks. The primary health care facility with a dental clinic had now also been fully equipped.

The team composition merged well with the existing facility and matched the anticipated need of the community. Amongst the varying medical specialties being represented, there were emergency physicians, anaesthetists, family physicians, dieticians, orthopaedic surgeons, a maxillofacial surgeon, an urologist, ED nurses, operating room nurses, a wound care nurse, dentists, and paediatricians.

The team composition might seem unusual for a disaster response mission, but from previous disaster responses, the organization had learned that a community is often stripped of health care in its entirety. Each member of the multi-faceted team was busy from the onset until departure, demonstrating the need for the varying skill sets.

Observations

The valley of Darkoush continually reverberated with the sound of shelling in the distance. Intermittent gunfire also echoed through the surrounding hillside. However, the team soon grew accustomed to this sinister background tune and began to relax and go about their tasks.

Darkoush has tremendous natural beauty, with its lush green hills and rivers, a beauty that was only matched by its people. The Syrian people were warm, welcoming, and generous, despite the meager little that they had. The civilians that welcomed the team had been subjected to unspeakable atrocities and many had lost most of their family members. When the team had arrived, however, they made sure that the team members had the best available accommodation, hot water always (despite no electricity), and that all the team members were well fed every day.

Their perseverance in the face of such adversity and hope that the international community will one day help them was remarkable. And in the dusty remnants of a city, they strove to establish normality in a world of chaos. Traders and food stalls lined main road and rebuilding was in progress despite the constant shelling. The hospital and the clinic were the newest buildings in town and these soon became focal points as well as beacons of hope and a sign that the world had not forgotten them.

The following information is based on the authors' observations. The patient profile was very similar to that encountered on previous disaster response missions. By far, the bulk was primary health care presentations. Patients with uncontrolled diabetes and hypertension, patients with chronic headache, chronic abdominal pain, minor skin and soft tissue infections, and the usual spectrum of childhood ailments proved to be the common presenting complaints.

Also, as experienced previously in regions with little or no health care, victims of trauma had been subjected to substandard or makeshift operations and treatment. The surgical teams attempted to rectify this by revising amputations, re-aligning limb fractures, and debridement of wound sites. The specialist wound care nurse proved invaluable in this regard.

The front line fighting was approximately 20 km away, and due to the mountainous terrain, none of the wounded from the front line ever reached the hospital in Darkoush. The medical team did, however, attend to victims of mortar fire and long-distance shelling. These victims were all civilians whose homes had been struck, and on average, five to ten such patients a day presented to the ED. In most instances, when a shell struck a home, most of the inhabitants were killed instantly. The survivors presented with shrapnel wounds which are exceptionally difficult to treat. For example, a 5-year-old boy presented with shrapnel wounds after a mortar had struck his family home. He had approximately 75 entry wounds which had to be explored and shrapnel removed. He also needed an emergency laparotomy and spent eight days in a makeshift intensive care unit.

Along with these presentations, there were large numbers of patients presenting with posttraumatic stress disorder, anxiety disorders, insomnia, and depression. This was understandable considering the circumstances under which they lived. A psychologist and a counseling team successfully had accompanied the team on a previous mission to the Republic of Congo, and their services were desperately required here.

Analysis of Observations and Recommendations

Based on the authors' observations during this humanitarian mission, the authors have highlighted the following lessons learned:

1. Planning ahead: on this mission, and unlike on many disaster response missions, the medical volunteers were met with the welcoming sight of a fully operational medical facility. Prior to the team's departure, arrangements had been made to begin the construction and equipping of the facility to maximize the team's role in Syria.
2. Attending to a population's primary health care needs will always be the bulk of the work on a disaster response mission: come prepared.
3. Local knowledge and input is invaluable: in a disaster situation, the livelihood of the locals largely has been stripped away. With decisive leadership, this manpower can be harnessed effectively. In this way, the local population is given a sense of purpose again, instilling hope and encouragement.

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4. Plan beyond the mission: to date, the GOTG hospital, which is staffed and managed by local Syrian doctors, has treated thousands of patients. When the South African team departed, the management of the hospital was handed over to local doctors, nurses, and medical students; staff who were committed to the plight of their people and who refused to leave the war stricken community. They had a broad skill set amongst them, including obstetricians, orthopaedic surgeons, anaesthetists, physicians, and general surgeons. They now had a hospital in which to work in and numerous operations and procedures have since been done.
5. Educate and impart knowledge during the mission: while attending to and managing patients, the team continually imparted knowledge to the local health care workers. They were eager and very receptive, and daily dedicated education sessions were held where basic life support skills and wound management skills were taught. Going above and beyond medical knowledge, the organization began the building of a school, again using local manpower. Today the school houses 300 school children of all ages.

Conclusion

On every disaster response mission, one always learns new lessons and one should always attempt to do better the next time. One of the most important things that the team learned is that a lasting legacy needs to be left. With the building of a hospital, a clinic, and a school, in conjunction with the distribution of hundreds of thousands of dollars of food and clothing parcels, this has hopefully been achieved. Disaster response teams should all continually endeavor to make a lasting change on these missions to best help those who need it the most.

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