# **ORIGINAL ARTICLE**

# **Evaluation of a short-term medical mission to Syrian** refugee camps in Turkey

#### Nora Alghothani, Yousef Alghothani<sup>1</sup>, Bassel Atassi<sup>2</sup>

The Ohio State University, College of Public Health, Division of Endocrinology, Columbus, OH, <sup>1</sup>The Ohio State University, College of Arts and Sciences, OH, <sup>2</sup>Wayne State University, Division of Hematology and Clinical Oncology, Michigan, USA

# Access this article online Website: www.avicennajmed.com DOI: 10.4103/2231-0770.110738 Quick Response Code:

### **ABSTRACT**

**BACKGROUND:** The escalating political and humanitarian crisis in Syria has left thousands detained, killed or displaced in neighboring countries. Given the permission and co-operation of the Turkish health authorities, a short-term medical mission to the Syrian refugee camps in the Hatay province was arranged. **MATERIALS AND METHODS:** To assess this mission's impact and potential expansion to serve other more emergently inflicted areas both inside and outside the Syrian borders, an evaluation was conducted *via* survey questionnaire of participating physicians. **RESULTS:** While almost all respondents found the experience worthwhile and fulfilling, medical, social and educational challenges as well as possible solutions were outlined. **CONCLUSION:** The use of several specified principles to further guide efforts towards providing service, education, relief, and awareness would result in greater effect, sustainability and growth of the mission.

Key words: Medical mission, refugee camp, refugee health care

#### INTRODUCTION

An uprising and a demand for political change started in Syria in mid-March 2011, marking the beginning of an ongoing Syrian political and humanitarian crisis. Civilian access to basic necessities has been compromised and medical care denied. Moreover, journalists, humanitarian and human rights groups have been limited access to the country.[1] This crisis in Syria has left thousands dead and many displaced. Of those escaping the violence, 157, 454 in total have fled to neighboring Turkey. More than 111,000 Syrians remain in Turkey as of November 2012, with approximately 12,000 of them being hosted in refugee camps in the province of Hatay, where many services including shelter, food, healthcare, education, social activities and security are provided. [2] Five of these Hatay refugee camps were visited during short-term medical missions organized by the Syrian American Medical Society (SAMS)<sup>[3]</sup> to help provide additional medical and psychological support to the Syrian refugees. Since the first mission in September 2011, twenty nine physicians have volunteered through this organization.

# **OBJECTIVE**

To review a short-term medical mission to the Syrian refugee camps in Hatay, Turkey by surveying physicians who participated, assessing its overall impact and identifying areas of improvement and most need.

# **MATERIALS AND METHODS**

An anonymous 38-question survey was electronically mailed to 25 individuals known to have participated in the SAMS medical mission to Turkey anytime between September 2011 and March 2012. The survey was sent a total of three times over a six week period to maximize participation. The survey was created, distributed and data collected using the online survey engine, eSurveysPro [Table 1].

Furthermore, the survey aimed to at least partially address the six factors outlined in Maki *et al.* 2008 research article as "benchmarks common to all missions regardless of type, service provided, and health care goal." These included impact, efficiency, educ ation, preparedness, sustainability, and costs.

Address for correspondence: Dr. Nora Alghothani, The Ohio State University, College of Public Health, Division of Endocrinology, Columbus, OH, USA. E-mail: nora.alghothani@osumc.edu

#### Table I: Turkey medical mission survey questionnaire

#### Turkey medical mission survey

- I. Gender:
- 2. Age:
- 3. Place of birth:
- 4. Place of current residence:
- 5. Medical specialty or professional background:
- 6. Dates of medical mission:
- 7. How did you learn of mission?
- 8. Have you participated in a medical mission before?
- 9. Were you able to speak Arabic with refugees fluently?
- 10. How many other physicians or medical personnel accompanied you during the mission?
- 11. How many of the refugee camps did you visit?
- 12. Please specify the patient population that you served:
- 13. What medical conditions were most prevalent among patients?
- 14. On average, how many patients did you care for each day?
- 15. What were the primary methods of diagnosis used during the mission? (check all that apply)
- 16. What was the average length of time spent with each patient?
- 17. What factors limited number of patients evaluated and treated? (check all that apply)
- 18. What factors limited quality of care? (check all that apply)
- 19. Was it easy to refer a patient to a local specialist or hospital for treatment or follow up?
- 20. Were there any negative patient outcomes directly related to mission? (if yes, please explain)
- On average how was time divided during mission? (percentage should add up to 100)
- 22. Did you feel education provided by the mission impacted health awareness of patient population?
- 23. How could this be improved? (refers to question 22)
- 24. Did local health care providers collaborate/communicate well with mission doctors?
- 25. How could this be improved? (refers to question 24)
- 26. Any complaints about the organization of the mission, including travel arrangements, hotel, communications, etc.?
- 27. What was the estimated cost spent on this mission?
- 28. Were you provided enough information regarding expectations prior to mission?
- 29. What was your primary motivation for the mission?
- 30. What was your primary concern?
- 31. What did you enjoy most about the mission?
- 32. What was most unpleasant during the mission?
- 33. What did you hope to accomplish with your medical mission?
- 34. Overall, did you feel the mission was a worthwhile experience?
- 35. Describe how this experience may have changed you
- 36. Would you recommend that this mission be continued?
- 37. What is the most important change needed to make the mission more effective?
- 38. Please add any additional comments about your experience below

Male/Female

Yes/No

Yes/No/Somewhat 0/1/2/3/4/5/6/7/8/9/10

How many days were spent at each? Adult males/Adult females/Children

In total?

 $\label{lem:condition} Chief complaint/Medical history/Physical exam/Laboratory tests/Local epidemiology/Other$ 

<5 min/5-10 min/10-15 min/>15 min

Efficiency/Personnel/Pre-mission preparation/Cultural competence/Language barrier/Supplies and medical equipment/Access to appropriate facilities/Other Efficiency/Personnel/Pre-mission preparation/Cultural competence/Language barrier/Supplies and medical equipment/Access to appropriate facilities/Other

I. Patient care 2. Patient health education 3. Logistics 4. Personal or down-time 5. Other

Completely agree/1/2/3/4/5/Completely disagree

Completely agree/1/2/3/4/5/Completely disagree

Was this achieved? Yes/No

163/140

Yes/No

#### RESULTS

Eighteen of 25 surveys were completed for a 72% response rate. Of those responding, 13 were males (72.2%) and five were females (27.8%). The ages ranged from 28 to 55 years. All respondents were of Syrian origin and able to speak Arabic fluently with the refugees. With the exception of one in each of the United Kingdom and United Arab Emirates, all participants were currently residing in the United States. The medical specialties of the participating physicians included general internal medicine, family

medicine, pediatrics, obstetrics and gynecology, emergency medicine, psychiatry, ophthalmology, infectious diseases, gastroenterology, cardiology, and pharmacology. The duration of the clinical mission ranged from four to seven days with an average of 5.11 days. Only 22.2% of respondents had participated in a prior short term medical mission. The smallest mission group consisted of two physicians and the largest of five. The majority of participants (72.2%) were able to spend one full day at each of the five refugee camps in Hatay [Image 1]. They each report caring for an average of 40 patients per day. Twenty five percent of physicians

provided medical care to adult males, 40% to adult females, and 35% to children [Figure 1].

The medical conditions noted to be most prevalent included acute ailments such as upper respiratory



Image 1: Hatay syrian refugees camp



Image 2: Camp encounter

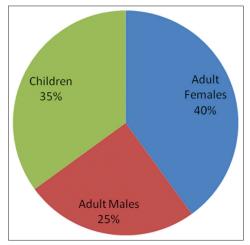


Figure 1: Patient population served

infections, gastroenteritis, conjunctivitis, hepatitis A, skin rashes as well as poorly controlled diabetes, hypertension, chronic obstructive pulmonary disease, asthma, arthritis, gastroesophageal reflux, and exacerbated chronic back pain. Vaginitis, urinary infections and incontinence, dysmenorrhea and poor pre- and post-natal care were common among the female patients. Many psychiatric conditions including somatoform disorders, depression, anxiety and post-traumatic stress disorder were seen among all patient groups. Tobacco abuse was also prevalent among adults. The primary methods of diagnosis used by all respondents were chief complaint and medical history, followed by physical exam 72.2% of the time. Laboratory and radiological diagnostic tests were not available during the encounters. 66.7% of physicians spent an average of 5-10 min with each patient [Image 2].

Factors that were limiting to all physicians, in terms of both number of patients evaluated and treated as well as quality of care provided, included access to appropriate facilities and presence of medical supplies and equipment. Nearly half felt that pre-mission preparation was a limiting factor and a quarter noted efficiency and personnel as such. None of the responding physicians found cultural competence or language a barrier. Although the volunteer physicians were informed of how to refer patients to a local specialist or hospital for treatment or follow up, the outcome of such efforts remained unknown to most. No physicians were aware of any negative patient outcomes directly related to the short-term medical mission.

All physicians spent at least 50% of their time during the mission on patient care and an average of 20% on patient health education. Of the respondents, 77.8% only somewhat agreed that the education they provided during the mission impacted health awareness of the patient population and all felt it could be improved. Two thirds (66.7%) of volunteer physicians thought that the collaboration and communication between local health care providers and mission doctors could also be improved. A third (33.3%) of the respondents expressed some frustration with the difficulty of camp entry and organizational logistics. The average money spent on the mission by each physician was \$1850, with a range of \$1500 to \$3500. The vast majority (88.9%) concluded that they were provided adequate information regarding expectations prior to the start of their mission. Safety was a concern prior to the mission for 66.7% of participating physicians while usefulness and impact of mission worried 33.3%. After returning from the mission however, physicians reported their experience to be safe. Most unpleasant during the mission was the lack of privacy for patients during physician encounters and overall limitations in time, resources, and privileges.

The primary motivation for the mission among all responding participants was not only offering both medical and emotional support to the refugees, but also overcoming a personal sense of helplessness during a tragic time for the Syrian people. The appreciation demonstrated by the refugees as well as the ability to interact, relieve and connect to them was most fulfilling and enjoyable to the volunteer physicians. All respondents felt that the mission was an overall worthwhile experience that allowed them to achieve their medical and social goals, and ended with a strong sense of self-satisfaction and gratitude. Almost all respondents (88.9%) recommended that this mission be continued and expanded to cover other more needy areas, to establish a more systematic way of providing health education, increase productivity of refugees while in camps and strengthen coordination between all those involved.

# **DISCUSSION**

Health of all people around the world is a global responsibility shared by medical personnel in the United States and other developed countries. Although intensive planning and support is required to serve the world's many refugees, short-term medical missions have traditionally composed an avenue to improved healthcare. With the most recent turmoil in Syria leaving a total of 333,854 UNHCR registered individuals displaced in Turkey, Jordan, Lebanon and Iraq, much attention and aid is being invested. [5] To help overcome challenges encountered and increase the impact of invested efforts, Suchdev et al. guiding principles for a sustainable short-term international medical trip – mission, collaboration, education, service, teamwork, sustainability and evaluation - are used to evaluate the SAMS' mission to Turkey as reported through participating physician's survey responses.[6]

Although the initial mission of the organized short-term medical trips to Turkey was to provide needed medical care and support upon finding generally adequate healthcare and services offered by the Turkish authorities at the camps, the mission was redefined to supplement and strengthen the Turkish efforts, as well as to overcome the cultural and language barriers creating a notion of mistrust. Collaboration between SAMS personnel and the Turkish health authorities has been integral. As simple on-site medical facilities have been established at some of the camps with a general practitioner usually available during the day, strong co-ordination allows for improved quality of care with a decrease in the high patient visits to physician ratio. Such has improved and continues to since the start of the mission in September of 2011.

Education has been another important component. Responding participants have all been culturally aware and proficient in the Arabic language, allowing them to better connect to the refugee population. Insight with regards to the technicalities of the trip as well as the common medical conditions and needs have been more thoroughly relayed as more experience has been obtained. These expectations have been compiled and are currently provided prior to each mission both verbally and electronically. Several presentations have been conducted locally to increase awareness and participation among the community. As for education of the refugees, much work is needed regarding health awareness and preventative measures including good hygiene, smoking cessation, adequate nutrition, exercise, medical compliance acknowledgement and acceptance of psychiatric conditions. A more structured and systematic method of providing such education may be achieved by training camp leaders or other more permanent personnel who may conduct an ongoing lecture series. Further, educating the Turkish health authorities on the cultural differences of the Syrian refugees may also allow for better efficiency and help bridge the gap. Thus, educating all parties involved will not only make for smoother relations, but also help eliminate many of the commonly seen avoidable conditions.

Service is the essence of the mission and has incorporated medical care, health education, as well as an inventory of basic medications, vitamins and supplies. Effort has also been directed towards assessing the possibility of providing similar and more emergent services to affected Syrians elsewhere. Teamwork is another principle integrated into the mission. The goal has been to diversify the physicians in each group with regards to specialty and experience. While in Turkey, the team is completed with the generous organizational help and hospitality of several Turkish individuals as well as that of Syrian refugee camp leaders who voluntarily help facilitate physician encounters.

To allow for sustainability of the mission, a recent visit was conducted by SAMS leaders to Turkish officials from the Health Ministry, identifying specific needs and focuses through an objective assessment. Furthermore, the structure of this ongoing coordinated mission may be implemented inside Syria, Jordan, Lebanon, or Iraq once the situation permits. Lastly, to help evaluate this medical mission, the aforementioned official visit to Turkey was conducted in addition to this survey study. Continued periodic evaluation of the mission is necessary perhaps using a more thorough standardized short-term medical mission evaluation tool, such as that suggested by Maki *et al.* Also, the constantly changing situation inside Syria and in the other neighboring countries should be reassessed for an

opportunity to expand the mission and allocate services to where it is most needed.

#### CONCLUSION

A structured humanitarian medical mission is an important component of global healthcare and can positively impact all parties involved. With the ongoing crisis in Syria forcing thousands to find refuge, any form of medical, financial and social aid is direly needed. The service, education, relief, awareness and comfort that a culturally-tailored short-term medical mission as described may bring to a traumatized population have long lasting effects. Constant assessment and improvement of the mission is needed however, to assure maximum efficiency and benefit.

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Cite this article as: Alghothani N, Alghothani Y, Atassi B. Evaluation of a short-term medical mission to Syrian refugee camps in Turkey. Avicenna J Med 2012;2:84-8.

Source of Support: Nil, Conflict of Interest: None declared.

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