

Medical Tourism Abroad

A new challenge to Oman's health system - Al Dakhilya region experience

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السياحة الطبية للخارج تحدي جديد للنظام الصحي في عُمان: تجربة المنطقة الداخلية

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المخلص: معرفة الأسباب التي تدفع الناس للبحث عن مشورة طبية في خارج السلطنة مع ما يتبع ذلك من مشاكل ونفقات، وتوضيح أنواع المشاكل الطبية والوجهات المفضلة والقناعة بالمعالجة في الخارج. الهدف الثانوي لهذه الدراسة هو إعطاء نبذة لأصحاب القرار في نظام الرعاية الصحية عن كيفية التعامل مع هذه الظاهرة بما يلبي احتياجات المجتمع. الطريقة: تم توزيع استبيان على 45 من المرضى الذين سافروا للعلاج خارج السلطنة مؤخرًا أو بالمقابلة الهاتفية. النتائج: تم استلام 40 استبيانًا، 68% من المشاركين كانوا من الذكور. كانت أمراض العظام من أكثر الأمراض التي تم علاجها بالخارج، وكانت تايلاند الوجهة المفضلة تليها الهند (50% و30% على التوالي). سافر 85% من المرضى للخارج للمعالجة فقط، بينما سافر 10% منهم للمعالجة والسياحة معًا، و2.5% كانوا أصحاء ولكنهم سافروا لإجراء الفحوصات الطبية. من المدهش أن 15% من المشاركين بالدراسة سافروا مباشرة للخارج دون طلب استشارة طبية داخل السلطنة. 38.2% من الذين تمت معاينتهم في السلطنة لم يكن هناك تشخيص محدد، و38.2% أخذوا علاجًا لكنه لم يكن فعالًا. حصل 73% من المشاركين في العينة على معلومات من الأصدقاء عن العلاج بالخارج، وكانت مكاتب السياحة الطبية والشبكة الدولية أقل المصادر استخدامًا. حصلت مضاعفات بعد العلاج في الخارج عند 15% من المرضى. الخلاصة: ينبغي تعميم الحقائق المختلفة حول العلاج في الخارج في المجتمع، وهذا يستوجب جهودًا أكبر في تعزيز الصحة العامة والتثقيف الصحي.

مفتاح الكلمات: عُمان، السياحة الطبية، نظام الرعاية الصحية.

ABSTRACT: Objectives: This study aimed to understand why people seek medical advice abroad given the trouble and expense this entails. The types of medical problems for which treatment abroad was sought, preferred destinations and satisfaction with the treatment were explored. A secondary aim was to give feedback to stakeholders in the health care system on how to handle this issue and meet the needs of the community. **Methods:** 45 patients who had recently travelled abroad for treatment were asked to complete a questionnaire or were interviewed by telephone. **Results:** 40 questionnaires were received. 68% of the respondents were male. Orthopaedic diseases were the most common conditions leading patients to seek treatment abroad. Thailand was the most popular destination followed by India (50% and 30% respectively). 85% of respondents went abroad for treatment only, 10% for treatment and tourism and 2.5% were healthy, but travelled abroad for a checkup. Interestingly, 15% of the participants went abroad without first seeking medical care locally. Out of those initially treated in Oman, 38.2% had no specific diagnosis and 38.2% had received treatment, but it was not effective. 73% of respondents obtained information on treatment abroad from a friend. The Internet and medical tourism offices were the least used sources of information. 15% of the patients experienced complications after their treatment abroad. **Conclusion:** Various facts about medical treatment abroad need to be disseminated to the public. This will necessitate greater effort in public health promotion and education.

Keywords: Oman; Medical tourism; Health care system.

ADVANCES IN KNOWLEDGE

1. Medical tourism abroad is a growing phenomenon that needs to be addressed carefully by health care authorities in Oman.
2. Public misconceptions about the standards of treatment abroad need to be addressed by extensive health education.

APPLICATIONS TO PATIENT CARE

1. Patients interested in going abroad for medical treatment need to be handled prudently by their treating physician.
2. Patients who insist on going abroad for a second opinion need to be appropriately guided and provided with all the relevant clinical data and evidence based medical information.

IN A GLOBALISING WORLD, HEALTH CARE IS no longer confined within national borders. Medical tourism is a new term used to describe the practice of seeking medical care abroad for non-emergency conditions. There is not yet an agreed international term for a person who travels abroad to seek medical treatment. Some experts label such patients "health tourists" or "medical tourists". However, these terms suggests that travel abroad is for pleasure, which is at odds with the anxiety and pain often involved in seeking medical treatment. Therefore some prefer to refer to "medical travellers" even though the person might decide to combine his/her medical treatment abroad with tourism.

Globalisation has prompted countries to evaluate their position on trade in health services.¹⁻⁵ The full extent of this trend is yet unknown, as data are sparse and anecdotal due to the absence of an internationally agreed definition and of a common methodology for data collection. This means that the limited statistics on medical tourism are often not comparable across countries; however, the available observations suggest that a substantial number of patients do travel to other countries for health care. For example, it is reported that Malaysia received 360,000 foreign patients from the Association of Southeast Asian Nations (ASEAN) region in 2007.⁶ According to a study by the World Health Organization's (WHO) Regional Office for the Eastern Mediterranean, each year Jordan treats more than 120,000 non-Jordanian patients, generating an estimated US\$ 1 billion in annual revenue.⁷ Regarding the number of residents from the USA travelling abroad for health services, a study by Deloitte Consulting estimated that 750,000 Americans travelled abroad for health services in 2007 and that this number would increase to 1.6 million by 2012.⁸ A study by the consulting firm, McKinsey, estimated that the number of US residents travelling abroad for medical care was estimated to range between 5,000 and 750,000 depending on the definition of medical travel.⁹

In Oman, there is a national committee for treatment abroad which decides on the eligibility of candidate patients. The number of people it sent for treatment abroad was only 20 per 100,000 of the population in 2010 (so approximately 610 persons), down from about 59 per 100,000 in 1977 (information provided in email by the MOH's Department of Treatment Abroad). The decline

in numbers reflects the diminishing importance of treatment abroad following the development of health services in Oman. The total expenditure on treatment abroad by the Ministry of Health (MOH) in Oman in 2003 was US\$ 2,563,171. Patients are sent to the UK (London), India and Germany.¹⁰ It was out of the scope of this study to measure the *magnitude* of medical tourism in Oman or even in Dakhilya region due to unavailability of statistics.

If this trend continues, experts are convinced that it will have major implications for public health systems around the globe. Despite the growing importance of medical travel, we still have little empirical evidence about its impact on public health, especially on health systems.¹ The medical community in developed countries has started to recognise medical tourism as a real phenomenon that impacts the profession, practitioners and patients. Peer-reviewed medical and health journals began publishing papers on this topic in 2006.¹¹ The medical tourism marketplace consists of a growing number of countries competing for patients by offering a wide variety of medical, surgical, and dental services. Some of the medical tourism companies hook patients up with a hospital and surgeon, arrange for their family doctors to send records and consult with the surgeons overseas, make travel arrangements and book hospital admissions.¹²

They are many motivators for seeking treatment abroad such as: 1) Increased access to information about foreign health providers through the new developments in information technology; 2) Lower international transportation costs; 3) Reduced language barriers due to globalisation; 4) Treatments unavailable in the home country for legal, cultural or other reasons such as injections of stem cells; 5) Long waiting lists for certain procedures (UK and Canada),¹ and 6) Inappropriate health insurance coverage (USA).^{12,13} However, researchers also found some barriers to medical tourism like the financial cost, fear of the unfamiliar and lack of confidence in foreign health care systems, discouragement by family doctors or treating physicians, and feeling too ill to travel.¹⁴

Customers of medical tourism companies can purchase anything from cosmetic procedures and diagnostic examinations to kidney transplants, *in vitro* fertilisation, cancer therapies, and orthopaedic procedures. The cost of medical tourism packages

varies greatly. The prices depend on the types of procedures, where patients travel, how long they intend to stay, and whether they choose postoperative accommodation in budget hotels or luxury resorts.¹⁵

Medical travel has also raised several ethical issues. This is more evident when there are differential health policies in a particular country, i.e. one for the citizens as a public service and another standard for foreigners coming in as paying clients. Informed consent is a key ethical and legal issue as medical tourism companies are obliged to explain to patients the risks and benefits of medical procedures abroad.⁸ The potential exacerbation of health inequities in destination and source countries and the disruption of continuity of care for patients are other ethical concerns. The International Conference on Ethical Issues in Medical Tourism (ICEMT) raised three key points: 1) Medical tourism has the potential for cross- or inter-disciplinary research; 2) Medical tourism research must engage with empirical research from a variety of disciplines, and 3) Ethical analyses of medical tourism must incorporate both individual and population-level perspectives.¹⁶

Many countries, especially in the Far East, invest in this emerging industry in order to build a modern medical infrastructure that will attract foreigners and will create a new source of income while improving the medical services provided to the local community.¹⁷ To respond to the growth in medical travel, many countries have set guidelines and accreditation tools to regulate its quality. Examples are the Joint Commission (formerly the Joint Commission on Accreditation of Health Care Organizations) which initiated the Joint Commission International (JCI) to accredit hospitals worldwide,¹⁸ and the standards framework for regulating the medical tourism industry and Statement on Medical and Surgical Tourism.^{19,20} These tools address a number of concerns about this new industry and some of the safety and quality issues that patients may encounter if they seek health care services abroad.

The objectives of this study are thus threefold: first, to provide an overview of the main reasons and trends of patients travelling across borders from the Dakhilya region of Oman and their preferred destinations; second, to analyse the satisfaction rating of local treatment compared with that

received abroad. Third, it aims to present the main challenges and areas for improvement for the health system and public health stakeholders in Oman as regards medical tourism.

Methods

The study was conducted in Al Dakhilya region (in north central Oman) between March 2009 and August 2010. A questionnaire about medical tourism was developed after a literature review and discussion with colleagues in the Directorate General of Health Services, Dakhilya Region.

The questionnaire was composed of two sections. Section one collected demographic and other data (including age, sex, place of residence, date of diagnosis in Oman, date of treatment abroad and the country where treatment abroad took place). Section two had questions on the reasons for treatment abroad, its costs, quality and the outcome of the treatment and finally which part of the body needed treatment. The questionnaire was distributed to all those who travelled abroad for health care during above period. The subjects, who were mainly employees and all from the Dakhilya region, were enrolled in the study when they came to the Department of Health Affairs in the Directorate General of Health Services in Nizwa for countersignature of their sick leave permission from their places of work in order to travel abroad for treatment. Verbal consent was taken from participants for participation in the study and they were assured that refusal would not lead to any adverse consequences. Most of the subjects were given the questionnaire for completion. A few were interviewed by telephone when the person who came to obtain the sick leave countersignature was not the patient. The Omani National Treatment Abroad Committee pays the expenses of treatment of those patients sent by the government. Those going by themselves are not reimbursed. Those who were sent abroad for treatment by the government were excluded from this study because it was not their decision to travel abroad for treatment, therefore their answers as to reasons for travel, destinations and satisfaction would be biased. The data were analysed using the Statistical Package for the Social Sciences (SPSS, Chicago, IL, USA, Version 16). The chi square statistical test was used and the *P* value set at < 0.05. The study protocol

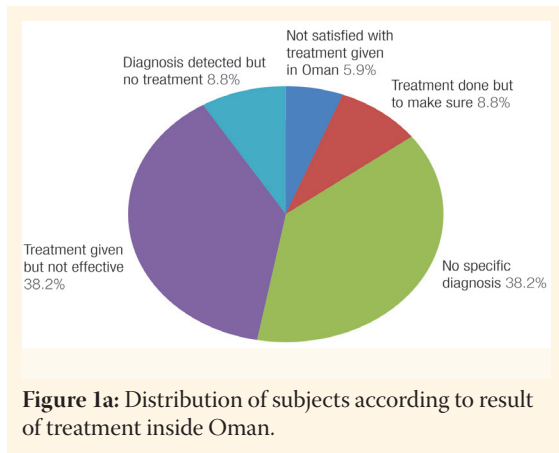


Figure 1a: Distribution of subjects according to result of treatment inside Oman.

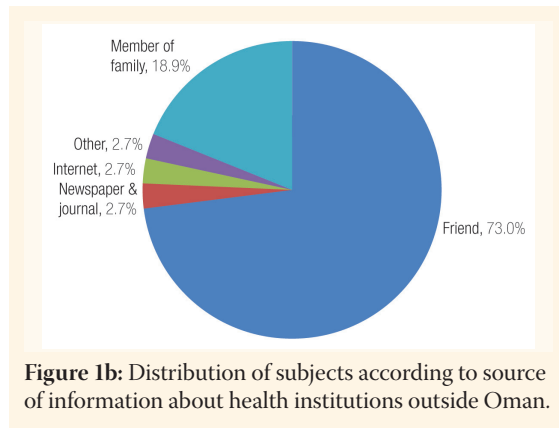


Figure 1b: Distribution of subjects according to source of information about health institutions outside Oman.

was approved by the Medical Research and Ethics Committee of the Directorate General of Health Services, Al Dakhilya region.

Results

Out of 45 forms distributed, 40 forms were completed, returned and analysed (response rate 89%). All were completed by Omanis. Using descriptive analysis, the mean age of the study population was 38 years. The highest percentage of respondents was in the age group 31–40 years (31%). More males went abroad for treatment (67.5%) than females (32.5%). A total of 50% of the participants went to Thailand for treatment followed by India (30.0%), Iran (10.0%), Bahrain (7.5%) and United Arab Emirates (UAE) 2.5%. As to the distribution of clients according to their reason of travel, 85% of the participants travelled abroad to get treatment only; 10% for both treatment and tourism; 2.5% for a check-up, and another 2.5% for other reasons. About 85% of the study sample was treated in Oman before going abroad for treatment; thus, 15% went straight abroad for treatment without seeking treatment locally. The results of treatment of those

Table 1: Distribution of subjects according to type of disease

Type of disease	Percentage
Orthopaediatric	31.6
Neurological	23.7
Ophthalmological	18.4
Gastroenterological	15.8
Cardiac	7.9
Physiotherapy treatment	2.6

treated inside Oman first are shown in Figure 1a. A total of 38.2% of the participants did not receive a specific diagnosis in Oman, and also 38.2% of the participants received treatment, but they did not find it beneficial.

More than 70% of the participants in the study got information about health institutions abroad from their friends and 18.9% from their family [Figure 1b]. The highest percentage of respondents went abroad for treatment for orthopaedic diseases followed by neurological and then ophthalmological disease [Table 1]. Using univariate analysis, those people aged 30–40 years had the most orthopaedic diseases (41.7%) followed by those aged 41–50 years (33.3%). Neurological diseases were also more prevalent in both age groups 31–40 and 41–50 years old compared to other age groups. Eye diseases were apparently more prevalent among people over 50 years old; however, due to the small sample size, the association between age and type of diseases ($P = 0.494$) was not statistically significant.

Male subjects went for treatment abroad mainly for orthopaedic diseases (28%), neurological diseases (28%) and gastroenterological diseases (24%). Females went for treatment abroad for orthopaedic diseases (38.5%), eye diseases (38.5%) and neurological diseases (15.4%). The association between type of disease and sex ($P = 0.116$) was, however, not statistically significant.

About one third of the participants stayed abroad for one week for treatment while 25% of the participants stayed 1–2 weeks. Those participants who travelled for orthopaedic, gastroenterological and neurological diseases preferred going to Thailand while those participants who sought treatment for eye diseases preferred to go to Iran; participants who sought treatment for cardiac

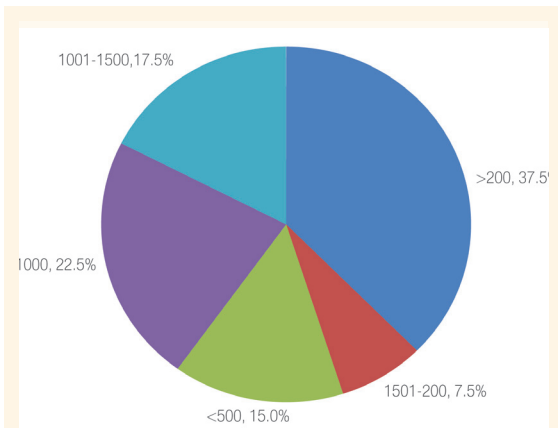


Figure 2: Distribution of subjects according to cost of treatment abroad in Omani rials (RO) (1 RO = c. US \$ 2.6).

diseases preferred to go to India. The association between type of diseases and country ($P = 0.051$) was, however, not statistically significant.

Concerning cost, more than 60% of the participants spent less than 2,000 Omani rials (c. US \$ 5,200) for treatment abroad while 38% of the participants in the study spent more than 2,000 Omani rials [Figure 2]. A total of 45% of the participants who went to Thailand spent more than 2,000 Omani rials and 41.7% of the participants who went to India also spent more than 2,000 Omani rials whereas 75% of the participants who went to Iran spent 1,000–1,500 Omani rials. The association between the cost of treatment and the country of treatment ($P = 0.249$) was, however, not statistically significant.

We found that the percentage of satisfaction about treatment abroad was 100% in all countries except India where it was 83.3% giving an overall satisfactory percentage of 95%. There was no association between satisfaction with treatment

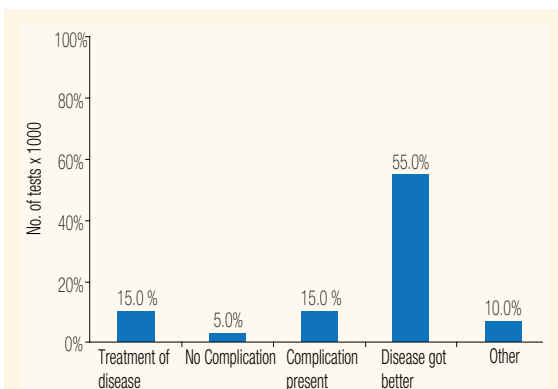


Figure 3: Distribution of subjects according to evaluation by Omani government doctors after return to Oman.

and country ($P = 0.296$). A total of 15% of the participants developed some complications related to the treatment. These complications include pain, allergy, swelling and high blood pressure. Half of the participants had follow-up in governmental health institutions after coming back from abroad with 55% of them getting better [Figure 3]. Visits to Bahrain produced the highest percentage of treatment complications (33.3%) followed by India (16.7%) and Thailand (15%). The association between treatment complications and country ($P = 0.685$) was, however, not statistically significant.

Discussion

The sample size of this study was relatively small due to the difficulty of enrolling in the study those who travelled abroad for treatment because of the unavailability of a database. Nevertheless it revealed some interesting findings. Men travelled more than women probably since they are able to travel alone, while women, following Islamic and traditional customs, usually need a male companion. The overall mean age was 38 years which means that people tend to seek medical care abroad while they are young.

Due to low medical care costs in south Asian countries, India and Thailand were the most popular destinations for treatment abroad. This is contrary to a study of Saudi patients who travelled abroad for renal transplantation where the majority of transplant tourists obtained their kidneys in Pakistan (49%) followed by the Philippines (28%), Egypt (11%), and the United States (3.2%).²¹ Although the majority of patients went for treatment only, it is interesting that some of them (10%) went for tourism as well. The explanation could be explained that they initially decide to go for tourism and then decide to obtain a medical check-up at the same time. This decision could also be influenced by the long delays and waiting lists at home. A study on reproductive health tourism in the United Arab Emirates (UAE) found that another reason for travel is privacy; this is a concern in an environment where both infertility and *in vivo* fertilisation are still stigmatised.²²

One of the interesting findings in our study is that 15% of the participants did not even seek any medical care locally, but rather travelled abroad directly although their illness could have been

managed locally. The reasons for such trend was not clear from this study so further studies may be necessary in future in order to explore this issue specifically.

Although dissatisfaction with local treatment was thought to be a major reason for seeking treatment abroad, this study showed only 5.9% of the participants were dissatisfied with local treatment. Concerning their source of information on treatment abroad, the Internet, newspapers and medical tourism offices were the least used sources (2.7% each); these are all available in Oman, but their low usage would indicate that people still intend to use traditional methods (such as word of mouth) as their source of information.

Although one may think that medical care abroad is cheap, overall costs are high. One third of participants in this study paid more than 2,000 Omani rials (c. US \$ 5,200) for their treatment. This may give an insight into how much people may be ready to spend on their health. A case report from Bahrain showed that the prescription of 19 drugs, many of equivocal benefit, at a monthly estimated cost of US \$ 615 imposed a substantial economic burden on the patient and led to poor adherence due to the confusing drug regimen.²³

While it is thought that treatment abroad does not lead to complications, this study revealed that 15% of the participants indeed suffered some complications. This percentage may also be an underestimation since people may prefer not to report problems so as not to be blamed for seeking medical care outside their country. In addition, some complications do not manifest immediately; however, the subjects in this study responded to the questionnaire within days or at a maximum 2 weeks after their return from treatment abroad. Alghamdi *et al.* in 2010 showed that the group of 'transplant tourists' had a significantly higher rate of acute rejection within the first year compared with those who underwent local transplantation (27.9% versus 9.9%, $P = 0.005$). Also, compared with local transplantation, transplant tourists had a higher rate of cytomegalovirus (CMV) infections (15.1% versus 5.6%, $P = 0.05$) and hepatitis C seroconversion (7.5% versus 0%, $P = 0.02$).²¹ In 2011, Al Khaja reported on a Bahraini patient who experienced adverse effects due to the polypharmacy prescribed abroad; these included nausea, vomiting, gastric pain,

flatulence, severe constipation, tiredness, palpitation, nervousness and dizziness which compromised the patient's quality of life and resulted in poor medication compliance.²³

The most popular specialty for which people sought medical care abroad in this study was orthopaedics. This could be explained by the chronic nature of such diseases, its high prevalence, especially among the elderly, and the scarcity of specialist clinics in each health institution or region of Oman.

The limitations of this study included scarcity of data and statistics on patients who travelled abroad for treatment; this resulted in a small sample size. A further limitation is the shortage of scientific literature about medical tourism in Arab and Arabian Gulf countries. Further studies in these various countries, individually or as multicentre studies, are required to obtain a clearer picture of the treatment abroad trend.

Conclusion

This study has shown that it is very difficult to obtain data on patients who travel abroad for treatment. This therefore necessitates the establishment of national registries and databases. Many facts regarding medical tourism should be made clear to the community (e.g. treatment abroad can have some complications, is costly and that consultation with a local doctor is necessary prior travel). Modern technological methods for accessing information sources should also be advocated (i.e. Internet). Health education about the treatment of chronic diseases should be intensified so that people can decide whether there is chance for their illness to get cured abroad or not.

Specifically, two different approaches can be used to respond to the issues which this study raises in Oman about medical treatment abroad: the public health sector approach and the community approach.

First, the Omani public health authorities (the MOH and its sister institutions) need to pay more attention to this trend by establishing a national database and registry of treatment abroad which should be regular audited. Second, Omani authorities, in conjunction with those in the destination countries, should 1) Set standards as a framework for regulating the medical tourism

industry and encourage other countries to do so; 2) Accredite medical tourism companies and then regularly review their accreditation; 3) Mandate medical tourism companies to contribute to funds to protect clients from financial losses and to compensate them in case of complications or medical errors.^{1,5,12} Scientific conferences and workshops organised with other Gulf Cooperation Council (GCC) countries should also be encouraged in order to empower researchers and scientists to understand this phenomenon in our immediate region.

As to the community approach, the aim would be to raise awareness through the various media among all age groups in the community about medical tourism and its implication for individuals, families, communities and countries. Since it was shown clearly by our study that data and statistics about medical tourists are limited and difficult to trace, people should be requested to report to their primary health care institution on their return for recording and follow-up. Patients planning on medical tourism should know that they need to consult their local doctors first, use modern technologies (e.g. the Internet for browsing destinations options and offers), and be aware that complications can occur in treatment abroad. This awareness raising and education would be better undertaken as a multidisciplinary effort by various ministries, agencies and non-governmental organisations (NGOs).

CONFLICT OF INTEREST

The authors reported no conflict of interest.

References

1. Helble M. The movement of patients across borders: Challenges and opportunities for public health. *Bull World Health Organ* 2011; 89:68–72.
2. Crooks VA, Kingsbury P, Snyder J, Johnston R. What is known about the patient's experience of medical tourism? A scoping review. *BMC Health Serv Res* 2010; 10:266.
3. Johnston R, Crooks VA, Snyder J, Kingsbury P. What is known about the effects of medical tourism in destination and departure countries? A scoping review. *Int J Equity Health* 2010; 9:24.
4. Martinez Alvarez M, Chanda R, Smith RD. The potential for bi-lateral agreements in medical tourism: A qualitative study of stakeholder perspectives from the UK and India. *Global Health* 2011; 7:11.
5. Snyder J, Dharamsi S, Crooks VA. Fly-By medical care: Conceptualizing the global and local social responsibilities of medical tourists and physician voluntourists. *Global Health* 2011; 7:6.
6. Whittaker A. Pleasure and pain: Medical travel in Asia. *Glob Public Health* 2008; 3:271–90.
7. Trade in Health Service and GATS. World Health Organization, Regional Office for Eastern Mediterranean. From: <http://gis.emro.who.int/HealthSystemObservatory/PDF/Trade%20And%20Health%20Services/jordan.pdf>. Accessed: Jul 2011.
8. Medical Tourism Consumers in Search of Value. Deloitte Center for Health Solutions. From: [http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_chs_MedicalTourismStudy\(3\).pdf](http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_chs_MedicalTourismStudy(3).pdf). Accessed: Jun 2011.
9. Ehrbeck T, Guevara C, Mango PD. Mapping the market for medical travel. *The McKinsey Quarterly*, May 2008. From: https://www.mckinseyquarterly.com/Mapping_the_market_for_travel_2134. Accessed: Jul 2011.
10. Suleiman BJ. Trade in health services and GATS in the Sultanate of Oman. From: http://www.searo.who.int/LinkFiles/Publications_Sultanate_Oman.pdf. Accessed: Jul 2011.
11. Horowitz MD, Rosensweig JA, Jones CA. Medical tourism: Globalization of the healthcare marketplace. *Med Gen Med* 2007; 9:33.
12. Eggertson L. Wait-list weary Canadians seek treatment abroad. *CMAJ* 2006; 174:1247.
13. Bouvier PA. Medical tourism: A new kind of traveler. *Rev Med Suisse* 2008; 4:1196, 1198–201.
14. Johnston R, Crooks VA, Adams K, Snyder J, Kingsbury P. An industry perspective on Canadian patients' involvement in medical tourism: Implications for public health. *BMC Public Health* 2011; 11:416.
15. Turner L. Medical tourism: Family medicine and international health-related travel. *Can Fam Physician* 2007; 53:1639–41, 1646–8.
16. Snyder J, Crooks V, Turner L. Issues and challenges in research on the ethics of medical tourism: Reflections from a conference. *J Bioeth Inq* 2011; 8:3–6.
17. Rotem A, Toker A, Mor-Yossef S. Medical tourism: Changing a world trend into a national resource. *Harefuah* 2009; 148:30–3, 88.
18. York D. Medical tourism: The trend toward outsourcing medical procedures to foreign countries. *J Contin Educ Health Prof* 2008; 28:99–102.
19. Turner LG. Quality in health care and globalization of health services: Accreditation and regulatory oversight of medical tourism companies. *Int J Qual Health Care* 201; 23:1–7.
20. Unti JA. Medical and surgical tourism: The new

- world of health care globalization and what it means for the practicing surgeon. *Bull Am Coll Surg* 2009; 94:18–25.
21. Alghamdi SA, Nabi ZG, Alkhafaji DM, Askandrani SA, Abdelsalam MS, Shukri MM, et al. Transplant tourism outcome: A single center experience. *J Transplant* 2010; 90:184–8.
 22. Inhorn MC, Shrivastav P. Globalization and reproductive tourism in the United Arab Emirates. *Asia Pac J Public Health* 2010; 22:S68–74.
 23. Al Khaja KA, Sequeira RP, Damanhori AH. Polypharmacy associated with medical tourism: A critique on drug therapy. *Int J Clin Pharm* 2011; 33:61–5.