

# Medical Tourism: Ethics, Risks and Benefits

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## ABSTRACT

**Background:** Despite of the global increase of medical tourism, there is no review done to examine the motivation leads to the practice of medical tourism, opportunities and risks with the practice of medical tourism and the ethical issue of medical tourism. **Objectives:** This review aims to highlight the issues associated with medical tourism and its facilitators and barriers by evaluating literature of the development and types of medical tourism in these countries. **Methodology:** We reviewed the relevant articles that were searched using Embase, Medline, Pub Med and CINAHL databases. Risks and benefits as well as ethical issues emerged from the practice of medical tourism were identified. **Results:** Pull factors that make patients having medical treatment, therapy and services abroad are language familiarity, the need for privacy, quality, bioethical legislation, food, cultural and tourist attractions at their destination. Affluent medical tourists from countries such as Indonesia, Brunei, Singapore and Bangladesh also are likely to practise medical tourism for both purpose of cheaper and reliable medical therapy and tourist vacation. Thus, the countries that have certain attractions associated with cheaper healthcare cost will be the most preferred place for them to practise medical tourism. **Conclusion:** This review can be useful for the patients who want to practise medical tourism, for nations which has already practised medical tourism to improve their quality in medical tourism and aware of ethical concerns that arise from this practice, as well as for the references of the countries which want to practice medical tourism in the future.

**Key words:** Medical tourism, Hospital care, Health care quality, Access and evaluation, Cross-border medical tourism, Push and pull factors.

## INTRODUCTION

Medical tourism can be traced back to the 1980s when several Latin American countries offering cheaper dental, cosmetic and surgical procedures to patients from United States (US) and Europe. Since the past few decades, the rapid growing of international trade and economy has influenced the rise of many other sectors especially healthcare sector. The concurrent ease of global travel, seeking for cheaper healthcare cost, desire for high technology of medical facilities, lack efficiency and effectiveness of public health services has increased healthcare sector more through the art of practicing medical tourism.<sup>1-4</sup>

Medical tourism is a practice of travelling to other country for the intent of attaining healthcare services. Such popular health-

care sought by patient at another country is organ transplantation, reproductive treatment and dental treatment.<sup>5</sup> Despite the raw definition of medical tourism described as the movement of patients abroad for medical therapy intention, the applicability and usage of 'tourism' terminology in medical tourism is continuously reviewed.<sup>6-11</sup>

Carrera (2006) defined medical tourism as the enhancement or restoration of the individual's health through medical intervention by organized travel outside one's natural healthcare jurisdiction.<sup>12,13</sup> Medical tourism is recognized as the act of tourists who are people that travelling abroad for the purpose of seeking medical services or treatment. Generally, travellers who have stayed away and travelled for more than 24 h from

Submission Date : 15-07-2015

Revised Date : 30-11-2015

Accepted Date : 16-02-2016

DOI: 10.5530/ijper.50.2.6

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their home country and often used any form of accommodation facility is considered as tourists while those who act in this way but does not meet this 24 h criterion are often determined as visitors. Thus, patients travel abroad for medical purpose is considered as medical tourists. They can be grouped into a special interest tourist and since their main motivation of travelling abroad is for a specific purpose, which are attaining healthcare.<sup>14</sup>

Medical tourism is not a new phenomenon and historically, the instance of medical tourism has started since thousands years ago to when Epidauria, a place in the Saronic Gulf where the healing god, Asklepios resides, reached by Greek pilgrims after travelling all over Mediterranean. Thus, Epidauria has been recorded as the original destination of medical tourism in medical tourism history. Spas and sanitariums also recognized as an early type of medical tourism and popular among England people in 18<sup>th</sup> century, as the high mineral water provided by spas treated a lot of diseases including psoriasis.<sup>15</sup> Cuba, being one of the known country practising medical tourism has actively practised and advertised medical tourism in their country since 1990s by the Cuban government which offered a package known as ‘sun and surgery’ package. This package included cardiac transplant and organs transplant.<sup>9</sup>

In recent years, medical tourism has been practiced broadly and interchangeably in many countries. India, Thailand, Korea and Malaysia are among the countries where the development of medical tourism increases aggressively.<sup>6,16-22</sup> This trend or practice becomes increasingly common because of the affordability and ease of global travel. In 2008 estimation, there were about 2 million Americans travelled internationally for the purpose of improving their health. Over 30 countries already have high technology of healthcare facilities that offered medical services to international patients. Patients can choose from a large variety of required procedures of prevention, screening and health maintenance by this rises in technology of medical worldwide that provides numerous options for healthcare on the global market.<sup>23</sup>

Despite of the global increase of medical tourism, there is no review done to examine the motivation leads to the practice of medical tourism, opportunities and risks with the practice of medical tourism and the ethical issues of medical tourism especially in Asian countries.<sup>24-26</sup> This review aims to highlight the issues associated with medical tourism and its facilitators and barriers by reviewing studies of the development and types of medical tourism in these countries.

## METHODOLOGY

### Inclusion Criteria

Studies were considered to be included in the review if the following criteria were met: (1) randomized controlled trials, (2) non-randomized controlled trials, (3) longitudinal studies, (4) cohort studies, (5) case-control studies, (6) descriptive studies, (7) reviews, (8) letters, (9) conference papers, (10) opinions, (11) reports, (12) editorial papers that reported medical tourism, (13) studies focusing in Malaysia and India medical tourism, and (14) no gender restriction placed on sample participants. Studies were excluded if: (1) they were review studies and (2) studies in other languages than English language.

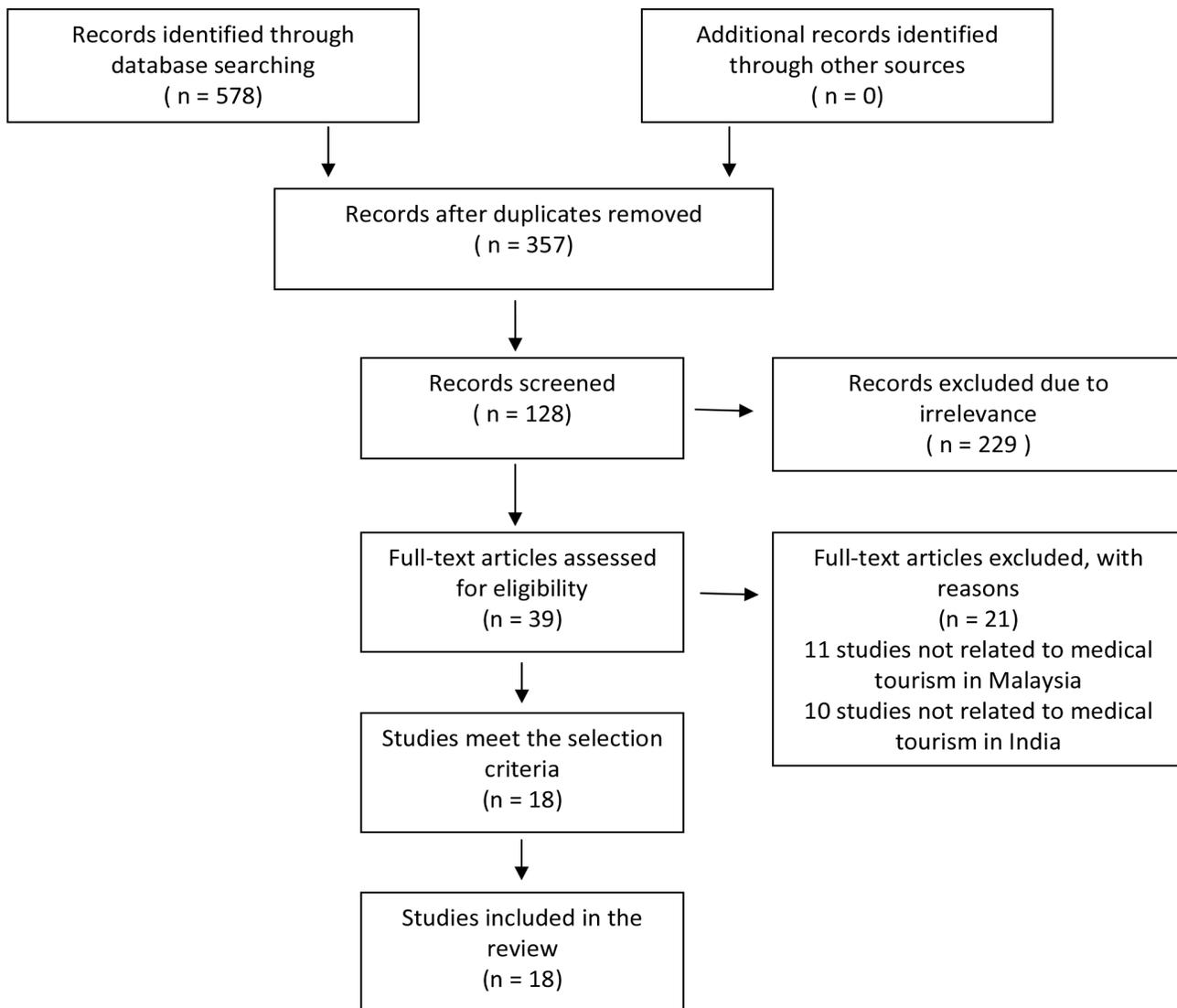
### Search Strategies

A narrative literature search was performed using databases provided by UiTM Library: Embase (starting 1980), Medline (starting 1948), PubMed, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) (starting 1982). The search strategy included articles published till March 2015 and written in English language. References from eligible articles were hand-searched in order to identify additional relevant papers. Keywords and their synonyms including “air travel”, “expeditions”, “medical tourism”, “health tourism”, “clinic tourism” or “hospital tourism” were used in the search strategies. The Boolean logic terms “or” and “and”, truncation, citation tracking and chaining were also applied to combine searches.

### Review Procedure

Studies of medical tourism have been found to be heterogeneous, as they are conducted in different countries used different definitions and different methods to collect data. For this reason we did not analyze the data from a statistical viewpoint, but the results were summarized according to the type of medical tourism and its relevant issues.

A total of 578 titles and abstracts were identified by three authors from electronic searches of the 5 databases and search engines, and wherever possible, a review of the reference lists. Of these, 539 titles and abstracts not related to medical tourism perspective and duplicated citations were examined and excluded. The full text of 39 articles was retrieved and distributed among the authors for further assessment. All authors agreed that 21 of the 39 manuscripts did not fulfill the inclusion criteria and were excluded. The PRISMA flow chart for our reviewing process is shown in Figure 1.



**Figure 1: PRISMA flow chart of the reviewing process**

## RESULTS AND DISCUSSIONS

One of the significant products of globalization is the rises of economic integration and interdependence of nation's state and region. Concurrent events of free exchange of products and people and the rise of cross-border movement are facilitated by this strong international connection between countries which has successfully increased the growing of international market rapidly. This includes the market of healthcare products, services as well as consumers and one of the growing healthcare market.<sup>27</sup>

Medical tourism is not a new phenomenon, what is new is actually the trend of practising medical tourism. Previously, medical tourism was practised by elite group from developing and third world countries to developed

countries to search for sophisticated and high quality of medical tourism. Recently, the trend has changed where involving ordinary group of people from more developed countries searching treatments in developing countries because of the price of medical treatments and services required for developing countries is far cheaper. Phua (2010) characterized cross border medical tourism into two different typologies which are quality sensitive medical tourism and price sensitive medical tourism. Quality sensitive medical tourism involved affluent people of a small group of wealth people searching medical treatment abroad for a sophisticated and high quality medical treatment and services which rarely provided in their home country while price sensitive medical tourism involved less affluent people travelling out of country to seek for affordable medical treatment price.<sup>28</sup>

### Ethical issue on medical tourism

The inequity of healthcare distribution among the local population and foreigner patients is the major negative effect seen in the practice of medical tourism.<sup>11,19,29,30</sup>

Since medical tourism gives a great benefit to nation's economy sector, there is a possibility for the development of two tiered health system where medical tourist enjoying the conducive medical facilities, well-trained physicians and high technology medical equipment while the local underprivileged patients would only have basic medical facilities and lack of source of medication and medical services. Besides that, better salaries and work opportunities offered to healthcare providers may cause them leaving the health public sector to work with private hospitals that capitalizing on medical tourism. These will definitely affect the quality of public healthcare sector as well as the ratio of healthcare providers-to-patients.<sup>6,31,32</sup>

One of the major reasons of long waiting times or poor services delivery in public healthcare sector is due to the inadequate skilled and well-trained public healthcare professional. India having low numbers of healthcare personnel of 1 million nurses, 200 000 dental surgeons as well as 600 000 physicians according to the report of India Planning Commission in 2008.<sup>33</sup> A shortfalls of healthcare specialist manpower at community health centers in India and their availability is worrying.<sup>34</sup> This is due to the brain drain and migration of skilled healthcare personnel to private sector inside or outside the country that provide international medical services which offer more competitive salaries and better opportunities. While the public health sector is overburdened with inadequate resources and physicians, the majority of advanced technology of medical equipment and vast medical facilities are in private sectors.

Furthermore, considerable large sum of money were taken away from the local population to develop this medical tourism industry by focusing on the construction of medical facilities at the urban areas; away from the rural areas for the local population needs. This is not justified for local citizens that live in rural areas to seek for medical treatments and services. This is one of the sentiments raised by local Brazilian when the country prepares for World Cup 2014 and the coming Olympic Game.<sup>5</sup> The argument are the market of medical tourism is driven by private health sector. Nevertheless, the profit obtained from this practice towards nation's revenue has urged nation to engage in this sector by investing the limited fund allocated for public healthcare sector into private sector especially in countries with no policy for the regulation of private healthcare sector. Private

hospital and private medical service center will be provided with best medical facilities, high technology of medical equipment as well as well-trained physician compared to public healthcare sector.

Low import duties of medical facilities and land have been subsidized by government for private sectors. For example, the intervention of government in the regulation of private sector in India is minimal. The practice of medical tourism could further rule out their demands and pressure state to give them even more subsidy. This eventually causes the country's budget in healthcare sector will go less for public healthcare sector and more to private sector. All these implications will put the pressure on local patients who have severe and chronic disease or illness and do not have the affordability to having abroad medical therapy and fully depend on public healthcare provided by their government.<sup>35</sup>

Another ethical issue is related to cross-border reproductive. For example, legal restriction of fertility treatment in France has motivated French citizens to have reproductive care treatment in Belgium. Fertility treatment for transgender couple or single mothers and homosexual are not allowed in France due to the absence of medical evidence on its sterility. In contrasts, Belgium has not legally restricted this practice towards these groups and many centers can provide reproductive care treatment to them. Furthermore, the prohibition of egg donator in France from patient's nieces or sisters has motivated patients from France to seek this treatment in Belgium in contrast with legal restriction of Netherland that prohibited anonymous egg gametes to be used in reproductive care treatment, which eventually motivated their citizens to seek their desired treatment in Belgium.<sup>36</sup>

### Social impact to the local population

Despite prior benefits of medical tourism, a number of studies have found the significant impact of practising medical tourism. The most important impact is inequity of health distribution towards local patients especially those who are fully dependent on the public healthcare provided by government. Although the market of medical tourism is driven by private health sector, the profit obtained from this practice towards nation's revenue has urged nation to engage in this sector by investing the limited fund allocated for public healthcare sector into private sector especially in countries with no policy for the regulation of private healthcare sector. Private hospital and private medical service center will be equipped with good quality medical facilities, high technology of medical equipment as well as professionally trained physician compared to public healthcare sector.

Furthermore, the medical centers tend to focus more on urban areas as to meet the demand for medical tourist of ease of mobility to medical centers but unfair to patients in rural areas to access those facilities. Besides that, this growing of medical tourism led to brain drain since the private sectors which practicing medical tourism are likely to offer more salary and best opportunity to skilled healthcare professionals which encourage them to leave public healthcare sector.

In addition, there are other impacts that arise from this practice such as the quality care issue, infection acquired during medical procedure especially in third world country and complication of travelling for medical tourist.<sup>37</sup>

### **Patients' decision-making in terms of push and pull factors**

Push and pull factors can affect patient's decision-making to practise medical tourism. Push factors are any forces or factors that drive people away from particular place and pull factors are any factors that drive people to a particular location. In other words, push factor happened due to non-availability of one's desired things in particular places that makes people seeks those things is another place while pull factors are desired things that are present in particular place that attract people to move to that particular places.<sup>38</sup>

International literature has recorded two different motivations that commonly cause patients from high income countries practising medical tourism to other nations, specifically the developing one. The most crucial factor in encouraging people to travel long distance just to seek medical therapy is thought to be cost-saving in searching affordable medical cost for patients without universal medical insurance that come from privately funded healthcare system such as US. According to push and pull factor theory, this might be due to the high medical therapy cost required in their own country that causes them to seek therapy at another country regardless the quality of therapy as well as non-availability of needed healthcare in their home or more cheaper medical therapy cost required in particular country that provided same quality of therapy with their own country has motivated them to having medical therapy there. Meanwhile, for patients from Canada and much of Europe countries that their home system have an access to publicly-funded medical therapy, practised medical tourism due to the long waiting list for healthcare therapy in their countries as well as looking for alternative abroad due to the unavailable services or treatment procedures in their own country or particular healthcare services that illegal locally. However, the huge interest of patients seeking medical services abroad are due to the cost-

saving factors even for publicly-funded patients that seeks alternative abroad to avoid long waiting times in their home country if their country refuse to pay for healthcare therapy abroad and this scenario happened often. Therefore, the strongest motivation for patients of developed country having medical services or therapy to developing countries via the industry of medical tourism is the cost-saving. Anyhow, there are critics arise from this motivation stated that this low cost of medical therapy and services in particular nations is due to the limitation malpractice insurance paid by healthcare professionals while patients have likely at risk when receiving this low cost medical therapy and services.<sup>6,39</sup>

Previous study has shown that in India, the costs of comparable medical services are on average of 1/8 to 1/5 of those in other countries. A cardiac procedure only costs about 3,000 to 6,000 US dollar in India compared to 30,000 US dollar in Singapore and 40,000 to 60,000 US dollar in US. Thus, with this cheaper medical services cost and availability of high technology medical facilities as well as well-trained physician in India has made India among the most favorable countries to practice medical tourism. Based on this study, the major ratio of healthcare growth is attributed to the growth in the market of medical tourism. Medical tourism has made healthcare sector hits a place among the other sectors in term of contribution to nation's revenue and employment rate. In 2012, India's health sector has grown nearly to 40 billion US dollar from 34 billion US dollar in 2009. According to Confederation of India Industry (CII), over the past few years, medical tourism in India has gained momentum which approximately 150,000 medical tourist arrived in India in 2005 and the number of medical tourist that choose India as medical tourism destination is expected to increase by 15% annually.<sup>35</sup>

For example, price advantage is the pull factor that makes India a well-known country in receiving patients all over the world for the medical therapy and services purpose. While India offering world class treatment in it huge number of hospitals, the cost of medical services and therapy is much cheaper whereas the cost differential between India and in West countries is huge and this makes India one of the favorite destination for medical tourism although it entrance in medical tourism industry mere recently. Industry observers predicted that for the each year of the next 6 years, India healthcare sector that had boosted up by healthcare tourism could grow up to 30% from 17 billion dollar per year healthcare market due to its price advantage. A study on Indian healthcare carried out by Confederation of Indian Industry (CII) stated that 50-69 billion US

dollar can be contributed by medical tourism alone as an extra profit for tertiary hospitals by 2012 that account for about 6.2% to 8.5% of gross domestic product.<sup>40</sup>

There is an enormous and intact market for curative treatment of medical tourism as well as therapeutic medical tourism such as Ayurveda. This new entrance in the industry of medical tourism has made India as a chosen destination for medical therapy besides from the traditional fact that India, being the oldest country practice medical tourism where tourists come for Ayurveda and other therapies. Since India has great technologies and huge pool of skill healthcare professionals, India is estimated to be a leader in medical tourism industry.<sup>41</sup>

Asian countries such as Thailand, India, Malaysia and Singapore are among the most famous medical tourism destinations which remarked by medical tourism industry. These countries can attract more tourists because of the medical treatments or services provided are less expensive than those of other part in the world like US or European countries.<sup>42</sup> Medical tourist or international patients can save up to 40% to 60% due to the lower labor cost in most of Asian countries which cause lower cost for medical treatment and services.<sup>43</sup>

Another important pull factor is the credibility and professionalism of healthcare providers in Malaysia, India and Thailand. The good English-proficiency and well-trained medical staffs is a plus point when deciding the destination for medical tourism.<sup>35</sup> In one study that seeks the reasons of patients from particular countries practising medical tourism in India for congenital heart disease treatment shown that the number of international patients having cardiac treatment in India is 1 in 10 of every cardiac admission. This indicated that India has a stable position among countries that frequently visited for the best quality of treatment. Surprisingly, patients from a country with good medical and surgical services like Malaysia took the highest percentage number of cardiac admission in India hospitals. This might be due to several reasons such as long waiting list, insufficiency of specialized cardiac surgery center in public hospitals, geographically near to India as well as low transportation cost in India. Besides that, medical tourists from South Africa is the second highest patients likely to have cardiac surgery in India although the culturally and physical proximity of South Africa to India is quite far. The main reason is due to the cost competitiveness advantage of India over other US and Europe countries. In India, 7500 US dollar has already covered the cost of travel, surgery and 3-week stay in India for surgery of ventricular septal defect which merely 10% cost of surgery of open heart in London, United Kingdom.

In addition, the unavailability of specialized cardiac surgery in several African countries is the reason of those patients having treatment in India. Even though, the desired treatments are locally present in these countries, there is high proportion of patients from Malaysia and African countries that received the sponsor by their government to undergo medical tourism in India.<sup>15</sup>

### Promotion of medical tourism

The effective promotion of medical tourism is one of the factors that lead to the growth of practising medical tourism. According to the Malaysian Tourism and Culture Ministry Malaysia and Ministry of Health, the promotions of medical tourism that has been conducted and implemented by them has attracted 770,000 and 790,000 medical tourists to choose Malaysia as destination country for having services and treatments in 2013 and 2014, respectively which in turn bring profit for about 191.80 million US dollar to the country.<sup>44</sup> The growth rate of income in the medical tourism industry had exceeded the Malaysian national plan (2010-2015) target by 10% every year, and for the Malaysian national plan period (2016-2020), the income was expected to grow by 15% annually, generating revenue of about RM2 billions by 2020.

Medical tourism facilitators or agents that are responsible in disseminating information about medical tourism to prospective patients, advertising its availability and overseeing follow-up care has contributed to the promotion of medical tourism by using the internet and popular social media to advertise possible and promising medical procedures and destinations.<sup>6</sup> For example, private hospitals in Malaysia engage foreign agents in several key markets overseas who help patients selecting Malaysia as destination of medical tourism. These agents then work closely with the health tourism team of the hospital to arrange every aspect of our foreign visitors stay at treatment in the hospital. Meanwhile, a study about promoting medical tourism in India found that the hospitals, clinics and medical service centers in India play a big role in attracting international patient for medical tourism in India through advertisement with a variety of messages and images that promoting a broad range of specialized medical services offered to international patients, which emphasize on best quality, advanced technology of medical equipment and facilities, competent and professional healthcare providers and best quality of medical care. Nevertheless, overall cost of this practice is rarely mentioned in those advertisements as they are often carried out by tour operators or agents.<sup>6,39</sup>

## Financial Implication of medical tourism

### Exporting countries

Exporter countries in medical tourism in context of medical cost advantage which commonly low income countries could gain benefit tremendously from the dividend they make through medical tourism as the foreign exchange is the prime financial source of medical tourism. The Tourism Research and Marketing Group reported that each year there are 27 millions of trips related to health which generating about 33 billion Euros. Medical tourism in most countries occur not mere through the private sector but the government also investing in private hospitals indirectly (i.e. through incentives of tax) and directly. Since the government also benefited from this practice, they participate in promoting medical tourism actively. For instance, India through leaflet of medical services offered in their airport and the campaign of 'Incredible India'.<sup>45</sup> Furthermore, the revenue from this practice is increased not only for the medical services or treatment provided but also during the healing period as well as the accomodation of accompanying person.

The expansion of medical tourism in particular countries has been used to bring back their healthcare providers who had emigrated by offering better opportunities and competitive salaries. Typically, abroad patients are more likely to trust the healthcare providers such as physicians, pharmacist, reflexologist and etc. who being trained in their home country. Thus, this will converse the brain drain and emigration of skilled workers from particular countries.<sup>5</sup> The traveller may travel alone or for those who undergo serious medical procedure that needs companion for the ease of mobility and safety such as cancer treatment and cardiac surgery may travel with one or more support person such as parent, siblings, friends or spouse. In this case the medical tourism destinations will benefit in their monetary inflow from the stay of patients and their companions aside from medical treatment cost itself. The close proximity of luxury accommodations to private medical centers or facilities which provide medical tourism services also aim to benefit from this industry.<sup>46</sup>

### Importing countries

Patients from importing countries (the original countries of the medical tourist) would have high confidentiality and privacy of medical treatment, increase personal care level as well as high medical services and treatment options by practicing medical tourism. Importing countries can reduce the waiting list and waiting time by practising medical tourism. This will reduce the number of mortality in importing countries and increase the health

condition of citizens which can produce more productive workers or citizens.

To certain extent, importing countries have financial benefit by sending patients to have medical treatments and services abroad to countries that offering low medical cost treatment. There are one study claimed that, overall US annual savings would be 1.4 US billion dollar if 1 in 10 patients from US who suffered from one of fifteen conditions having medical treatments or services abroad. Furthermore, if bilateral trade relationship between countries is applied, cost of medical treatments abroad can be directly negotiated and savings from this low cost of medical treatment of abroad can be included in nation's budget to be used for developing other sectors.<sup>5</sup>

### Risk exposure to medical tourists

There are risks associated with the practice of medical tourism which arise from the surgery procedure or travelling abroad. Three broad categories have been identified: risk of travel, risk post-operative procedure in patients own country as well as risk that might affect the health of patients during the procedure.<sup>47</sup>

Medical tourism comes with two main risks that are broadly discussed in the context of in terms of psychology and physiology. Psychologically and emotionally, being away from the closest people such as family, spouse, and parents may lead to acquired stress to medical tourist. Such health risk related to travel is due to the mental burden and particularly during the healing period abroad. Besides that, physiological risk that may be developed during airline travel is the major concern that for the medical tourist before and after having medical treatment or services). Potential health conditions using long haul flight are more susceptible to travelers' thrombosis which also known as deep vein thrombosis (the swelling of deep vein due to the clotting of blood in those particular areas).<sup>48</sup> It is more likely to occur for restricted and lack of movement during the flight which causes lack of blood flow to the areas of the legs. Furthermore, there might be a possibility of blood clotting occurs in the lungs which lead to pulmonary embolism.<sup>49,50</sup>

The risks of medical tourism are not restricted only when patients neither are abroad nor ended after patients check out from the hospital. Lack of information flow between abroad physician and home country is another negative impact of medical tourism as the continuity of care towards patients is broken. This might arise from inadequate follow up care after the medical treatment is received abroad by the patients. There are no transfer of health information from foreign hospital to home

country which might lead to several consequences such as inability to screen complication from the treatment or surgery abroad, toxicity arise from administered medication. If any complication arises, patients are more susceptible to severe condition as the local physicians have little knowledge on what is going on during abroad treatments or medical procedures.<sup>51</sup>

However, these problems can be avoided by requesting their medical report from the attending doctors. Destination countries that have poor medical care laws enforcement might lack legal remedial procedure if complications of treatments arise. This would be a problem to medical tourists are further separated geographically from their home country. Furthermore, some physicians in home countries may refuse to treat patients who having medical treatment abroad due to the fear of being accused or sued for complication arising from treatment abroad for those countries with little legal recourse for procedures or treatments.<sup>47</sup>

Besides that, patients exposed to post-operative infection in the hospitals, lack of blood supply available at the hospitals of destination countries as well as travelling during healing period clearly have negative impact of patients' condition and health. Decision making of practicing medical tourism based on cost advantage is thought to be risky and gives bad impact on patients' health.<sup>52</sup> Furthermore, unknown health risks may be exposed to medical tourist that having medical treatments or services which are illegal in patients' home country.<sup>39</sup> Study showed that a kidney transplant patient might contract tuberculosis, pneumonia, HIV, urinary tract infection, wound infection as well as hepatitis B from kidney transplant procedure through medical tourism. There are only 69.2% patients with one year average graft survival and 75% of patient's survival rate based on previous medical tourist having this procedure abroad.<sup>53</sup>

## LIMITATION AND RECOMMENDATIONS

Apparently, the finding of this review is geographic restricted to India where the ethical issues discussed are mainly focusing in this country which may not reflect the same in other countries like Thailand and China that practice medical tourism. The review also mainly focuses on motivation which leads to the practice of medical tourism, opportunities, risks and the ethical issue associated with medical tourism. Other issues such as types of medical tourists, decision making process, branding, positioning, competitive differentiation are not discussed. Besides, only English written studies are included in this review which has limited the relevant data from other non-English written studies.

With the above mentioned limitation, a mixed methods studies are recommended to uncover issues such as perception, facilitator and barrier of general public in developed countries about medical tourism. It is hope that the recommended findings would provide much needed information on the key issues identified, and knowledge gaps that exist about medical tourism.

## CONCLUSION

The main forces that encourage patients to practise medical tourism to particular countries is due to the relatively low cost required for medical services comparable with its quality, more inflow of patient to that particular countries will help to increase their economic sector through this practice. However, inequity of health distribution towards local patients especially those who are fully depend on the public healthcare provided by government do occur.

This review can be useful for the patients who interested in medical tourism, for nations which has already practiced medical tourism to improve their quality in medical tourism and aware of ethical concerns that arise from this practice, as well as for the references of the countries which want to practise medical tourism in the future.

## ACKNOWLEDGMENTS

This work was supported by LESTARI Grant Scheme: 600-RMI/DANA 5/3/LESTARI (42/2015). The authors would like to express their gratitude to Ministry of Higher Education and Universiti Teknologi MARA, Malaysia for financial support for this research. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

## CONFLICTS OF INTEREST

The author declare no conflict of interest.

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## PICTORIAL ABSTRACT

MEDICAL TOURISM: ETHICS, RISKS AND BENEFITS	
<b>Push and pull factors of medical tourism:</b> <ul style="list-style-type: none"> <li>• Cost-saving</li> <li>• Services or treatment procedures in home countries are not available</li> <li>• Advanced technologies and equipment</li> <li>• Price advantages</li> <li>• Credibility and professionalism of healthcare providers</li> <li>• Good English proficiency in the tourist destinations</li> </ul>	<b>Roles of medical facilitators:</b> <ul style="list-style-type: none"> <li>• Disseminating information of medical tourism to prospective patients</li> <li>• Advertising its availability</li> <li>• Overseeing follow-up care</li> </ul>
<b>Financial implication of medical tourism:</b> <ul style="list-style-type: none"> <li>• Exporting countries: profit from medical tourism, more work opportunities, monetary inflow from medical tourist</li> <li>• Importing countries: High privacy of medical treatment, reduce waiting list for treatment, increase personal care level, reduce rate of mortality</li> </ul>	<b>Disadvantages of medical tourism:</b> <ul style="list-style-type: none"> <li>• Inequity of healthcare distribution</li> <li>• Inadequate skilled and well-trained public healthcare professional in public institutions</li> <li>• Ethical concerns: Cross-border reproductive</li> <li>• Risk exposure to medical tourists: risk of travel, risk post-operative procedure, risk of the medical procedure</li> </ul>

## ABBREVIATIONS USED

**US:** United States; **CINAHL:** Cumulative Index to Nursing and Allied Health Literature; **UiTM:** Universiti-Teknologi MARA; **CII:** Confederation of Indian Industry.

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## SUMMARY

- The pull factors that make patients having medical treatment, therapy and services abroad are language familiarity, the need for privacy, quality, bioethical legislation, food, cultural and tourist attractions at their destination.
- The push factors include high medical therapy cost required in their own country, long waiting time or unavailability of the treatment procedures in home countries
- Affluent medical tourists from countries such as Indonesia, Brunei, Singapore and Bangladesh also are likely to practise medical tourism for both purpose of cheaper and reliable medical therapy and tourist vacation.