Travellers Health Through "Emporiatrics

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ABSTRACT

"Travel broadens the mind" and people have been extolling the merits of travel for a very long time. The general belief is that travel is good for travellers, mentally and physically. But while travel can indeed be interesting and exciting and good for the mental and physical wellbeing, all too often, it can be harmful to a traveller's health [1]. The increase in the numbers of travellers and the speed at which they travel, has not only

had economic, cultural, and social repercussions, but medical, epidemiological, and medico-legal consequences as well [2]. Travel Medicine seeks to prevent the illnesses and the injuries which occur in the travelers who go abroad and it manages the problems which arise in the travellers who come back or come from abroad. It is also concerned about the impact of tourism on health and it advocates for the improved health and safety services for tourists.

Key Words: Travel medicine, Travelers health, Travel hazards

INTRODUCTION

Travel medicine or emporiatrics is the branch of medicine that deals with the prevention and the management of the health problems of international travelers. "The art of travel medicine is selecting the necessary prevention strategy without unnecessary adverse events, costs or inconvenience" [3].

The necessity of Travel Medicine is a result of the rapid expansion in international and intercontinental travel, in the development of the means of the prevention of the risks which are linked to this increased travel, in the modifications which are made in the doctor-traveler relationship, and in the updating of the ever changing epidemiological data [2]. There has been considerable growth in the interest in the field of travel medicine and in the intersection with Tourism Studies since the 1990s. Globalization facilitates the spread of diseases and it increases the number of travelers who will be exposed to different health environments. It has been estimated that about 80 million travelers go annually from the developed to the developing countries [3]. The major content areas of travel medicine include the global epidemiology of the health risks to the traveler, vaccinology, malaria prevention, and pre-travel counseling, which were designed to maintain the health of the approximately 600 million international travelers [4].

Yet, this interest from a medical perspective is not new. What is new, is the way in which the interest in travel medicine has developed across the science-social science divide and has now become one strand of a wider practitioner and academic interest in the tourists' well-being.

THE SPECTRUM OF TRAVEL HEALTH PROBLEMS [5,6]

It is worth looking at some figures to see how commonly health problems occurred among travellers, to look for the patterns in the sorts of problems they had, and to learn whether they sought any advice before their departure.

Source of advice	% seeking advice	% of that group who became unwell
Travel agent	21	31
Family doctor	10	42
Other	13	36
Multiple sources	04	36
No advice taken	52	26

[Table/Fig-1]: Percentage of travelers seeking advice from different

MORTALITY AND MORBIDITY [7,8]

- Mortality studies have indicated that cardiovascular diseases account for most of the deaths during travel (50%-70%), while injuries and accidents follow (~25%). Infectious diseases account for about 2.8%-4% of the deaths during/from travel.
- Morbidity studies have suggested that about half of the people from a developed country who stay for one month in a developing country will get sick. Traveller's diarrhoea is the most common problem which is being encountered.

The World's 10 Worst Travel Diseases [9]

- 1. Traveler's diarrhoea
- **2.** Dengue fever
- 3. Malaria
- 4. Lyme disease
- 5. Hepatitis
- 6. Parasites
- **7.** Typhoid
- 8. Yellow fever
- 9. Sexually transmitted diseases
- **10.** Media disease of the week eg: Swine flu, SARS

THE RISK ASSESSMENT IN TRAVEL MEDICINE [10]

The risk assessment preferably starts before the traveller enters the consulting room. The risk assessment has to be undertaken as a part of the pre-travel consultation and the exact itinerary and the medical history of the traveller is required. Addressing the risk in travel medicine is generally all about trying to modify the risks which have been established from the travel health consultation.

Establishing the risks includes:

- **1.** The destination
- 2. The traveller's medical history
- **3.** Intervention

1. Risks of the destination

- What countries and what parts of these countries are they visiting?
- How long are they going to stay?
- What time of the year are they visiting?
- What are the living conditions?
- What activities are they undertaking?
- Is there anything special about the destination culturally or legally?
- What is the traveller's prior travel experience?
- What access is there for an appropriate medical care?
- Does the traveller know first aid?

2. Risks of the traveller's medical history

Some travellers may not meet the medical guidelines of travel or they may need special clearance to fly on commercial aircrafts, such as those with

- Pre-existing illnesses
- Pregnancy
- Recent surgery or
- Serious physical or mental incapacity

3. The risks of intervention

All interventions have potential risks, including giving the wrong advice

- Advice and education
- Vaccination
- Chemoprophylaxis
- Screening and effective management

PROVIDING TRAVEL HEALTH ADVICE AND SUPPORT

More than 900 million international journeys are undertaken every year. The global travel on this scale exposes many people to a range of health risks which can be minimized by precautions which are taken before, during and after the travel. The 2012 edition of International Travel and Health provides updated information on vaccines and their requirements, malaria and yellow fever risks,

and new information for the last minute travellers [11].

The travellers often give insufficient thought to their health needs prior to their travel, seldom considering the possibility of accidents or illnesses occurring while they are overseas. The travel agents who are involved may give some idea on the health-care needs of the traveller, but the commercial pressures which encourage the travel often conflict with the ensuring health protection provisions for travellers are adequate, and this aspect of the travel is consequently under-emphasized by the travel agents and the airlines alike [12].

The travellers are advised when they book an international flight, to ensure that they have all the necessary travel documentation, and to consult their doctor about the immunization requirements [13]. Vaccines are an important public health measure and they may be prompt remedies for the travellers to attend the pretravel health advice sessions [14]. Travel health advice is primarily aimed at prevention, and it is therefore offered before the travel. It includes the steps which are taken before and during the travel. There is also an aspect of travel health which is provided after the return from travel, which is usually diagnostic.

Pre-Departure Advice

Protecting the traveller's health and safety while they are overseas includes the following measures:

1. Medical examinations and screening – To ensure that the travellers will be fit if they are intending to live and work overseas, or to ensure that those travellers with current health issues are fit to travel.

The Patient:

1. Medical Issues

- Age-specific issues
- Underlying illnesses, immunosuppression
- Medical history
- Medication use
- Vaccination history
- Allergies
- Contraindications to vaccines and medications
- Reproductive
- Pregnant
- Breastfeeding
- Risk-taking behaviours
 - Advice should be given about:
- The general health measures while travelling,
- Protective measures to avoid infection, immunization requirements, and health and accident insurance.
- The patient and the doctor should also discuss about the certification for, and the use of medication while travelling.
- **2. Psychological preparation** To identify the potential sources of stress and personal difficulty while overseas, and to provide personal protection strategies against consequent problems.

3. Provision of a medical kit – To ensure that the travellers have first aid supplies and medications for personal use when adequate medical advice is not available.

The travel emergency kit

- A copy of the medical records and the prescription medications
- Over-the counter medicines and supplies
- Analgesics
- Oral rehydration salts
- Decongestants, cold medicines, cough suppressants
- Antibiotics/antifungals/hydrocortisone creams
- Pepto-Bismol tablets, antacids
- Band-Aids, gauze bandages, tape, Ace wraps
- Insect repellants, sunscreen, lip balm
- Tweezers, scissors, thermometer

A medical certificate to provide a written authority for the travellers to take this kit into any country on the itinerary should be provided, especially for those countries with strict drug smuggling prevention programmes and unpredictable legal systems.

4. First aid training - Encouraging travellers to remote locations to to equip themselves with the knowledge of basic first aid is useful, but in reality, most of the travellers do not bother to do this. First aid should also be promoted in relation to the use of traveller's first aid kits.

For those travellers in remote situations such as in climbing expeditions, ocean yachts, or military deployments, first aid training should be provided prior to their departure and a first aid/medical kit will be needed to be included in the traveler's luggage and carried at all times.

5. Preventive measures for the prevention of thermal injuries – This includes the pre-travel acclimatization to heat, education, and dealing with travellers who are at a high risk of thermal stress

The doctor should give a general advice prior to the departure to hot environments.

- 1. Wear appropriate clothing.
- 2. Avoid direct sunlight
- 3. Try to be in shade
- 4. Maintain adequate fluid intake
- 5. Maintain adequate salt intake
- **6.** Avoid excessive exercise, particularly during acclimatization

The other aspect of thermal stress is protecting against cold, and this is especially important in adventure travel such as mountaineering and high altitude trekking, but also in connection with swimming and diving.

6. Insure and plan for aeromedical evacuation and repatriation if required- to ensure an expedited and a properly supported evacuation of any injured or severely ill person back home with advanced hospital stabilization locally if required.

- **7.** Advice regarding accidents and related hazards ensuring that the travellers are minimally disrupted by travel to/ from their destination, and are advised regarding the avoidance of accidents and other health or safety hazards, for example, animal bites, while they are overseas.
- **8. Special provisions for specific travel hazards** this may include protection against altitude sickness for mountaineers and occupational health advice for people who are working overseas, for diving medicine, medical student electives, etc.
- **9. Protection against tropical diseases** to ensure that the travellers are advised, and where appropriate, vaccinated, against the many tropical diseases which may be a risk at their destination.

In 2003, the International Society of Travel Medicine introduced a certificate of knowledge examination in travel medicine. We cannot make the travellers bullet-proof, but it is possible to make them bullet-resistant. The pre-travel visit should minimise the health risks which are specific to the journey, give travellers the capability to handle the most minor medical problems, and allow them to identify when to seek local care during the trip or on return [15].

Post-Travel - After Return from the Travel

Having concluded their journey, the patients may seek medical advice for three main reasons. They may complain of early post-flight symptoms of illnesses which are related to travel fatigue or the circadian rhythm disruption.

- They may be experiencing persistent diarrhoea.
- Thirdly, they may be experiencing symptoms such as fever, rashes, jaundice, or weight loss, which may suggest an exotic infectious disease.
- Less commonly still, the passengers may also be named as the contacts of known cases of illnesses.
- Essentially, all travellers should seek or be given advice before extensive travel. Yet, despite the available information and the resources, upto 70 percent of the travellers report some health problem, and approximately 8 percent will require medical care or pharmacotherapy during their journey or after they return.

TRAVEL INSURANCE [16]

Travel insurance is an insurance that is intended to cover the medical expenses and the financial (such as the money which has been invested in nonrefundable pre-payments) and other losses which are incurred while traveling, either within one's own country, or internationally.

A temporary travel insurance can usually be arranged at the time of the booking of a trip, to cover exactly the duration of that trip, or a more extensive, continuous insurance can be purchased from travel insurance companies, travel agents or directly from travel suppliers such as cruiselines or tour operators. However, the travel insurance which is purchased from the travel suppliers tends to be less inclusive than the insurance which is offered by insurance companies. The travel insurance often offers coverage for a variety of travellers. Student travel, business travel, leisure travel, adventure travel, cruise travel, and international travel are all various options that can be insured.

The most common risks that are covered by travel insurance are:

- Medical expenses
- Emergency evacuation/repatriation
- Overseas funeral expenses
- Accidental death, injury or disablement benefits
- Cancellation
- Curtailment
- Delayed departure
- Loss, theft or damage to personal possessions and money (including travel documents)
- Delayed baggage (and emergency replacement of essential items)
- Legal assistance
- Personal liability and rental car damage excess

Some travel policies will also provide cover for additional costs, although these vary widely between the providers.

In addition, often, a separate insurance can be purchased for specific costs such as:

- pre-existing medical conditions (e.g. asthma, diabetes)
- sports with an element of risk (e.g. skiing, scuba-diving)
- travel to high risk countries (e.g. due to war or natural disasters or acts of terrorism)

Usually, the insurers cover pregnancy related expenses, if the travel occurs within the first trimester. After that, the insurance coverage varies from insurer to insurer. The travel insurance can also provide helpful services, often 24 hours a day, 7 days a week, that can include concierge services and emergency travel assistance.

Typically, the travel insurance for the duration of a journey costs approximately 5%-7% of the cost of the trip.

CONCLUSION

Giving adequate advice on travel health requires a good knowledge about the local health hazards overseas, the public health measures, and the effectiveness of immunization and prophylaxis. The traveller's general practitioners are the most likely persons whom they approach for travel health advice, yet, the general practitioners receive very little, if any training in travel health, tropical health, or aviation medicine. In summary, travel medicine will be established as an interdisciplinary special discipline in the coming years and it will be characterized by new risks and on the other hand, by newer methods of therapy and prophylaxis.

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