

Exercise

- 45 years female an executive of a company living in Pakistan has to travel in country which is endemic with malaria. She plans her visit in the mid July for two weeks. The intended destination has hot weather. She has diabetes for which she takes insulin. Occasionally she feels breathlessness on walking stairs. Her blood pressure is normal.
- Plan a health aspects of her travel

Emporiatrics

Greek word

Emporos one who goes on shipboard as a passenger

Iatrike medicine

So it describes science of the health travelers.

Some data of international travel

- According to statistics from the World Tourism Organization, international tourist arrivals worldwide in 2010 for business, leisure and other purposes amounted to 940 million
- Travel for leisure, recreation and holidays accounted for just over half of all international tourist arrivals (51% or 446 million arrivals).
- Some 15% of international tourists reported travelling for business and professional purposes
- Around 27% travelled for specific purposes, such as visiting friends and relatives (VFR), religious reasons and pilgrimages, health treatment, etc

Some data of international travel

Slightly over half of travelers arrived at their destination by air transport (51%) in 2010 while the remainder travelled by surface (49%) whether by road (41%), rail (2%) or sea (6%). Over time, the share for air transport arrivals is gradually increasing. International arrivals are expected to reach 1.6 billion by 2020.

Travel medicine. concepts

Travel medicine or Emporiatrics is the branch of medicine that deals with the prevention and management of health problems of international travelers.

It is an interdisciplinary specialty concerned not only with prevention of infectious diseases during travel but also with the personal safety of travelers and the avoidance of environmental risks

Travel medicine concepts

The major content areas of travel medicine include the global epidemiology of the health risks to the traveler, vaccinology, prevention of disease and pre travel counseling.

Many of these risks can be minimized by precautions taken before, during and after travel.

Health risk for travellers

- Health risks for international travelers
- Health needs of the traveler
- Travel to be undertaken
- Sudden and significant environmental changes, altitude, humidity, temperature exposure to variety of illnesses
- Health risks depends on accommodation, available hygiene and sanitation situation

Travel –related risks

- Mode of transport
- Destination
- Duration and season of travel
- Purpose of travel
- Standards of accommodation, food and hygiene situation
- Behavior of the traveler
- Underlying health of the traveler

Pre travelling medical advice

Travelers intending to visit a destination in a developing country should consult a travel medicine clinic or medical practitioner before the journey. This consultation should take place at least 4–8 weeks before the journey and preferably earlier if long-term travel or overseas work is envisaged. However, last-minute travelers can also benefit from a medical consultation, even as late as the day of travel.

Components of health advice

The consultation will include health risks (including traffic accidents)

determine the need for any vaccinations and/ or antimalarial medication and identify any other medical items that the traveler may require.

A basic medical kit will be prescribed or provided, supplemented as appropriate to meet individual needs.

Dental, gynecological and age-appropriate examinations are advisable before prolonged travel to developing countries or to remote areas

This is particularly important for people with chronic or recurrent health problems.

Travelers with underlying medical problems are strongly advised to consult a travel medicine clinic or medical practitioner to ensure that their potentially complex travel health needs are met

Medical certificate

A medical certificate to provide a written authority for the travelers to

- take this kit into any country on the itinerary should be provided, especially for those countries with strict drug smuggling prevention programs and unpredictable legal systems.

Medical kit

- a medical kit should be carried for all destinations where there may be significant health risks. The kit should include basic medicines to treat common ailments, first aid articles and special items like syringes and needles

Basic medical kit

- First aid items
- Adhesive tape
- Antiseptic wound cleanser or alkaline soap
- Bandages
- Scissors
- Antihistamines
- Nasal decongestant
- Oral rehydration salts
- Sterile dressing

Additional items

- Medications for pre-existing medical conditions
- Antidiarrheal medications
- Antibiotics targeting most frequent infections in travelers (travelers diarrhea, infections of skin and soft issues, respiratory tract and urinary tract.
- Antibacterial ointment
- Antimalarial medicines

Special group of travelers

Age extreme age groups

48 hours after birth but recommended 7 days for air travel. Infants sensitive to environmental changes high altitudes

Pregnancy

Most airlines restrict air travel in last trimester

Air travel should be carried during the first trimester

After 28th week of pregnancy, a letter from a doctor or midwife, should be carried confirming expected date of delivery and that pregnancy is normal.

For single pregnancy, flying is permitted upto the end of 36 weeks

For multiple pregnancies, flying is permitted upto the end of 32 weeks

Special groups of travelers

Disability

Pre existing illness

Cardiovascular disorders Chronic hepatitis Chronic kidney disease Chronic respiratory disease

Diabetes mellitus Epilepsy Severe anemia

Travelers should carry all necessary medications and medical items for the entire duration of the journey. Travelers should also carry the name, contact details of their physician information about medical condition and treatment details of medication generic names included, and prescribed doses. A physicians attestation should also be carried.

Responsibility of the traveler

- obtaining adequate insurance cover; taking health precautions before, during and after the journey;
- obtaining a physician's attestation pertaining to any prescription medicines, syringes, etc. being carried;
- the health and well-being of accompanying children;
- taking precautions to avoid transmitting any infectious disease to others during and after travel;
- full reporting to a medical professional of any illness on return, including information about all recent travel;
- being respectful of the host country and its population; — practicing responsible sexual behavior and avoiding unprotected sexual contact.

Responsibility of the traveler

- the decision to travel;
- recognizing and accepting any risks involved;
- seeking health advice in good time, preferably 4–8 weeks before travel;
- complying with recommended vaccinations and other prescribed medication and health measures;
- careful planning before departure;
- carrying a medical kit and understanding its use;

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Medical examination after travel

- Travelers should be advised to have a medical examination on their return if they:
 - return with a fever from a country where malaria is or may be present, so that malaria can be excluded as a cause of their illness
 - suffer from a chronic disease, such as cardiovascular disease, diabetes mellitus, or chronic respiratory disease or have been taking anticoagulants; they received treatment for malaria while travelling;

Immunization

- Hajj
- Haj is important ritual for Muslims and each year millions of Muslims gather in the holy cities of Makkah and Madinah.
- Health aspects of Hajj
- Quadrivalent meningococcal meningitis vaccine
- Seasonal influenza vaccine
- H1N1 flue
- Opv
- Yellow fever

Traveler diarrhea

- Occurrence of three or more watery or unformed stools per day in a traveler or any number of stools when accompanied by abdominal cramps, fever vomiting or prostration.
- Affects 10-80 %. Mostly self limiting but can be severe in 30 -40 %
- Consumption of safe water.
- No particular prophylactic treatment available

Interventions for specific protection

- Chemo prophylaxis
- Malaria is endemic in over 100 countries that is visited by 125 million people each year.
- WHO recommends
- Chloroquine sensitive areas chloroquine
- Emerging chloroquine resistance area C PLUS proguanil
- Reported chloroquine resistance areas C P mefloquine
- Doxycycline. AP, atovaquone plus proguanil

Immunizations

- Vaccinations against
- Cholera
- Plague
- Yellow fever
- Pneumococcal
- Hepatitis A
- Hepatitis B
- Rabies
- Japanese encephalitis

Specific behavioral modifications

- Measures against feco-oral transmission
- Measures against bites and stings
- Measures against hazards of recreational activities
- Measures against ultraviolet radiation