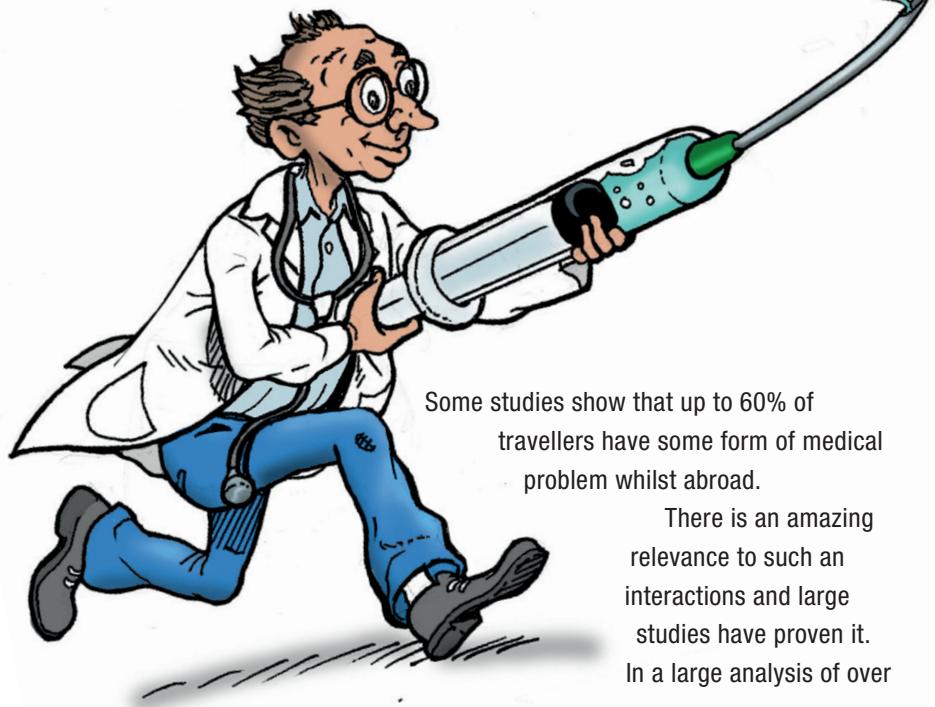


THE PRE-TRAVEL VISIT: more than just about shots!

There is a perception in the community that a pre-travel visit to a travel medicine practitioner is not necessary. Often the visit is considered a 'necessary evil' as a particular vaccine is mandatory for a country to be visited. Hence we find the reluctant businessman hastily scrambling in a visit in order to get a yellow fever vaccine before jetting off to Angola, the petrified student coming for an update of childhood vaccinations before being allowed to pursue post-graduate studies in the USA, and the pilgrim en route to Saudi Arabia arriving for the fulfilment of the visa requirement of a meningitis vaccine. However, there is much value to be gained for the prospective traveller from a pre-travel visit. It

may be as simple as avoiding annoying mosquito bites, it may lead to much less disabling traveller's diarrhoea that can erode the enjoyment of half of an expensive tropical paradise holiday, and on a few occasions, it may even prevent a fatality.

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There is an amazing relevance to such an interaction and large studies have proven it. In a large analysis of over



TRAVEL MEDICINE

By Dr Salim Parker
SASTM President



Guiding the Profession
Protecting the Public



The travel practitioner will also be able to advise who should not travel at all, who should delay their travels and who of those afflicted with chronic diseases may travel with some caution.

adjustments with factors such as direction of travel (either eastwards or westwards) taken into account.

The statistics obtained from airlines also sheds some light on the value of pre-travel visit.

None of the passengers in one

investigation who were medically screened before travel had any emergency during a flight. Conversely another investigation found that of those who had a medical issue on board not a single one had a pre-flight assessment. About 65% had an exacerbation of a pre-existing medical issue which included respiratory, cardiac and abdominal problems. These could probably have been stabilised before the journey was undertaken. Also someone with known heart problems would have had been counselled to carry the appropriate medication such as lifesaving sublingual tablets or spray on them at all times. The travel practitioner will also be able to advise who should not travel at all, who should delay their travels and who of those afflicted with chronic diseases may travel with some caution.

Certain guidelines have been well established as to who may not travel by air. These include neonates younger than 48 hours, women who are more than 36 weeks pregnant (or more than 32 weeks in cases of multiple pregnancies),

any traveller who has an infectious disease, and any person with a psychiatric condition that is not fully controlled. Other contraindications to air travel revolve around two

basic principles. The first is that the aircraft cabin is pressurised to the equivalence of an altitude of about 2500m, resulting in a decrease in pressure. Boyle's Law states that a decrease in pressure results in an increase in volume. Those who had procedures that resulted in the introduction of air in cavities such as the abdomen and skull, or have infections preventing the normal passage of air such as severe sinusitis, should not fly.

thirty-two thousand travellers, it was found that those who had a pre-travel visit had less malaria, hepatitis and HIV. In another study, which compared travellers who visited a travel clinic with those who only took advice from their travel agent, those who visited the clinic used malaria prophylaxis more frequently, suffered from less mosquito bites, had less travellers' diarrhoea and did not have a single case of malaria compared with the study counterparts. There is evidence that pre-travel counselling increases vaccination compliance to more than 80%, increases the awareness of how to avoid traveller's diarrhoea and the use of safe drinking water. It is also seems to increase awareness of risky behaviour such as sexual encounters. This is an important consideration as in one Glasgow study 19% of females, 32% of heterosexual males and 40% of homosexual males had at least one sexual encounter with a new partner whilst travelling.

Yet very few of those intending to travel even consider visiting a travel clinic. In one study in a first world country, only 36% did so with a significant number asking family and friends for advice. We normally advise travellers to visit a travel clinic about six weeks before travel. Yet South African data reveals that the average presentation before travel is only two weeks. Of more significance was that nearly half of one sample did not know their departure dates! The reason for the early presentation is to administer a full series of vaccines such as rabies or hepatitis B if indicated. Several visits spread over minimal intervals is needed for maximal vaccine efficacy. Underlying chronic medical conditions such as diabetes and asthma need to be stabilised and proper advice given. An insulin dependent diabetic flying across a number of time zones will need dose

In a large analysis of over thirty-two thousand travellers, it was found that those who had a pre-travel visit had less malaria, hepatitis and HIV.

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The second principle is that that the dissociation curve of the oxygen carrying haemoglobin of the red blood cells is affected negatively. This is due to the increase in altitude and this leads to a decrease in the oxygen saturation in the blood. Now normally this has little effect on a healthy traveller but anyone who severe lung problems or has heart problems, where even a small drop in oxygen saturation can lead to inadequate oxygenation, can suffer damage. An unstable angina patient may have a myocardial infarction precipitated, and a severely anaemic person may feel distinctly unwell. All these underlying medical conditions can be assessed by a travel medicine practitioner and proper advice can be given. Fitness to fly is not the only consideration during the consultation. Medical facilities at the destination must be considered when a traveller suffering from a chronic condition consults the travel practitioner.

Factors to consider for any journey include:

- The traveller and medical conditions: needs risk assessment
- The destination
- The activities
- Perceived and real risks
- Impact of destination on traveller
- Impact of traveller on destination
- Vaccinations/Prophylaxis/Self treatment
- Where to get help/Insurance
- Resources such as internet sites

Finally it has to be borne in mind that travel medicine is a continuum involving the pre-travel preventative measures, during travel contingency and evacuation plans as well as insurance in case of problems, as well as post-travel sequelae.

Travellers' Health Risks



Of 100,000 travellers to a developing country for 1 month:

- 50,000 will develop some health problem
- 8,000 will see a physician
- 5,000 will be confined to bed
- 1,100 will be incapacitated in their work
- 300 will be admitted to hospital
- 50 will be air evacuated
- 1 will die

Steffen R et al. J Infect Dis 1987; 156:84-91

Value of pre-travel consultation



Travel Clinic	Travel Agent
• Anti-malarials advised: 86%	• Anti-malarials advised: 19%
• Diarrhoea: 6%	• Diarrhoea 19%
• Mosquito bites: 8%	• Mosquito bites: 20%
• Malaria cases: 0	• Malaria cases: 3

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In-flight Medical Problems Seen

6 month British study of one major airline



Categories of problems (n=507)		
Exacerbation of pre-existing problem	330	65%
New medical problem	140	28%
Traumatic injury	37	7%

Exacerbation of pre-existing medical problem (n=330)

• Respiratory Problems	69	21%
• Cardiovascular Problems (3 deaths)	46	14%
• Abdominal Problems	33	10%
• Forgotten Medication or medication in baggage hold	20	6%
• Miscellaneous Problems	162	49%