Guiding the consultation: the informatics of travellers' health in a check-list

Never Stand Still | Medicine | School of Public Health and Community Medicine

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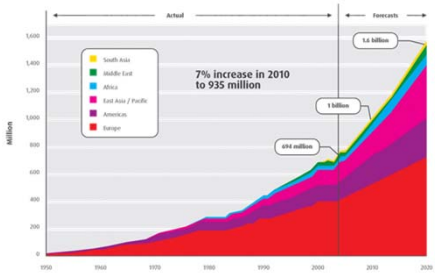
Summary Points

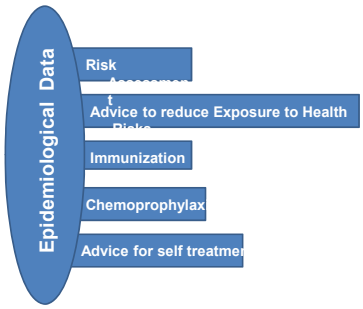
- The travel health consultation involves wholistic and individualised risk assessment (this traveller, this trip and this time)
- The issues are much wider than infectious diseases
- Resources such a pre-consultation questionnaires, checklists and travel health data sources can improve the quality of the consultation

Global travel continues to increase



According to the World Tourism Organisation (UNWTO) the number of international tourist arrivals worldwide has now exceeded 1 billion per year

The Pre-Travel Consultation

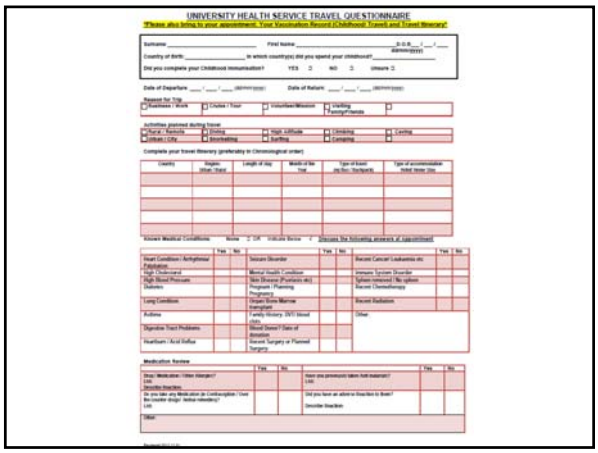


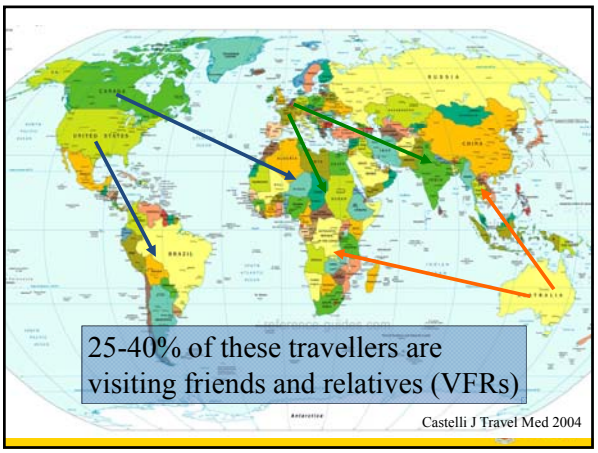
The Pre-Travel Consultation – Risk Assessment

- Itinerary
- Reason for travel
- Duration, style and season of travel
- Medical history
- Immunization history
- Allergies
- Special health needs

The Pre-Travel Consultation – Risk Management Topics

- Food and water precautions
- Insect bite prevention
- Immunizations
- Malaria Prevention
- STIs
- Travel medical insurance
- Air transportation issues, e.g. DVT
- Environmental risks
- Safety and security
- Travellers with special needs
- Cultural issues


UNIVERSITY HEALTH SERVICE TRAVEL QUESTIONNAIRE



Visiting friends and relatives

- Less likely to seek pre-travel advice
- Longer stays overseas, often in resource poor settings
- Live like “the locals”
- Higher risk for malaria[1], influenza[2], typhoid[3], hepatitis A[4]
- Opportunistically educate, where possible

1. *Leder. Clin Infect Dis. 2004 39:1104-12.*
2. *Leder. Clin Infect Dis. 2003 36:399-406.*
3. *Mermin. Arch Internal Med. 1998;158:633-8.*
4. *Behrens. BMJ 1995;311:193.*

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The Older or Chronically Traveller

- Older people and those with chronic illnesses are travelling more than ever before
- Doctors, especially general practitioners are called on to assess fitness for travel and provide travel health advice to these patients

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General advice for the older or chronically ill traveller

- Prepare for travel by being well rested and plan itinerary to minimise stress
- Health summary and medication list
- Travel Insurance - may be higher premium for pre-existing conditions and some policies exclude psychiatric illness

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The elderly and air travel

- Must be mobile, able to eat, drink and manage own medication and get to toilet
- Avoid dehydration as this increases hypoxia and likelihood of confusion in older people
- Take sufficient medication supplies for entire trip, carried in hand luggage
- Assessing fitness to fly guidelines www.caa.co.uk
- MEDIF form to provide information to airlines - available from travel agents and medical departments of airlines

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Recommended medical exclusions from international air travel

Myocardial Infarction	Not within 7 days. Medical information form required within 21 days
Stroke or transient ischaemic attack	Not within 3 days. Medical information form required within 10 days.
Congestive cardiac failure	Individual assessment – need to be controlled
Arrhythmia	Must be stable
Deep vein thrombosis	Individual assessment – patient needs to be stabilised on anticoagulants
Anaemia	Not fit if Hb < 7.5 g/dl. Medical information form for Hb 7.5 – 10.5 g/dl. Not within 10 days of sickling crisis
Pneumothorax	Not within 2 weeks following full inflation of lung
After surgery	Not within 5-7 days depending on circumstances Appendicectomy, five days; angioplasty, not within 3 days, with stents 5 days; coronary bypass, not within 10 days

Diabetes

- Increase fluid intake, avoid alcohol and arrange appropriate meals
- Increase frequency of blood glucose monitoring
- Take hypoglycaemics as prescribed according to local time
- Have snacks on hand in case of delays in meal times

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Diabetics on Insulin

- Insulin may need adjustment if time zone changes > 4 hours
- Insulin can be in hand luggage - does not need to be refrigerated
- call airline in advance
- carry NDSS registration card
- carry copy of insulin prescription
- only sufficient insulin and injecting equipment for flight and following 24 hours in cabin luggage

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Chronic lung disease

- At cruising height cabin air has PaO_2 of oxygen 20-25% less than sea level
- Exercise tolerance is a good guide to ability to cope with decreased oxygen tension
- Dyspnoea at rest is a contraindication
- If can climb a flight of 15 stairs and walk 50 metres without symptoms then should not experience problems in flight
- Further assessment may be needed - ABGs, respiratory function tests and referral

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Cardiovascular disease

- Exercise tolerance (15 stairs and 50 metres) is again a good guide to ability to cope with reduced PaO_2
- People with angina or congestive failure who are symptomatic on minimal exertion are likely to need supplementary oxygen (usually 2L or 4 L per minute)
- Consider cardiology referral
- Letter summarising medical problems and copy of recent ECG

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The 3 Rs of vaccinations

- Routine
- Review lifetime vaccination/illness history – no need to repeat doses

- Required
- To cross international borders

- Recommended
- To prevent trip-specific risks

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Original Research

Sustained outbreak of measles in New South Wales, 2012: risks for measles elimination in Australia

Yellow Fever Vaccine Recommendations in Africa and the Americas

Current as of September 2012

Source: CDC. Yellow Book 2014, Yellow Fever; [updated Aug 2013;cited Oct 2013]. http://wwwnc.cdc.gov/travel/yellowbook/2014/chapter-3-infectious-diseases-related-to-travel/yellow-fever

Travel Medicine Resources

Internet Resources

- **www.who.int** World Health Organization. International travel and health book available online. Also interactive map for malaria and yellow fever risk
- www.cdc.gov/travel. US Centres for Disease Control – comprehensive disease and country information
- www.welltogo.com.au Australian website from Travel Health Advisory Group
- www.tripprep.com Shoreland's travel health online
- http://www.travelhealthadvisor.com.au/. New name and website for MASTA in Australia and New Zealand.
- Travellers Medical and Vaccination Centre - www.traveldoctor.com.au.
- www.smartraveller.gov.au. This Australian Government site provides travel warning and information on consular services

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Internet Resources - Malaria

- **CDC** Malaria **site including malaria maps**
  - www.cdc.gov/malaria/map/
- **WHO malaria map**
  - http://www.who.int/malaria/publications/world_malaria_report/global_malaria_mapper/en/.

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Travel Medicine Decision Support Tools

- www.masta.edu.au/
- www.rovertravelscript.com.au/
- http://www.shoreland.com/
- https://www.travax.com/

- https://www.travax.com/scripts/Login/Login.asp?ReturnUrl=%2f

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