

Emergency Health Care Oversease (Part 2

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NORTH AND SOUTH AMERICA

United States of America

Case History

A 68 year old woman had a severe stroke on a cruise ship sailing in the Caribbean, with a home port in Florida. She had suffered a mild stroke 2 years previously and was not covered by her travel health insurance for any recurrence or symptoms of cardio and cerebrovascular disease. On admission to hospital in the USA she was very ill and required lengthy intensive health care and rehabilitation. The admission contract made with the family made them responsible for all financial costs. Treatment, hospital management and repatriation expenses bankrupted them.



This is not an uncommon case with ill travellers who are hospitalised in America. The need for all visitors to have comprehensive and adequate health insurance is crucial and should be emphasised at pre-travel clinic consultations. Tourists should only venture there certain of personal health insurance protection with close scrutiny of small print clauses and exceptions to cover. Failure to secure health cover, or travel with insufficient protection or exclusions for past medical conditions may prove disastrous. Ill tourists to the United States are exposed to very high fees inherent in the private health care sector.²⁰

The case history illustrates a problem faced by many Americans. The U.S. only holds 37th place in the WHO list of top countries for quality health care services, despite being the highest spender. 45 Million US residents have no health coverage at all. 25 million people who are underinsured spend more than 10% of their income on out of pocket medical costs. Underinsured, they are particularly vulnerable, as are unwary tourists. Until a health catastrophe occurs, visitors are often unaware of exposure to health risk.

Canada - Health care in Canada is delivered through a publicly-funded health care system, which is mostly free at the point of use and has most services provided by private entities. A system of high quality, for residents, visitors have to make private arrangements in emergency, with costs not dissimilar to the USA and adequate insurance cover is essential. Canada is a very large country with vast distances between towns and villages in the interior. Doctor's surgeries can be a hundred miles apart and distance and weather can delay immediate access to emergency health care for tourists to the hinterland.²¹

High quality emergency medical care is available in North America providing the patient is insured. In the absence of this protection there can be very long waits to access A. & E. units and fees can be extortion-ate if hospital admission is required. In rural areas distance can delay urgent admission especially if weather conditions prevent emergency flights.

South America - draws the adventurous traveller, with unique cultural and scenic attractions enticing the tourist to Chile, Bolivia and Peru The intrepid traveller needs to journey in robust good health to overcome the rigours of the route. Diverse geography, large distances, tenuous communications, high

altitude, temperature extremes, infection and trauma can affect the tourist who should anticipate health problems.²²

Case history

In an elderly group of travellers in Chile, a man developed a myocardial infarction and a lady a rasping cough which went on into pneumonia. In pain he waited three hours to see the only doctor and as the sole ambulance was in use, he had to be transported by bus back to Calambra hospital 31/2 hours away. After several hours waiting to be seen there and an ECG., which confirmed the infarction, he was advised that facilities were so inadequate in the hospital that he should return to his hotel. He had travelled 7 hours to have the diagnosis confirmed but remained untreated. He was eventually repatriated back to the UK by air. The woman deteriorated despite antibiotic therapy. With poor investigative local resources she was forced to abandon her holiday and return to Santiago. UK tour operators did not provide the ongoing support that they inferred and intercontinental communication between insurance companies, tour operators and patients was desultory and anxiety provoking, adding psychological trauma to the scene.

Medical emergency and evacuation problems are likely to prevail in impoverished, undeveloped and distant tourist locations in rural parts of South America. Even with adequate health insurance cover, protection can only provide what is available. Accessibility and quality of service varies across the regions. State of the art private facilities may be located in the big cities, but an embryonic health service with limited facilities is likely in the rural scene. Land evacuation is protracted and sometimes impracticable. Prompt air evacuation is not assured for cardiac and respiratory conditions as helicopter and small aeroplane transfer is rarely practicable.

A trip across the continent traverses the backbone of the Andes. Such a journey requires preplanning, physical stamina and endurance to accomplish successfully. It is now being undertaken by middle aged and elderly people some of whom are frail and chronically ill. Travel agencies do not adequately inform customers of the physical and psychological ardour of this itinerary. Most are poorly informed about the risk of prolonged travel at altitude, when much of the time spent in Bolivia and Peru will occur at 4,000 metres altitude and higher. Older and chronically ill, at risk, travellers contemplating such a trip should seek a pre-travel health consultation.

Chile and Bolivia - Geothermal areas are unguarded. Unwary visitors get scalded from superheated mud pools and fall through silica encrustment into boiling water and steam caverns. First aid attention may be a day of car travel away. Tourists rarely appreciate the health risk of Acute Mountain Sickness (AMS) and fail to recognise headache and vomiting threatens the onset of pulmonary and cerebral oedema and death. Those with chronic cardiac and respiratory problems are over-challenged and may be precipitated into cardiovascular and respiratory failure. Adverse health effects are compounded for those travelling over the border from Chile into Bolivia, with average travel altitude over 3500 metres and passes climbing to 5000 metres and more.

Onward travel in a developing country with poor hygiene facilities exposes the traveller to gastroenteritis and added fluid and electrolyte loss can add to dehydration. Sanitation can be basic, hand washing difficult and food exposed to flies and contamination. The thin air at high altitude poorly screens the sun's harmful ultraviolet light rays and solar burn is a constant. Roads are very bad, vehicle related trauma is far more frequent than in the UK. with emergency aid often many hours away.

Recommendations

- Travellers should be aware that if affected by AMS. in these remote areas will face a long, rough trip to lower altitude with evacuation taking up to 24 hours. This delay could prove fatal.
- Prophylaxis with a carbonic anhydrase inhibitor reduces the likelihood of Acute Mountain Sickness. 200 mg. of acetazolamide should be taken 24 hours before exposure to an altitude of 3000 metres and continued daily while at high altitude.
- Be aware that some policies from insurance companies exclude cover if one ventures above 12,000 feet.
- Consider that first aid and medical care will be delayed and limited, which may be a decisive factor in survival following infection, medical mishap or trauma.
- Precautions are required against enteric infection.
- UVL screen filters should be used.

- Tourist transport often carries oxygen in cylinders for people with AMS. It is a wise precaution to ensure there is a cylinder on board before departure.
- Big towns such as Sucre have private medical clinics and La Paz has good access to well-equipped private medical units for those who have travel health insurance protection.

Peru - A 2000 World Health Organization report ranked Peru health system 130th out of 191 countries. Lake Titicaca is a magnet for many tourists at over 3,000metres altitude. Acute mountain sickness may prevail and its storm-tossed waters can cause motion sickness. Proceeding eastwards and down from the altiplano mosquitos can be a problem. The tourist mecca of Cusco-3,000 metres altitude-is mosquito free, the train however travels down the gorge into the jungle with exposure to malaria transmitting insects. Tourists in shorts with bare arms are often bitten at the ruins in Machu Picchu, in the local town and on the train. They fail to consider prior antimalarial medication or the use of mosquito repellents.

Considerations At pretravel health consultations: Health professionals should:

- deter those with chronic conditions e.g. COAD, the frail elderly, the anaemic, a history of deep vein thrombosis and pulmonary embolism, from setting out on such a trip.

Travellers should:

- Consider pretravel health consultation.
- Seek prophylaxis for malaria and altitude sickness
- Carry, Mosquito repellent protection, anti-motion sickness medication, lip salve, first aid kit, water sterilising tablets, large water bottle.
- Anticipate long, arduous land and air journeys
- Assume water, salads, uncooked food to be contaminated unless certain of source.
- If past history includes heart attack, stroke, COAD, immunosuppression, carefully consider the wisdom of travel.

Summary

The tourist will find good health care in Canada and the USA. The private sector is very expensive and adequate health insurance is a vital prerequisite to North American travel, Uninsured, emergency health care may be delayed and of variable quality. Private South American health care is of variable quality and emergency care may be inferior, limited or far distant. This is a high health risk part of the world. The older traveller and particularly those with pre-existing illness should consider risk of gastro-intestinal infection, trauma, malaria, acute mountain sickness, solar irradiation and the fatigue of long distance travel in arid , harsh environment. Medical aid may be a day away with no prospect of emergency air evacuation and land transportation is scarce.



WEST AFRICA

The west coast of Africa was long known as the White Man's Grave because of the high death rate from tropical disease. Countries once shunned by Europeans are now visited in increasing numbers by those intent on accessing winter sunshine. Tourists, apparently protected by comprehensive travel health insurance, often assume that urgent health care needs will be met in medical emergency overseas, as speed-ily and efficiently as within the NHS. An adverse medical event due to trauma and disease in countries in West Africa however, may expose patients to

limited resources and health care and delayed treatment. Insurance companies can only provide the best locally available medical and nursing care. Evacuation and treatment may not equate with that in the developed world. Poor communications, climatic extremes, bad roads and limited transportation threaten delay in emergency hospital access.²³

Paucity of health professionals, hospitals, and institutional resources determines poor quality of health care provision. Facilities are best in the cities, but up-country and small ports of call often have a rural hinterland, with difficult and distant access to major cities. Traditional medicine, dependent upon herbs and ancient and voodoo practices often, form part of the primary health care. Cruise ships are disgorging passengers into countries fringing the West African coast. Standards of emergency care vary considerably from country to country, are often rudimentary and may only be available in the main cities and not in ports.

Common diseases in sub-Saharan countries include cholera, typhoid, pulmonary tuberculosis, anthrax, pertussis, tetanus, chicken pox, yellow fever, measles, infectious hepatitis, trachoma, malaria, and schistosomiasis.

The Gambia - A country with one of the world's lowest per capita income rates, its health care system is rudimentary. There is one teaching hospital in Banjul the capital staffed by consultant specialists mainly from Cuba. There is also an MRC unit in Bakau which specialises in tropical diseases. Both of these are near coastal tourist areas, but are extremely busy, crowded and sleep two patients per bed when under pressure.²⁴ A few private clinics with limited facilities provide emergency care for the ill or injured tourist, but have scant investigative or intensive care capacity. The nearest treatment centres are in Dakar, Senegal many hours, drive plus a ferry crossing, away, with transport at a premium and roads often impassable in the wet season.¹ The alternative evacuation route is to Europe, a six hour flight, not a viable alternative for a patient with a heart attack, infarction or respiratory emergency, as airlines will not fly individuals for a week or ten days after these critical medical incidents. As in all West African countries, malaria is rife.

Senegal - This country is one of the first ports of call for ships leaving the UK on cruises to South Africa and the Far East. If passengers become ill on the Atlantic crossing they may be disembarked here. Private clinics and a few state hospitals are under-resourced, under-doctored and medications may be difficult to acquire. Large disparities still exist in health coverage, with 70% of doctors, and 80% of pharmacists and dentists, living in the nation's capital city, and only 0.1 physicians and 0.4 hospital beds per 1,000 people.

Major health problems include measles and meningitis along with water-related diseases as malaria, trypanosomiasis, onchocerciasis, and schistosomiasis.

Cape Verde Islands - These islands are a port of call for cruise ships on transatlantic crossings. Health facilities are very limited, and some medicines are in short supply, or unavailable. There are hospitals in Praia and Mindelo, with smaller medical facilities elsewhere. Brava and Santo Antao islands no longer have functioning airports so air evacuation in medical emergency is impossible. Malaria occurs in Cape Verde, with risk is mainly limited to the island of Santiago, and highest risk from July to December.

Ghana - Ghana has Government funded health care, with hospitals and clinics also run by religious groups and a few "for-profit" clinics playing a role. Urban centres are well served; however, rural areas often have no modern health care. Patients there rely on traditional African medicine, or travel great distances for care. Ghana experiences the full range of diseases endemic to the region. Private and state facilities are available to tourists in Accra, but are generally poor in the rural scene. As with most West African countries, there is a high health risk from road traffic accident and emergency aid may be delayed, casualty units far distant with limited resources for transfusion and surgery. Travel health insurance companies can negotiate reasonable care for patients in emergency and there are good air connections to Europe.²⁵

Sierra Leone - is recovering from a vicious civil war when the infrastructure was damaged. Hospitals and clinics are decayed. Money buys access to what health support is available. Ambulance transfer is rare. This is a hazardous place for pedestrians and vehicles and the risk of accidental trauma is high. Emergency admission to a local medical unit is best avoided, but air evacuation depends upon a few

direct flights to Europe. Transport is scarce, the roads often dirt tracks and communication between centres fragmented. The few hospitals and clinics are grossly overburdened with the demands of a malnourished destitute population. The country suffers from epidemic outbreaks of diseases including yellow fever, cholera, Lassa fever and meningitis.

Ivory Coast (Cote d'Ivoire) - In the Ivory Coast there are sharp regional and socioeconomic disparities in health care. There are 12 physicians per 100,000 people. Access to potable water and waste disposal systems is limited in rural areas. The health care system is unable to meet the health care needs of the population, with continuing low ratios of doctors and nurses to patients. Chronic shortages of equipment, medicines, and contribute to overall poor service delivery. In rural areas, health care remains a under the guidance of lineage elders and traditional healers. Malaria, yellow fever, sleeping sickness, yaws, leprosy, trachoma, and meningitis are endemic.

Cameroon - Health care for tourists is available in big cities in Cameroon. Simple blood samples are usually analysed in the country, but complex ones go to France. Health care activities are either run as government services, or private services managed by various churches. Modern equipment is needed, with many clinics using outdated equipment. In 2004, there were 7 physicians, 36 nurses, per 100,000 people. Principal diseases are Malaria, HIV Aids, tuberculosis, sleeping sickness, cholera, dysentery and meningitis. Malaria is prevalent in the coastal region, and the forests. Other serious water-borne diseases are schistosomiasis and sleeping sickness, spread by the tsetse fly. Cameroon lies in the yellow fever endemic zone.

Benin - The population depends upon traditional medical practices- voodoo doctors -when in clinical need. There are a few conventional clinics and hospitals accessible to tourists. There were only 6 physicians and 20 nurses per 100,000 people in 2004. Most serious epidemic diseases have been brought under control Yaws has been almost totally eradicated in the north. Yellow fever has almost disappeared. Cholera cases are now rare.

Sao Tome and Principe - These are small islands lying on the equator off the coast of Africa, an attractive port of call for cruise ships. Medical care is extremely limited. The main health facility is the Ayres Menezes Hospital, located on the island of Sao Tome. Most doctors and hospitals expect payment in cash, regardless of whether the traveller has travel health insurance. Serious medical problems require air evacuation to a country with state-of-the-art medical facilities. Flights are limited and rarely fly direct to Europe. Malaria remains a health risk.

Gabon - In Gabon health facilities remain inadequate, particularly outside the Libreville area. The government provides nearly all health care services. The internationally known Albert Schweitzer hospital is located in Lambarene. Evacuation and repatriation for the ill or injured tourist is likely to be delayed and emergency care extremely limited Malaria, sleeping sickness, tuberculosis, and other infectious diseases are widespread,.

Togo - Medical services include treatment centres with services free except at the clinic at the hospital in Lome, where patients pay a nominal fee. About 61% of the population have access to health care services. In recent years there have been significant decreases in mortality caused by smallpox, yellow fever, and sleeping sickness. Yaws, malaria, and leprosy continue to be major medical problems

Namibia - Namibia is a country with high levels of inequality in access to health care resources. The main tourist centres have reasonable private health facilities, but tourists safari up country where health units and resources may be unavailable or limited and evacuation can be prolonged 26 Drinking water outside main cities and towns may be contaminated. Malaria risk exists in the entire northern third of the country from November to June and along the Kunene river and in Kavango and Caprivi regions throughout the year.

Summary

Health services in West Africa:

- are poorly developed and do not meet the needs of all residents
- vary markedly from country to country

- are particularly poor in rural and coastal areas away from cities.
- may not meet the needs of the ill or injured tourist
- Hospitals and clinics are poorly resourced
- Transport to hospital may be unobtainable
- Yellow fever immunisation is mandatory
- Maximal antimalarial precautions are required
- Travel health insurance will not necessarily bring access to optimal emergency care.
- The risk of traffic related trauma is very high
- Air and land evacuation may not be possible in emergency.

East and South Africa - At the southern end of the African coast line is Capetown, port of call for many cruise ships and ill passengers are off loaded here. The health system consists of a large public sector and smaller private sector. Health care varies from the most basic primary health care, offered free by the state, to highly specialised hi-tech health services available in the private sector. The public sector is under-resourced and over-used. The enlarging private sector, caters for foreigner visitors and medical tourists seeking top-quality surgical procedures at relatively affordable prices. The private sector also attracts most of the country's health professionals. Medical tourists looking for top-quality surgical procedures at relatively affordable prices are visiting in increasing numbers.

Kenya - Access to health care varies widely through-out the country, with quality and resources varying markedly between rural and urban communities. Most facilities are located in Central Province, and few in the border provinces of Western Valley and Nyanza. Prevalence of communicable disease in Kenya is a major factor with HIV, malaria and tuberculosis rife.²⁷ A large percentage of the population does not seek care despite being ill. 90% of the population in sub-Saharan Africa use traditional medicine as their source of primary healthcare.²⁸

Stark disparities are apparent in levels of care, and facility to facility in different regions. Top of the service spectrum are Teaching Hospitals such as Kenyatta National Hospital (KNH) in Nairobi. The next best level of care is found in provincial hospitals, with uneven distribution of health workers between urban and rural areas. Contrast in levels of care is seen in KNH, which offers public and private wards, attended by the same doctors. A patient in the public ward, can expect to spend long hours waiting to be seen, and may be expected to share a bed with another patient. Patients are grouped in large, open, chaotic rooms and afforded no privacy which compares badly with the private ward of the hospital. While both public and private patients receive a reasonable level of care at KNH, the disparity between services offered there and elsewhere can be substantial. The provincial general hospital in Nyeri, for instance demonstrates a major drop in quality of care and resources such as morphine, a basic analgesic²⁹ can be in short supply.

Zimbabwe - Zimbabwe's health-care system is collapsing. Hospitals face dire shortages of doctors and medical supplies and are unable to undertake basic operations because of shortages of anaesthetics, sutures, and essential supplies. The country is battling one of the world's highest rates of infection of

HIV/AIDS, estimated to be killing more than 3000

people weekly. Elective surgery has been abandoned in the central hospitals and even emergency surgery is often dependent on the ability of patients' relatives to purchase drugs, suture materials, and supplies of blood from private sellers. Ambulances are grounded for want of fuel and spare parts.²⁹ Harare, now has regular outbreaks of cholera.

Considerations

- Elderly people should be advised to avoid travel in the country until the health care system reaches minimal standards of provision.
- The health care and transportation systems have disintegrated and emergency aid is problematic.
- Travel health insurance cover cannot provide protection in the absence of resources.

Zambia - Services to Zambian nationals are free at rural health centres and urban hospitals. The public health care sector suffers from a severe shortage of doctors, medicine, medical equipment and supplies. Zambia has one of the highest rates of HIV infection, even in hard-hit sub-Saharan Africa. There are limited private facilities for tourists. Malaria and tuberculosis are major health problems

and hookworm and schistosomiasis afflict a large proportion of the population Namibia. This is a popular safari destination. The country is arid, distances between health centres can be considerable and health care variable. (*See previous note on Namibia*)

Tanzania - Medical treatment is free or highly subsidized in company clinics and hospitals. Tanzania's national health care system stresses primary care at an affordable cost, but faces an acute shortage of health care workers. Low pay, poor working conditions and limited training programs contribute, worsened by the burden of treating HIV/AIDS and malaria patients, Health standards in Tanzania have declined and care is poor. The public system serves the vast majority of the population, but is chronically under-funded and understaffed. The wealthiest 20% of the population uses the private system, the route followed by the insured ill tourist.^{30,31}

South Africa - Medical facilities are good in urban areas but can be limited elsewhere. Tourists on safari may find themselves distant from medical aid. Private facilities are good where they exist. Kruger National Park, Mpumalanga and northern KwaZulu-Natal are low risk malaria areas during December-April. Swimming and paddling in stagnant or slow-moving water as there is a risk of contracting bilharzia. (*See comment on West Africa*)

Considerations

- Safari travel means long hours in four wheel drive vehicles in a dusty, dry wild environment, in areas where malarial mosquitos thrive.
- Safari visits depend upon early morning and late afternoon trips at a time when mosquitos are active.
- Dry and non- air-conditioned camping environs make for dehydration and water sources may be infected.

There is a high risk from infection and trauma and emergency medical aid may be distant of variable quality and ambulance evacuation non-existent.

Central and east African countries which offer wild animal safaris are high risk destinations for elderly travellers. Infection, trauma, dehydration are likely to befall the older person who may find that emergency medical care is distant and not of optimal quality. Ideally safaris should only be embarked upon by those in robust health. Pretravel health consultation is advised for those with pre-existing health conditions, and vaccine prophylaxis and antimalarial precautions should be taken.

Summary

With the exception of South Africa the tourist will meet some of the poorest health facilities in the world if requiring emergency aid. Health professional staff are scarce, training variable, resources often basic or absent. Scarce transport and bad roads create difficulties in casualty evacuation. Blood supplies may be contaminated and emergency aid units far distant. Elderly travellers, particularly vulnerable to heat and trauma, should be aware of the limitations of health care in the region and that travel health insurance protection in the region can only supply aid from what is locally available and is subject to severe limitations in treatment and health care.

ASIA FAR EAST AND ANTIPODES China - China is undertaking reform of its health-care system to make it more affordable for the rural poor. Chinese medical schools provide training in Western medicine and also instruct in traditional medicine, but relatively few physicians are competent in both areas. In urban hospitals, there may be separate departments for traditional and Western treatment. In county hospitals, however, traditional medicine receives greater emphasis. It depends on herbal treatments, acupuncture, acupressure, moxibustion (the burning of herbs over acupuncture points) and "cupping" of skin, with heated bamboo believed to be most effective in treating minor and chronic diseases. Traditional treatments may be used for more serious conditions as well, particularly for such acute abdominal conditions as appendicitis, pancreatitis, and gallstones, a consideration for foreign visitors who become ill far from major



hospital centres.

Western style medical facilities with international staff are available in Beijing, Shanghai, Guangzhou and a few other large cities. Hong Kong has excellent private facilities. Many other hospitals in major Chinese cities have so-called V.I.P. wards or gaogan bingfang. with reasonably up-to-date medical technology and skilled physicians. They provide medical services to foreigners and have English-speaking doctors and nurses.

India - A universal health care system is run by the constituent states. Government hospitals, some of which are among the best hospitals in India, provide treatment at taxpayer expense hospitals, either free or at minimal charges. There is a large private sector in cities and tourist areas. Emergency transportation to hospital can prove a daunting procedure in much of rural, India, a consideration elderly tourists should keep in mind.

Japan - The Government provides healthcare services, with the patient accepting responsibility for 30 % of the bill. Japan has excellent hospitals and clinics, and provides highly-technical, state of the art equipment. Patients are free to select physicians or facilities of their choice. Due to large numbers of people visiting hospitals emergency access is an issue in some units and a particular problem in Tokyo. In 2007 14,000 emergency patients were rejected at least three times by Japanese hospitals before getting treatment. Some healthcare in Japan is provided free for expatriates and foreigners. The Japanese have no 'family-doctor' system and medical ethics and bedside manners are not strong points with health professionals.

Malaysia - The country offers a comprehensive net-work of hospitals and clinics, with 88.5 % of the population living within three miles of a public health clinic or private practitioner.

Nepal - The health-care delivery network in Nepal is poorly developed. Government-operated health-care delivery system consists of hospitals and health centres with very basic facilities. Health-care practices in rural areas often depends upon the medicine man or shaman as well as Ayurvedic treatment. Allopathic (modern) medicine and quality of care is poor. There are private medical facilities in Kathmandu.

Diarrhoeal disease is a major public health problem. There is high risk of road accident trauma. Evacuation may be difficult and protracted with limited air transport and tenuous road movement. In the higher valleys, patients may have to be carried to hospital on a Sherpa's back.^{32,33} Infection risk is considerable with high endemicity of malaria, food and water borne disease such as typhoid and paratyphoid fever, giardiasis, amoebiasis, helminthiasis, rabies and hepatitis B. There is also a risk from the effects of high altitude inducing acute mountain sickness.

Considerations

- Malaria prophylaxis
- Prophylaxis with acetazolamide for high altitude exposure
- Assumption that all water is contaminated and use of water sterilising tablets.
- Consideration of limited emergency care and protracted evacuation and hospital access

SOUTH EAST ASIA

Indonesia - The level of health care in Bali, much visited by tourists, varies from local clinics and hospitals, to foreign run clinics such as SOS International. Small urban clinics can handle simple injuries. Each district in Bali has a hospital located in the main town, however, Sanglah hospital in

Denpasar is the only one capable of dealing with major operations and patients are transferred here from elsewhere on the island.

Thailand - The health care system relies heavily on specialized medicine. The Thai Government has developed a universal health care programme where-by everybody gets treatment at public hospitals for a standard fee per visit. If foreigners have a medical problem while in Thailand, a few hospitals of good reputation, cater for foreign patients, with Bumrungrad Hospital being popular. Bangkok General Hospital and its affiliates Samitivej Hospital and Bangkok Nursing Home Hospital, are also commended. Certain hospitals have been actively seeking medical tourists to visit Thailand and now up to 60% of patients at Bumrungrad Hospital and 40 % at Samitivej Hospital are foreigners.

Summary

Large variations in health care occur across south east Asia with some countries having excellent resources and catering for medical tourism. Congested roads and poor transportation result in high road traffic accident risk and trauma in many countries. Emergency transportation can be limited. Travel health insurance cover essential. There is a high likelihood of gastrointestinal infection and malaria in many of these countries.

ANTIPODES

Australia - Australia has a highly commended medical care system. The Australian Government has signed Reciprocal Health Care Agreements (RHCA) with the government of the United Kingdom which entitles British visitors to limited subsidised health services for medically necessary treatment while visiting Australia. This covers any ill-health or injury which occurs while in Australia and requires medical attention. The Royal Flying Doctor Service provides an excellent service to rural many rural areas.³⁴ but emergency aid can be delayed due to adverse weather.³⁵ A resident of UK is entitled to the following for any ill-health or injury requiring treatment:

- free treatment as a public in-patient or outpatient in a public hospital
- subsidised medicines under the Pharmaceutical Benefits Scheme
- Medicare benefits for out-of-hospital medical treatment provided by doctors through private surgeries and community health centres. Medical treatment can be accessed through private doctors' surgeries and community health centres. Doctors at these practices charge for their services by charging Medicare direct or presenting a bill for payment by the patient which is then reimbursed by Medicare. If treated as a public patient in a public hospital, treatment is free on display of passport or reciprocal health care card to staff at the hospital. Medicare will not cover:
 - medicines not subsidised under the Pharmaceutical Benefits Scheme
 - dental work and allied health services
 - accommodation and medical treatment in a private hospital
 - accommodation and medical treatment as a private patient in a public ambulance services
 - home nursing
 - physiotherapy, occupational therapy, therapy, eye therapy, chiropractic services, podiatry glasses and contact lenses, hearing aids

New Zealand - The New Zealand health system functions on the Anglo-American model of care, with emergency care in the pre-hospital setting being conducted by paramedics. There are reciprocal arrangements with the UK. and WHO rates the system highly.

The World Health Organization has ranked the health systems of 191 nations. France and Italy took top spots and Australia, New Zealand, Canada and the UK rating highly with Germany on most measures of performance, including quality of care and access to it.

ARCTIC AND ANTARCTIC

80,000 tourists per year visit the Falklands and Antarctica. A significant number visit the Arctic on cruise ships varying in size from small, ice-strengthened vessels, to massive cruise liners, which combine several days cruising around the Falklands with South Georgia and Antarctica, Greenland, the Svalbard peninsula and Spitzbergen. Larger cruise ships to the region have the health facilities of modern luxury ships. Small ones may not have an on-board doctor. Irrespective of size they will off load ill or injured passengers in the Falkland Islands if cruising southern seas and to Svalbard and the main land in the Arctic. Helicopter rescue is limited by range in the Arctic and patients have to be air

evacuated from Svalbard to Norway and from Greenland to Denmark for intensive care. The nearest mainland countries to Greenland and Svalbard, they have good health facilities with UK, reciprocation.²⁷

Antarctica - The Falklands Islands provide an emergency medical service for cruise ships and intrepid travellers visiting via South America. The water supply is safe and there is a reciprocal health agreement between the UK and Falkland Island Governments which allows free medical treatment for UK residents in the Falklands. This does not cover dental care. Medical services are based in the 27 bed, well-equipped King Edward VII Memorial Hospital (KEMH) in Stanley. The islands have 4 general practitioners with extended skills, two consultants, 28 nurses, a radiographer and modern digital plain X-ray equipment, excluding CT and MRI scanner. The pharmacy is stocked with UK pharmaceuticals but tourists are advised to bring enough of their regular medication to cover the duration of visit.³⁶

Given the small size of the hospital, the restricted range of diagnostic facilities available and a limited ability to manage intensive care patients, coupled with the lack of complex treatments such as kidney



dialysis, it is normal to stabilise a critically ill patient and then transfer them to a larger hospital. KEMH has an agreement with the Clinica Aleman in Santiago and every tourist must be insured to cover this potential cost. "Aerocardal" transport charges in the region of US\$ 30,000. Fees of the Clinica Alemana are comparable to a private hospital anywhere in Europe (\$40,000 US). The RAF normally will not consider transferring a tourist as a patient even if they are UK passport holders. During the tourist season, October-March, doctors are accustomed to dealing with over-seas hospitals, transfers and insurance companies. Ships leave from Stanley to cruise the Antarctic

peninsula and islands, a four day sail away from the nearest aid in the Falklands .Air evacuation is not practicable and emergency care will depend on ship resources.

The Arctic, Greenland and Svalbard - There are small village clinics in Greenland villages and Svalbard has a small hospital unit. Serious conditions have to be evacuated by small fixed wing aircraft, an expensive undertaking. Local Governments are now insisting that visitors have repatriation insurance in place before arrival

Consideration

The standard of medical care in the Falklands is broadly similar to the UK but tourists must bear in mind the limitations imposed by the size of the hospital, range of specialists and the limited range of diagnostic equipment available. In the Arctic resources are very limited and evacuation often delayed and very expensive.

Case History

On a sea crossing from the North Cape of Norway to Greenland an elderly woman was wheel chair dependent and required help from her husband with all basic needs. The husband had a severe heart attack and had to be airlift-ed by helicopter, operating at its maximal range, to the nearest hospital in Norway. Bereft of assistance in daily living the care of the wife became a major problem for crew who were not allowed to touch passengers far less offer intimate care and a harassed medical/nursing staff struggling to support with passengers with norovirus infection. She had to be airlifted to the mainland by small aeroplane in an exercise which had to be funded by the patient as she was uninsured.

Summary

Elderly potential travellers to Antarctica and the Arctic should organise a pretravel health consultation. Travel health insurance protection is essential with adequate cover for repatriation. They should be aware that emergency aid may be many hours and in bad weather days away.

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References:

- 1 McIntosh I 1991 Travel Induced Illness Scot. Med. 11.4 14-15
- 2 www.nhs.uk/NHS England/www/EHIC/Pages/Introduction.aspx
- 3 Honor M. Medical care for visitors to France. 2008. *Brit.Trav.Health Assoc J.* 10.20-21
- 4 Mackay I Primary Care services with the EU. 2007. *Brit.Trav.Health Assoc.* IX,10-15.
- 5 Mackay I Health care on a European river cruise.2010 *Brit.Trav.Health Assoc .J* 15.26-9.
- 6 Rhisel R. Pay as you go in Romania 2010 *Brit.Trav.Health Assoc. J* 16.60.
- 7 Gaal, P., Rekassy, B., and Healy, J. Health Care Systems in Transition: Hungary. Copenhagen: European Observatory on Healthcare Systems, 1999.
- 8 Orosz, E. and Hollo, I. 'Hospitals in Hungary: The story of stalled reforms, Eurohealth, vol. 7, num. 3, Autumn 2001.
- 9 Gaal, P. Study of the Hungarian Health Care System. Civitas, 2002.
- 10 Shannon C. Irvine F and B Analysis of Hungary' Health Care System www.civitas.org.uk/nhs/download/Hungary.
- 11 Popova S Feschieva, N The state of primary medical care in Bulgaria *Journal of Public Health* 1995 17, 1. 6-10.
- 12 McCarthy M Serbia rebuilds and reforms its health care system *The Lancet*, 2007 Volume 369, 10.
- 13 Croatia European Observatory on Health Care Systems AMS 5001891 (CRO)CARE 04 01 02.
- 14 Melrose A Health Care Round the Mediterranean2009 *Brit.Trav.Health Assoc.J* 21-23.
- 15 McIntosh I Health care and security for travellers to Middle east.2005 *Brit.Trav.Health Assoc.J* 26-27.
- 16 Mackay I Health Care Caribbean style *Brit.Trav.Health Assoc.J.* 11.9-10.
- 17 McIntosh I Cruise ship facilities 2007 *Brit.Trav.Health Assoc.J*10.10-12.
- 18 McIntosh I health and safety on cruise ships 2007 *Brit.Trav.Health Assoc. J*10-15.
- 19 McIntosh I Health care and security for travellers to the Middle east 2005 *J Brit.Trav.Health Assoc.*
- 20 Mackay I Health Care in the USA. 2009 *Brit.Trav.Health Assoc.J*13.16-17
- 21 Bailey R. Rural health service in north Saskatchewan 2007. X 23.
- 22 Mackay I Travel and Health across South America. 2007 *J BritTrav Health Assoc., X*, 19-21.
- 23 Melrose A. Health care for visitors and residents in west Africa. 2011 *Brit. Trav Health Assoc J* 16 25-27.
- 24 Dalton K Health care in the Gambia *Brit. Trav Health Assoc J* 2010 16.23.
- 25 Eyob Zere, Custodia Mandlhate Equity in health care in Namibia: developing a needs-based resource allocation formula using principal components analysis *Int J EquityHealth.* 2007; 6: 3
- 26 2who@ghana@gha.fro.who.intUNICEF, 2008.
- 27 Wamai, RG. (2009). "The health system in Kenya: Analysis of the situation and enduring challenges." *JMAJ.* 52(2): 136.
- 28 Kareru, PG, Kenji, GM, Gachanja, AN, Et al. (2007). "Traditional medicines among the Embu and Mbeere peoples of Kenya." *Afr. J. Trad. CAM.* 4(1): 75.
- 30 Mwww.worldlifeexpectancy.com/country-health-e. Tanzania health system.

- 31 <http://www.nationsencyclopedia.com/Africa/Tanzania-HEALTH.html#ixzz1EJuipEOU>
- 32 Mackay I Nepal, the tourist view of the health scene. 2004 *J. Brit. trav. Health Assoc* 5 ,35-6.
- 33 Kharal PM Travel Medicine in Nepal 2004 *J Brit. Trav Health Assoc.* 5.33-4.
- 34 McIntosh I Royal flying doctor service of Australia. 2006 *Brit. Trav.health Assoc J.* 7.26-7.
- 35 Mackay I The good Samaritan.response 2008 *Brit. Trav Health Assoc J.* 8.14-16.
- 36 Diggle R .Falkland's health care J Brit.Trav.Health Assoc .J XI, 2006.11-12.