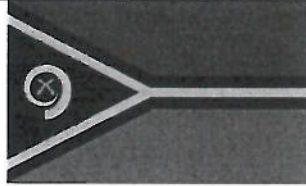


## Barts and the Royal London SMD MBBS Year 5 Medical Elective 2011

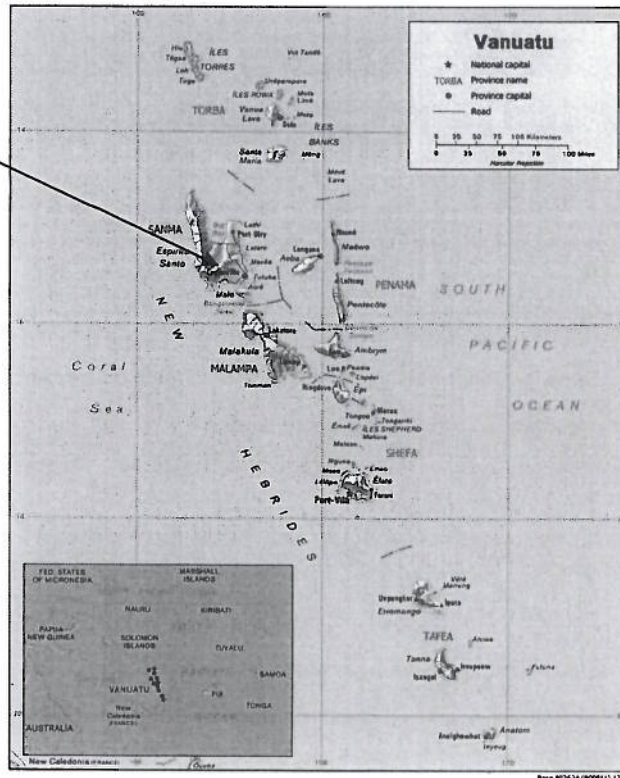


**Republic of Vanuatu**

### Background to Vanuatu

The Republic of Vanuatu is a Y-shaped chain of 83 mountainous islands (65 of which are inhabited), located on the "Ring of Fire" in the South Pacific, which accounts for most of the islands being of volcanic origin. Vanuatu lies 1750km east of Australia, 500km north-east of New Caledonia, 800km west of Fiji and 170km south of the Solomon Islands. The largest islands are Espiritu Santo, Malekula and Efate, the latter houses the capital Port Vila. For my elective I was based in Northern District Hospital in Luganville (the country's second largest settlement on the island of Espiritu Santo).

Northern  
District  
Hospital



### History

Republic of Vanuatu is thought to have been first inhabited by Melanesian people around 1400BC, as evidenced by the discovery of Lapita pottery dating to around this time. European explorers such as the Portuguese Pedro Fernandez Quiros, working for the Spanish empire, discovered the area in the 17th century, when he landed on the island of Espiritu Santo he originally thought that he had arrived in the infamous landmass of Australia. Europeans began to settle in the late 18th century. In 1906 Britain and France officially claimed the country, jointly managing it through a British-French Condominium, as the New Hebrides. An independence movement was established in the 1970's, and the Republic of Vanuatu gained independence on the 30th July 1980.

## Population Facts<sup>1</sup>

<b>Population: (July 2011 est.)</b> 224,564;	country comparison to the world: <a href="#">182</a>
<b>Age structure: (2011 est.)</b> 0-14 years: 29.6%; 15-64 years: 66.1%; 65 years and over: 4.3%.	
<b>Median age of population: (2011 est.)</b> total: 24.9 years; male: 24.9 years; female: 25 years;	
<b>Population growth rate: (2011 est.)</b> 1.343%;	country comparison to the world: <a href="#">87</a>
<b>Birth rate: (2011 est.)</b> 20.86 births/1,000 population;	country comparison to the world: <a href="#">86</a>
<b>Death rate: (July 2011 est.)</b> 7.43 deaths/1,000 population;	country comparison to the world: <a href="#">119</a>
<b>Net migration rate: (2011 est.)</b> 0 migrant(s)/1,000 population;	country comparison to the world: <a href="#">101</a>
<b>Urbanization: (2010)</b> urban population: 26% of total population (2010) rate of urbanization: 4.2% annual rate of change (2010-15 est.)	
<b>Infant mortality rate: (2011 est.)</b> total: 46.85 deaths/1,000 live births; male: 49.3 deaths/1,000 live births; female: 44.28 deaths/1,000 live births	country comparison to the world: <a href="#">52</a>
<b>Life expectancy at birth: (2011 est.)</b> total population: 64.7 years; male: 63.04 years; female: 66.44 years;	country comparison to the world: <a href="#">170</a>
<b>Total fertility rate: (2011 est.)</b> 2.39 children born/woman	country comparison to the world: <a href="#">94</a>
<b>Drinking water source: (2008)</b> improved: urban: 96% of population; rural: 79% of population; total: 83% of population. unimproved: urban: 4% of population; rural: 21% of population; total: 17% of population.	
<b>Sanitation facility access: (2008)</b> improved: urban: 66% of population; rural: 48% of population; total: 52% of population. unimproved: urban: 34% of population; rural: 52% of population; total: 48% of population.	

## Economy

Given highly forested nature of the islands, the economy of Vanuatu is based primarily on small-scale agriculture, which provides a living for about two-thirds of the population (see above table for rates of urbanisation). The other mainstays of the economy are fishing, and tourism. Mineral deposits are negligible and there are no known petroleum deposits. Tax revenues come mainly from import duties and neither personal income nor company profits are taxed.

Economic development is hindered by dependence on relatively few commodity exports, vulnerability to natural disasters (being situated on the "Ring of Fire" the country is at risk of earthquakes and tsunamis), and long distances from main markets and between constituent islands. In mid-2002, the government stepped up efforts to boost tourism through improved air connections, resort development, and cruise ship facilities. Agriculture, especially livestock farming, is a second target for growth. Australia and New Zealand are the main suppliers of tourists and foreign aid.



## Health System in Vanuatu<sup>2</sup>

There are five public hospitals, which provide inpatient and specialist outpatient services, of these five there are two tertiary referral hospitals located in both Port Vila and Luganville (where I was based). Patients in need of specialized tertiary services are referred for overseas treatment, mainly to Australia and New Zealand, as these are not available in Vanuatu. During my stay in Vanuatu there was a patient who had arrived on holiday on the island and impaled himself whilst climbing a fence, lacerating his femoral artery. Fortunately for him he was staying in the same accommodation as the resident surgeon in the hospital and managed to seek prompt medical treatment. After initial surgical intervention to stabilise the patient he was airlifted to the hospital in Port Vila, which was slightly better equipped before being transferred back to Australia for further surgical intervention.

In addition to these five hospitals there are 27 health centres, which provide outpatient and inpatient services (mostly prescription of drugs and deliveries), health promotion and preventive health services, such as immunization. Each of these health centres is staffed by a nurse practitioner, who is also the manager, a midwife and a general nurse. All the islands have at least one dispensary, which is usually staffed by a general nurse.

Aid posts have been established in most villages and are funded by the community, while the

Ministry of Health provides basic medicine and training for the staff. There are about 231 aid posts in the country, each staffed by a village health worker. The five public hospitals in the country have a total of 390 beds and the health centres have lower number of beds. In 2006, 14 856 inpatients and 356 236 outpatients attended clinics. Thus, the bed occupancy rate was 2.1 per 1000 population and there were 1.5 outpatient visits per person.



Pictures showing the Paediatric department at Northern District Hospital, Luganville.

During my elective I spent time in the paediatric department. Here the main health problems of the children related to:

- Pneumonia
- Meningitis
- Malnutrition
- Traumatic fractures following accidents

It was upsetting to see cases which would be managed very differently in the UK given our relative abundance of resources in comparison to those available in Northern District Hospital, Luganville. For example, there were several cases of meningitis, where the infant was not responding to the treatment being prescribed and as a result had developed permanent neurological impairment. The hospital did not have the facilities for lumbar puncture and therefore the causative organism could not be ascertained in order to give the most appropriate medications, as we would in the UK.

There were also several cases of malnutrition due to poverty, exacerbated by family circumstances and poor family planning. I met one family, who were struggling to support their nine children with the youngest at 18 months being disabled and constantly being readmitted to hospital the mother was pregnant with her tenth baby.

### The Pacific Partnership<sup>3</sup>



The Pacific Partnership is an annual deployment of forces from the Pacific Fleet of the United States Navy, in collaboration with regional governments and military forces, along with humanitarian and non-government organizations. It was originally conceived following the 2004 Indian Ocean earthquake and tsunami, in order to improve interaction between the region's military forces, governments, and humanitarian organisations during disaster relief operations, while providing humanitarian, medical, dental, and engineering assistance to nations of the Pacific, and strengthening relationships and security ties between the nations.



The view from the grounds of the hospital, showing one of the three Pacific Partnership ships anchored off Espirito Santo.

During my stay in Vanuatu, the Pacific Partnership was deployed to the island of Espirito Santo, where they were constructing schools and preparing for a weeks worth of health clinics in the hospital and in more remote areas of the island.



Queues of Ni-vans waiting patiently for free consultations at Northern District Hospital, Luganville, courtesy of the 'Pacific Partnership' a joint alliance between the US, New Zealand and Australian Navy.



The expedition tent in the grounds of the hospital where the dental services were being provided. Similar tents were used for the health clinics that were running in other more remote areas of the island.



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