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OBS + GYNAE

Medical Elective at Hopes Clinic, San Pedro, Ambergris Caye, Belize.

San Pedro, Ambergris Caye.

San Pedro is a small town of 5-6 000 people, many of whom are foreign nationals either residing in Belize or on vacation. It is located on a Caye, or island constructed naturally from the long term biogenic turnover and deposition of coral reef material. It is extremely low-lying with little or no agricultural land. Traditionally inhabitants have been subsistence fishermen but now the predominant economic driver is tourism, with food and materials imported from the mainland.
Until 1978 there was no medical representation on the island. Residents had to travel by boat, a 1.5 hour journey, to the then capital of what was British Honduras, Belize City. Provision has gradually improved. Now there is a mixture of government and private health clinics with a range of specialties represented.

What are the most common perinatal complications that contribute to infant mortality in belize? Contrast this with the U.K.

UNICEF measures deaths in terms of under 5 mortality rate per 100 population, infant (under 1) mortality rate and neonatal (less then 28 days) mortality rate. In terms of the under 5 mortality rate Belize has been improving its rate from 43 per 1000 population in 1990 to 18 in 2009. The causes of death in 2008 were headed by Complications of Prematurity at 18%, then Congenital Abnormalities at 15%, Pneumonia (11%) and Birth Asphyxia (9%) were followed by infection and sepsis at 4% (http://www.who.int/gho/countries/blz.pdf). The under 1 rate has reduced from 35 in 1990 to 16 in 2009. The neonatal mortality rate, not measured in 1990, was 8 per 100 in 2009. Plainly most childhood deaths occur in the first year, with half of those in the first 28 days. The anecdotal opinion of the obstetrician at Hopes Clinic was that for perinatal deaths infection and sepsis was the main cause of mortality, followed by haemorrhage and eclampsia (Opinion, D. Gonzales, Hopes Clinic).
In the UK the under 5 rate has reduced from 10 to 6 between 1990 and 2009. The under 1 rate has reduced from 8 to 5 in the same period, and the 2009 rate for neonatal deaths was 3. Therefore a direct comparison of the UK and belize in 2009 shows that in Belize the comparable rates are about a three times that in the UK.

How are obstetric and gynaecological services organized in Belize? How are obstetric emergencies escalated? Compare with the U.K.

My experience has been exclusively on the island of Ambergris Caye which has unique challenges, so I will limit my discussion appropriately.
Obstetric and Gynaecological services are provided in the public and the private sectors. On the island there are two clinics specifically providing services, the government Polyclinic, and the private Ambergris Hopes Clinic, at which I was placed. The Polyclinic provides reasonable antenatal care, as well as good childhood vaccination programmes. Gynaecological services are limited, providing smears and family planning advice. Obstetric services are provided, and most of the islands population attends this clinic, which is free. However, there is no qualified obstetrician in residence, the service being supported by General Practitioners. The Hopes Clinic is attended by patients who can afford to pay, and a higher level of service is provided. Extensive gynaecological and obstetric expertise is present, stopping short of major surgery and

obstetric emergencies. This is due to the current lack of an anaesthetist or emergency doctor on the island. Expectation is that this will change within a year.
The main failing in the provision of a functional service on the island is the absence of reliable transport for obstetric emergencies and emergency patients in general to the tertiary KJarl Heusner Hospital in Belize City, a 15 minute plane journey or half an hour by boat. Commercial ferry and plane services terminate at approximately 6 pm and do not restart until 7 am the following morning. There is no state provision of transport either within or outside working hours. Until January this year the gap was filled by the British Army, who provided helicopter cover free of charge as part of their deployment for training in Belize. Due to recent coalition defense cuts this service was discontinued. Currently, during the day a commercial plane seat can be purchased subject to availability for approximately US$65. Outside of normal hours a plane must be privately chartered at a cost of around US$2500. Most patients do not have the ability to pay. There is therefore an almost total unavailability of access to emergency cover for almost half of every day. Last week a bay died on arrival at the tertiary centre because of a 3 hour delay an accessing transport from the island. The baby was malpresented and an extended period of foetal distress resulted in its death prior to arrival. The event has renewed criticism of the ministry of health and has ignited debate on how a service could be guaranteed, possibly including a local tax.

An additional failing on the island is the provision of interventional gynaecological services, in particular relating to family planning. Procedures like tubal ligation or vasectomy are provided only privately at the Hopes Clinic. There is no government provision. Added complexity is the staunchly catholic Belizean society where family planning is discouraged, meaning women find it emotionally and financially difficult to access these services. There is a small group of American women on the island who occasionally fund tubal ligations for deprived women who have had multiple pregnancies with no other means to access the procedure. This seems to be a recurring theme throughout healthcare on the island, groups, or the community, raising the funds for a particular patient to receive treatment, either on the island or abroad. While commendable, it is no solution for the long term needs of the population.

Discuss how the provision of services in Belize has influenced your view of health provision in the U.K. How will your experiences improve your clinical skills and professionalism towards future patients?

I have been able to view the belizean healthcare system from an interesting viewpoint, that of a private practitioner filling the spaces not provided for, or inadequately provided for, by the state. The public system is underfunded, wrought by allegations of corruption, and populated by young doctors with limited experience, most of whom will ultimately move abroad. While prescriptions are theoretically free, patients are often told their drug is not is stock, so they have to pay privately at a pharmacy. Better services are available at private clinics, but many people cannot afford to pay. There are however situations I've witnessed where allowance is made for less well off patients, or where fundraising allows for private treatment.

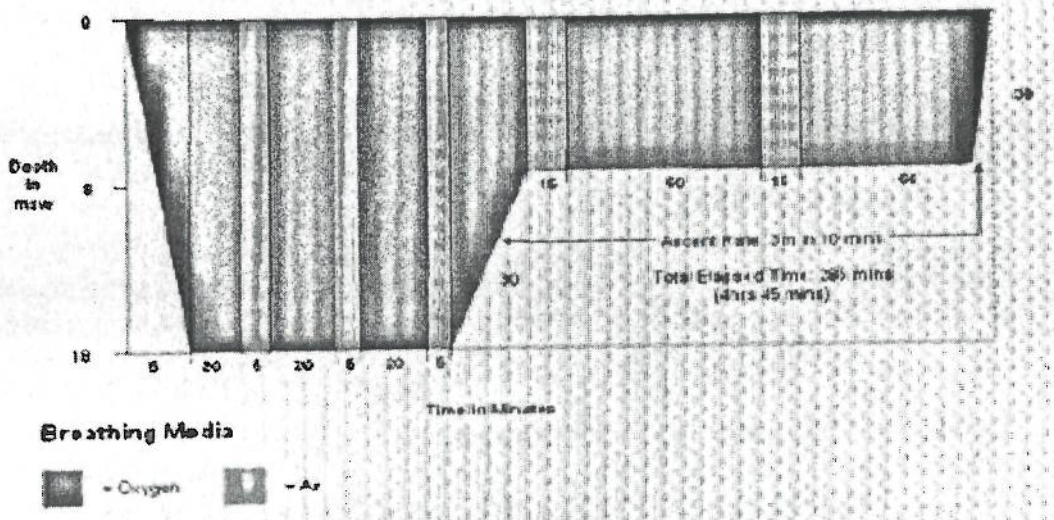
On the topic of regulation, there is little or no regulation of the private health sector, with doctors free to offer whatever services they feel appropriate, whether suitably qualified or not. I have been made aware of cases where doctors are providing obstetric services when not qualified in the speciality. There are few membership bodies overseeing levels of professionalism. What are viewed as important aspects of care for UK students like written and informed consent, are not given so much emphasis in Belize. Meanwhile there is little or no recourse to the law for substandard clinical treatment, with cases of doctors being sued extremely rare.

Discuss any patient's observed receiving hyperbaric treatment, including signs, symptoms and treatment regime. Discuss the outcomes. Finally discuss the provision of hyperbaric medicine resources on the island.

The hyperbaric chamber on the island is provided principally for the treatment of dive emergencies, where a too rapid ascent from depth has results in 'the bends'. During my stay there were three dive accidents, but the doctors attending the scene determined that no decompression sickness symptoms were noted, and therefore the chamber was not used.

The chamber is privately owned and has been in existence for 20 years. It is funded by dive insurance payouts following treatment. It therefore lies unused the majority of the time, but is still fully manned ready for treatment to commence.

Treatment for decompression sickness is using table 6 of the standard US navy derived decompression tables, alternating breathing oxygen and air at 3 bar for 1 hour, then at 2 bar for 2.5 hours, as shown in this table:



Effort is being put into researching the chambers' use for other medical treatments, including burns, infections and ulcers, to increase the usage and reduce running costs. However, as yet this has not come to fruition.

I have gathered a better understanding of some of the difficulties in healthcare provision in developing nations and the particular problems facing the part of Belize. I have come to a greater appreciation of the importance of equal access to healthcare regardless of ability to pay. I will perhaps have a greater acceptance that in such a system as the NHS there will inevitably be bureaucracy and sometimes waste of resources, but much of this is a valid attempt to provide cost effective, accountable services where the patient is in full possession of the implications and options of treatment, and where clinicians are held culpable should mistakes occur.