ELECTIVE (SSC5b) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

The Billy Riordan clinic is located in Cape Maclear on Lake Malawi, the 3rd biggest lake in Africa. The clinic dealt with chronic conditions similar to the UK such as hypertension and epilepsy. There were biweekly clinics to manage these. Due to the hot, humid tropical climate, there were also high rates of malaria, mostly plasmodium falciparum but also cases of p. vivax. Like most developing countries, it has a young population with the average life expectancy being 39. The shift in demographics is notable with many clinics involving a high proportion of paediatrics. Common paediatric conditions were gastro-enteritis and viral chest infections The lake is also populated by bilhartzia snails that are often infected with schistosomiasis, a flatworm parasite. The parasite is released by the snails and disease is spread by contact with fresh water contaminated by the parasite. The water from the lake is used for washing, swimming and cooking. This leads to high infection rates with schistosomiasis. In adults there were also fairly high rates of STI's such as HIV and syphilis. HIV rates are as high as 10%. While Malawi culture is fairly traditional and conservative, e.g. woman do not show there knees relationships are often not monogamous and use of condoms are not widely practiced leading to the high rates of STIs.

It serves a population of 15,000 and is privately funded mostly by Irish and American donors. The clinic is staffed by local health care assistants and nurses but many of the doctors and nurses are volunteers from Ireland and the UK. Although during 'normal hours' a morning and an afternoon clinic is available Monday- Friday. However, it is open 'out of hours' 7 days a week on a 24 hour basis. The clinic charges a small fee to attend, approximately the same price as a bus ticket to the nearest district hospital. The clinic also employs approx. 30 local staff including translators, lab assistants, kitchen and security staff.

Compared to public rural clinics it was relatively well resourced with drugs and equipment. The clinic had 3 oxygen cylinders that can compress air to give a maximum of 35% oxygen. If >3 people require oxygen then they have to travel to Monkey Bay district hospital, a 45 minute bus ride away. There is a small ambulance available to transport patients. The clinic has antigen based rapid diagnostic skin prick tests for malaria. This was very convenient, as all patients presenting with a fever would be screened for malaria and as a result, the diagnosis was rarely missed, leading to fewer cases of severe malaria. Additionally, there was a skin prick test for haemoglobin levels (a low level is a marker of severe malaria) so severe cases were easily detectible. The threshold for a blood transfusion was <60mg/dL. There are not facilities for blood transfusions, so again the protocol was for the patient to travel to Monkey Bay, to receive this. However, despite being a major hospitial, due to poor resourcing, Monkey Bay does not always have blood and in this case, they may have to travel to 4 hours to Blantyre for the transfusion.

There are limited facilities to give IV fluids and IV antibiotics, however there is a high threshold for giving them. The clinic has a specialist HIV clinic that is separately funded by the Bill and Melinda Gates foundation. This does HIV testing and runs an anti-retroviral clinic. Importantly, before every HIV test, counselling is done to improve understanding of transmission of the virus and how to prevent it.

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A notable difference in service provision was the availability of family planning services. While in the UK, family planning is a significant part of general practice and many different contraception options are available, this was not the case at the clinic. There were no oral contraceptives available. A small number of woman opted for the depot contractive injection and condoms were also available. However, there was a striking difference in practice regarding availability and use of contraceptives. A range of reasons probably explains this, importantly health attitudes and practices regarding the use of contraceptives. Oral contraceptives are perhaps not used due to the high risk of 'user failure' due to low adherence or availability of support.

Additionally, GP in the UK provides specialist ante-natal care, at this clinic this was not available and mothers travelled to Monkey Bay.

A further striking difference was the small number of psychiatric presentations compared to the UK general practice, where a third of consultations relate to mental health. The Billy's drug store cupboard did not stock any psychiatric drugs (except sedatives used for seizures) and no psychological therapies were available. Again there are many complex reasons to explain this that are beyond the scope of this objective.

From a professional point of view, the clinic proved an excellent place to improve my clinical skills. I worked with the nurses administering injections and learnt about wound management. Additionally, as there were many presentations of malaria (with complications of enlarged spleens and livers) and pneumonias (with positive clinical signs) it was an excellent opportunity to hone my cardio-respiratory and abdominal examinations.

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