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RURAL MEDICINE

ELECTIVE REPORT (SSC 5c)

Location: Tanzania- Rural medicine, Gen Surg/Med

Objectives

Describe the pattern of disease/illness of interest in rural Tanzania and discuss this in the context of global health.

A report from 2009 highlighted the top 10 diseases by incidence.

Disease	Under 5 years	Over 5 years	Total
Malaria	968	1247	2215
URTI	559	592	1151
Diarrhoea	229	95	324
Skin Infection	165	98	263
Wound	61	192	253
Pneumonia	96	55	151
Stomatitis	17	75	92
Epilepsy	6	66	72
Asthma	2	45	47
Fungal Infection	11	30	41

This pattern of infectious diseases etc are vastly different our healthcare system which is heavily focussed around chronic disease and degenerative disease. Unfortunately conditions such as asthma and rickets which we found to be prevalent in the village were not well managed. Bronchodilators or calcium and vitamin D supplements were not part of the regular medication delivery to the dispensary, and as a result apart from education, no real treatment was available.

How does the pattern of health provision in Tanzania compare with the UK?

The lack of resources and infrastructure in the Tanzanian healthcare system was clear, particularly in rural areas. Most notably limited staff, limited medications, lack of resources and equipment for basic investigations and tests.

The dispensary I was at was a small, 5-room building on the south side of Mkwaja village. There are 3 full-time staff, who provide the 1500 population of Mkwaja, as well as several thousand other people from surrounding villages (potentially 16,000) with basic healthcare. The staff comprise of 1 full-time doctor and 2 full-time nurses, working Monday-Friday, from 8 am to 3.30 pm. The hospital has two consulting rooms, a drugs store/dispensing room and a maternity room with equipment for delivery. The doctor undertakes the main outpatient's clinic, whereas the nurses oversee the family planning and vaccination programmes. Outside Mondays and Fridays the hospital still sees many patients, who come in for general problems and concerns, as well as services such as vaccinations, contraception and a HIV clinic. The vaccination programme is furthered by the use of a 'mobile clinic', this involves one of the nurses going out to the surrounding village. The facilities and services provided are very good in comparison to other small rural establishments in the country.

Also of note for the future is the fact that Mkwaja is the end of the electricity line, with the villages to the south and west having little or no power. This coupled with the fact there is available land adjacent means there is hope for development and expansion in the future.

These infrastructure issues meant that patients were not able to get a basic level of care we take for granted here in the UK. For example a patient presenting with a hx of headache and fever is given paracetomol and also a course of antimalarials on the off-chance they could be presenting with malaria. This is a needless waste of antimalarials due to the lack of malaria testing kits. The biggest issue however is that if the headache is caused by something more serious such as meningitis, only when the patient finishes the course of antimalarials and paracetomol trial is he advised to go to a larger district or city hospital. For most villagers this is out of reach due to time, the nearest district hospital is 3 hours drive away, and cost of transport and actual treatment and investigations.

What were the challenges in setting up a medical records system in a rural Tanzania clinic, and was it successful?

For any hospital to ensure that it's delivering the right healthcare to each patient, there must be a well organised system of gathering, keeping, and usage of patient records. Currently, any patient that comes in brings a simple children's exercise book with them, in order for a brief presenting complaint, and diagnosis to be written, along with the prescription of any drugs.

This rather simplistic way of trying to create 'patient records' fails quite badly, due to the fact that the vast majority of people lose the books soon after a consultation, meaning that any relevant, and important past medical history is lost for any future consultations. Therefore, the most efficient, and straightforward way of ensuring that patient records and data are kept safe, and readily accessible to the staff, is by implementing computer software for patient records, and prescription of drugs. The usage of computers will also be useful in the fact that data in regards to incidence of diseases, and the demography of patients and their problems, can be recorded, and analysed in an effective way. This will greatly help the provision of healthcare services which are tailored to the needs of the larger community, and make a real difference in the way in which core, greater public health issues are addressed.

For these reasons, myself and my colleague contacted the hospital before out visit and brought along 2 computer setups loaded with EMR (electronic medical records) system. For 2 weeks we trained up the staff, some of whom have never used a computer before, to be proficient in the system. Although we encountered serious obstacles such as the lack of internet, power cuts at the village, transports issues due to flooding, in the end we were successful. All 3 staff were able to enter a new patient's details, enter a new visit, prescribe medications on the system, and more importantly create reports and statistics over time periods that are vital in moving healthcare forward.

Reflection

My elective placement in Mkwaja Hospital opened my eyes to the problems and difficulties faced by healthcare establishments, and patients in rural Africa, and the effect upon the health and lifestyles of many people, not just in Mkwaja, but in similar places throughout

Tanzania and other parts of Africa.

The villagers were extremely grateful and welcoming towards me, in the anticipation of having someone who could help them in a way that they previously would not have experienced. But, the lack of certain drugs and equipment meant that my expertise could only go so far, before I reached a road-block in my path of delivering good medical treatment. The villagers soon became aware of this, and it helped me realise that work has to be done in this hospital, so that the current staff, and volunteers in the future, can deliver a service which is good enough to make a real difference, and truly help the countless people in this part of the country, who desperately require proper, and adequate healthcare.

Though the lack of basic resources and facilities in an unfortunate reality, it is not too difficult at all for Mkwaja Hospital to work its way out of this current situation, and propel itself to new heights, and become a well established centre within the Saadani area. With hospitals in Pangani and Tanga to look up to, Mkwaja Hospital can work towards a real, tangible goal, and emulate, if not exceed the level set by the two large district hospitals. Much of the basic facilities are already there, and as outlined in the previous section, simple and effective improvements can swiftly bring the hospital to a level whereby it can strive to achieve these impressive longterm goals. The geographical location, being by the coast, and the solid electricity supply, as well as having 16,000 villagers spread across the area, makes Mkwaja the ideal site for such a project, and with the right approach, and careful, meticulous planning, I have no doubt that the ideas and aspirations put forward by Mr David Guthrie, the co-ordinator of my placement, will become a glowing reality, and make the hospital, and in turn the village, a shining example to other similar places throughout Tanzania.