MEDICAL ELECTIVE MAY 1989

SPONSERS: 1) Medical Defence Union.
2) Nottingham Medical Chirurgical Society.
3) Automotive Products Charitable Trust Fund, Leamington Spa.

Introduction:

For my elective I had the opportunity of visiting almost any country. I chose Sierra Leone, West Africa. The reason for this choice was twofold. Firstly, as part of my B. Med. Sci, I had completed a short course in Tropical Medicine and this would give me the chance of seeing some of the diseases studied. Secondly, my home town of Leamington Spa, and the Warwick District, is twinned through the international organisation "One World Link" with a town called Bo, and Bo District, in Sierra Leone. This cultural Link involves the whole town including schools, churches, the hospital, the Town Council, many other groups and individuals of all ages. The strength of the Link has grown over the ten years of its existence and many exchange visits have taken place. My visit gave me the opportunity to meet some of the friends and members of O.W.L. and also to gain some information and insight into the problems facing the doctors and other medical staff working in the country.

My Visit:

The Hospital where I obtained my elective was the "Nixon Memorial Methodist Hospital", [N. M. M. H.], in the town of Segbwema in the Eastern Province with Dr Jenny Gibson, a doctor who had formerly worked at the Bo Government Hospital and a good friend of O.W.L.

I arrived to the confusion, heat, and excitement of Lungi airport in Freetown, the capital, late on Tues. the 2nd of May, and through the kindness and organisation of the Methodist Curch Overseas Division, who fund the hospital, and Goeff Crawford, I was able to travel the 227km 'up country' to the hospital as soon as Fri. the 5th.

My day was very flexible and I was able to take part in many different activities within the hospital.

The N. M. M. H._ at Segbwema

During my stay I worked with the two Locum doctors; Dr Wyn Watson, a Dermatologist, and Dr Bill Watson, a G.P. with a particular interest in Tuberculosis. Both of them had had a wide experience in Africa. There was also a Sierra Leonian doctor, Dr Conteh, who was able to tell me about some of the cultural influences on the local people and their attitudes in general to 'medicine'. Also on the same compound there is a ward run by The Royal Society For the Blind and an Americain research station for Lassa fever which is endemic to the area.

I took part in ward rounds, Out-Patient clinics and other clinics such as Under-Fives, Mother and Baby, Ante-Natal and Leprosy, I was also invited to join the community health team on their visits to the surrounding villages. This involved a journey on the back of a moped along the narrow and appalling laterite 'roads' into the bush! Some of the women had walked miles to bring

their babies to the clinics to be weighed and examined and this was an opportunity for the community health team to try to educate them about vaccinations, rehydration, hygiene, etc.

While I was in Segbwema I also had planned to do a small drugs-related project. There was a nurse employed for 2 hours a day as a 'Statistician' and with access to her records I had the chance of obtaining information regarding the variety and numbers of different conditions treated. I was also lucky to be present at a time when the N.M.M.H. were re-organising their system for ordering and controlling the drugs for the hospital. The report I was able to complete, sugested ways that O.W.L. may change and improve its efforts at supplying some drugs for Sierre Leone, but also increase the amount of general information available to the medical sub-committee in England and increase understanding and insight into some of the problems faced by the patient and doctor in a developing country.

On my return across the country, I spent 5 days in Bo town with the Taylor family, which is twinned with my family in Leamington. It was extreemely valuable and enjoyable to live with an African family and they arranged for me to visit various schools and the Bo Government hospital. Because it is purely dependent on the Government for wages, equipment and drugs etc., the hospital had many problems of this kind. I was able to compare the similarities and differences to the N. M. M. H. and therefore try to include in my O.W.L. report, proposals which were relevant to the slightly different situation.

I spent a few days in Freetown again before my departure and returning on Tues. the 30th of May I was relatively happy that I had achieved what I had set out to do during my short stay in Sierre Leone.

REPORT FOR O.W.L. JUNE 1989

DRUGS FOR BO GOVERNMENT HOSPITAL

Background:

The Link between the Bo and Warwick Districts is not one where aid is the primary concern. O.W.L. is an organisation which exists because people in both countries agree there is mutual advantage in creating and nurturing personal links. Its aims include the hope that through education and friendship a greater understanding and respect can develop and possibly even create a climate in which political and economic changes can occur.

However as this Link has progressed, O.W.L. has been able to offer some medical and health orientated aid in the form of 1) Medical Supplies and Drugs and 2) A Water Well Project to help provide clean un-contaminated water for the people of Bo.

Before my visit, I became aware that there was very little information on the situation in the hospital. For a number of years drugs and unwanted medical equipment had been collected by many interested G.P.s and hospital staff, stored in a cellar in Leamington, sorted by volunteers and eventually shipped to Sierra Leone free of charge by the Choitrams Supermarket chain to fill up their containers. Unfortunately, although gratefully received,. it was still not really known how relevant or useful these supplies were.

Together with Dr Avery, the chairman of the medical sub-committee, and Mr Bernard Cross, the Link Pharmacist, I decided to do a small drugs-related project.

AIMS

To investigate:

1) Which conditions are most commonly requiring treatment?
2) Which drugs are most frequently used?
3) Which drugs are in short supply?
4) What are the major drugs-related problems?
5) Were there any ways that the link could improve its current activity in this area?

DATA SOURCE

In-Patients:

The hospital statistician had records of every admission into N.M.M.H. for 1988. At the end of the year this was used to produce an annual report.

Next to each name was a 'diagnosis' filled in at discharge.

This gave me the data to calculate the 10 most common conditions needing admission.

The accuracy of the figures was limited by the way the diagnosis had been recorded by the doctors and the difficulties encountered when trying to make a definative diagnosis without adequate or reliable laboratory back-up in many cases and no X-ray or other investigative proceedures.

Out-Patients

During various Out-Patient sessions in 1988, some of the doctors had recorded the diagnoses made. However, this was not done on a regular basis so although it was possible to make a list of some of the most common conditions it was not possible to find out their frequency.

AIM 1) Which conditions are most commonly requiring treatment?

A) FEMALES TOTAL No. RECORDED=261

1.	P. U. 0. (Fever of unknown origin)	12.0%
2.	'Infertility' (? for D&C- see N.B.)	09.6%
3.	P. I. D. (Pelvic Inflammatory Disease)	08.4%
4.	Miscarriage	07.7%
5.	'Anaemia' (?causes, ?mainly ' peri-natal bleeds')	04.2%
6.	Gastro-Enteritis	03.8%
7.	Parasite infestation (mainly S. Mansoni)*	03.8%
S.	Pneumonia	03.0%
9.	'Cancer'	03.0%
10.	Pulmonary Tuberculosis	02.8%

* Relies on laboratory diagnosis for which there is no quality control.
''No other information available
N.B.'Infertility' is perhaps the most feared condition by a female in Sierra Leone. This as a diagnosis is unacceptable and means that the woman will have very little place in society. There is a powerful belief amoung the women that a D&C is a procedure which offers a 'cure' and there are stories of women conceiving afterwards. Some women are therefore not satisfied until this is offered.

B) MATERNITY

TOTAL No DELIVERIES=350
No. Live Births =290
normal deliveries =200
Percent peri-natal mortality=17.1%

C) MALES TOTAL RECORDED=190

1.	Inguinal hernia	25.3%
2.	P. U. 0.	10. 0%
3.	Heart Failure	06. 3%
4.	Pulmonary tuberculosis	04.2%
5.	Peptic Ulcer	04.2%
6.	Nydrocele	04.2%
7.	Intestinal Obstruction	03.7%
8.	Urinary Retention	03.7%
9.	Parasite Infestation* (S.Mansoni) (Onchocerca)	
10.	Malaria (clinical diagnosis)	02.5%

D) CHILDREN TOTAL RECORDED=478

1. Pneumonia	16.5%
2. Malaria	13.6%
3. P. U. 0.	12.3%
4. Gastro-Enteritis (and dehydration)	09.4%
5. Anaemia (?causes)	07.7%
6. Malnutrition	05.6%
7. Measles and complications	05.4%
8. Tuberculosis	03.8%
9. Parasite Infestation*	03.1%
10. Meningitis	02.3%

E) PERCENTAGE OF ADMISSIONS DUE TO INFECTIONS OR INFESTATIONS

MALES 33%
FEMALES..... 40%
CHILDREN..... ..... 60%

(Figures include P. U. 0.)

F) OUT-PATIENTS -Some of the more common onditions but NOT in order of frequency.

Fever (P, U. 0.)
Malaria
Pneumonia
Tuberculosis
U.T.I.s
Gastro-Enteritis
Measles and its complications
Gonorrhoea
P. I, D.
Other infections

Schistosomiasis
Filariasis
Onchocerciasis
Fungal infections (and other skin infections

Malnutrition
Anaemia (including Sickle-Cell)
Hypertension
    Hypertensive heart disease
    Pregnancy related
Heart Failure
Hernias
Hydroceles
Piles

2) Which drugs are most frequently used?

During my stay, as I have already mentioned, the N. M. M. H, was re-organising its systems for recording, dispensing and re-ordering drugs. A table of Drug Usage was formed using data over the past few years.

The drugs most commonly used were;

ANALGESICS: Paracetamol
A. S. A. (Aspirin)

ANTI-MALARIALS: Chloroquine

ANTIBIOTICS: Amoxycillin
Co-trimoxazole
Tetracycline
Chloramphenicol
Penicillin
Metronidazole

T. B. Drugs

Mebendazole

Iron
Folic Acid
Vit. B Complex
Multi-Vitamins

3> Which drugs are in short supply?

This question was an easy one to answer; ALL OF THEM !
....and perhaps I could add 'especially the expensive ones!

In N.M.M.H. the drugs were supplied by the Methodist Church and funds raised by asking small, set prices for the treatments given. (There was also a Samaritain Fund for those who couldn't pay.)

In the Bo Government Hospital, due to the inadequate supply from the Government itself, the patients had to go and buy their own drugs from the pharmacists in the town, This added to the price of admission, the cost of the Doctors time, the price of any tests that needed to be done, and occationally even the kerosine required to run the emergency generator during your own operation, means that being ill can be very expensive indeed !

4)_ What are the major drugs-related problems?

A. The difficulties in communication between the donors and the recipients of the donations. -It became apparent that some of the drugs and equipment was inappropriate. This seemed to be due to a lack of specific information or records avaible.

B. The Transport from Freetown. -Choitrems deliver the supplies to the Supermarket in Bo, but transport is generally unreliable in the country and petrol prices are on the increase.

C. Sorting and Storage of the supplies. -This relies on the tremendous dedication of the Link members, especially Sam Stevens, the pathologist, to sort out the cartons received.

The drugs sent are of tremendous variety and often in packets of variable numbers.

As we learn more about the possible dangers of drugs it becomes necessary to be particularly aware of any drugs which may perish or be affected by LIGHT, HEAT, or MOISTURE. Also some of the supplies are out of date by the time they reach Sierra Leone and apart from the fact that it is illegal to prescribe them in the country, it may also be potentially dangerous.

D) Unfortunately, there is alarge profit to be made by selling drugs. If these drugs get into the wrong hands, they are likely to be sold. This highlights the need for a fully secure and accountable system in storing and dispensing these drugs.

E) Compliance of the patient. -This is also a problem. In many cases it does not really matter but in others it can be dangerous. Two examples of this are;

1) Antibiotics; when a full course is not taken, resistance of the microbes involved is encouraged. In subsequent severe infections there is then a difficulty to treat.

2) T. B. therapy takes from 6 months to a year. The drugs therefore expensive and prescribed in large quantities. It is also very difficult for the people to understand why they need treatment when they are well. These factors combined mean that the control of spread of T.B. is tricky. Also again there is the problem of developing resistance.

F) The general shortage often means the use of a cheaper or available drug instead. There is little or no follow up and therefore no information on sideeffects or even the success of the treatments used. REMEMBER; It is easy to be critical BUT we must always remember the pressures on a hungry man to be fed and to feed his family whether they are patient or employee of the hospital.

5> Were there any ways that the link could improve its current activity in this _area?

Over the last 3-4 decades there has been an enormous increase in our scientific knowledge about the mode of action, the effects and the side effects of drugs.

Following this increased understanding many world wide organisations e.g. W. H. 0., OXFAM, C. M. C. (Cristian Medical Councel) and companies such as E. C. H. 0. (The supply of Equipment to Charity Hospitals Overseas), have recognised the need for tighter control over the drugs sent to developing countries. The major step forewards has been the introduction of a limited "ESSENTIAL DRUGS LIST"

PROPOSALS:

I feel that the One World Link between Warwick and Bo Districts could best develop by following the latest guidelines suggested by E.C.H.O.

1) Donations should be of a limited number and should all be from the W.H.0. Essential Drugs List for Sierre Leone.

I think this would make it easier for a fully accountable and safe system to operate.

2) Drugs should always be fully labelled with their generic name and strength.

3) Packaging units of larger quantities are more suitable than small, packets of a few tablets.

I am sure this will help the recipient of the supplies to sort them out and provide a list for the Doctors so that they know what is available for prescription.

4) Drugs should have a shelf-life of at laest one year after estimated arrival.

This will decrease the possibility of them doing harm.

I am happy to meet with the members of the Link and present my report, to answer questions and discuss further the proposals above and ways of putting them into practice. I thoroughly enjoyed my visit and have a great admiration for our friends in Bo. I am confident that we can improve the Link further.

Finally I wish to thank the many people who have helped me and especially for the loan of the Word Processor!

Helen Austin
Final year medical student at Nottingham.

June 18th 1989