My Student Elective

Usefully employed in Tumu-Tumu

RODERICK HARVEY

It was only a few weeks before my final departure that I learnt that I could spend part of my elective at Tumu-Tumu in Kenya. I had no idea what to expect, and it was with some apprehension and a suitcase judiciously packed with a range of books, designed to cover most eventualities, that I left Heathrow for Nairobi. Tumu-Tumu lies about 110 km north-west of

Nairobi in Central Province at an altitude of 2000 m. It is a fertile agricultural area with lush vegetation that supports a relatively dense rural population. The main crops are maize, bananas, tea, and coffee—much of it growing on small holdings of a few acres. The region is dominated to the east by Mount Kenya, rising to over 5500 m.

I travelled from Nairobi to Karatina, a sizeable market town about eight kilometres from Tumu-Tumu, by matatu—a type of communal taxi. There is no real village at Tumu-Tumu, which apart from the hospital comprises a group of mission buildings, including a church

and girls' boarding school, a few basic shops, and a couple of bars. The hospital has about 200 beds and five wards: men's, women's, women's gynaecological, maternity, and paediatric for children under 5. Each is an independent single-storey building within the hospital compound. In addition, there is an out-patients department, an antenatal clinic, an operating theatre, a laboratory and an x-ray unit, together with several domestic buildings including a home for student nurses.

At sea

There were two permanent doctors: the medical superintendent Dr Spellmeyer, a German, and a Californian. There were also several medical assistants who worked in the out-

patients department and, while I was there, four students—two from Eire, one from Glasgow, and myself. We all arrived during the same weekend and so started our duties equally "at sea." We were each allocated a ward, and I was put in charge of the women's general medical and surgical ward, which also admitted children over 5. I was expected to do a daily ward round, with one of the nurses in which I examined the patients, assessed their progress, reviewed their treatment, and considered their discharge. The prospect of this was daunting initially, but I was surprised how quickly I settled into the routine. The assumption by both nurses and patients that I was "all-knowledgeable," and their willingness to accept my judgment certainly helped me. It both boosted my confidence and stimulated me to try to fulfil such an ill-founded reputation. Nevertheless, my rounds were often protracted affairs with frequent references to a clinical pharmacology textbook, which accompanied the notes on the trolley and rarely left my side.

When I first arrived I expected to be faced with a variety of tropical diseases with which I was quite unfamiliar. I was struck, however, by the similarity of the disease to that seen in Britain. On my ward the most common complaints were chest infections ranging from acute exacerbations of chronic bronchitis to pneumonia, and heart failure of rheumatic aetiology. Other common and familiar conditions included: carcinoma, especially of the stomach, prostate, and breast, which frequently presented in advanced stages with widespread lymph node disease and lymphoedema; asthma; tuberculosis, especially in men; and among the young children diarrhoea and vomiting, upper respiratory tract infections, and convulsions. Although these diseases were familiar, their physical signs were often grossly exaggerated compared with those usually seen in this country, as the patients tended to present both later and direct to the hospital.

Tropical diseases were relatively rare, but had always to be considered. Most were intestinal infestations with ascaris, hookworm, amoebae, or *Giardia lamblia*, and, indeed, the commonest cause of anaemia was hookworm. An almost routine investigation was examination of stools for ova, cysts, and occult blood. Treatment of these conditions with metronidazole, levamisole, or bephenium hydroxynaphthoate was simple and effective, but often futile as reinfection rapidly occurred. The only other tropical disease of importance was malaria. This was not endemic in the area, and we saw only one or two cases a week. It had to be considered, however, in patients with unexplained spiking fevers—even when blood smear examination proved negative for the parasite.

An interesting and surprisingly large group of patients—that perhaps have a parallel in our society—left hospital after two or three days with the diagnosis "hysteria." They were almost invariably unmarried girls between 15 and 21, who had left school, had no job, and frequently had an illegitimate child. They would present with widespread and vague symptoms such as "hotness of the whole body," weakness, lethargy, headache, and abdominal aches and pains. They would lie in

bed, covered from head to toe by blankets, apparently moribund. Careful examination and a few routine investigations including a white cell count, blood smear, haemoglobin, Mantoux test, and urine and stool microscopy would disclose no abnormality, and generally a miraculous cure was effected by a two- or three-day course of paracetamol as a placebo.

Duties

Apart from conducting a daily ward round, my duties were to admit any patients sent to the ward from the outpatients and occasionally to help in theatre. In the hospital English was used both verbally and in the notes. Most people around Tumu-Tumu spoke only Kikuyu, although the official language of Kenya is Swahili. History taking and communication with the patients required a nurse as an interpreter, and unfortunately their English was not always perfect. Having clerked a new patient and come to a provisional diagnosis one was obliged to consider appropriate investigations and treatment. This was a novelty for me, and my examination technique certainly became more critical, as I knew that I would have to take decisions on the basis of my findings.

Appropriate treatment depended upon two factors: its efficacy and its cost. Patients paid six shillings a day to stay in hospital and were charged additionally for drugs and investigations. The average earnings of agricultural workers was only ten shillings a day. The rule was to use drugs only when strictly necessary and then to begin with the least expensive. Bronchitis in the absence of fever was treated with cough expectorant alone, most acute infections with penicillin initially (there being little problem of resistance), and chronic chest infections with tetracyclines. More expensive antibiotics including ampicillin, cloxacillin, co-trimoxazole, and gentamicin were available if required, and, indeed, the pharmacy was well stocked. Several effective and cheap drugs such as chloramphenicol, and thioacetazone (for tuberculosis in place of para-aminosalicylic acid) were regularly used despite their potential, if rare, side effects. Economy was the order of the day, and I well remember being mildly chastised for the indiscriminate use of an intravenous infusion, and for giving expensive salbutamol syrup in place of inexpensive aminophylline to children with wheezy bronchitis.

The range of investigations available was limited to haemoglobin estimation, white cell and differential counts, erythrocyte sedimentation rate, blood smears, urine and stool microscopy, Gram stains, and simple radiography. We were encouraged to use these as little as possible and to rely principally on clinical judgment. For example, a chest radiograph was not indicated simply on the basis of the clinical diagnosis of pneumonia, but only if the patient failed to respond to treatment.

The operating theatre was used mainly for emergencies, caesarean sections, tubal ligations, and diagnostic laparotomies. Anaesthesia was achieved intravenously for minor procedures or by ether inhalation for larger operations. All the equipment, including surgical gloves, disposable syringes, and needles, was reautoclaved to destruction, and, indeed, a blunt needle could often make venepuncture quite a problem.

While I was at Tumu-Tumu the four students worked first on call on nights from five in the afternoon until 8.30 the next morning on a one-in-four rota and also one in four weekends. This was the most rewarding time when one had most responsibility, but also the most exhausting. The weekends were the most tiring as they meant three consecutive nights and two whole days. When on call we would sleep in a private room off one of the wards, and I well remember lying in bed, wide awake, listening to the nurses moving about outside and waiting for footsteps to come up to my door and knock. It was almost a relief when they finally came. We were called on average about three times a night. I think I learnt most when faced in the middle of the night by problems such as status asthmaticus which required both immediate evaluation and action on my

part. Starting, as I felt at the time, out of my depth taught me something that cannot be learnt in a teaching hospital; how to take responsibility for patients and make decisions with some confidence alone.

Responsibility and leisure

During my stay I felt somewhat responsible for the death of one child and perhaps instrumental in saving the life of another. The first was a baby who presented in the early morning with diarrhoea, vomiting, and a fever, in whom I failed to detect the bronchopneumonia which manifested itself fully and fatally a few hours later. The second was a boy of 7 who came in with similar symptoms at about one in the morning. On examination I felt that his neck and legs were rather stiff, and the idea of meningitis niggled in the back of my mind. Eventually I telephoned the doctor who was second on call, and we did a lumbar puncture which showed purulent cerebrospinal fluid. I spent much of the rest of the night setting up an infusion and working out doses of intravenous antibiotics, and although very tired the next day, the feeling of satisfaction was something that I had never experienced before.

Life at Tumu-Tumu was not all work. One in four weekends "on" meant three in four off. Some evenings we spent in one of the local bars, which was a pleasant place to meet the local people. At weekends it was possible to travel over a good deal of Kenya and see the country, its people, and national parks. Travel by matatu, bus, train, and hitch hiking was cheap and enjoyable if sometimes uncomfortable. I travelled as far west as Kisumu on Lake Victoria and as far east as the coast at Mombasa. The high point for me was the weekend in which the two other male students and I climbed Mount Kenya, staying a night in a refuge hut just below the summit. We managed to avoid high-altitude mountain sickness, and the experience was unforgettable for the almost insuperable effort of walking at such a height, the beauty, and the cold.

I thoroughly enjoyed my stay in Kenya: I learnt a lot; I felt I was useful, which as a student one rarely does; and I also had an excellent holiday.

MATERIA NON MEDICA

Spanish interlude

Malaga on a Sunday morning appeared most attractive. As we emerged from the local bus we could see at the end of the street the green of the central gardens lit up by the already hot sun, with suggestions of interesting statues, fountains, and flowering trees. It was the first day of our brief autumn holiday. Hope and peace were everywhere.

Suddenly the whole atmosphere shattered before our eyes. I had heard a noisy motorcycle approaching from behind. I was walking along the edge of the pavement with a very old canvas bag, containing car keys, a novel, money, and tobacco, under my arm. There was a push, a grab, and he was on to the pillion and away with his fellow thief, regardless of the horrified cries of my wife and myself.

It was paradoxically at that moment that we discovered the real Spain. They gathered round. They murmured. By look and gesture they offered comfort and understanding. One of them insisted on calling a taxi, paying the fare, and arranging with another, younger, man who knew French to conduct us to the police. This young man was the embodiment of kindness. We were penniless, lost, and bewildered. With a knowledge of French and my wife's suddenly discovered £5 note, we followed him to a hotel, where we were able to obtain enough money for our trip back. He seemed reluctant to leave us, walking up and down the hot street in case the thieves might have thrown the bag away. Eventually we agreed to meet him two days later at the same rendezvous. Perhaps he would show us round the city.

But he wasn't there. What really Good Samaritan ever returns except to reimburse the innkeeper (Luke x, 35)?—S L HENDERSON SMITH (general practitioner, Huddersfield).