

# Hospital pharmacy in Uganda

By ANGELA FELL MRPHARMS

*Angela Fell worked as a VSO pharmacist in a 300-bed university teaching hospital in Mbarara, Uganda from March 2000 to March 2002. This article describes her experiences in “the pearl of Africa”*



*Sterilising glass bottles of intravenous saline in autoclaves in the sterilisation unit*

Uganda is a beautiful country. Winston Churchill called it the “pearl of Africa”. To a certain extent, that description also applied to the exterior of the university teaching hospital at Mbarara, which was attractive and well laid out. My accommodation was pretty good, on a compound with a lot of doctors of different nationalities, just across the road from the hospital, 200 miles from Kampala, the capital city.

## FIRST IMPRESSIONS

I was a little daunted when I first arrived. On my first day I was shown around the pharmacy department and introduced to all the pharmacy staff. This did not take too long, since the pharmacy department consisted of three small rooms — an outpatient dispensary, an inpatient dispensary and a pharmacist’s office — together with a store and a sterilisation unit. There were three dispensers (technicians), five dispensing assistants and three storekeepers. I was the only pharmacist, and before I arrived there had not been a pharmacist for 18 months, since the previous VSO (voluntary service overseas) pharmacist left. My line manager was the medical superintendent, but the person with whom I was mainly to interact was the hospital administrator.

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## PHARMACY SYSTEMS

I noticed early on that there seemed to be no system in the way drugs were stored. In the dispensaries, this was because the facilities were poor — old metal cupboards with padlocks were the only form of storage. In the store it was because a very out-dated system of classification was being used. During my stay, I tried to persuade the senior store keeper to change to an alphabetical system but he was unwilling to do so, because it was not how he had been trained. He used ledgers to record everything. Even though it took him a long time to find items in the ledger, I could not convince him to change.

The system for ordering drugs was also not what I was used to. One of my main tasks was to ensure that we always had enough drugs in the hospital. That sounds simple, but it was not. Orders were placed at three-monthly intervals with the government drug store in Kampala. Unfortunately, the hospital received money, via the university, on a monthly basis from the Ugandan government, which meant that it really could not afford to order three-months worth of drugs at one time. In between the main orders, drugs were obtained from a local community pharmacy that had won the contract to supply us with drugs in an emergency.

An order to the government drug store was placed by the senior dispenser a few weeks after I arrived. It was sent to the medical superintendent to approve and then to the university bursar. A few days later it was

returned saying that we must reduce the total cost. I looked through it and discontinued all the “non-essential” drugs, such as analgesics other than paracetamol and opiates, and antibiotics other than chloramphenicol, gentamicin, ampicillin and benzylpenicillin. It was returned a second time, saying it was still too much. All we could then do was reduce quantities. As a result, we ran out of suxamethonium. The “emergency pharmacy” did not stock suxamethonium, but we managed to find some money, along with a vehicle going to Kampala, so that we could get some more. This close shave made me realise that I needed to know every week exactly what the stock levels were. We had no proper computer records as my computer was not linked to the computer in the store. Instead, I printed out a list of drugs we had and asked the senior store keeper to write in the stocks for me every week.

During my second year money became even more scarce and it was decided that we should open a private pharmacy so that outpatients could buy drugs that we did not have in the hospital. The private pharmacy proved to be successful in that it was well used and made a small profit, which was put back into the hospital. It also saved patients having to go into town to pick up their medicines.

## OUTPATIENTS

I was also surprised to discover that outpatients retained their prescriptions. This meant that we had to record every prescription dispensed. Patients who were regular attendees at outpatients clinics had their

prescriptions written in exercise books, which created a useful record of treatment. Out-patients who did not attend a specific clinic waited to see a clinical officer who was basically a partly-trained doctor. Monitoring of prescriptions written by the clinical officers was difficult, because not all of them were seen by a pharmacist. From those prescriptions I did see, it was obvious that some of the prescribing was a bit erratic. During my stay, I drew up guidelines for antibiotic prescribing, and these seemed to have some effect.

## — CLINICAL PHARMACY

Clinical pharmacy is very much in its infancy in Uganda. Pharmacy courses have only recently begun to teach it as a subject. Ugandan doctors generally do not understand the concept of clinical pharmacy, but they were happy for me to attend ward rounds if I wanted. During the early part of my stay, I took part in some medical ward rounds, and I was able to identify a serious problem. There were two diabetes patients on the ward, both with high blood glucose levels. In Uganda, we were still using 40u/ml insulin, but 100u/ml syringes. It turned out that these syringes had been donated from Canada and the store keeper who looked after the sundries was not

allowed to order any more syringes while we had these in stock. Initially, I calculated how to ensure an accurate dose was given with the 100u/ml syringes, and trained the nurses and pharmacy staff, who in turn trained the patients, accordingly. Eventually, one of the VSO doctors got rid of the 100u/ml syringes and bought some 40u/ml syringes out of his own money. In the end, I had to stop doing regular ward rounds, due to lack of time. I did, however, go to weekly doctors meetings and contribute to the writing of prescribing guidelines.

## — AIDS SERVICES

At the beginning of the second year, we were told that our hospital should start prescribing antiretroviral drugs. Before then, the only drugs available to AIDS patients at the hospital were antimicrobials used to treat or prevent opportunistic prevention. There would be no money for the antiretrovirals, so they would only be available to patients who could afford to buy them. I wrote drug counselling guidelines, working with the American consultant who ran the AIDS clinic. I also worked out how we could obtain the drugs on credit, which was from a hospital in Kampala who had sourced drugs in India. As usual, I had to find a vehicle going to Kampala to collect them as the uni-

versity would not give us money for petrol. Not long before I left we received free nevirapine from the MOH to give to pregnant mothers with AIDS to prevent the transmission of the disease to their babies.

During my stay, I was also involved in providing services to the local hospice, which looked after a lot of AIDS patients, as well as cancer patients. In particular, I made up morphine mixture for them from morphine powder. We also started using morphine mixture in the hospital and I helped one of the English doctors to train the doctors how to use it. Many Ugandans were frightened of the addictive properties of morphine and I had to help convince them that its use in palliative care was not generally a problem.

## — FINAL THOUGHTS

As I said at the beginning, Uganda is beautiful and the people are lovely, although sometimes I thought they did not have enough of a sense of urgency. But perhaps that helped them, in that I found the job frustrating at times, whereas they seemed more able to take things at face value. I hope that I was able to contribute to the health of the local population and that the beneficial effects of the small changes I was able to make to improve the drug supply system might still be being felt long after I have left.

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