Medicine in Malawi: An Occupational Hazard?

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Acknowledgements

I would like to thank the University of Malawi’s College of Medicine for hosting my elective, and their final year students for providing me with a unique insight into their training. Thank you to all the doctors, nurses, staff and patients of Queen Elizabeth Central Hospital in Blantyre, and the faculty at Brighton & Sussex Medical School. I am very grateful to the Faculty of Occupational Medicine for granting me the Mobbs Corporate Health Fellowship and facilitating this invaluable experience.

Background

In 2009 The Malawi Country Profile on Occupational Safety and Health (OSH) identified many areas of development required to safeguard employees in the workplace. This included a range of professions, including agriculture, transport and industry. In terms of healthcare the main focus was on infection prevention and control. There were guidelines issued for record keeping of many incidents, including needle stick injuries and post-exposure prophylaxis use. The employment of personal protective equipment was recommended rather than mandatory. The report stated that the Directorate of OSH in Malawi did not appear to have adopted the International Labour Organisation’s policy for management of OSH. Therefore even if the Directorate’s own policy was in place it provided no national guidelines for companies to follow, which made regulation and certification of OSH practices very difficult. The profile reported that between 2.3% to 8.3% of the Ministry of Labour budget had been allocated to fund OSH for the last five years, and suggested that this may not be sufficient to cover the necessary daily operations, training and laboratory work that was needed.1

The findings of the profile led in part to the creation of the Malawi National Occupational Safety and Health Programme. This aims to implement five objectives from 2011-2016:

1. To improve capacity for occupational safety and health management.

2. To strengthen legal framework and infrastructure on occupational safety and health.

3. To improve occupational safety and health information and documentation.

4. To improve occupational safety and health promotion and safety and health culture.

5. To improve the mainstreaming of HIV/AIDS and occupational TB management.

The programme is ongoing in conjunction with ILO’s Decent Work Agenda, the Global Strategy for OSH, and the Malawi Growth and Development Strategy II.2
Objectives

1. To experience working in a country where occupational health issues may not be a top priority.
2. To discuss OSH issues with other students, doctors and healthcare professionals from different backgrounds.
3. To work with healthcare professionals and experience the strengths and weaknesses of the current system in Malawi.
4. To assess the impact of OSH issues on workers and healthcare professionals in their daily lives.
5. To gain a greater understanding of the importance of occupational medicine as a specialty.

Elective report

I undertook my clinical elective at the Queen Elizabeth Central Hospital (QECH) in Blantyre, Malawi which was run by the University of Malawi’s College of Medicine. QECH is a government-run teaching hospital which provides free healthcare to all its patients, so it is extremely busy and people regularly travel for many hours in order to reach the hospital.

On arrival at QECH I was introduced to the students and teachers I would be attached to for the duration of my elective. Every morning we had clinical teaching before a review of patient statistics. The hospital itself has 1000 beds, including 3 main medical wards and a tuberculosis ward. Every day of my attachment the statistics revealed overcrowding on the wards, with the 50-bed women’s ward regularly housing over 70 patients alone. This involved mattresses being placed on the floor between beds and along the corridors of the wards.

One of the bays on a medical ward at QECH

I spoke to both staff and students at QECH in order to ascertain the level of importance that is placed upon the teaching and awareness of occupational medicine. The University of Malawi’s College of Medicine students are given Hepatitis B vaccinations at the start of their course, and receive an introductory course in occupational medicine at the start of their third year. They said they were heavily advised to take post-exposure prophylaxis (PEP) in the event of a needle stick injury involving a person whose HIV status is either ‘reactive’ (positive) or unknown, and there were also signs up on the wards directing all staff to do this. The students I spoke to confirmed...
that there was always a large supply of PEP available at QECH, and that they were aware which member of the admin staff was responsible for providing it and following up on their care.

I observed daily challenges in the hospital during my elective. There were sinks available on the wards and in clinic rooms but running water was rare, and soap even more so. Occasionally a bottle of purple hand wash would appear on the ward but it would be used up very quickly. The only alcohol gel I saw was available in small bottles for personal use, which members of staff bought for themselves from the pharmacy. The gloves provided by the hospital were one-size only and therefore not tight fitting. I saw empty glove boxes regularly used as trays for venepuncture equipment, and needles were either re-sheathed or stuck into the mattresses next to the patients after use in an attempt to avoid sharps injuries. There would be one sharps bin per ward which regularly moved from its designated area, and all the ones I saw were completely open at the top or had cracked lids.

![Sharps bins were often moved](image1.jpg) ![Most had cracked or missing lids](image2.jpg)

The students did not recall receiving manual handling training during their course, but were constantly transferring patients from beds to wheelchairs. They also provided basic physiotherapy to mobilise the patients, partly for rehabilitation purposes and also due to the unavailability of DVT prophylaxis.

Some corridors in the hospital were too narrow for beds to be pushed beyond a certain point, so the porters and nurses had to transfer the patients to narrower beds halfway down the hallway. Sometimes wheelchairs needed to be lifted through doorways and past obstructions. Patients
would be placed on the floor behind one side of the double doors leaving only one side free to be opened, and the mattresses and drip stands would reduce the width of the corridors significantly. All ‘corridor patients’ were on mattresses along the walls, with the doctors and students constantly bending down, crouching or sitting on the floor in order to examine the patients.

Some items of personal protective equipment were generally available. The tuberculosis ward had one set of double doors leading on to it with a sign advising that masks, gloves and aprons should be worn at all times. However there was rarely anyone to check or challenge entry on arrival at the ward, and few further measures seemed to be in place to ensure the safety of those working in close contact with the patients. Doctors, nurses and family members could often be seen on the ward with little or no visible protection in place.

Towards the end of my attachment a young woman was admitted with advanced symptoms of rabies. As the side rooms had to accommodate at least four patients each, it was not possible for her to be placed in a room of her own. As a consequence of this she was placed on a mattress in the corridor outside the staff toilet on the main women’s ward, as it was in a small alcove. A table was pulled partially in front of her in an attempt to stop other patients from getting too close, but the toilet was still available to use by the staff. The doctor attending to the rabies patient had only loose-fitting gloves and a disposable apron to wear, as there were no masks or goggles available at the time.
A doctor examining a young woman with rabies symptoms whilst wearing minimal protective equipment. The mattress is beside the staff toilet, and the table in the foreground is an attempt to keep other staff and patients from approaching.

Conclusion

Occupational medicine in Malawi is a complicated issue which has recently come to the foreground due to the National Profile of 2009. Having spent some time in QECH, I concluded that the main OSH issues seemed to be due to:

1. A lack of basic resources (procedural trays and equipment, sharps bins, etc.)
2. A lack of beds
3. A lack of official guidelines for use of equipment and protective clothing

The doctors and nurses regularly work under extremely difficult circumstances with very limited resources. Some items of personal protective equipment were relatively accessible on the wards, but the use of them requires stricter guidelines in order to significantly reduce the risks currently posed to healthcare workers. Together with the protocols and regulations on infection prevention and control being implemented by the National OSH Programme, a combination of basic resources and increased OSH education could greatly benefit the healthcare workers of Malawi.
References


All images taken by Fiona Dogan after obtaining consent.