

The Impact of Poverty on Health: A Fourth Year Medical Elective in Malawi

Caroline Stanley

Fifth Year Medicine, TCD

INTRODUCTION

Set amidst the striking, mist-shrouded Mulanje Mountain Range, Phalombe, a small town in Southern Malawi, was home to four Trinity College medical students in July 2007. Having heard wonderful stories from our friends who had been there the previous year, we decided to make Holy Family Mission Hospital the destination for our four-week medical elective. Malawi is one of the poorest countries in the world and, as one can imagine, my experiences at Holy Family were quite different to anything I'd witnessed in any Irish hospital. Most startling was the very high case fatality rate and it wasn't long before I appreciated just how devastating absolute poverty can be in terms of health and disease. Phalombe is located in a very poor and remote area that falls victim to many food shortages. Malnutrition, poor sanitation and lack of education in this region which are directly caused by poverty lead to poor health and disease.

In addition to my experiences at Holy Family, I was also fortunate to see the workings of the Likulezi Project, a local charity in Phalombe that was founded in 1993 in response to the devastation caused by the acquired immunodeficiency syndrome (AIDS) epidemic. Unsurprisingly for an area of such poverty, the adult human immunodeficiency virus (HIV) prevalence stands at 19%, much higher than the 10% seen in northern and central regions of Malawi (1). The project now plays an important role not only in combating AIDS, but also in helping combat poverty by supporting local enterprise and adult education. My experiences at Holy Family and the Likulezi Project allowed me to witness first hand just how important social and economic factors are in determining health. Previously I had given very little consideration to this crucial aspect of medicine and so, in this manner, my elective experience gave me a much deeper insight into the many factors involved in delivering effective health care.

HOLY FAMILY MISSION HOSPITAL

Holy Family is a 216 bed general hospital situated in the grounds of the Phalombe Catholic Mission, which is also home to a church, a convent and a large nursing school. The hospital has five main wards (male, female, paediatric, labour, and post-natal) and an outpatient's department. During our four weeks, we rotated through each of these areas and so were exposed to a very wide range of medical conditions. With only the most basic investigations available, well developed clinical skills are paramount, however with severe shortages of adequately trained staff this is difficult to achieve. Such limited resources mean it is also necessary to question the value and consequences of any investigation or intervention.

Lack of technology is not the only impediment to healthcare workers in the developing world. One of the innate

difficulties faced by many health care facilities is earning the respect of local people. For many in Malawi, the witch doctor is the first port of call in times of sickness with the local health centre taking second place. As a result, many patients present to the hospital after their illness has progressed to a late stage. I believe that this reluctance to trust in basic Western health care stems from a lack of formal education. My experiences at Holy Family highlighted how education and promotion of health plays a crucial role in preventing disease.

MATERNAL MORTALITY AT HOLY FAMILY

In Malawi there are more than 1,000 maternal deaths for every 100,000 births, which is over 100 times greater than the Irish maternal mortality ratio (2). Out of 1,776 deliveries at Holy Family in 2006, 21 women died either during labour or in the peri-natal period. A ruptured uterus is the most common cause of maternal death in Holy Family which is usually caused by prolonged labour or multiparity (3). Grand multiparity is very common in Malawi and the fertility rate was recorded as 5.9 in 2005 (2).

Another obstetric complication common in this area of Malawi is cephalo-pelvic disproportion (3). Dr Anten, the Chief Medical Officer at Holy Family, attributed this to the very young age of most primigravidas and poor nutritional status during growth and development that results in women having a small, under-developed pelvis. In Malawi, there is a huge cultural pressure on women to bear many children. However, health promotion and education in the area of family planning could have a huge impact in changing reproductive choices and thus reducing maternal mortality. During my four weeks at the hospital, I witnessed only one bilateral tubal ligation. Perhaps not so surprisingly, the patient was a relative of one of the medical officers and so was probably very aware of the advantages of family planning.

INFANT MORTALITY AT HOLY FAMILY

In 2002 Malawi ranked 17th in the world for infant mortality with a rate of 113 per 1,000 live births. Maternal education is thought to be the most influential protective factor against infant mortality in Malawi (2). Although the paediatric ward in Holy Family had its own oxygen concentrator, many parents refused oxygen therapy for their children because they believed that it might harm them. This is an example of the many beliefs that are held by some people who have had very little formal education. During my four-week elective, two infants died from cardio-respiratory arrest secondary to severe respiratory distress caused by a lower respiratory tract infection. In both cases the parents had refused oxygen therapy for their children. I remember asking one of the clinical officers why they would not give the oxygen without the parents' consent, but I soon began to see how fruitless this would have been and how

damaging it would have been to the little respect that people had for western style medicine. The answer to this problem lies with education.

Lack of education is not the only obstacle of a functioning health care system in Malawi. For many people the mere act of getting to the hospital is momentous in itself. The hospital had a very high paediatric case fatality rate of 10.4% (3). Dr Anten cites "late presentation" to the hospital as the main reason for this. Holy Family is a private hospital and in order for patients to qualify for free health care they must be referred from their local District Health Office. Some of the referral centres are far as seventy kilometres from the hospital while transport is difficult to come by. In Phalombe, there was one village ambulance, which was a bicycle with a plank of wood tied to the back. Also the loss of income for a mother as many women, with many mouths to feed, cannot afford to stay in hospital with their sick children.

HOLY FAMILY HOSPITAL; CHALLENGES AND STRENGTHS

Notwithstanding the many barriers faced by people accessing healthcare, the actual service that the hospital can provide is constrained by extremely limited resources. For example, the hospital struggles to provide basic life support, as it has to contend with severe staff shortages and frequent stock outs of essential drugs such as local anaesthetic, antibiotics and even intravenous fluids.

However despite all of these problems there are many success stories. Holy Family is a designated Voluntary Testing and Counselling (VCT) Centre. This is the most common way people in Malawi and many places in Sub Saharan Africa get tested for HIV. VCT involves two counselling sessions; one given prior to testing and given post results. Patients are counselled about the virus, how it is spread and how to minimise the risk of infection. The VCT centre at Holy Family has five members of staff working voluntarily as part-time counsellors. In 2007, 4,093 people were tested and 34% of these were found to be HIV positive (3). This vast test number could not have been achieved without the selfless enthusiasm and dedication of the staff members who run the centre.

In Malawi, anyone with stage three or four AIDS is entitled to free treatment and Holy Family Mission Hospital also has an anti-retroviral (ARV) clinic, which was established in June 2005. The laboratory at Holy Family does not have the facilities to measure CD4 level, so clinical features are used to determine stage. By June 2007 there were over one thousand patients receiving ARV therapy through Holy Family (3).

THE LIKULEZI PROJECT

Gemma Brugha, an Irish nurse, who first came to Malawi in the 1980's as a volunteer in Holy Family Mission Hospital, founded this local charity. Brugha has developed Likulezi into a sustainable, self-contained project because her experiences working in the hospital have taught her how disruptive outside influences can be. When she started

working in Holy Family there were many foreign aid workers and volunteers in the area. At that time, the hospital was considered one of the finest in Malawi. However, after 1995, as the situation in Mozambique improved and the United Nations left, there was a mass exodus of foreign volunteers from the area. This sudden loss of staff and income had a disastrous effect on the hospital and wider community. Currently the project operates throughout three hundred and thirty villages and has over one thousand volunteers, all of who are Malawian (4).

The Likulezi Project plays a crucial role in the economic and social development of the community in Phalombe by operating in four core areas: AIDS education, home care and counselling for those with AIDS, orphan support and community development. I was fortunate to experience the workings of two aspects of the Likulezi project- home care and orphan support.

HOME CARE AND COUNSELLING

Home care plays a central role in the initial aim of the project which was to help alleviate the devastation and suffering caused by AIDS. Likulezi volunteers are trained not only as carers, but also as educators and so they encourage family members of the patient to get tested and counsel them regarding how to minimise the risk of infection. The project also provides these families with practical items, such as a bamboo mat to sleep on, soap, blankets and likhuni phala (a nutritious porridge). In visiting families out in remote villages with the volunteers, I got a real insight into the scourge that is HIV and how it devastates whole families and communities. The taboo and stigma associated with AIDS was evident as many people expressed their wishes not to talk about the disease especially in front of their children. There were also many patients with end stage AIDS who were unable to receive ARV therapy because they refused HIV testing.

THE LIKULEZI ORPHAN SCHEME

In 2005, it was estimated that there were over 800,000 orphans in Malawi (1). With no parents to support them, these children are forced to leave school at a very young age and find work in order to feed themselves and their younger siblings. The Likulezi orphan scheme aims to break this vicious cycle of poverty by supporting orphans and their families. In Malawi, the grandparents are frequently left to rear these orphans. Considering the prevalence of HIV in women between the ages of 20 and 24 is four times that in men of the same age (1), it is unsurprising that many AIDS deaths are in young mothers. One of the Likulezi volunteers and I visited an orphan family where the grandmother was taking care of three young children that had lost both parents. The mother had died of AIDS and as the father had abandoned his family once his wife became ill. We sat together on the bamboo mat provided by the project and listened to this old woman tell us of how she had to work as a labourer on other people's land in order to make enough money to feed the children. However, the project had helped this family by supplying seed and fertiliser and supporting the orphans through

school. This support is given for a five-year period, after which the families can be included in a special revolving fund, where they are given a small amount of capital to make an income generating activity of their choice. One of the most important aims of the scheme is to keep the children in school and this is paramount in helping the community achieve long-term economic development.

LEARNING FROM EACH OTHER

The main lesson I took home from my four weeks in Malawi was how social problems strongly impact on health. I came across so many inspirational people that left me in no doubt that Malawi could overcome the many problems it faces. I found it remarkable how happy and generous ordinary people were. One evening when the four of us decided to go for a walk to the village we came upon an entire family, including grandparents and grandchildren, outside their small house singing and dancing. We stood there, captivated by their beautiful, harmonious singing and I remember thinking how wonderful it was that people can be so content and happy, despite their many struggles.

I met many remarkable people during my four-week elective but I particularly remember one of the volunteers from the project. One hot afternoon, the four of us cycled with her to a small village about twenty kilometres away where she helped care for a young mother who was dying of AIDS. This volunteer herself looked worryingly thin and she carried her two-year-old son on her back while she cycled. This was a woman who probably struggled to feed her own family, who could well have had grave health problems of her own and yet she was taking time to try and help another woman and her family. This is the lasting image that returns to me when I reminisce about my summer in Malaw. Malawi may have a lot of progress to make in several areas, such as education and health but there are also many lessons our society could learn from the people of this beautiful place.

REFERENCES

1. National AIDS Commission. HIV/AIDS in Malawi; Estimates of the prevalence of infection and the implications. National AIDS Commission; October 2003. Available from: URL: http://www.synergyaids.com/documents/MAL_AIDS.pdf
2. WHO Statistical Information System. [Online]. 2007 [cited 2008 March 3]; Available from: URL: <http://www3.who.int/whosis>
3. Anten R. Annual Report; Holy Family Hospital, Phalombe; July 2007
4. Brugha G, Mthobwa P. The Likulezi Project Profile; 2006.

Past TSMJ Directors and Chief Editors

YEAR	DIRECTOR	CHIEF EDITOR
2000	Aric David Parnes	Rajan Puri
2001	Sonia Chacko	Jarrold Wall
2002	Ray Walls	Ashish Jain
2003	Ciara McLaughlin	Heather Church
2004	Brenda Rice	Des McMahan
2005	Rebecca O'Rourke	Ciaran McMullan
2006	Rachael Liu	Peter Lonergan
2007	Michael Ednie	Jared Butler / J. David Ryan