

## Information for Volunteer Physiotherapists

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### Introduction

Ripple Africa is not a medical charity — in fact, healthcare is the smallest project the charity runs — but it has supported the health centres at Kachere and Kande and the rural hospital at Chintheche since 2003, it has built and continues to support the dispensary at Mwaya, and it runs a disabilities and rehabilitation project and sexual health programme locally. In November 2019, we began supporting Tukumbo Health Centre too.

### Structure of Health Services in Malawi

In Malawi, three levels of healthcare exist: rural clinics (e.g. Mwaya Dispensary, Kachere Health Centre and Kande Health Centres), rural hospitals (e.g. Chintheche), and District hospitals (e.g. Nkhata Bay). The healthcare system is government funded and free at the point of delivery to all. Investigations are limited by resources, and diagnosis is largely based on clinical presentation. Some basic laboratory testing is available at the rural hospitals, and some further tests and imaging available at the District Hospitals. Malawi has very few doctors; the only doctor in Nkhata Bay District is the DHO (District Health Officer). Therefore, rural and District hospitals are staffed by Clinical Officers (COs) and rural clinics by Medical Assistants (MAs).

Clinical Officers are trained for a minimum of four years and are experienced practitioners, and Medical Assistants are trained for a minimum of three years. The Clinical Officers and Medical Assistants are usually in charge of their workplace, and manage all care including in-patients and out-patients. They diagnose, treat, and prescribe. The Clinical Officer who has run Chintheche Rural Hospital for over 13 years (Greyson Kumwenda) is a very experienced clinician who is extremely dedicated to the community in which he works.

All clinics and hospitals will have a team of nurses. Nurses can qualify in Malawi via a diploma or degree course from either a government run or private institution, and the courses vary in length and quality. In Malawi, nurses are dual trained in midwifery and nursing, and nurses also diagnose, treat and prescribe. Due to their dual training, they find it strange that volunteer nurses come to Malawi with no midwifery knowledge/experience. Due to their having a wider role in rural Malawi they also find it strange that volunteer nurses aren't necessarily happy with diagnosing patients and initiating treatment. You will meet a number of dedicated individuals during your time volunteering. Nursing is not generally seen as a vocation as it tends to be in developed countries, however. It is very important to get used to all these concepts before arriving in Malawi.

Rural clinics usually have a team of community health workers called Health Surveillance Assistants (HSAs). They have a diverse role, including the management of the community health needs, assisting in clinic, collating all records, and performing VCT (Voluntary Counselling and Testing for HIV). They have up to 10 weeks of formal training and attend training days up at Nkhata Bay District Hospital every so often.

It is vital to be aware that, while the above is what is laid out, you may find in practice things don't always work as outlined. Recruitment and retention of good staff in all positions in the rural areas is recognised as a huge problem throughout Malawi (this applies to the non-healthcare sectors as well as healthcare). Nationally, there is a recruitment shortage in nursing with vacancy rates of up to 60% in the rural areas. This is multi-factorial. Rural clinics tend to survive on minimum staffing levels for all positions.

Volunteers should come with an open mind about their role and be aware that, due to the vast differences in how healthcare is delivered, you may find yourself doing very different work to your usual practice. This can be both frustrating and very rewarding, depending on your expectations.

## Physiotherapy in Malawi

According to the World Confederation of Physiotherapists, in 2019, there were approximately 19 million people in Malawi and just 124 physiotherapists. In 2011 there were only 15. After much campaigning, the Malawian government opened a physiotherapy programme at the University of Malawi College of Medicine and in December 2010, the first cohort of 25 physiotherapy students commenced their training on Malawian soil. There is a higher concentration of physiotherapists in the bigger centres, such as Blantyre, Lilongwe and Rumphi, the rural areas tend to have far less assistance.

In rural areas, physiotherapy is dependent on community based rehabilitation providers who operate out of organisations such as MACOHA (Malawi Council for the Handicapped) and MAP (Malawi Against Physical Disability).

In this case, the provider is often a physiotherapy assistant. There is a MACOHA office in Chintcheche (approximately 40 mins from Mwaya by minibus). MACOHA is jointly funded by two main overseas-based NGOs, in conjunction with the government. Due to recent global financial pressures, MACOHA has gradually been receiving less funding. This has resulted in resources being stretched and jobs lost, and means that there will be less providers covering an increasingly growing population.

## Basic Information for Volunteer Physiotherapists

- The minimum time commitment needed for a placement is four weeks.
- Specific experience in orthopaedics, rheumatology, paediatrics, burns care, neurology, and infectious diseases is extremely valuable. More experience than that stated above is significantly more useful.
- Previous experience of working in a low income country would be of great benefit.
- While volunteering with Ripple Africa is a brilliant way to learn about Malawian healthcare and culture, you may well find that the experience is very different to what you imagine.
- The effects of malnutrition, cerebral malaria, HIV/AIDS, and TB are all areas of which it is useful to have some background understanding before arrival.
- Healthcare in Malawi must be taken in the context of much wider issues, such as poor education (particularly amongst women), gender inequalities, malnutrition, severe poverty, subsistence farming, unsustainably large families, and an HIV epidemic. Tackling poor health involves being aware of all of the social and economic problems which contribute to it.
- Public health and education in the community on a wide variety of topics is a huge area of potential work for any healthcare volunteer and is one of the best ways to add value to the Malawian system. This can apply to physiotherapists as well as to nurses and doctors.
- Male volunteers can experience specific issues, due to cultural differences and the fact that the majority of patients seeking healthcare at rural clinic level are female.

## Ripple Africa's Disabilities and Rehabilitation Project

Our Disabilities and Rehabilitation project currently supports over 120 children and their families. There are some adults included in the programme however the majority of those being provided support are children. The project is run by Matilda Mwale. Home visits and group sessions are run across four different villages. Home visits take place on a Monday morning in and around Kachere, on a Wednesday morning in and around Mwaya and on a Thursday in and around Chituka and Chifira. On a Tuesday, home visits take place

in the afternoon in Kande. The group sessions run in the afternoons on the same days for Kachere, Mwaya and Chituka and Chifira. At Kande, the group session is during morning hours.

The various disabilities that children present with include brittle bones, spina bifida, knocked knees, cerebral palsy, cerebral malaria, epilepsy and cognitive delays. Some of the older patients we work with will be referred to Matilda from the hospital, and will often be those who have suffered from a stroke.

Volunteers assist Matilda with her home visits and at the group sessions, sharing skills and advice on each client's care. As we are working within a rural environment, access to modern devices such as wheelchairs, walking frames and crutches are hard to come by. We work alongside local carpenters to create wooden versions, and volunteers love the opportunity to think outside of the box and come up with designs - something they often don't get to do, nor need to do, in their usual Western workplaces.

Physiotherapists with experience working with people with a disability, neurological disorders, paediatrics, burns and amputees would find their skills and knowledge of particular use in this area of Malawi. However, anyone with general musculoskeletal and orthopaedic knowledge will also find plenty of work in the community.

### **Some of the Challenges Within the Healthcare System in Malawi**

- Understand that healthcare facilities are extremely basic, and there are huge limitations on what can be done for severe illnesses.
- There is a lack of very basic equipment that you would be used to in your home country.
- Many volunteers find that standards of cleanliness are not what they are familiar with.
- If you are working with the nurses at the local healthcare facilities, it can be useful to be aware that working in healthcare is not a vocation for all nurses in Malawi.
- Previous volunteers have found it difficult to undertake patient care due to the language barrier. Learning some ChiTonga (body parts, left and right, hours, days, months, etc.) will help a great deal as the majority of patients are women with little or no English.
- Gender based inequalities are so important for many of the issues above; however, these inequalities are rarely talked about openly so it can be very challenging to understand these as a *mzungu* (white) volunteer.
- Ripple Africa does not recommend bringing supplies with you. It creates expectation with the local healthcare staff and more widely within the communities that this is one of the charity's core functions. This is damaging in the longer term. We believe in providing a hand up, not a hand out.
- Transport money for patients is a huge issue. Previous volunteers have sometimes felt pressure to give money to individual patients if their condition necessitates assessment/treatment at a facility further away as they will otherwise not be able to get there. Ripple Africa does not recommend giving money to individual patients as it sets a precedent and will encourage more people to ask future volunteers for transport money.
- You may be asked to fund various healthcare training days/ideas/work/projects. Please, please do not do this or promise any money. If you are interested in helping with something like this and getting involved, ask Dan.

### **Healthcare in the Area**

#### **MACOHA (Malawi Council for the Handicapped)**

Despite the funding cuts at MACOHA, they still have an office in Chintheche and volunteers can visit to attend their Club Foot Clinic. This is an interesting experience for volunteer physiotherapists if they have not seen the Ponsetti technique in action, or it could be valuable for those applying the technique if they have any advice to improve their current practice. However, these clinics are quite slow, and there are usually only two or three patients each week.

MACOHA also has the timetable of when there are visiting orthopaedic and physiotherapy teams at Chintheche Rural Hospital. Once or twice a year, CURE International Hospital in Blantyre sends an orthopaedic team to different parts of the country to provide orthopaedic advice and surgical management for patients in more remote areas of the country. Organisations such as MAP and MACOHA have a direct role in referring patients for these visits, as does Ripple Africa's Disabilities and Rehabilitation Project co-ordinator. The number of patients referred often depends on the amount of funding they have available at the time.

### Community Healthcare

- The HSAs run weekly Under 5s Clinics which rotate round the various villages.
- The babies and children are weighed and immunised with all their information being recorded in their "health passport". Any children noted to be underweight are asked to attend the "Underweight Clinic" at Kachere Health Centre. They can then be assessed and referred on as required.
- At the end of Under 5s Clinics, all the sick babies/children are assessed and treated.
- The HSAs do a lot of regular outreach work, including seeing patients at home to reduce the pressure on the health centre.

### Mwaya Dispensary

- Mwaya Dispensary opened in June 2011. It was built by Ripple Africa in response to requests from the local community. Prior to the Dispensary opening, people in the local communities had up to a 20km round trip to reach either Kachere Health Centre (to the south) or Kande Health Centre (to the north).
- While Ripple Africa built the clinic and subsequently the house for the medical assistant to live in, it is run fully by the government (it was built only on this premise).
- Supplies and equipment are all subject to the limitations indicated in the section called Medications.
- Permanent clinical staff based at Mwaya Dispensary include a Medical Assistant, Hospital Attendant, Medicine Dispenser and Gardener/Caretaker.
- Facilities comprise a general outpatient clinic, including malaria testing (rapid test), an Under 5s Clinic, and a dispensary for commonly prescribed medicines. The most common illnesses seen at Mwaya Dispensary are gastro-intestinal problems, malaria and HIV/AIDS related illness, problems associated with malnutrition, and respiratory infections as outlined in the section above.
- There is no running water or electricity at Mwaya Dispensary, but there is a small amount of solar power.
- There is no labour ward, ante-natal or post-natal care at Mwaya Dispensary. The nearest facilities for this are at Kachere Health Centre and Kande Health Centre.
- Opening times: Monday to Friday, 9.00am to 4.00pm (lunch 12.00pm to 2.00pm), although timings may vary and run over.

### Kachere Health Centre

- Kachere Health Centre is situated in the village of Kachere, 7km south of Mwaya Beach on the main lakeshore road.
- Volunteers can either cycle there (about 30/40 minutes), walk/cycle to the main road at Matete and catch a minibus (costs MK300 each way) or walk to the Health Centre (about 1½ hours).
- Kachere Health Centre has a catchment area for approximately 26,000 people.
- Facilities at the health centre are extremely basic. They include an outpatient department for daily consultations, a holding room with two beds for sick patients requiring IV therapy, observing or awaiting transfer via ambulance to a bigger centre.
- There is also a dispensing area for basic medications (see the Medications section below), a maternity/ ante-natal consulting room, and a VCT (Voluntary Counselling and Testing for HIV) clinic provided free of charge. Deliveries and malaria testing also take place here.
- There is electricity and running water at the health centre.
- There is no telephone line at Kachere Health Centre. Communication is reliant upon someone having credit for their mobile phone.
- Permanent clinical staff based at Kachere Health Centre include a Medical Assistant, nurse/midwives, Health Surveillance Assistants, Medicine Dispensers and Gardener/Caretaker.
- Opening Times: Monday to Friday, 9.00am to 4.00pm (lunch 1.00pm to 2.00pm), although timings may vary and run over.

### Kande Health Centre

- Kande Health Centre has similar facilities to Kachere Health Centre, and it is situated in the village of Kande, 7km north of Mwaya Beach on the main lakeshore road.
- Volunteers can either cycle there (about 40 minutes), walk/cycle to the main road at Matete and catch a

minibus (costs MK300 each way) or walk to the health centre (about 1½ hours).

- There is an anti-retroviral clinic building.
- Permanent clinical staff based at Kande Health Centre include a Medical Assistant, Nurse/Midwives and Medicine Dispensers.

### **Tukumbo Health Centre**

- Tukumbo Health Centre is situated on the outskirts of the village of Tukumbo, 15km south of Mwaya Beach on the main lakeshore road.
- Volunteers can walk/cycle to the main road at Matete and catch a minibus (costs MK500 each way).
- Facilities at the health centre are extremely basic. They include an outpatient department for daily consultations, a room for dressings, and a maternity room for ante-natal and post-natal consultations. Deliveries are not offered here so women have to travel to Kachere Health Centre or Liuzi Health Centre.
- There is also a dispensing area for basic medications (see the Medications section below), and a VCT (Voluntary Counselling and Testing for HIV) clinic. Malaria testing also take place here.
- There is no telephone line at Tukumbo Health Centre. Communication is reliant upon someone having credit for their mobile phone.
- Permanent clinical staff based at Tukumbo Health Centre include a Medical Assistant, nurse/midwife, Health Surveillance Assistants, Medicine Dispensers and Gardener/Caretaker.

### **Chintheche Rural Hospital**

- The next biggest referral centre from Kachere, Tukumbo and Kande Health Centres is Chintheche Rural Hospital, about 25km north of Matete roadblock.
- Volunteers can walk/cycle to the roadblock in Matete and catch a minibus to Chintheche which will cost about MK800 each way and takes around 45 minutes.
- The Senior Clinical Officer is Mr Greyson Kumwenda. He is supposed to have three other Clinical Officers as well as a team of nurses and midwives.
- The hospital has a laboratory capable of checking for malarial parasites and TB. It can also perform glucometer testing, Hb, crossmatch and serology, and sometimes blood counts, depending on supplies.
- There is a blood bank fridge which rarely contains more than a couple of units of donated blood, and previous healthcare volunteers have encouraged their fellow volunteers to donate blood.
- There are three adult wards, a paediatric ward, a post-natal ward, delivery suite, and operating theatre.
- Greyson previously performed caesarean sections and numerous surgical procedures (tubal ligation, I&D of abscesses, etc.) himself at Chintheche Rural Hospital.
- However, the equipment and supplies were removed in 2013 after a number of changes in service revision at District level. This causes issues when patients do not have the means to travel to Nkhata Bay Hospital for treatment.
- Every few months, various clinicians/specialists visit.
- The antiretroviral clinic runs here every Wednesday.
- Although the wards are very basic and often overcrowded, the staff take great pride in their work and do the best they can with their limited training and resources.

### **Nkhata Bay District Hospital**

- The next centre for referral from Chintheche Rural Hospital is Nkhata Bay District Hospital, 80km north of Kachere.
- Volunteers can walk/cycle to the roadblock at Matete and catch a matola or minibus to Nkhata Bay which will cost about MK2,000 each way and takes around 90 minutes.
- This much larger facility is run by the District Health Officer (DHO), the only permanent doctor in the District (of 300,000 people) and a team of Clinical Officers.
- There are more extensive (although still basic) laboratory facilities, x-ray and an ultrasound that works intermittently.

- Laboratory tests available are FBC, Us&Es/LFTs.
- Teams of specialists, such as dentists and ophthalmologists, run clinics at Nkhata Bay and will also run satellite clinics at Kachere and Kande, and other health centres every few months.
- All elective and emergency surgery takes place at either Nkhata Bay Hospital or, if further specialist care is required, the patient will be referred on to Mzuzu Central Hospital or even to Blantyre.

## Malaria

- Malaria is by far the most commonly diagnosed condition.
- Depending on season (the rainy season is much worse), 50% - 70% of patients are diagnosed with malaria, and half are usually less than five years old.
- Every pregnant woman is supposed to be given a mosquito net at ante-natal clinic free of charge each time they are pregnant.
- The government should pay PSI a subsidised rate for bed nets, which should be delivered to the Health Centres every month for distribution through maternity clinics. These are often not delivered and may need chasing up.
- Patients are treated for malaria on extremely low clinical suspicion.
- The RDT (rapid diagnostic test) for malaria has been available at Mwaya Dispensary, and Kachere and Kande Health Centres since 2012. It is not clear how this is being used in clinical practice, and it seems to vary significantly between different healthcare workers.
- National guidelines in Malawi require that, where there is no facility to check for malaria parasites, any child below the age of five years old with a fever be treated for malaria. This does result in massive over-prescribing of these important drugs, and there is already resistance developing.
- Any adult with a fever (especially if they have "general body pains", headache, and abdominal pains) is also usually prescribed antimalarials even if they have another reason for their fever.
- The current first-line treatment for uncomplicated malaria is CoArthem (LA). This is given BD for three days to all patients and there are four dose increments depending on weight. LA is contraindicated in the first trimester of pregnancy and interacts with erythromycin.
- Alternatively, sulfadoxine-pyrimethamine (SP, aka Fansidar) can be given as a one-off dose depending on weight and age. The usual adult dose is three tablets stat. It is safe in pregnancy and used antenatally for malarial prophylaxis. SP has been used in Malawi with the same regime since 1991, and it is now recognised that about 30% of falciparum malaria (the most common strain in Malawi) is resistant to SP.
- Severe malaria or disease unresponsive to oral treatment is using IV or IM quinine.
- Patients are usually transferred to Chintheche Rural Hospital if they attend unconscious or fitting, or if they have not improved quickly after initial doses. A complete five to seven day course should be completed with oral quinine.

## Additional Information

- Ambulances to transport patients to a higher level care facility are hard to come by at Mwaya, Kachere, Tukumbo, Kande, etc.
- If a patient needs onward referral, then they either make their own way there on public transport or, if they are too sick, an ambulance is called from Chintheche Rural Hospital.
- There is currently one ambulance based at Chintheche Rural Hospital, but it is very often unavailable at short notice.

## Registration for Physiotherapists

All volunteer physiotherapists planning to work during their time in Malawi can discuss registration options with our UK Volunteer Programme Manager.

If you would like to be put in touch with previous volunteer physiotherapists to get their personal insights into their time working in rural Malawi, then please contact the UK Volunteer Programme Manager ([volunteer@rippleafrica.org](mailto:volunteer@rippleafrica.org)).