

Annual Impact Report

July 2021-June 2022

Primary Healthcare Department Mulanje Mission Hospital

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Vote of thanks

We are grateful for the work that could be done through the work with many partners. We thank St. Andrews and St. Georges West and Stockbridge Church, the Good Little Company, Fane Valley Presbyterian World Service & Development, EMMS International, Blacksburg Presbyterian Church, Greenpop, Stichting Steun Malawi, Christian Blind Mission, the Church of Scotland, the Presbyterian Church of the USA, Schouten Foundation and various individual donors. We thank you for supporting us in promoting health to all in the catchment area.

1. Introduction

Mulanje Mission Hospital is committed to providing quality health care and public health programmes in our catchment area and to all who seek our care.

In the year July 2021 to June 2022 the Primary Health Care department continued to offer integrated public health services in its main focus areas of intervention, which comprises of Prison Health, Sustainable Livelihoods, Orphan and Vulnerable Child care, Mother/Newborn and Child Health, Teenage pregnancy prevention, Malaria vector control, Environmental health, Palliative care, AIDS/HIV and TB, COVID-19, non-communicable diseases, cervical cancer screening and Flood relief. New this year is a programme promoting energy saving cook stoves locally known as "changu changu mbaula" translated as "quick quick stove". This report gives a summary of all programmes, highlighting the activities, achievements and the challenges.

1. Staffing

Head of department is the PHC Coordinator, Tikondwe Katumbi with a background in Environmental Health seconded by deputy Head Mrs. Sue Sabuni, a registered community nurse.

Staffing per sections

Environmental Health

- 1. Environmental Health Officer
- 2. Assistant Environmental Health Officer (currently vacant)
- 3. 68 Health Surveillance Assistants

Maternal and Child Health

- 1. Medical Officer PHC
- 2. 5 Community Health nurses
- 3. 4 Nurse Midwife technicians
- 4. 1 Senior enrolled Nurse midwife

Orphan and Vulnerable Child care

- 1. Medical Officer PHC
- 2. Project Officer
- 3. 1 Community health nurse
- 4. 2 Home craft workers

HIV and Aids

- 1. HIV/AIDS Coordinator
- 2. 5 HIV/AIDS counselors

Sustainable Livelihoods

- Project Officer
- 2. 1 Assistant project Officers
- 3. 3 Home Garden workers

Teenage Pregnancy Prevention

- 1. Medical Officer PHC
- 2. Project Officer

Youth Centre:

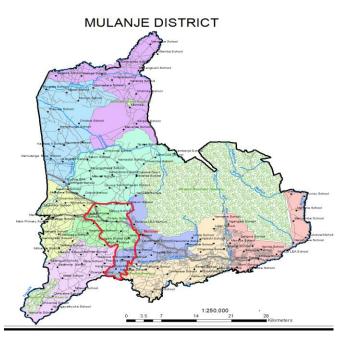
4 youth volunteers



Mount Mulanje overseeing the catchment area

3. Catchment area

Mulanje Mission catchment area has a total of 72 villages and a population of about 100.000. Each village ideally has a Health Surveillance Assistant, which a paid community worker, but in some instances, these tend to more than one village because of shortages of workers.



Mulanje is one of the poorest areas in de world with a high prevalence of HIV/AIDS. 80% of the people in our area are small-scale farmers and it is the most densely populated district in Malawi (DHS, 2018). There is a high prevalence of teenage pregnancy: 31% of the Malawian women aged 20-24 years delivered before the age of 18 (UNICEF, 2019).

Map of Mulanje District with MMH catchment area in red

4. Summary of programmes

4.1 Prison Health

4.1.1 Summary

Mulanje Prison is located at Mulanje Boma (the administrative Centre of Mulanje district) and serves both Mulanje and other districts, such as Phalombe and also neighboring country Mozambique. The facility was designed to keep 200 prisoners but currently has about 300 inmates. It has both male and female cells, 8 in total. There is a room which was used as a holding cell but is now our clinic.

The specific situation in Malawi with delays in the judicial system means that many prisoners are held in captivity without having their case been tried in court yet.

4.1.2 Activities and achievements

MMH provides basic health services at the prison. This happens during weekly clinics, attended by a nurse, a clinical officer, HIV test provider from MMH and a pharmacist from the Government Hospital. The major medical problems at prison were: respiratory tract infections, skin diseases including scabies, diarrhea, sexually transmitted infections and hypertension.



Provision of hand washing facilities at the prison

4.1.3 Challenges

Congestion at prison means there is an ongoing risk of diseases prevalent in crowded conditions, such as scabies, COVID-19 and tuberculosis. The space available for the clinic at prison is rather small and it has become a big challenge to keep the COVID-19 measures in place.

4.2 Sustainable Livelihoods

4.2.1 Summary

The sustainable livelihoods programme aims to uplift the general living conditions in the catchment area. Using the **Model Village Approach**, rural communities are engaged in conservation agriculture and are empowered to develop sustainable sources of income. Examples of activities are agroforestry, beekeeping and honey production, soil and water conservation, riverbank protection and the development of small-scale irrigation schemes.

The beneficiaries are households of Traditional Authorities Chikumbu, Mabuka and Nkanda in Mulanje District, Southern Malawi. Most of the work was carried out in **15 model villages** in the catchment area. We also support **fifteen primary schools** and their teachers through the Primary School Agricultural Network. Activities in primary schools include **gardening**, **introduction of livestock** and **expansion of environmental conservation** and **tree planting**. We believe that a new generation needs the skills to farm productively and sustainably in a changing environment.



Tree nursery at Mwanamvula and production of beehives

4.2.1.1 Energy efficient cookstoves



Using the "Changu Changu Mbaula", meaning quick quick stove

We train households and communities to use improved cook stoves.

By using the improved stoves, firewood and charcoal consumed for

cooking is be greatly reduced, resulting in a **reduction of greenhouse gas emissions**. The improved stoves can also provide co-benefits to users in the form of **relief from high fuel costs**, **reduced exposure to health damaging indoor air pollutions**, **faster cooking**, **and increased cleanliness and convenience**. In addition, reduced firewood and charcoal demand would lead to less forest cutting, and the **reduction in deforestation**.



Even maize cobs can be used for cooking on the Changu Changu Mbaula



Changu Changu Mbaula in action; little wood is needed

4.2.2 Activities and achievements

Activities	Achievements
Enhance Farmer to Farmer Extension	32 Lead Farmers trained
Activities	22 Para-Vets Trained
Mounting of demonstrations plots of various technologies	1434 follower Farmers trained and mentored by the Lead Farmers
Train Farmers on conservative agriculture (CA) practices	1869 Farmers trained
Train Formars on Baskyard Cardoning	2386 Farmers trained
Train Farmers on Backyard Gardening	1975 Backyard Gardens established

Train Farmers on Crop Diversification, Food Budgeting and integrated Pest Management	1326 Farmers Trained
Livertonic and districts	106 Young Goats Passed-on
Livestock productivity	62 Raised Standard goat stables constructed
Villaga Caringa and Lagar Carona activa	1286 Active members
Village Savings and Loans Groups active	51.000.000 MK (50.000 USD) saved
Irrigation schemes	5 enterprises generated
Bee Keeping	183 Bee Hives Procured & Distributed
Scaling up soil and water conservation	168 Marker ridges constructed
practices	193ha under Water Harvesting Technologies
Energy Saving Cook Stove Production	1003 Community members trained and 703 cook stoves constructed in 7 villages
	6 Nurseries Established
Agroforest and aforestation	33,400 trees planted
	6ha conserved through natural regeneration

The reconstruction of a 9 HA Solar Powered Mwamadi Irrigation Scheme is a success story to the programme. It benefits 56 farmers and their families at Mwamadi and surrounding villages.



Irrigation scheme at Mwamadi village



Irrigation scheme at Mwamadi village

4.2.3 Challenges

A challenge was the washing away of trees along the Ruo River banks during storm Ana in January 2022. Storm Ana also destructed crops of people in the catchment area, emphasizing even more the need for climate change resistant farming. Also, the programme emphasizes self-reliance and as such does not provide hand-outs or allowances to people participating in programmes. This is

not practiced by all actors in the District and as such sometimes participation is less than desired. However MMH strongly believes in truly sustainable development which must take place through self-motivated communities.

Damage at the Ruo river after storm Ana



4.3 Orphans and vulnerable children

4.3.1 Summary

The goal of this programme is improved quality of life for orphans and vulnerable children through the provision of health, education and school support.

The programme is targeting orphans and other vulnerable children in the catchment area of MMH, as well as exceptionally needy children from within Mulanje district but outside the catchment area. The target is 550 orphans to be recruited in the program.

An orphaned triplet that
lived in very poor
conditions with their
grandmother, has been
included in our OVC
programme

4.3.2 Activities and achievements



Brainstorm session at life skills training for OVC

Activities	Achievements
Fortified porridge	12,995 kg has been distributed to all orphans
Lactogen	967 tins of lactogen have been distributed to orphans or babies of mothers without enough breastmilk
Under five children supported in the program	88 under five are being supported
Primary School	441 orphans are going to primary school and received school uniforms, bags and shoes
Secondary school	30 OVC are going to secondary school and received school bags, uniform and school shoes, school- and examination fees
Vocational skills training	47 OVC enrolled in various programmes
Training of Orphans in bee keeping	83 OVC have been trained in beekeeping
Livestock farming	34 goats have been distributed
Volunteers trained	40 psychosocial support volunteers have been trained
Adverse Childhood Experiences (ACEs) screening	All OVC >5 years were assessed quarterly
Life skills training	126 OVC have been teached on sexual and reproductive health

4.3.3 Challenges

Due to economical restrains we get a lot of applications of OVC. The programme has not been able to cater to all applicants.



Home garden of an orphan with healthy vegetables and collar with a female goat and kids

4.4 Maternal, Newborn and Child Health

4.4.1 Summary



Community volunteers attending training and a community nurse doing a health talk

The ultimate goal of the programme is to contribute to **reducing child and maternal mortality and morbidity** through high quality hospital maternal, neonatal and child health services, raising awareness and expanding knowledge around sexual reproductive health amongst community members, and sustaining the activities of community structures with several volunteer groups.

4.4.2 Activities and achievements

Activities	Achievements
Procurement of essential supplies	No stock outs have occurred
Clinic days provided for immunization, growth monitoring, ANC and FP	228 clinic days
Training sessions conducted and number of staff members attended.	3 trainings, 60 members trained
Number of infection prevention supervision	2 supervision sessions have been
completed and reported	conducted
Amount of health care workers trained in infection prevention standards	121 health care workers
Number of safe motherhood adverse outcomes	Neonatal deaths -23
audited and reported on in clinical meetings	Maternal deaths -1

Number of volunteers actively disseminating information on MNCH	330 (10 per village)
Number of village Safe Motherhood Committees supervised	33
Health education sessions conducted	305 community members
HAC/HCAC meetings held	2 meetings held
Volunteers that are trained in recognizing malnutrition in children	41 volunteers have been trained

4.4.3 Challenges

Prices of all items have increased dramatically resulting in more economic instability and financial challenges for the hospital. It has also resulted into an even poorer supply chain from the government resulting into an extra burden for the hospital.

4.5 Teenage Pregnancy Prevention

4.5.1 Summary

The goal of this programme is to work towards reducing HIV infection amongst adolescent girls and boys, reduce teenage pregnancy amongst adolescent girls and enhance access to sexual reproductive health services and rights information. To reach this, a holistic approach has been used with establishment of mentor networks, strengthened Youth Friendly Health



Sex education at school

Services, improved sex education, involvement of influential leaders, involvement of men, repurposing of traditional (harmful) rituals and offering hope for the future through educational opportunities.



Left: girl visiting the Youth Friendly Health Services clinic Right: tailoring training of a young mother

4.5.2 Activities and achievements

Activities	Achievements
Number of condom outlets established	3
Number of condoms distributed amongst youth	2.530
Teenage pregnancy rate	681 girls (25% of pregnant women)
Number of youth seen in the hospital	2337 (of which 118 at YFHS)

Number of comprehensive education sessions	20 (in total 1.100 participants)
Radio programmes	13 programmes on topics concerning SRH
People trained in SRH involved in traditional initiation ceremonies	340 people
Training of girls in vocational skills	60 girls
Getting girls back to (secondary) school	60 girls
Youth talent shows	305 community members
Men involvement through boys conference and mentor training	90 men trained

4.5.3 Challenges

Due to the financial problems in western countries as a result of the Ukrainian war, the donor funding this programme failed to get all funds together. We therefore had to reduce the activities to a minimum from January 2022, we were able to keep the 60 girls in secondary school. There was also a countrywide stock-out of condoms and therefore we weren't always able to provide condoms at the outlets.

4.6 Malaria Vector Control

4.6.1 Summary

Through the promotion of bednets, early testing and treatment for malaria, Indoor Residual Spraying and Larval Source Management the department has successfully reduced the burden of malaria over the past ten years. During the monitoring period in the past four malaria seasons, not a single under-five death due to malaria was recorded.

From the year 2012 MMH started to implement malaria vector control using Indoor Residual Spraying (IRS) in its catchment area. In the year 2017, Larval source management (LSM) was added. The goal of this programme is to reduce malaria transmission and thereby reducing morbidity and mortality due to malaria infections.

During 2021/2022, MMH used a neonicotinoid, Sumishield. Malawi's Ministry of Health Insecticide resistant management plan stipulates that insecticides should be changed yearly to prevent parasites from developing resistance and this is what is followed.

4.6.2 Activities and achievements

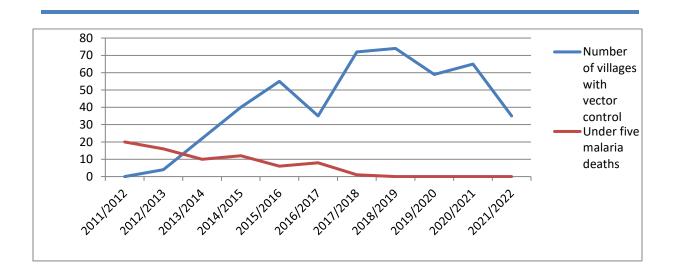
Activities	Achievements
Villages on vector control	35 villages
% Villages with vector control	49% of the villages
Total population protected	56.840 people protected
Average deaths in past 5 years compared to neighbouring hospital (Phalombe DH)	1.8/year compared to 5.8/year in neighbouring hospital
Malaria positive rate in intervention area	5% compared to 53% 7 years ago



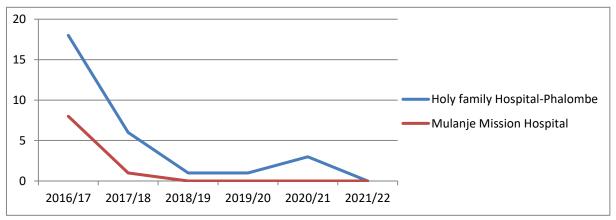
Men whose families benefit from Vector Control in Nkhukhu village

The diagram below is showing a graphical presentation of the relationship between quantity of villages sprayed against under five malaria death

Relationship between no. of villages with vector control against under- five malaria deaths



Under-5 deaths in intervention area (MMH) versus non-intervention area (Phalombe Hospital) based on hospital registries



The above graph shows a downward trend in under-5 mortality in a non-intervention area too. Both MMH and Phalombe have registered zero under-five malaria deaths in under five years during the peak malaria season, however there are significant additional effects of IRS and LSM.

4.6.2 Challenges

Vector control through indoor residual spraying (IRS) is very effective but also expensive. MMH therefore concentrates on high burden areas, to make optimum use of the available funding. We have performed a review of malaria burden in all 72 villages in June 2021 to make a good selection of areas to be sprayed. The programme is exploring ways to move away from IRS whilst maintaining the same good outcomes.



Beneficiaries of vector control at Nkhukhu village

4.7 Water and sanitation and infection prevention

4.7.1 Summary

This programme was designed to improve access to **safe, reliable water supplies and sanitation services**, recognizing that lack of access to these resources are a barrier to growth and health in 20 health facilities in Southern Malawi under both Government and Christian health association of Malawi.

4.7.2 Activities and achievements

Activities	Achievements
Health care centers provided with running water	3 health care centres
Health care centers provided with latrines	2 health care centres
Health centers provided with both water and latrines	1 health care centre

4.7.3 Challenges

In the South of Malawi many health centres are poorly equipped, to the point of being without running water and adequate toilets. The demand for upgrades is very high. It proves tough to work effectively with the local district health offices in providing proper maintenance.



Top: drilling a borehole at Mpala Health Centre Down: usage of the borehole by community member



4.8 Palliative Care

4.8.1 Summary

This programme addresses needs of poor families in hard-to-reach, rural Malawi, served by poorly resourced health facilities, increasingly needing palliative care due to increased incidence of cancer and other life-limiting diseases at this stage in the AIDS epidemic, and due to projected increases in Non-Communicable Diseases (NCDs). It offers a holistic approach, providing pain relief and treatment of symptoms alongside social and spiritual support ill patients with life-limiting illness and their families. They are also supplied with food supplements and trainings in how to improve nutrition from home grown food.

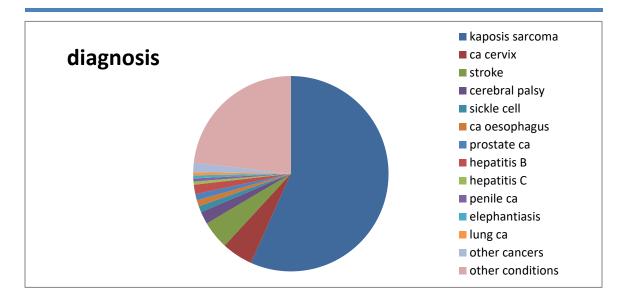
4.8.2 Activities and achievements

Activities	Achievements
Registered patients	221
New registered patients	33 patients
Total contacts	1341 contacts
Number of patients requiring home visits	28 patients
Nutritional status of patients	20% of patients are malnourished

Of the included patients 75% of these are HIV positive, the most common diagnosis is cancer. Free life-prolonging and chemotherapy is available within the programme.



Specialized palliative care nurse on a home visit to bed-ridden patient



Diagnoses of palliative care patients (ca means cancer)

4.8.3 Challenges

There were some months where it was not possible to procure food supplements for the patients due to increasing prices. However, we have now found a new donor in the Maja Foundation and will be able to provide food to all malnourished palliative care patients.

4.9 HIV/AIDS and TB

4.9.1 Summary

The impact of HIV/AIDS in Malawi is huge, and especially so in Mulanje. As Mulanje Mission Hospital we join the 95-95-95 set of goals made by the United Nation's programme on HIV/AIDS. The goal is that 95% of people who are HIV infected will be diagnosed, 95% of people who are diagnosed will be on antiretroviral treatment and 95% of those who receive antiretrovirals will be virally suppressed.

4.9.2 Activities and achievements

Activities	Achievements
HIV tested at MMH	15.625 persons
HIV tested positive	629 persons (4%)
HIV patients on treatment	6.606 persons
HIV patients with well suppressed viral load	3321/3435 (97%)
HIV patients started on TB treatment	35 persons
Total patients started on TB treatment	144 persons

4.9.3 Challenges

It is a difficult task to test 95 % of our population, there is still a lot of stigma on HIV and AIDS and therefore people are reluctant to get tested. With challenging logistics of accessing second-line antiretroviral regimens, it is still a challenge to switch to a next line of treatment when there is treatment failure. Also. treatment adherence is sometimes poor, being two of the reasons of the relatively low number of patients with well suppressed viral load.



A nurse working with the digital HIV system

4.10 COVID-19

The hospital is a vaccination site for the AstraZeneca and Johnson and Johnson (J&J) vaccine. MMH embarked on **door to door, church visits vaccination campaign and organized a football bonanza** in order improve uptake of the vaccine. During the year, the hospital was able to vaccinate a total of 2.974 persons with the AstraZeneca and J&J vaccines which is a much higher number than last year, being less than 1000. There is also a treatment Unit for severe Covid-19 at the hospital which admitted over 60 severely ill patients. Follow-up of Covid-19 cases happens through the Environmental Health Office. Representatives of the department are active in the District Rapid Response Team for Covid-19.

4.11 Non communicable diseases

4.11.1 Summary

Noncommunicable diseases (NCDs) are chronic diseases such as hypertension, diabetes, asthma and epilepsy.

In Malawi, NCDs are **increasingly contributing to the burden of disease**, they are now the second leading cause of deaths in adults after HIV/AIDS in Malawi. They account for 16% of all deaths with 17% in males and 14% in females. Malawi has very high levels of hypertension at 32.9% in adults, which is much higher than many countries in the region. MMH started a NCD clinic in 2014 and has increased its capacity over the past years, with the latest addition of an epileptic clinic in 2021. Services are free to those in the catchment area.

4.11.2 Activities and achievements

Non communicable diseases clinic	
Patients in NCD clinic with hypertension	1.771 persons
Well controlled hypertension	506 (29%)
Patients with diabetes type 1	25
Patients with diabetes type 2	241
Well controlled diabetes	61 (23%)
Epilepsy patients	100
Asthma patients	209



Patients in NCD clinic at the waiting area

4.11.3 Challenges

With the current frequent stock-outs of medication nation-wide it is a challenge to purchase all the needed medication and maintain identical regimens for well-controlled patients. Compliance is also frequently not ideal, as people often feel better once they are well-controlled and then sometimes stop coming to the clinic.

4.12 Cervical cancer screening

4.12.1 Summary

Cervical cancer is the most common malignancy in women in Malawi. **Early detection is a major player in preventing cervical cancer**, this can be done with Visual Inspection with Acetic Acid (VIA). During VIA, a dilution of white vinegar is applied to the cervix. The health care provider

then looks for abnormalities on the cervix, which will turn white when exposed to vinegar and can be treated with thermocoagulation during the same appointment.

4.12.2 Activities and achievements

Cervical cancer screening	
Screening with VIA done	1.924 women
VIA positive	41 (2.1%)
Suspected cervical cancer	60 (3.1%)

4.12.3 Challenges

Once cervical cancer is suspected, VIA is not possible and a sample for histology should be taken. The cost of this is sometimes prohibitive to patients, in which case the hospital sponsors.

4.13 Flood Relief

Storm Ana (end of January 2022) was a major storm that caused extensive damage to crops and buildings. The hospital worked to reconstruct latrines and provide assistance to those with disabilities through a partnership with Christian Blind Mission and an appeal to the public. This is ongoing.



People affected by Storm Ana and the damage it did on the river banks