

Medical Action Myanmar Activity Report

January – December 2019





Unpacking medical supplies for the Community Health Worker in a remote community only accessible by elephant

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Health education discussion in Putao, in the far Northern Himalayan region of Myanmar

Summary

In 2019, Medical Action Myanmar celebrated 10 years of providing free health care in Myanmar. In these 10 years, MAM has created a network of 10 clinics and 1700 Community Health Workers who provide free health care. Over 1,100,000 consultations were performed in 2019, making it our busiest year!

10 years ago, MAM opened its first clinic in an industrial slum zone, with half a million people, called Hlaingthayar. It was a crowded clinic with a small medical team. The need for health care was great and we expanded our services and built a 2nd clinic. But the population has rapidly increased to over 1 million people. MAM now opened a 3rd clinic and wants to build a paediatric hospital in this crowded slum area, to provide comprehensive 24/7 care for the most vulnerable children.

This year, medical teams identified hundreds of children with deformed bones in remote communities

in Nagaland. It is caused by vitamin D deficient *rickets*, leaving some children unable to walk. This is preventable suffering and has long term - sometimes life-long - disabling effect. We actively searched for more cases, provided treatment, and conduct research to find out why so many children are living with this condition in order to define the best treatment and prevention measures.

MAMs main goal is to reduce suffering. We provide free health care, with a focus on (but not limited to);

- Very poor people, single parent families, orphans, elderly without family support
- People with severe physical problems, like club feet, cleft lip, or other severe deformities
- People (mainly children) who are being abused
- "High risk people" including migrant workers, female sex workers, men who have sex with men, drug users and their families.

1. Introduction

Myanmar has a population of 52 million with 26% of people living below the poverty line and 5% living in extreme poverty.

Medical Action Myanmar started operations in 2009 with 1 clinic in the poorest slum in Yangon. Since then, we expanded to 10 clinics and 1,700 Community Health Workers (CHW) who provide free health care in the most remote and hard-to-reach communities. In 2019, we performed 1,133,929 consultations.



Fig. Location of MAM activities

2. Medical clinics

MAM conducted 340,823 consultations, 7 days a week. Besides 12,000 home visits were made for patients with chronic diseases like malnutrition, TB and HIV.



a. Paediatrics and malnutrition

41,328 consultations for children were conducted. Treatment of acute malnutrion gets special attention.



A mother feeding her malnourished child

Child Protection: Some children seen during consultations are abused and need protection. MAM's child protection team dealt with 174 cases, to prevent further abuse, or, in very violent cases, go to court.

Child Support: MAM provides extra support including food, school items, clothing and a hygiene kit to extra vulnerable children like orphans, children with chronic diseases and children living in extreme poverty. 59 children joined the program in 2019, bringing the total to 350 children. The support is worth \$360 per year.



b. Reproductive health and family planning

Many women have more children than they can care for. This leads to poverty and poor health of mothers and children. Some women seek illegal abortions, which can result in infection and death. 18,617 family planning consultations were conducted. 2,254 women got a contraceptive implant.



An MAM doctor inserts the contraceptive implant

Women with sexually transmitted infections (STI) have often no symptoms and screening is essential to detect syphilis, chlamydia, gonorrhoea a.o. These infections facilitate HIV transmission and are harmful for unborn babies. Female sex workers are most at risk to get and spread STIs and HIV. Many work in brothels with limited opportunities to visit a clinic during the time of their contract. MAM set up a mobile team to visit these sex workers *in the brothels* to provide contraception, STI testing (lab) treatment and HIV testing.

25,329 consultations for STI screening were made.



c. Antenatal care

Treatment of HIV+ pregnant women saves their lives and prevents HIV transmission to their baby. Alongside 4,145 antenatal care consultations in 2019, 266 HIV+ mothers were treated. All 57 children tested were HIV (-) 18 months after delivery (!)



d. HIV prevention and treatment

We are involved in large scale prevention activities including health education discussions, condom distribution and needle exchange for heroin users, which benefits the people with high risk behavior *and* their partners and children.

We tested 20,544 people of whom 1,017 (4.9%) were HIV (+). By the end of 2019 we are treating 4,247 patients. Over 85% of patients is still surviving after 8 years. That is a good result!



A counselling session as part of HIV treatment

e. Tuberculosis

In 2019, we tested 4,146 patients for TB and 1,029 tested positive and received treatment. 226 patients were co-infected with HIV.

f. Eye screening

People with severe HIV can get blind due to cytomegalovirus (CMV). Injecting ganciclovir directly into the eyeball can prevent blindness. Dr Ni Ni Tun is specialised in this.



MAM's co-founder, Dr Ni Ni Tun, examining a patient

We screened 1,301 patient's eyes in 2019. 325 patients were diagnosed with TB or other pathologies and 13 with CMV retinitis and treated. Patients who need surgery get eye surgery free of charge.

g. Hepatitis C

MAM treats patients for Hepatitis C to prevent progression to terminal cirrhosis. Treatment is too expensive for patients to buy themselves. So far 224 patients were treated and cured since 2017.

h. Day-care

Severely ill patients are admitted to day-care. In 2019 we treated 3,281 patients in day care. Patients who need surgery or obstetrics, are referred to local hospitals. All costs are provided by MAM.



A young child in the Day-care

i. Counselling and outreach service

Counselling is done to support compliance with longterm treatments for diseases like HIV and TB. In 2019, 68,965 sessions were conducted and 12,189 home visits were done for socially weak patients. Poor compliance leads to resistance, which is a threat for all.

j. Laboratory

184,934 laboratory tests were conducted in 2019.

k. Food and travel support

Patients with a serious chronic disease are often unemployed and poor. Some sell their medicines to buy food, leading to treatment failure. We provide food for patients until they recover from the acute phase of their disease and return to their job. In 2019, 1,447 patients received food (rice, beans, oil, fish, salt).



I. "Mother" House

MAM built a house for extremely vulnerable children (HIV orphans and abused children). This house has 2 'mothers' who care for them with love, and make sure they get their medicines and education. The mothers also organize social activities, recreational trips, guitar and swimming classes.



Children in the Mother House

3. Community Health Workers

There are no trained health professionals in remote communities. Infrastructure is poor and transportation costs to hospitals prohibitively expensive. Sick people visit local "quacks", who treat them without training. MAM trained villagers to become *Community Health Workers* (CHW) to manage malaria, respiratory infections including TB, diarrhoea and other common diseases *in* the community. Severely ill patients are transported to hospitals, paid by MAM. In 2019 these CHWs conducted 780,917 consultations.

a. Malaria

CHWs tested 270,420 people for malaria with a simple rapid test. 11,424 were positive and treated.



CHW have proven to be very effective and malaria decreased dramatically.



b. Tuberculosis

CHWs referred 8,261 TB suspected patients to get an X-ray and a lab test. 924 were diagnosed with TB. In 2016-2018 92% completed their 6 months treatment.

If a patient is too sick to travel, MAM staff collects the sputum in the community and brings it to the hospital. If positive the medicines are brought to the village.



c. Basic Health Care

CHWs conducted a total of 543,366 consultations, mostly for respiratory infections, gastrointestinal infections, malnutrition and skin infections. 23,942 women received family planning consultations.



CHW testing a child for malnutrition

d. Referrals of severely sick persons

MAM trained CHWs to recognize severe conditions that need referral. 3,934 patients were referred and MAM paid for transportation, treatment and food.



Referral: Patient Story

In November, 1 year old Pyi was playing outside while his parents worked in a nearby field on their small farm in a remote village in Nagaland, northern Myanmar, where it can be very cold in the morning. Pyi was near a fire to keep himself warm until he fell into a boiling pot of water. His parents heard him shouting for help, and found him severely burnt across on his face, shoulder and arm. They rushed to the CHW who give first aid treatment and referred him to the hospital. He was hospitalised for 12 days and gradually recovered. As a poor farming family, they could never afford the travel or treatment costs and MAM paid the cost. He will have some scars but the quick referral prevented him from serious complications and scar tissue causing contractures.



e. CHW medical training & monitoring

All MAM CHWs received classroom training and are subsequently visited (bi-) monthly for practical *on-thejob-training* by one of the 55 medical mobile teams. This is very labour intensive but we are convinced that *on-the-job-training* in the community with a doctor and the CHW seeing patients together is essential to improve the skills of the CHW. In 2019, 9,021 monitoring visits were conducted.



MAM medical team walking to the next village



Evening clinic by MAM doctor and CHW



MAM doctor and CHW visiting a TB patient at home

Rickets special report

In the beginning of 2019 we identified children with bone deformities, joint pains and some were unable to

walk, in Nagaland, in the far north on the Indian border. These symptoms suggested rickets, usually caused by vitamin D deficiency. This is surprising because there seems to be enough sunshine and rickets was not diagnosed before in Myanmar. Blood tests and X-rays confirmed rickets and the children were treated with vitamin D and calcium. This can cure young children with mild symptoms but for older with children severe bone deformities we might not reach complete cure. Surgery can be considered to improve mobility.



We screened all 274 communities in Nagaland and identified 330 children with rickets. Blood tests and X-rays after 3 months treatment showed normal vitamin D levels and initial healing of bones and almost all children reported less pain.



People were not aware that rickets could be prevented or treated. And villages are too remote, many only accessible by foot and the people never visited a hospital. To inform the population, MAM started an awareness campaign about prevention and treatment.



The identification of rickets in remote communities is a good example of the importance of the CHWs. They are based in isolated communities with health care issues that are usually unnoticed and untreated. Rickets was not identified before the CHW network was set up. It is a preventable disease we can prevent unnecessary deformities which are devastating for these children.

Future plan; We plan to study the aetiology of rickets in this region and define the best way to treat the children and to prevent new cases.



"Sabre" legs of a 17 year old



X-rays examined by a "bone-radiologist", Dr Frank Smithuis junior, indicated promising bone growth.

4. Research

MAM conducts research with *Myanmar Oxford Clinic Research Unit (MOCRU),* which is - coincidently - also lead by Frank. The main aim of the research is to improve the diagnosis and treatment of diseases.

a. Fever studies

Fever is the most common reason for attending health care. The problem is that we often don't know what is causing it. Clinical diagnosis are usually difficult, and a wrong diagnosis results in a wrong treatment.

Two fever diseases, *Typhus* and *Melioidosis*, common during 'the British times' are largely forgotten these days, partly due to the lack of laboratory tests. We explored if these diseases are still common.

Typhus; We tested 128 fever patients with a newly developed rapid test for scrub typhus. 15 (12%) patients tested positive. This indicates that typhus might be a common causes of febrile illnesses. This is important for clinicians to know; only if you are aware of a disease, you can diagnose and treat it!

Melioidosis; is an often fatal disease caused by a bacteria that lives in the mud. It was discovered in 1911 by a British doctor in Yangon (!), but since the 2nd World War the disease has been rarely diagnosed. It is hard to believe that it left with the British!

We took 3,870 mud samples from 387 sites all over the country. 31 sites had one or more positives samples.

This study confirmed the common presence of melioidosis in Myanmar and now, clinicians can consider melioidosis as one of the differential causes of pneumonia and sepsis, in particular for rice farmers!



The next step will be to investigate if this bacterium is a common cause of death in hospitals at these locations.

b. Causes of Pneumonia Study

To effectively treat pneumonia, we need to know its causes. We studied 299 patients with acute



Mud samples taken for melioidosis culture at specific depths



Areas with most melioidosis positive cultures

pneumonia, to identify the bacterial and viral causes. Surprisingly, the results showed 95 (32%) patients had lung-TB, which is generally only considered in patients with chronic complaints of pneumonia. This is very important for the management of patients with signs and symptoms of acute pneumonia in the future.

c. Tracking Resistance to Malaria

Malaria treatment is failing across South-east Asia. Further spreading of this resistance could result in catastrophic consequences in both Asia to Africa.

To investigate the spread of resistance, MAM & MOCRU cooperated in a large study implemented in 8 tropical countries. They enrolled 1,110 patients with 115 from Myanmar. Myanmar showed no resistance and treatment was still effective. However in all other countries, resistance was very high and it is possible that it will spread to Myanmar.

5. Pictures



MAM teams supporting vaccination in remote villages!





Measuring malnutrition of pregnant women to improve the nutrition of their unborn baby



After Nagaland, we also found children with rickets in Putao, 200km to the North-east



A 41-year-old man with rickets since childhood. He is using an animal bone to prevent a fracture of his tibia



6. Donations

Our activities are only possible thanks to the donations we get. Small or large, they all make a big difference for the patients we treat! Some diseases, like malaria or rickets, can be treated for a few dollars. It can save a life or it can prevent a lot of unnecessary suffering.

For people who live in Australia, Canada, Germany, Switzerland, The Netherlands, UK and USA, donations can be tax detectable. For information please contact Mr Sieb, our financial person: sieb@mam.org.mm

Bank details Medical Ac	tion: USD	Bank details Medical Action: EURO		
Bank name	ABN AMRO Bank	Bank name	ABN AMRO Bank	
Bank address	Apollolaan 171, 1077 AS	Bank address	Apollolaan 171, 1077 AS	
	Amsterdam, The Netherlands		Amsterdam, The Netherlands	
Account name	Medical Action	Account name	Medical Action	
Account number (USD)	43.84.12.974	Account number (EURO)	54.12.25.693	
IBAN number	NL56ABNA0438412974	IBAN number	NL24ABNA0541225693	
BIC:	ABNANL2A	BIC:	ABNANL2A	

