



## Medical Action Myanmar activity report

January – December 2017



*Robin Smithuis, brother of Frank and a well-known radiologist is training MAM doctors with the brand new portable ultrasound he donated*

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## 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 working in Myanmar in June 2009 with the opening of a clinic in the biggest and poorest slum in Yangon. We have gradually expanded and are now supporting 10 clinics including five in Yangon, three in Kachin (North), one in Karen (East) and one in Mon state (South-East).

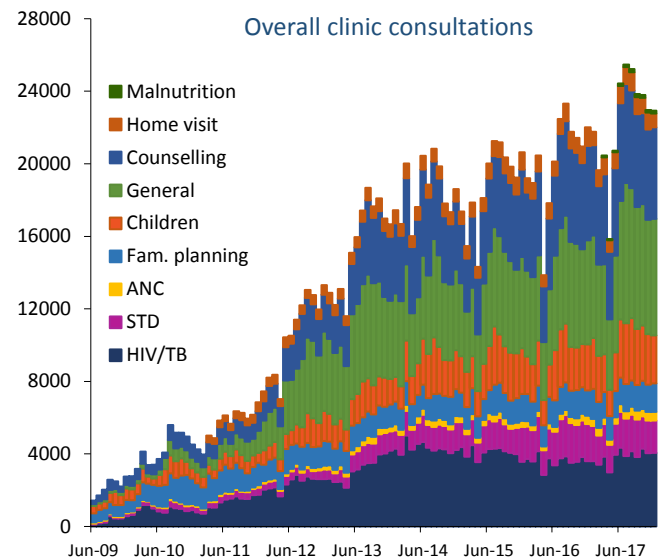


In addition, MAM has set up a network of 1,750 Community Health Workers (CHW) to provide malaria, TB, malnutrition and basic health care in the most remote and hard-to-reach communities.

More than 750,000 patient consultations were performed by MAM in 2017, including 267,000 through the clinics and 495,418 through the CHWs.

## 2. General clinic information 2017

During this reporting period, three new clinics were opened including one in Yangon, one in Karen state (a small hospital with 12 beds and a delivery room) and one in Kachin state in the biggest mining area in Myanmar. MAM clinics provide a wide range of health



services, free of charge, to the poorest populations who cannot afford health care. The services provided range from acute medical consultations to more complex services such as TB and HIV-related health care. Most clinics open 7 days a week. MAM's 120 clinic staff are joined by international volunteer specialists. Besides 267,000 clinic consultations, over 10,000 home visits were made for patients with chronic diseases like malnutrition, TB and HIV.

### a. Paediatrics



A total of 32,637 consultations for children were made including respiratory diseases (47%), gastro-intestinal diseases (12%), skin diseases (10%), malnutrition (6%), dengue (1%) and others (24%). Children with complicated conditions were referred to hospitals and MAM provided treatment and transport costs.

*Mother and baby waiting to see doctor at a MAM clinic*

### b. Malnutrition

Since early diagnosis and treatment of malnutrition can dramatically decrease related mortality, MAM started systematic screening of children and pregnant women. Malnourished children and pregnant women were provided with therapeutic feeding and treatment.



*MAM staff checking nutrition status of a child*

Out of 31,745 children screened, 289 were found to be malnourished and 51 were severely malnourished.

### c. Child Support

MAM provides support to extra vulnerable children. Beneficiaries include children who are HIV positive and children living in extreme poverty. 232 children are currently receiving support.

Each child receives support worth of USD360 per year including nutrition support, school items, clothing and a hygiene kit. Extra financial support is sometimes provided to families to start a small business.



*One of the children in the child support program*

### d. Child Protection

In 2017 MAM started to deal with child abuse cases in Yangon. Although we are not specialized in child protection, some abused children arrived in the clinic and it would be irrational not to try to protect them. With expertise from outside the organization we have now set up our own child protection team. Besides health care for the child victims we link the child with

specialized staff to prevent further abuse and even go to court where needed. We also provide health education to raise awareness as most parents are not aware of child abuse. More than 26,000 people were



reached through a mass awareness raising campaign. In 2017, we supported 51 cases who needed protection. 22 children needed legal support, because of sexual abuse or because they were street children caught stealing.

### e. Reproductive tract infections

Most women with reproductive tract and sexually transmitted infections (STI) have few or no symptoms and active screening with physical examination and laboratory tests is essential to detect diseases like syphilis, chlamydia and gonorrhoea. These infections facilitate the transmission of HIV and can be very harmful for unborn babies. Pregnant women and sex workers are therefore a specific target of our activities. Female sex workers have a high HIV+ rate (18%) and it is important to provide STI treatment and HIV prevention and treatment to them. But as they have limited opportunities to leave the brothel, MAM set up a mobile team to visit sex workers *in the brothels* to provide contraception, STI treatment and HIV testing. Over 22,000 consultations for RTI and STI were made.



*MAM staff meeting and treating sex workers in a brothel*

**f. Family planning**

Many women have more children than they can care for. This can lead to poverty and poor health of mothers and children. Women sometimes seek illegal abortions, which can result in infection and death of the mother. 17,710 family planning consultations were conducted. The contraceptive implant is increasingly popular and 796 women got an implant inserted.

**g. Antenatal care and HIV**

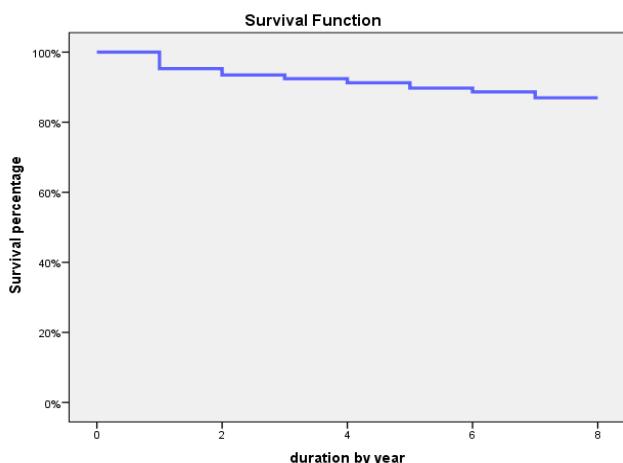


*MAM nurse explaining a patient how to take medicines*

Treatment of HIV+ pregnant women not only saves their lives but also prevents HIV transmission to their unborn or breastfeeding baby. HIV positive mothers are enrolled into the program from pregnancy until 1½ year after the birth of the baby. In 2017, 127 mothers have been under care. 58 of them delivered in 2017. To date, 39 children were tested for HIV 18 months after delivery and none of them were infected with HIV.

**h. HIV prevention and treatment**

MAM clinics provide HIV care including testing, counselling, treatment and nutrition support. In 2017, a total of 19,091 patients were tested for HIV and 1,059 (6%) were found to be HIV positive. 939 patients were put on treatment (ART) and by the end of 2017, 4,429 patients were receiving ART.



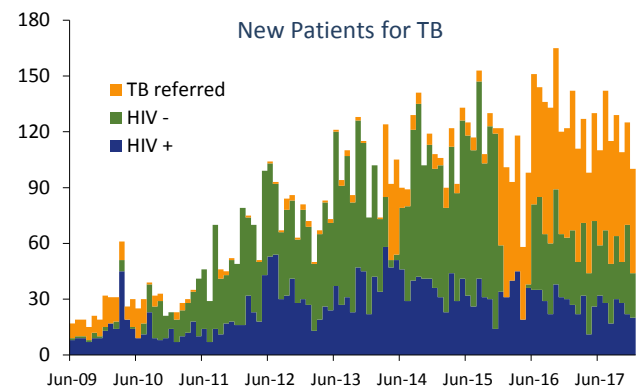
*Survival graph for patients treated with ART; >85% of patients still surviving and healthy after 8 years on treatment*

With more than a decade of experience in managing patients with HIV, Dr Ni Ni Tun and her team became a reliable referral centre that supports and provides clinical advice to other organisations regarding HIV-related opportunistic infections (OIs).



**i. Tuberculosis**

In 2017, a total of 4,994 patients were tested for TB and 1,440 tested positive and were put on treatment including 295 patients who were co-infected with HIV.



HIV-negative TB patients have to be transferred to the government health system while TB/HIV co-infected patients will receive treatment at MAM clinics. In 2017, MAM clinics referred 734 patients to NTP.

**j. Eye screening and blindness prevention**

People with severe HIV infection have a high risk of becoming blind due to cytomegalovirus (CMV) infection. But injecting ganciclovir directly into the eye ball can prevent blindness. Dr Ni Ni Tun is specialised in this procedure.



*MAM doctor conducting CMV screening*

Over 1,500 patients were screened for eye pathology in 2017 and 16 patients were diagnosed with CMV retinitis and 484 patients had TB lesions or other eye pathologies that were treated.

For severe cases that need surgery MAM works in partnership with "Myanmar Eye Services" that provides eye surgery free of charge. But MAM has to provide the hospital charges and laser treatment which cost approximately USD 1,600. We think it is worth it, as it is the difference between vision and blindness.



*Trainers and participants of CMV training*

In December, MAM organized a 5-day training, conducted by international CMV specialists (free of charge), led by Dr David Heiden. 14 government and INGOs doctors attended the training to diagnose and treat CMV and other eye pathology.

#### *k. Hepatitis C Treatment*

In October 2017, MAM started providing Hepatitis C treatment among HIV patients to prevent rapid progression to terminal cirrhosis if left untreated. HIV-patients with Hep C are referred to Than Sit charity clinic which is affiliated with MAM. Patients who are at the early stage of Hepatitis C are eligible for the treatment. Hepatitis C treatment costs USD360 for a complete treatment which is prohibitively expensive for low-income patients. In 2017, a total of 22 patients received treatment for hepatitis C and more will follow.

#### *l. Day-care unit*

Severely ill patients, including patients with opportunistic infections, are admitted to the day-care



wards of MAM clinics. Patients who need special care such as surgery or obstetrics, are referred to the local hospital. Referral expenses and treatment costs are provided by MAM.



*A patient screened by the new portable ultrasound*

#### *m. Laboratory testing*

In 2017, approximately 100,000 laboratory tests were conducted including CD4, liver function tests, kidney function tests, etc. MAM procured a HIV viral load machine and ultra sound machines that will help to improve treatment management.

#### *n. Counselling and outreach service*

Counselling is essential to promote compliance with long-term treatments for diseases like HIV and TB. In 2017, over 59,000 counselling sessions were conducted. In addition 10,000 home visits were done by MAM outreach workers, to support socially weak patients to help resolve their compliance issues. Poor compliance leads to resistance which is a major threat for all.



*Health education in the community*

MAM health educators visit communities regularly to conduct health education sessions on infectious diseases (TB, HIV, STI) and common health problems (malnutrition, diarrhoea) in the area.

*o. Food supply and travel support*

Patients with serious chronic diseases and poor health are more likely to face unemployment, leading to poverty. Some may sell their medicines to support their family, leading to treatment failure and drug resistance. MAM provides food for patients until they recover from the acute phase of their disease (a few months) and can return to their job. In 2017, 2,104 vulnerable people with chronic diseases, orphans and single-woman households received food support (rice, beans, oil, fish and salt). In order to mitigate financial burden for MAM patients and to ensure attendance, MAM also provides travel allowance for its patients.

*p. "Mother" House*

MAM built a house for extremely vulnerable children (HIV orphans and abused children) named "Mother House". This not very well chosen name came from the idea that orphans need love and a family environment (a mother). This house has 2 'mothers' who 'adopt' the children, care for them with love, and make sure they get their medicines, education, and social activities. There are 10 children ranging from 7 to 17 years.



*In the garden of the mother house*

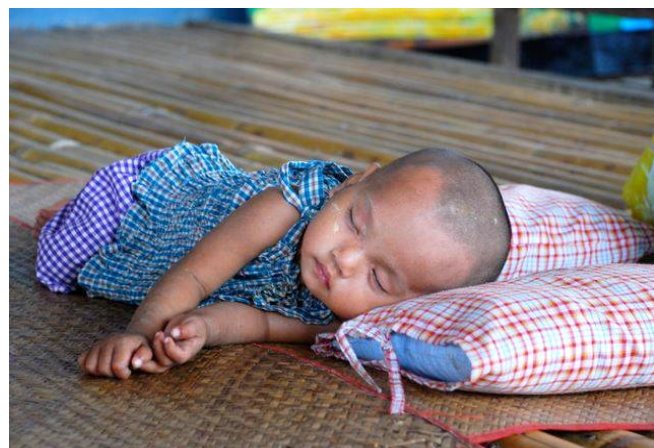
Besides the basic care and education there are also recreational trips, guitar classes and swimming.



*And more ultrasound training by radiologist Robin Smithuis*

**MAM clinics in 2017**

- 3 new clinics were opened*
- 267,000 clinic consultations performed*
- Child protection activities started*
- 31,745 children were screened for malnutrition*
- Hepatitis C treatment was started*
- and*
- All 39 babies born from HIV+ mothers were HIV (-) after the mothers were treated during pregnancy*



### 3. Community Health Workers

#### a. Rationale

Remote communities do not have trained health professionals. These communities are small and far apart with a very poor infrastructure. Transportation costs from remote villages to hospitals are prohibitively expensive. When people get sick they usually visit a “Quack”, a person who treats patients without proper training. In 2011, MAM started to train villagers to become *Community Health Workers* (CHW) in these remote communities. By the end of 2017 the number of trained CHW was 1,748 (map page 1).



The house of a CHW with a poster with logo advertising for the 'BEST' diagnosis and treatment

CHWs were initially trained to manage malaria, which was initially the most important disease in remote areas. Later additional training was provided for pneumonia, TB, diarrhoea, malnutrition, family planning and other diseases. CHWs were also trained to refer severe and complicated patients to hospitals and the costs are provided by MAM.

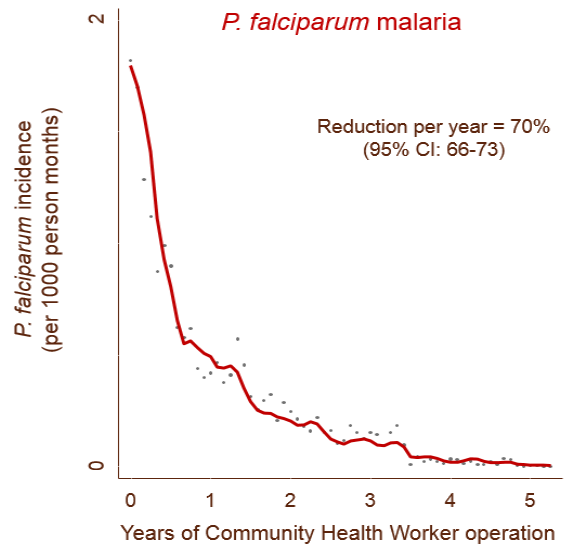
In 2017, 495,418 patient consultations were conducted, including 2,190 patients who were referred with life-threatening diseases to hospitals.

#### b. Malaria

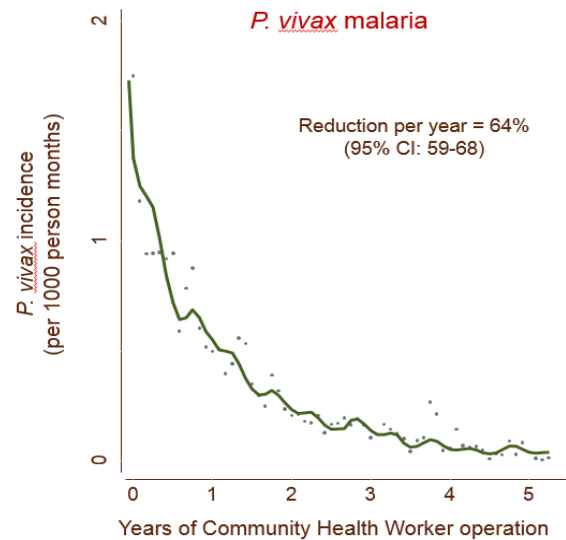
In 2017, a total of 195,078 people were tested with RDTs and 9,122 patients (4.7%) tested positive for malaria; 3.7% for falciparum and 1% for vivax malaria. CHW malaria activities have proven to be extremely effective. With supply of simple rapid diagnostic tests (RDT) and effective treatment to the trained CHWs, malaria has decreased dramatically.

To assess the rate of decline in malaria we conducted a retrospective analysis of 571,286 malaria rapid diagnostic tests done between 2011 and 2016 by 1,335

CHWs. The average reduction of malaria incidence over the past 5 years was 70% for falciparum malaria.



Vivax malaria is notoriously difficult to control, but the CHW project even succeeded to rapidly reduce this stubborn parasite with 64% per year.



The reduction of malaria is so impressive that we decided to describe the activities and the results in a scientific paper and it is now submitted for publication in a medical journal.

A total of 63,390 bed-nets were distributed.



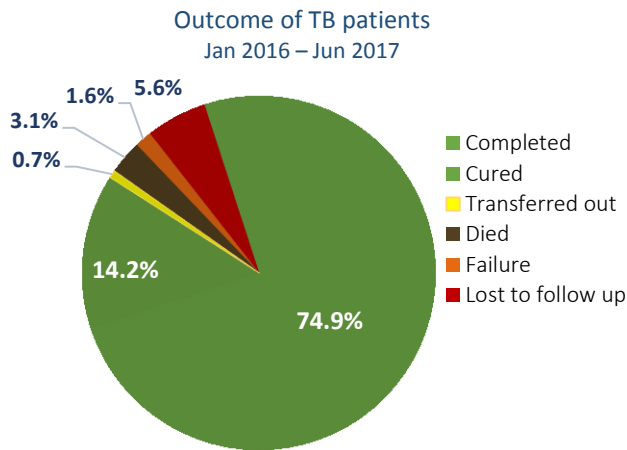
A CHW conducting malaria rapid tests for fever patients



**c. Tuberculosis**

CHWs are also trained to identify patients who have signs and symptoms of tuberculosis (TB). TB suspected patients are referred to hospital to receive anti-TB treatment if necessary. If the TB suspected patient cannot travel, the MAM team can collect sputum and send it to the hospital and collect the medicines.

5,134 patients were referred for TB screening and 1,101 patients were diagnosed with TB. Approximately 90% of those who received treatment were successfully treated (cured or completed treatment).



**d. Malnutrition**

Screening of children under 5 years of age for acute malnutrition, based on the Middle Upper-Arm Circumference, was started in the project in 2012, and subsequently extended to include pregnant women. Early diagnosis and treatment dramatically decreases mortality from malnutrition.

In 2017, 10,656 children and 906 pregnant women were screened and respectively 544 (5%) children and 57 (6%) women were diagnosed and treated for malnutrition with *plumpy-nut*, a high-energy peanut-based paste for malnutrition. CHWs also provide advice to care-givers on how to take care of their malnourished children.

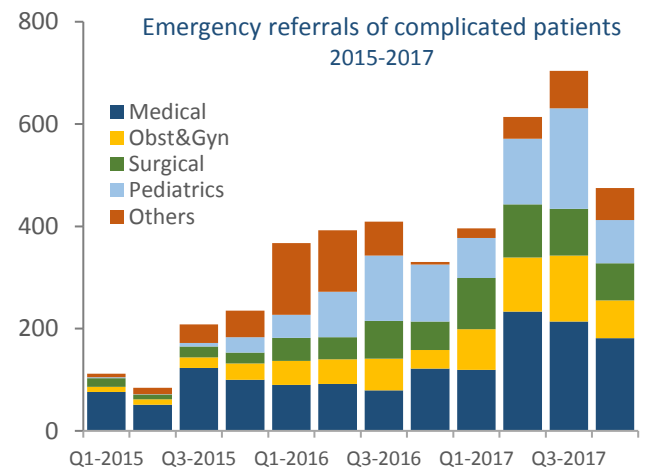


**e. Basic Health Care**

In 2017, CHWs conducted a total of 300,349 consultations, mostly for gastrointestinal infection, respiratory infection, and skin infection. More than 31,000 women received family planning consultations from CHWs supervised by a medical doctor. MAM mobile medical teams joined CHWs activities and treated 21,589 patients together with CHWs. This is a good opportunity for CHWs to receive on-the-job training and to receive feedback on their performance.

**f. Referrals of severely sick persons**

Occasionally, there are severely sick patients who need treatment at the hospital. However, most villages are far from hospital and villagers cannot afford transportation costs. MAM provides support for referrals and trains its CHWs on severe conditions that will need to be referred to the hospital.



In 2017, a total of 2,190 patients were referred to hospitals. Expenses for transportation, treatment and food were provided by MAM. Average referral cost per patient is USD 63, which is prohibitively expensive for farmers in remote communities.



A mother with complicated labour was referred to the hospital for safe delivery

**g. Referral: Patient story**

In October 2017, a 7-year old girl (the daughter of one of the MAM supported CHWs) was having fits several times a day and could not walk or speak. She got epilepsy 2 years ago after a head injury. She had received treatment at Myitkyina hospital for two years, but the family could not afford the regular journey to the hospital and stopped visiting the hospital. She was now in a critical condition and MAM



referred her to the neuro-surgical unit in Mandalay where she was operated on. The operation was successful and she improved significantly. She returned home and is now able to speak a bit and walk with support. She will be receiving follow up care and treatment with support from MAM.

**h. CHW training & monitoring**

All MAM CHWs receive a 3-day training course on malaria diagnosis and treatment and monthly *on-the-job-training*. Every month, 50 MAM medical teams travel to remote villages to provide field based training for the CHWs. This is extremely 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. This method is even more essential since the CHW activities have expanded to an integrated package that combines malaria, TB and other diseases like pneumonia and diarrhoea and referral of complicated patients to hospitals.

In addition to on-the-job-training, the quality of the CHW activities is monitored through the field visits. In

2017, a total of 13,127 monitoring visits were made. Patient home visits are also conducted to verify the quality of service and assess patients' perception on MAM's service.



*MAM doctors provide feedback to CHWs during monitoring visit*

Based on the monitoring findings and client record analyses, action plans to enhance support and results at CHW sites are developed. Bi-annual CHW meetings are organised for CHWs to learn additional knowledge as well as to share experience.

**i. Health education and bed net distribution**



CHWs conduct health education session to promote health awareness among the community and to inform health services supported by MAM. Health education sessions are conducted in 7 different local languages. Approximately 76,000 people attended health education sessions. A total of 63,390 bed-nets were distributed at the health education sessions.



*Community engagement*

**j. Referral: Patient story**

A 20 year old woman, from a remote village in North West Myanmar, was seen by one of the CHWs with a very large swelling on her right foot. The swelling had grown over the past 5 years and the foot had such a bad smell that the girl had to live separately and was in social isolation.



She had visited the local hospital 8 times without success. Unfortunately the hospital visits were expensive (high transport and treatment costs) and the family was now seriously in debt. Conservative treatment was not an option anymore as the infection (a Mycetoma) was too far gone. MAM decided to support the only treatment possible; an amputation and a below-knee prosthesis.



All costs, hospitalisation (84 days), food, prosthesis, transport was paid. MAM also paid the debts the family had accrued, because it would have been impossible for this poor family to ever pay them back.

The people who had given the family the loans for previous treatment generously decided not to ask for the usual extremely high interest.



The young woman can now fully function, she is helping the family with farming and is finally out of social isolation.



k. More pictures



*In 2017 we have expanded our activities especially in the very remote northern part of the country including Putao region in the eastern Himalayas and in Naga land in North-West Myanmar on the Indian border. MAM doctors providing feedback to CHWs during monitoring visit. In 2018 we will further expand in these regions.*

