

| Annual Report **2020**

Doctors *for* Madagascar



Dear friends, supporters and donors of Doctors for Madagascar,

Madagascar is sometimes referred to as the eighth continent – it is an island of mesmerising beauty, home to species that are found nowhere else in the world, full of vibrant colours and people. However, this extraordinary country of forests, tropical beaches and highlands is one of the poorest in the world. Approximately 75% of the population live on less than US\$ 1.90 a day. Changing climates in recent years have led to droughts, failing harvests and a lack of clean water, so malnutrition and waterborne diseases are rife. The last year and the COVID-19 pandemic have been devastating on global and local economies, pushing populations further into poverty. Use of essential health services has plummeted – a combination of sky-rocketing drug prices, fear of infection and poverty rates increasing at record level. The last year has brought a whole new set of challenges to an already struggling country, but our teams both on the ground and in Germany have not let that deter them.

Training, equipment and resources have been vital in Madagascar to help our team to carry out their work. More than 60 employees, including midwives, doctors, technicians, drivers and engineers, in four regions of the country, carry out their work with passion. Our team in Germany has also stayed strong, with doctors, technicians, software developers and global health researchers, in close contact virtually if not in person. Though the last year has kept us apart, our common goal unites us: to provide patients with high-quality and affordable healthcare.

It has been thanks to these incredible teams and their work that we have been able to continue and extend projects such as »mTOMADY«, our mobile maternal health wallet project, supported by the *Else Kröner-Fresenius-Stiftung*, so that patients can safely save and receive money for their health care. Maternal mortality rates are high in Madagascar, exacerbated by the long distances between villages and health facilities, but our »Maternal Health Project« continues to improve maternal and newborn health with support from the *Else Kröner-Fresenius-Stiftung* and *ALTERN AID Foundation*. And while the world has focused on one pandemic, pandemics such as tuberculosis continue – about one third of Madagascans are infected. But our »INTUBAA« project continues strong, and with our new eTB project we are improving communications within the National Tuberculosis Programme's network, thanks to the »Clinical Partnerships Initiative« of the *German Development Agency (GIZ)* and the *Nord-Süd-Brücken Foundation*.

You can read more about these projects, and many others, over the next few pages. Let us introduce you to the real Madagascar.

Contents

Helping mothers and newborns	4
Maternal health training	8
Protection from medical impoverishment through a digital technology	10
Prepared for pregnancy	12
A vicious cycle of poverty and health care	16
Decades of disrepair	18
Triplets in Fotadrevo	20
Fighting a different pandemic	22
Three brothers	26
Training health care staff	28
Emergency medicine training for remote locations	30
LandCruiser Maintenance	32
COVID-19 – and what it means for Madagascar	34
Global Digital Health Lab	36
Income and expenses 2020	38



Helping mothers and newborns

Pregnancy is not without risk for any mother, and especially in South Madagascar poverty, malnutrition and remote communities mean complications are frequent. This is why we work with expecting mothers through their pregnancy to delivery and beyond across 4 regions of the country in 71 healthcare facilities.

Thanks to mobile ultrasound sessions, we are able to detect complicated cases early before

they become a major risk and ensure women have the treatment they will need in good time, even in remote villages. For emergency cases that can't be treated locally, our ambulance teams are able to evacuate women and their new-borns to the nearest clinics, meaning they don't have to travel the long distances on foot. Sensitisation sessions, domestic visits and community health workers help to explain the warning signs, emphasise the importance of contraception and encourage

delivery in hospital, where women receive a 'dignity kit' for their baby, including a set of baby clothes, hat, a washable diaper, stick of soap and comb. Our health centres are provided with the equipment and medication they need, and staff are trained to be able to give the best care possible.

This year has not been without challenges, with restrictions on carrying out our activities freely and scared patients wanting to stay

home, but our goal has not changed: to reduce the rate of maternal and infant deaths. Our teams continue to work on this – and with success!

Without the much-appreciated support of the *Else Kröner-Fresenius-Stiftung* and the *ALTERNAID Foundation* this would not be possible. Thank you!

476 emergency
ambulance evacuations

15,460 safe deliveries

1,411 complicated cases
detected and cared for

71 partner primary-care
health centres in 4 of
Madagascar's 22 regions

29,859 prenatal consultations
at partner health centres

13,522 prenatal ultrasound exams

7 reference hospitals

Ultrasound session for an expectant mother in rural Anosy





Maternal health training

In February, our colleagues Dr Zava, Dr Rinja and Dr Mahery came to Berlin for a training course on maternal health organized by the GIZ's »Clinical Partnership Initiative« - what a hello! These three doctors are the project managers and local coordinators for our maternal health activities in Anamalanga, Atsimo-Andrefana and Anosy in Madagascar. The training started with the history of midwifery in the world, and the value of midwives in the medical field. A key topic was the main causes of maternal mortality in resource-poor communities, as well as the importance of communication and good leadership.

It was a pleasure for all of us to be with our colleagues from Madagascar in Berlin!



◀ *Dr Mahery, Dr Zava, and Dr Rinja (from left to right) in front of the Brandenburg Gate. It was wonderful to welcome our colleagues in Berlin!*

▲ *The training was organised by the GIZ for medical practitioners from around the globe*

Protection from medical impoverishment through a digital technology

Since its launch in 2019, our mTOMADY project has gone from strength to strength. mTOMADY started as an electronic savings account for pregnant women, the so called Mobile Maternal Health Wallet. Now, mTOMADY users can even take out a health insurance policy using a simple phone. In a country where 90% of the population have no health insurance, and 70% live at risk of financial ruin due to medical costs, new ways to protect people from medical impoverishment are urgently needed.

mTOMADY allows users to save money and access subsidised treatments, while hospitals can quickly process claims and securely transmit medical data. The technology also ensures transparent pricing of treatments, so that patients know what to expect when they arrive at hospital, and uses behavioural nudges to encourage people to save for their health insurance. Health coverage is more

important than ever, at a time when low-income populations are facing the economic impacts of the COVID-19 pandemic.

mTOMADY's success can be measured through the year: in January 2020, we were honoured to win the *Global Health Hub Germany's* »New Ideas for Global Health« competition, and by the end of the year, mTOMADY was established as its own social enterprise together with *Charité Berlin* - mTOMADY gGmbH. Doctors for Madagascar and mTOMADY will continue to work closely in Madagascar: we all share the same goal, of providing affordable and quality care to patients who need it.

None of this would have been possible without the valuable support of the *Else Kröner-Fresenius-Stiftung*, *Charité Berlin*, the *Berlin Institute of Health*, and *ThoughtWorks Germany*. Thank you!





Prepared for pregnancy

Often in Madagascar, patients are scared to come to hospital because of unexpected costs that threaten them with financial ruin. They can't risk treatment, as they simply cannot afford it. But thanks to our Mobile Maternal Health Wallet, this was not the case for Nadia.

Nadia's first pregnancy had required surgery – although it led to a healthy baby boy, she still wanted to be well prepared for her second pregnancy. She joined our Mobile Maternal Health Wallet, so that she could save money ready for hospital care. Her friends and family were able to add money to her savings

account as well, and Doctors for Madagascar gave her a bonus of 50% of her savings.

This was all especially useful when her husband lost his job due to COVID restrictions – although his income wasn't much, it was enough to keep their little family fed. Without this source of income, money was tight, but with her savings account Nadia didn't need to worry about how to afford care. Her second baby came in July, and even when she needed surgery again, the money in her savings account was there ready and waiting. She was able to pay for everything including follow up health checks for her and her baby.



A mother and her newborn recovering in hospital



I regularly send money to my mother, so she can go to the hospital in case she needs treatment. And I can be sure the money is saved for her health.

Family member in Antananarivo

TRANOMBAROTRA CALIFORNIE

Transparent and regular payments allow us to provide better treatment quality. Payments via mobile money save us a lot of time - which we can now spend on our patients.

Health facility staff in Antananarivo



9,224 pregnant women used the Mobile Maternal Health Wallet to prepare for delivery

3,722 calls to our toll-free helpline for advice and financial consultation during pregnancy

14,990 claims paid safely to health facilities

Users need only a simple mobile phone to access mTOMADY and start saving money for health care.



A vicious cycle of poverty and health care

Over 75% of the population of Madagascar live on less than US\$ 1.90 a day, many relying on the harvest for an income, and this means that surprise, out-of-pocket payments for health care can financially ruin them. Often, patients simply will not go to hospital at all: they cannot risk the cost, and they have nothing left to sell. It is a vicious cycle, as poor health prevents people from working and bringing in an income.

not in a position to pay for their treatment. Doctors and clinicians conduct inquiries into the financial situation of patients on a case-by-case basis. Thanks to the generous support of the *Ein Zehntel* («One Tenth») Foundation and private donors who have contributed to the fund, we have been able to help dozens of patients and their families who otherwise would not have been in a position to afford their healthcare.

Our »Saving Lives« project was started in order to cover the costs of patients who are

The treatment costs for **104** patients were partly or completely covered

73 adults, **31** children

Decades of disrepair – making rural clinics »Bright and Clean« again

Due to a lack of funds to renovate and maintain buildings, many public health facility buildings are falling into disrepair. Patients are treated in inappropriate conditions and doctors, nurses and midwives are prevented from carrying out their activities properly. Some health facilities lack a proper area for pregnant women to stay while waiting for delivery, who put their own and their baby's health at risk by travelling several kilometres while in labour, while at others, staff live in the building, preventing its normal use. And without proper structures like toilets and incinerators, hygiene and cleanliness are harder to maintain, increasing the risk of infection.

With the support of *genialsozial*, we started the project »Bright and Clean«, working closely with our partners in Madagascar, and prioritising sites most in need of repair. Incinerators and latrines have been built, hospital buildings repaired, and delivery and perinatal rooms extended at 8 different health facilities. We have built accommodation for staff, so that buildings can function fully and the quality of care is not compromised.

The results are clear: thanks to »Bright and Clean«, these health facilities are able to function properly and provide safe care to patients.



The health centre in Agnavoha after renovation



Men at work



Three generations

Triplets in Fotadrevo

When the midwife found triplets during Nina's ultrasound session at the primary health center in Fotadrevo, there were worries – carrying multiple babies increases the risk of complications, and how would Nina be able to afford the inevitable costs that brought?

The chances of having triplets are about one in 10,000 – it seems that Nina was this one. The 37-year-old lives in Fotadrevo in the south of Madagascar, mother to 5 children and was already in a precarious situation. Like many families in this area, they rely on a good harvest to put food on the table, and there is not much left over to buy anything else.

Nina was cared for by the dedicated midwives of the health center in Fotadrevo. With their knowledge and skills, thanks to training sessions from our staff and volunteers, Nina was able to give birth to her three babies without fear. Born prematurely – common with triplets – they had low birth weights, they were kept at Fotadrevo with their mother for a while to recover. They all did well, and the triplets were soon able to go home to their five older siblings.

We were able to fully cover the costs of Nina's care, which was a great help to her and her family. Otherwise, they would have run into debt paying the costs and pushed deeper into poverty.



Triplets and mother recovering after delivery

Fighting a different pandemic – tuberculosis

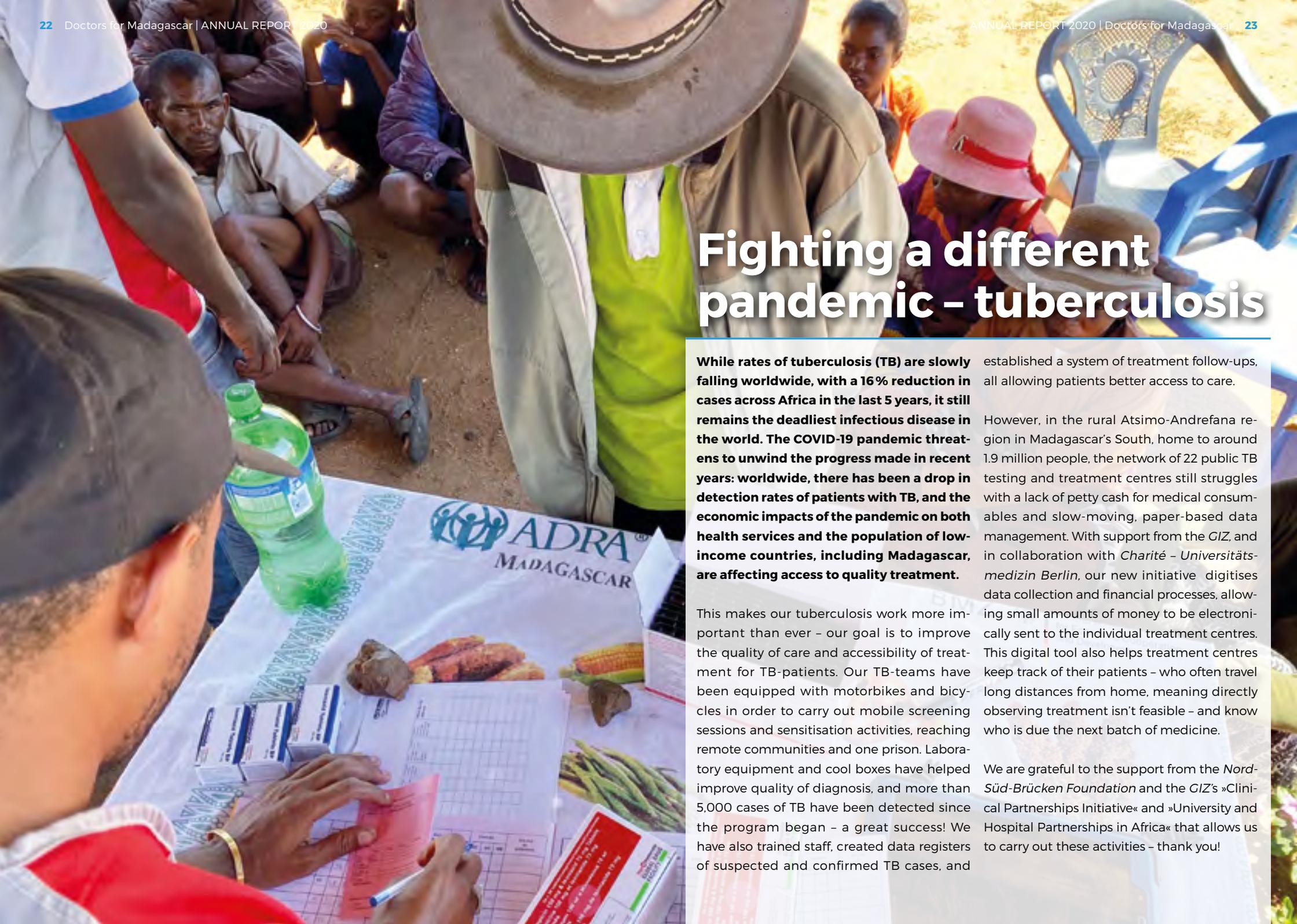
While rates of tuberculosis (TB) are slowly falling worldwide, with a 16% reduction in cases across Africa in the last 5 years, it still remains the deadliest infectious disease in the world. The COVID-19 pandemic threatens to unwind the progress made in recent years: worldwide, there has been a drop in detection rates of patients with TB, and the economic impacts of the pandemic on both health services and the population of low-income countries, including Madagascar, are affecting access to quality treatment.

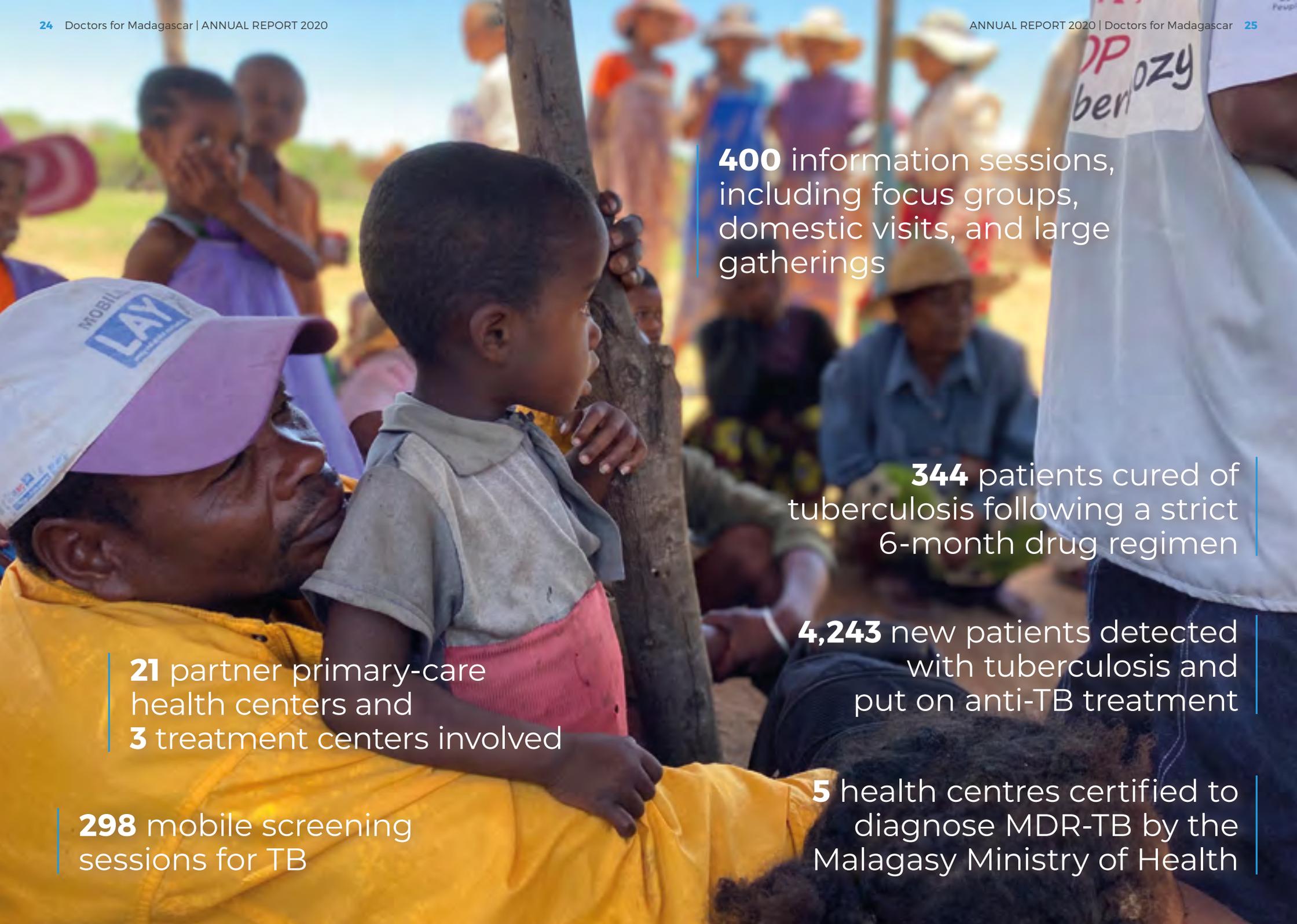
This makes our tuberculosis work more important than ever – our goal is to improve the quality of care and accessibility of treatment for TB-patients. Our TB-teams have been equipped with motorbikes and bicycles in order to carry out mobile screening sessions and sensitisation activities, reaching remote communities and one prison. Laboratory equipment and cool boxes have helped improve quality of diagnosis, and more than 5,000 cases of TB have been detected since the program began – a great success! We have also trained staff, created data registers of suspected and confirmed TB cases, and

established a system of treatment follow-ups, all allowing patients better access to care.

However, in the rural Atsimo-Andrefana region in Madagascar's South, home to around 1.9 million people, the network of 22 public TB testing and treatment centres still struggles with a lack of petty cash for medical consumables and slow-moving, paper-based data management. With support from the GIZ, and in collaboration with *Charité – Universitätsmedizin Berlin*, our new initiative digitises data collection and financial processes, allowing small amounts of money to be electronically sent to the individual treatment centres. This digital tool also helps treatment centres keep track of their patients – who often travel long distances from home, meaning directly observing treatment isn't feasible – and know who is due the next batch of medicine.

We are grateful to the support from the *Nord-Süd-Brücken Foundation* and the GIZ's »Clinical Partnerships Initiative« and »University and Hospital Partnerships in Africa« that allows us to carry out these activities – thank you!





400 information sessions, including focus groups, domestic visits, and large gatherings

344 patients cured of tuberculosis following a strict 6-month drug regimen

4,243 new patients detected with tuberculosis and put on anti-TB treatment

5 health centres certified to diagnose MDR-TB by the Malagasy Ministry of Health

21 partner primary-care health centers and **3** treatment centers involved

298 mobile screening sessions for TB



Three brothers

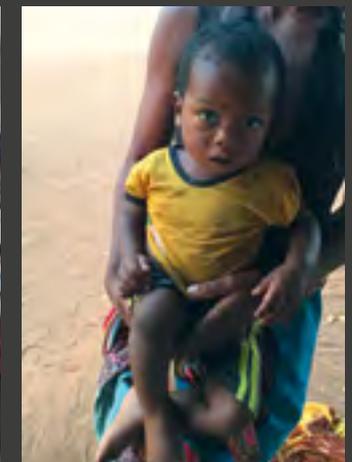
The southern region of Madagascar is extraordinarily beautiful, with grasslands and moors, bio-diverse rainforests, and stunning beaches. It is a very different landscape to the capital, Antananarivo – but it also has a lower altitude, and this means more mosquitos. Malaria is a major health problem in Madagascar, with over 2 million cases a year, but often simple methods of prevention are unaffordable for families in this area.

This was the case for Entekeve, Tsiandreza and Esoaony, aged 4, 4, and 16 months. These three brothers lived with their older brother and parents in the village Androipanao, in the Ampanihy district, in a house made of sheets of wood. They have a bit of land to cultivate, a tamarind tree, and a single chicken. Their income: 50,000 Malagasy Ariary, or 10 € per month, if the harvest is good. This means unexpected costs, or a bad climate, could push the family into extreme poverty.

When all three developed a fever, they were brought to Ejeda, 75km away from their home. The boys were weak and lethargic, and quickly diagnosed with serious malaria. The family knew the symptoms well, as this wasn't the first time dealing with the disease even this year – their older brother had already been treated for it earlier in the year.

The three younger sons were immediately started on antimalarial treatment through a transfusion. Tsiandreza and Esoaony recovered well, but unfortunately, Entekeve died two days after starting treatment.

The family could only afford the medical bill for one son; for the others, they said that they had nothing more they could give. The remaining costs were covered by our Destitute Fund, a big assistance for the family.



Tsiandreza and Esoaony

Trained staff:

- **796** community health workers (maternal and newborn health)
- **47** community health workers (tuberculosis)
- **57** doctors, midwives, and nurses (obstetrics & gynaecology)
- **39** lab technicians and health workers (tuberculosis)
- **28** doctors, midwives, and nurses (emergency medicine)
- **5** drivers and technicians (equipment & vehicle maintenance)

Health facilities included in structured hygiene and patient safety improvement programme:

- **4** health centres
- **2** reference hospitals

Training health care staff

It is an old saying: give a man a fish, and he'll eat for a day; teach him to fish, and he'll never go hungry. Training is an important part of our work in Madagascar, equipping them with the knowledge they need to perform invaluable and lifesaving tasks.

In Antananarivo regular mother-child health and quality management training has taken place, with regular refresher courses for two centres each month. Midwives learn effective maternal healthcare, making sure that their patients are well looked after. Thanks to hygiene training in the south, health workers

have a better understanding of how to improve their work, and with courses running in small health centres and hospitals previously lacking hygiene standards have improved.

Community health workers are a key part of our outreach and sensitisation programmes – these are the people most in contact with the community. Training, especially about nutrition, illness in pregnancy, and detecting and treating infectious diseases such as tuberculosis, means that they are able to go out armed with information and help their communities make informed decisions.

Emergency medicine training for remote locations

In January 2020 just before COVID-19 hit, I carried out emergency training for health workers and midwives at Ejeda hospital in Madagascar.

As well as preventing complications, a DFM midwife's duty also includes treating pregnant women with complications and transporting them, sometimes many kilometres, to hospital safely. The poor road conditions and rural landscape means that even a few kilometres can take a few hours or even days, depending on the weather. Midwives must frequently take life-saving measures on the spot, or even on the roadside, often with only the ambulance driver for support.

Pregnant women especially in the south of Madagascar suffer from dangerous complications much more frequently than in Europe. As a result, their new-borns are also often put

at risk. Because of this, the central focus of my training was obstetric emergencies. Especially in the case of infants, simple measures such as suctioning off secretions and proper ventilation can literally save lives.

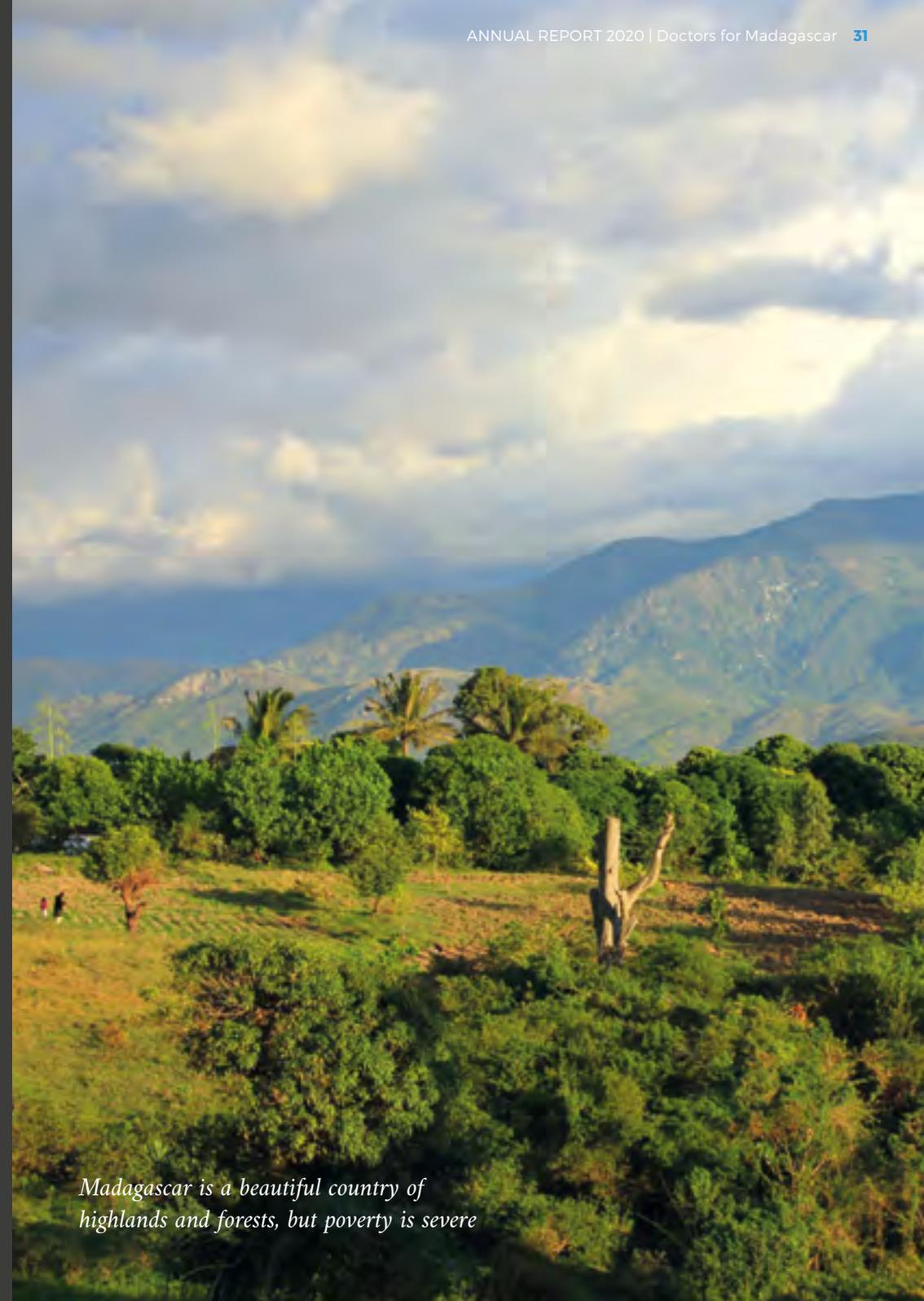
Ambulance drivers and other staff were also given First Aid training, so that they are able to assist the midwives in the case of emergencies. Training sessions such as these are invaluable in saving the lives of mothers and children.

Particularly impressive, even touching, for me was seeing how motivated and focused these midwives and co-workers are on their training, and how urgently they want to be able to competently help their fellow human beings.

Dr. Malte Antaszek (Anaesthetist, emergency medicine)



Villages are often several kilometres away from the nearest health centre



Madagascar is a beautiful country of highlands and forests, but poverty is severe



Road conditions are often poor, meaning vehicles need to be well maintained to be able to cope. The driver on top of the car just found a network signal to call another vehicle for help.

LandCruiser Maintenance

We operate 5 LandCruiser ambulances at 3 locations in the rural south of the island, where road conditions can be extremely challenging and the next garage is a 2 day trip away. LandCruiser specialists and volunteers Tom Zündel and Thomas Dahm from *Deutscher LandCruiser Club e. V.* gave driver and maintenance training for all our drivers for 2 weeks in January 2020 – just before the pandemic severely restricted travel to and from Madagascar. Since then, they have stayed in constant connection with our teams on site via WhatsApp supporting them with everyday maintenance issues. Our drivers are now much better equipped to take care of the vehicles our teams need for their daily work. Thank you!



Our driver Nassim filling up the engine oil



One of our vehicles parked on the way to a community outreach

COVID-19 – and what it means for Madagascar

Like everywhere else in the world, Madagascar has not been left untouched by coronavirus. The number of confirmed cases in Madagascar in 2020 was less than 20,000, and fewer than 300 deaths, with a population of just over 26 million. However, it is not so much COVID-19 itself that threatens the health of the population, but the social and economic consequences. The pandemic has had devastating effects on the health-care system and the rural poor, pushed further into poverty by lockdown restrictions, unemployment and rising costs. Drought conditions persisting into 2021 and a poor harvest mean that there are few resources to fall back on and seasonal employment has dried up even further. As one of our doctors in Madagascar said, 'people are no longer thinking about their health, but how to afford food'.

Patients are afraid to come to the health centres for fear of infection or quarantine, vaccination campaigns have been suspended, and especially tuberculosis goes undiagnosed and untreated due to disruptions. We have

observed rising costs and shortages of medical consumables and drugs, and some, such as anti-malarials, are nowhere to be found.

Some of our work has been stopped or restricted, especially sensitisation activities: unable to bring big groups of people together, our teams have relied on focus groups and home visits, which reach less people. We've continued our activities in line with state guidelines with added motivation, adapting where we need to. The GIZ and other donors have helped us to smoothly and quickly reallocate funds to focus on reducing the impact of the pandemic. We've been able to provide training on coronavirus to health workers, including how to raise awareness of the importance of social distancing and hand washing, as well as provide personal protective equipment to our partners and teams.

Our international cooperation and strong German-Madagascan relationships have never been more important. We continue to work with the people who need us, despite the challenges the pandemic has brought.

80+ health workers and doctors equipped with PPE and hand sanitiser

127 health workers and community leaders trained on coronavirus prevention





Pregnant women take part in a survey in Antananarivo



Asking a doctor: What challenges do you face in offering the best possible care to your patients?

Assessing the impact of our interventions on health – Global Digital Health Lab at Charité Berlin

Evaluating the impact of our activities has always been close to our hearts. We believe that a thorough understanding of the impact of an intervention on health outcomes and its cost effectiveness are key to distributing limited resources in global health to where they are needed most. In 2020, we took this initiative a step further and created the *Global Digital Health Lab at Charité Berlin*. The team consists of 15 postdocs, PhD and Master's

students, many of whom are also actively involved in implementation projects with Doctors for Madagascar. We are also extremely happy that two Malagasy team members have successfully enrolled in a competitive PhD program in Global Health at the University of Heidelberg. We have also just started research projects in other African countries working with a variety of partners and there is much more to come.

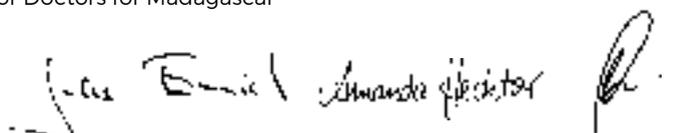


The Global Digital Health Lab team on a boat outside of Berlin. Two students from Madagascar joined remotely.

Thank you...

...to all our friends, supporters and donors. Without your help and generosity, none of this would be possible. 2020 has been a year of challenges, but thanks to your encouragement, commitment, enthusiasm, ideas, and of course, your giving, we have still made successes. We use all our donations carefully and consciously to achieve our goal of improving medical care for as many people as possible in Madagascar. These challenges are far from over, however, and there is even more need for and value in your support in continuing our work. Nonetheless, with our 10 year anniversary approaching in 2021, we are proud of all we have achieved so far, and look forward to the future together.

Yours,
For Doctors for Madagascar



Dr. med. Julius Emmrich Amanda Hecktor Nadine Muller

Get involved!

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INCOME

Total donations/grants **593,449.75 Euro**

EXPENSES

660,725.45 Euro

