LINES OF IMPACT

Schistosomiasis

Lymphatic Filariasis

Onchocerciasis

Trachoma

Geohelminthiasis
Neglected tropical diseases (NTDs) are a group of mostly communicable and destructive diseases that affect the poorest populations and are particularly prevalent in tropical areas, where access to clean water and improved sanitation is very limited.

Women and children living in unsanitary conditions are at much higher risk of contracting NTDs. These devastating and dangerous diseases are preventable and treatable. However, they continue to cause severe disfigurement and other long-term disabilities that create barriers to education, employment, economic growth and overall development.

**NTD Burden**

1.5 billion people are affected by NTDs worldwide.

Almost 40% of the global burden of NTDs occurs in Africa.

Only 0.6% of global health funding is allocated to the fight against NTDs.
LINES OF IMPACT PROGRAMME

These diseases are neglected because the people who suffer from them have no platform or voice to ensure that they become public health priorities. Through the Lines to Impact Initiative, Speak Up Africa aims to increase the volume and quality of information, articles and productions on the topic of NTDs by collaborating with African journalists on cross-cutting themes.

WORLD NTD DAY

On 30 January 2020, the first-ever World NTD Day kicked off a decisive year in the fight against NTDs. In 2020, the Covid-19 pandemic dramatically changed advocacy and strategic communication approaches around NTDs. Today, more than ever, public health and investment in NTDs is recognised as a priority, yet global attention tends to focus on the latest disease rather than those that have affected us for a long time. This makes it even more important to create awareness and a sense of urgency around the elimination of NTDs.
THE JOURNALISTS OF "LINES OF IMPACT" PROGRAMME
Jessica Ahedor is a freelance science/health Journalist in Ghana. She worked for First Digital TV/ GNTV as a health reporter, Lead News Anchor, Producer, and Programme Host for 6 years. In 2019, Jessica corresponded for West Africa Democracy Radio- Dakar, Senegal, she is the Gender and Health correspondent, Pan African Vision–Washington DC, Scientific African Magazine–Rwanda and a co-founder of Science Journalism Ghana. Jessica also reported from the African continent and abroad - Kenya, Uganda, Rwanda and Togo, Gambia, Ethiopia, Canada, and the UK on myriad of health and environment issues. In 2020 she was selected fellow as part of CAPOOP Media Fellowship Programme by Speak Up Africa to increase volume and the quality of WASH coverage in Africa.
More than 1.5 billion people in the world suffer from Neglected tropical diseases (NTDs) - a cohort of parasitic, viral, and bacterial diseases that cause substantial and a long term illness. Out of this, Africa bears 39 percent of this burden with Ghana being endemic with a considerable number of them - namely Lymphatic Filariasis, Onchocerciasis, Trachoma, Schistosomiasis, Soil transmitted helminthiasis, Buruli ulcer, Yaws, Leprosy, Guinea worm, Human African Trypanosomiasis (HAT), Cutaneous leishmaniasis, Snake bite and Rabies. These diseases come with its attendant disability, psycho-social and economic implications for individuals who suffer these predicaments. The sufferers of these NTDs usually battle neglect, public ridicule, and loss of self-esteem. Experts say public perception about the diseases makes it challenging for the sufferers to co-exist with others.

Available literature by CK Ahorlu et al on public perception about most common NTDs in Ghana is usually likened to hereditary, witchcraft or bad omen, “dirty blood” in some communities. As such, some believe the condition could be corrected or managed through hard work, excessive drinking of palm-wine and excessive sexual activities.

But Ghana, over the years has devised many strategies to rid the country off NTDs, through its master plan of the National Program led by Dr Kofi Marfo. The strategies include situational analysis, NTD strategic agenda and operational framework. This has seen the country eliminating 3(Trachoma, Guinea worm and Human African Trypanosomiasis) out of the 14 NTDs and still counting. With the milestones chalked so far by the country, Dr Marfo, national NTD programs Manager asserts a multi-sectorial approach is needed to achieve the set target by World Health Organization in 2030. “We have come a long way as a country with the strategies for eradication, but a concerted efforts form all stakeholders will speed up the process towards achieving our set objectives and target by 2030”.

A publication in Acta Tropica by S.D Mante as part of the West African Filariasis Project, revealed an overwhelming number of citizenry suffering from all forms of NTDs due to stigmatization, cost, low level of knowledge on the conditions and fear of being mocked and rejected. However, Professor S. D Mante a consultant, on the Africa Filariasis Project says there is a need for reorientation and sensitization on the NTDs to reduce the level of “cooked” perceptions about the conditions. This he said will go a long way to help reduce stigma and enable the sufferers of these NTDs to seek care early instead of shying away.

“On the West African Filariasis project we encountered a substantial number of people suffering from all forms of
NTDs and hydrocele is one of them. The numbers were huge when we started in 2012 and I can say it has reduced a bit but the issue of stigma and low level of knowledge about these conditions are not helping, we need to reorient and sensitized all parties involved”.

Cost remains one of the barriers to access to care for many who suffer NTDs in Ghana especially those with obvious complications that need surgical intervention. Most of such interventions are taken up by foreign based benevolent organizations through a philanthropic works. Though Ghana’s health insurance scheme is supposed to cover public health interventions for free, most of such cases required additional funds to enable patients to foot their bills for care.

It is evident that, a holistic fight against NTDs will have to be informed by painstaking research, as such Prof Alex Debrah, Researcher, at Kwame Nkrumah University of Science and Technology believes the country can set up research fund to augment external funding other than the total dependence on donor support.

Ghana could become the first highly populated Sub-Saharan African nation to achieve its NTD elimination target by the WHO in 2030. But, that will only happen if health-systems are strengthened and mobile health-activities continue to enable NTD disease reduction.

However, this year’s 2021 World NTD Day celebration - second year in a row will ignite efforts and action for the involvement of the international community and the private sector in Ghana to actively take part in the fight against NTDs and say “No to NTDs”.
Maimouna Bangoura is a Guinean journalist, she started as a technician reporter for Continental FM radio in 2008. She then became a journalist host at Groupe Evasion Guinea in 2011. In 2016, she won the Award of the best health magazine CFI. In 2018 she founded the laguinéenne.info news site.
The emergence of Covid-19 in Guinea has prevented the mass distribution of drugs for the elimination of neglected tropical NTDs from proceeding as scheduled. With this in mind, the national programme to combat NTDs has put in place a recovery plan in the country’s different regions. In Boké, the teams in the field were successful despite the challenges. The annual mass treatment campaign (MTC) was carried out respecting barrier measures to prevent the spread of the coronavirus.

In Boké, mass distributions of anti-NTD drugs were scheduled to take place in March 2020 in nine prefectures. According to Dr Mamadou Kaba, head of the disease prevention and control division, all the formalities were carried out, in particular the training of agents and advocacy at regional, prefectural and sub-prefectural authority levels to carry out the campaign successfully. Unfortunately this coincided with the arrival of the coronavirus pandemic in Guinea. Given the context, the national authority urged the campaign to stop. It was only at the end of August 2020 that the campaign was carried out: “We did mass awareness raising at all levels and advocacy where everyone was involved. The various heads of health centres and distributors were trained. 992 product distributors divided into 542 distribution teams. At national level, we were granted training of more than 700 sorters and mobilisation agents. They travelled throughout the prefecture. We also received a kit of gels, bibs and soaps. The measures were respected by everyone”.

After the stage of raising population awareness on respecting barrier gestures, the campaign was held over a period of seven days. Depending on the target population, the teams went door-to-door. People aged 5 and above are eligible for the campaign, i.e. 80% of the population, states the person responsible for prevention and control of the disease. He points out that two individuals the same age who are not the same size do not receive the same number of tablets. The taller you are, the more tablets you receive during the campaign. Between 90cm and 120cm corresponds to 1 tablet. The campaign targeted 430,250 people, or 80 per cent of the population.

In Boké, ivermectin 5 mg is given against Onchocerciasis and lymphatic filariasis and Albendazole against geo-helminthiasis (intestinal worms). Some citizens are reluctant to take medicines during campaigns. With support from local authorities they ended up cooperating. They justified their reluctance by the lack of timely information since the product is not taken on an empty stomach. “So if you find somebody who hasn’t eaten lunch they will refuse you on the pretext that they haven’t been told. For others it is because of what the health workers are wearing, such as when they are wearing trousers”.

These two products can have side effects that include: dizziness, visual disorders, abdominal pain, diarrhoea. The population is prepared for what to do if they experience adverse effects: “Before we give the medicine, we explain to the person concerned that the product is for a certain disease and that to take it you must be in a certain condition. However, if after taking it you have the side effects mentioned above, go to a health centre, report them or call the team that visited, as they leave their contact details to receive free treatment. Side effects are not immediate, nationally, a small fund has been set up and a category of drugs to deal with serious complications. There is even an ambulance, because if a serious case occurs in Sangaredi for example and the health centre is unable to manage it, the hospital is informed and the doctor trained in the matter goes in the ambulance to collect the person and hospitalise them. The driver’s costs, fuel and food for the patient during their stay is provided by the national NTD programme. Fortunately, we have not had any serious cases”.

The campaign respected barrier gestures. Once in a concession, the agent washes their hands with soap and water and then applies the hydro-alcoholic solution before beginning their work, which involves putting the water in a bucket with a cup.

Then people are lined up and their measurements are taken. Every measured person takes the cup to ingest the medicine they have been given. And most of the families had kits, says Dr Mamadou Kaba. A list with the name of each family, age and gender is made to find out if next year the same or new people will be eligible.

He adds that the delay in the mass distribution of medicines has not had a major impact on the beneficiaries. However, health workers had difficulties in the field, such as the inability to reach some villages to give the medicines because of rain which caused some rivers to overflow. As a result, the villages beyond these rivers were not covered as the operation took 6 days. But after the winter season, the rest of the medicines
were used by the head of the centre to organise catch-up sessions for these villages.

Doctor Mamadou Kaba also mentions some lessons learned from the mass distribution of medicines in Boké in 2020: “too few agents assigned in the field as the number of people estimated by the authorities is different from the actual number. A team of two people covers 100 to 150 people per day. There are very remote locations where the distance between points A and B is 10 to 15 km. They are told to do the work in five days, whereas it took two to three days to do one village. This information is being fed back so that soon we can increase the number of teams in the field or the number of days.”

The disease prevention and control officer at the Boké DPS did not immediately have statistics on cases of onchocerciasis and lymphatic filariasis, which can affect women’s breasts and feet: “During each campaign, patients with lymphatic filariasis and onchocerciasis are identified and the information is fed back to the programme to find new approaches to their care. The medicine we give during the campaign is a preventive measure”.

Like in Boké, mass distribution of medicines did not take place as planned in 2020 because of Covid-19. That is why the national programme to combat NTDs has set up a recovery plan for it to be implemented in the different regions of Guinea. Respect for barrier gestures was important. The aim is to eliminate or control neglected tropical diseases (NTDs). It is organised once a year and administered to the entire eligible population (5 years and older) of the health district for the 4 NTDs (Lymphatic Filariasis, Onchocerciasis, Trypanosomiasis and Trachoma).

The recommendation is that districts which are hyper endemic to geohelminthiases be treated with albendazole twice a year, underlines Dr Sadan Sidibé, communication officer for the programme: “against onchocerciasis, Ivermectin tablet 3mg - Albendazole tablet 400mg: against lymphatic filariasis, praziquantel tablet 600mg: against trichonsomiasis, albendazole tablet 400mg: against geohelminthiasis, azithromycin tablet 250mg, Azithromycin syrup 1200mg and Tetracyclineophthalmic ointment 1%: against trachoma for children from 6 months”.

Dr. Sadan says that apart from PQ, side effects are rare after taking these drugs because the products used are well tolerated. In addition, the side effects disappear within 24 hours of taking the medication.

These mass drug distributions are made possible thanks to the technical and financial support of Sightsavers, Helen Keller International (HKI) and Catholic Relief Service (CRS).

Maimouna Bangoura
Leprosy is one of the NTDs (neglected tropical diseases). A group of communicable diseases common in tropical regions. They affect more than 1.5 billion people worldwide, 39 per cent of whom live in Africa. 47 out of 55 African countries are endemic to at least one NTD. The Boké region is endemic to leprosy. Currently the Leprosy, Tuberculosis and Onchocerciasis Treatment Centre (LTO) is treating six patients. Efforts are being made to overcome the disease, although challenges remain.

In 2018, 21-year-old Mamadou Tahirou Diallo noticed two spots on his body. One on his leg and the second on his arm. His diagnosis showed that he had leprosy. An infectious disease caused by Hansen’s bacillus that affects the nerves and skin. It can also be transmitted by the flow droplets from a multibacillary patient to a healthy individual. In addition to the appearance of hypo-pigmented spots on any part of the skin, which do not hurt or itch. The patient will notice insensitivity either on the sole of their foot or on their palms, and the part with the spot does not sweat.

For the first four months, Tahirou Diallo followed the treatment correctly. For reasons of time, he says, he gave up the treatment for four months. He should have finished his treatment last October and returned to see his doctor on 15 January 2021 after receiving several phone calls from them. At the time, he had only one spot on his arm, the one on his leg had disappeared. But he began to develop complications including swelling of the nerves. His doctor will consider appropriate care to soothe the pain and bring the nerve back into function to prevent it from being damaged in the long run. Leprosy can be cured, however, patients need to be monitored for the rest of their lives because the dead bacilli in the body become troublesome and can lead to serious complications.

70 year old Saifiou Bah has been cured of leprosy. He has been receiving treatment since 2005 and the four spots he had on his skin have all disappeared. Every three months he comes for check-ups to see if there are any complications because they can occur before, during and after treatment, says Saliya Diakité, a nurse supervisor at MTN in Boké. People affected by NTDs often live in remote areas. “I live in Wendouboy, 90 km from Boké. I have my check-up every three months and I am given the medication for the trimester. It’s free, we even get help with transport. I would tell anyone with this disease to go to the hospital”.

The Boké centre is currently treating six patients, three of them in the Dabis sub-prefecture, one in Tanéné, one in Kolabumgni and one in Kamsar.

A leprosy diagnosis is based on two strategies: the first one known as active advance, which involves looking for patients in the most isolated areas with difficult access, or who have contacts who have had sick relatives and are now developing leprosy. Under the second strategy, the patients themselves come to the structures to say that they have spots on their bodies. Is it leprosy or not; after sampling, a skin biopsy confirms the existence of the disease. The patients are then classified into two groups following to the WHO system: paucibacillary and multibacillary patients.

Boké’s NTD nurse supervisor says that paucibacillary patients have fewer than five spots, while multibacillary patients have five spots or more. As far as treatment is concerned, he says:

“After the diagnosis, you receive the right drug for the treatment. It’s a pack of 28 pills, with arrows showing when to take them, and it’s monthly. Multibacillary patients take 6 tablets at a time to begin with, then follow the direction of the arrow, the treatment lasts 12 months. Paucibacillary patients take 3 tablets at a time and also follow the direction of the arrow. The treatment lasts 6 months. Once they reach the 27th or 28th day they come or send someone to collect the medicine. This is to make the spots disappear and prevent complications. Treatment is free thanks to the support of the programme and its partners”.

Depending on the patient’s progress, check-ups are scheduled monthly, quarterly or even annually. When they come for their check-up, the doctor asks for the empty pack to see if the medicine has indeed been taken and that they have not developed any complications.

For very serious complications, the Boké Leprosy Tuberculosis Onchocerciasis (LTO) Centre can intervene: “For patients with complications, wounds are dressed and corticosteroid therapy is used to minimise complications and heal wounds if the nerves are found to be tender. The treatment is currently on an outpatient basis. They are also advised to wear..."
glasses to avoid eye problems, wear soft shoes, and avoid certain gestures that may affect their condition. When the complications are very serious, the patient is referred to the PIRP centre in Kindia for appropriate care such as physiotherapy, surgery to restore nerve function, or even to dress the wound”.

Saliya Diakité adds: “in the past, rare cases were brought here as part of the PIRP. One of them was a woman from Kisomaya in Dabis who was abandoned by her husband because of leprosy as she had complications but she could not be saved with the support of the programme. There was also a young man whose treatment was successful; he is now in the West.”

We were unable to carry out our activities at the PIRP physical disability prevention and rehabilitation centre in Kindia to find out the condition of the sick. At the national programme to combat NTDs we met the head of the leprosy department who gave us an overview of the state of this disease in Guinea. “On average 250 new cases of leprosy are detected each year in the country’s prefectures. Guinea Forestière is the most leprosy-prone region in the world, recording 58 cases in 2018, followed by Basse Guinea with 47 cases. Moyenne Guinea is the least affected region with 10 cases detected during screening and 15 people sick”.

According to him, the high number of leprosy cases in Forestière region can be explained by its demographics compared to other regions, since the disease is contagious and is transmitted from a sick person to a healthy one.

The challenges relate to the lack of means of transport for staff to go and fetch patients in remote areas with difficult access. Some patients are also reluctant to be treated and there are shortages of certain equipment in certain centres such as Boké.

In terms of progress, the head of the leprosy services explains: Health worker and population awareness of NTDs, the availability of medication in all of the country’s medical facilities. Leprosy can be diagnosed in all facilities. The establishment of disability prevention centres and physical rehabilitation of PIRP patients in Faranah, Kankan, Kindia and Pita. These structures are built and equipped by partners committed to the elimination of NTDs. Socio-economic reintegration into communities of people who have been cured.

Experiences in the fight against NTDs include the coupling of the mass drug treatment (MDT) campaign with leprosy and burn ulcer case detection, the resilience of MDT campaigns in the context of Covid-19. Moreover, the involvement of communities will help to fight the stigmatisation of patients so that NTDs are seen in the same light as other diseases. In addition, it will enable us to carry out screening campaigns to reach as many patients as possible and to record all contacts. These two approaches will help to achieve our goal of ending NTDs by 2030.
Yandé Diop is a journalist with a master’s degree in journalism and communications, and a member of the association of journalists in health, population and development (AJSPD). Yandé Diop was born in Kaolack, Senegal, where she completed her primary and secondary education. She has worked in the media since completing her journalism studies in 2010. She made her debut in the written press, with Senegalese media group Walfadjri, before joining the Promo consulting group, which runs the «Rewmi» newspaper and radio station, for four years, and then the «Libération» daily newspaper, where she spent the majority of her career in the media sphere. She recently embarked on a career in the online press as Editor in Chief of the Thieydakar.net general news website and promotor of the Sante221.com site, focusing on health issues in Senegal.
Senegal has set a target to reduce morbidity from neglected tropical diseases. The country is also aiming to eradicate them by 2030, in line with World Health Organization (WHO) standards. Diseases such as leprosy have already been eliminated, although elimination is not the same as eradication. However, there are constraints, despite the efforts and actions carried out in the field.

**Un objectif de réduire la charge de morbidité**

Neglected Tropical Diseases (NTDs) are a diverse range of bacterial parasitic diseases that mainly affect the most vulnerable people. It is because it affects this layer and there is little interest in Western countries that the term “neglected” is used. There is also little interest in research and medicines for these diseases. They do not directly result in death but can affect the person for years. They are also disabling. Morbidity is real. They do not directly cause death, Western countries are spared and the international community shows little interest in neglected tropical diseases. Nevertheless, early diagnosis is necessary, along with correct treatment on a case-by-case basis, and the organisation of mass distribution campaigns of drugs for diseases requiring preventive chemotherapy.

**All 79 districts are endemic to Senegal, the campaign figures are as follows**

In Senegal, the health system is made up of 79 health districts. They are all endemic. At least as far as neglected tropical diseases are concerned. The coordinator of the Neglected Tropical Diseases Programme at the Senegal Ministry of Health and Social Action has reported that our country is making efforts. “Since the 2000s, new efforts have been made to treat these pathologies more effectively. In Senegal, as in other African countries, AIDS, tuberculosis and malaria, among others, were priorities. It is left to partners to support the fight against NTDs”.

Note that 20 NTDs have been identified but Senegal is fighting 13 of them. Five (lymphatic filariasis, onchocerciasis, geohelminthiasis and trachoma) of these diseases require preventive chemotherapy. It is, moreover, these ones that justify the mass drug distribution campaign. The other eight are taken on a case-by-case basis. These include leprosy, scabies, snake bites and rabies. “The Ministry has different branches for different pathologies. The idea is to contribute to the international effort to eliminate neglected tropical diseases by 2030”.

In 12 of Senegal’s 14 regions, a drug distribution campaign has been organised. This is like other African countries, in line with World Health Organization recommendations. This campaign is aimed at the preventive chemotherapy diseases cited above. It took place from 15 to 20 December. In these 12 regions, 46 districts have been targeted for lymphatic filariasis, geohelminthiasis and onchocerciasis. It aims to reduce the level of morbidity, and to avoid the complications that arise from chronic evolution. There is sufficient medication. The World Health Organization has facilitated the delivery of medicines while the National Supply Pharmacy is taking part in medication management.

**Financial deficit, lack of knowledge of NTDs, and other constraints**

These diseases remain little-known and the fight must be multi-sectoral. Thus the majority of targets are in schools. “For example, we are working with the education sector. For this campaign, the teachers themselves administered the medicines to the children”, says Dr. Kane. It seems that there
are not very many partners, which means that the programme may face a financial deficit. Enda Santé is the executive body of the Senegal River Basin Development Organization (OMVS). Anyone who talks about dams and irrigation is talking about bilharzia.

There is a high prevalence of the disease in northern regions near the dam. These are Matam, Saint-Louis and towns like Podor. The private sector must also be involved in the fight against these pathologies. And it is in the light of this that OMVS, among other partners, is responding to the struggle as partners. “It’s not just about health. People also need to know more about the diseases”. There is a lack of communication, the programme is only discussed during the campaign, a communication plan will be drawn up so that all the activities can be carried out. There is also the training of health personnel to enable effective care at operational level.

**A negative economic impact**

Neglected tropical diseases affect vulnerable people. They create a disability and have a significant impact on the economy. These illnesses are mainly observed in people and further impoverish the victims. Sustainable development goals (SDGs) such as poverty, education, hygiene are affected. Going further, according to the national coordinator of the programme to combat neglected tropical diseases in Senegal, “at least ten (10) sustainable development goals are affected”. Dr. Ndèye Mbacké Kane states bluntly that eradicating them would be synonymous with achieving the SDGs. It should be noted that the vulnerable people are children of school age.

They are often faced with a lack of academic performance and also with dropping out. This is due to repeated absences. Trachoma is a problem for women. The disease has left many women blind. From an economic point of view, women are the heart of family life. If they are blind many things don’t work and the impact is often fatal for the family. In addition to women and children, the poor are also vulnerable. Most of them earn their living from day to day. Once ill, their activities cease and their vulnerability increases. Doctor Ndèye Mbacké Kane, coordinator of the national programme against neglected tropical diseases, speaks in this video.

**Filariasis, optimism that it will be eliminated in Senegal in 2026**

Filariasis is a parasitic disease. Lymphatic filariasis belongs to the group of neglected tropical diseases. It is transmitted by a mosquito bite. The microfilariae are transmitted at an early age. It is during years of incubation that the disease manifests itself through a disabling morbidity, particularly in what are called hydroceles in the scrotum in men and in the feet (lower limbs), also known as elephantiasis. It can even reach upper limbs and breasts.

At least according to Doctor NGayo Sy, coordinator of the lymphatic filariasis and onchocerciasis programme at the disease control directorate of the Ministry of Health and Social Action. He further explains that Senegal has set itself the goal of eliminating the parasite. A mass drug distribution campaign is held every year. Patients also receive care. “At district level, patients were counted between 2018 and 2020, a total of 179 cases of hydroceles and 133 cases of elephantiasis were recorded passively during the campaigns”. After combating the disease, it was then controlled and evaluated, which led to the understanding that it is possible to eliminate it.

**Disabling situation**

When we talk about a disabling situation, we are talking about a complication of the disease. This is not a spontaneous situation, but happens over time. It can be up to 10 years, 20 years or more. However, “if we notice in time, it is possible to gain the upper hand before it becomes irreversible. It all depends on the case. When it comes to hydroceles, there is a treat-
ment”. These are situations that our surgeons deal with in facilities with appropriate laboratories or personnel to do the work. As far as elephantiasis is concerned, unfortunately at one level there is nothing we can do about it. Only ensure hygiene and avoid other infections, especially at community level. There is advice how to cope with it, how to lift feet, how to manage the fever, among other things...

A survey to understand the target

Dr. Sy believes, however, that more accurate mapping could give the exact figures. Introducing normal care into the health system, and finding a partner for surgery and assistance at community level is also a challenge. “We are currently discussing the management of cases of morbidity with all partners. We took the first steps during the campaigns by recording the cases. We will now actively search for cases at community level. But before that, you need to understand the target. To do so, a survey must be carried out at intermediate level, with head nurses and relays to return care to the centres and to all levels of the structures. Training and updating is necessary at this level. These steps will enable us to quantify the number of patients”.

Doctor Ngayo Sy is coordinating the fight against lymphatic filariasis in Senegal, he discusses the key points in this video.

The epidemiological situation regarding Bilharzia: poverty as a determining factor

Bilharzia is one of the NTDs (neglected tropical diseases). It is caused by worms that thrive in fresh water. These parasites develop in ponds, marigots and rivers. The disease manifests itself in several stages or phases. According to Dr Boubacar Diop, coordinator of the programme to combat bilharzia and geohelminthiasis, there is what is called the penetration phase of the phirhocerciasis which is released by the mollusc, the disease’s intermediate host. “It penetrates the human body transcutaneously when it comes into contact with water. During this phase, there are often no complications. Wrinkles are observed in the area of penetration. The second phase, is the infectious phase. It manifests itself through headaches and does not last very long. As for the last stage, it is the terminal phase and there is no treatment”. He also explains that there are two kinds of diseases. “Urinary bilharzia, which manifests itself by the presence of blood in the urine. In the case of intestinal bilharzia, bloody stools are found in patients, most often children”. Another complication is that the disease can be fatal. “If not treated early, the disease can progress to complications such as kidney failure and other complications that can lead to the loss of the patient”.

In Senegal, out of 79 health districts, 63 are affected by bilharzia. Within the affected districts, there is an uneven distribution across the fourteen regions of the country. Almost all regions are affected. However, distribution is unequal in terms of transmission sites, notes Dr. Diop. He continues, “There is a permanent, year-round transmission focus located in the river basin (the five regions of the Senegal River Basin Development Organization). At the sentinel sites of Saint-Louis, Matam, Louga, Tamba and Kédougou, prevalence rates of over 50% are observed. The other transmission focus is temporary, seasonal. Generally, contamination lasts for four months, especially during the rainy season. It concerns the districts in the south and south-east of the country. Here, average prevalence is between 10 and 50%”. It should be noted that this disease is also the disease of poverty. It is linked to drinking water which, like the disease group it belongs to, is neglected. It mobilises few resources. Added to these constraints is the problem of who is res-
p.19

Eradication of bilharzia, a probability

The Ministry of Health and Social Action has a data collection platform. “All of the programme’s indicators, particularly those relating to morbidity, are collected, and care will be provided at operational level in districts and health posts after laboratory confirmation. This goes beyond mass drug distribution campaigns. This is the flagship activity aimed at reducing morbidity. Eradication is possible.” The work of mapping endemic areas was the first step. The second step will be to define the objectives according to the results obtained. Between 2016-2020 the objective was to control and reduce the burden of disease. For 2020-2025, the objective will be split in two in terms of the ecological and environmental aspects, and also in terms of the behaviour of the population where many things have not changed. Transmission takes place 24 hours a day and the aim will be control. And for areas of low transmission, the goal of eradication can be set.

Doctor Boubacar Diop is coordinating the fight against Bilharzia in Senegal, he discusses the matter in this video.

A major step towards elimination

Senegal has taken a major step towards elimination, stopping treatment although monitoring is still required. The difficulty still lies in the serious form according to the coordinator. Trachoma is one of the neglected tropical diseases. It manifests itself as a somewhat common form of conjunctivitis at first in children and can lead to permanent blindness in adulthood. Senegal is well on its way to eliminating this disease, which is considered a public health problem. The fight against this pathology has been carried out by the Ministry of Health and Social Action in Senegal since at least the 2000s. At least according to Mactar Dieng Badiane, an ophthalmologist and coordinator of the national programme for the promotion of eye health in Senegal responsible for Trachoma. He was answering a question about the situation regarding this MTN nationally. In his office, he explains that there is a mapping at programme level to know the number of cases of the form found in children but also the serious forms that can lead to blindness in adults aged 15 and over. This mapping is now complete, he says. It is a question of knowing prevalence, expected rates as well as the strategy to be adopted.

TRACHOMA, SENEGAL IS WELL ON THE WAY TO ELIMINATION

Mapping of the trachoma situation in Senegal has been complete since 2014. Of the suspected districts among the 79 in Senegal, at least 19 have been put on mass drug treatments: One group had to be followed for one year, another two years and the last one for three years, in line with World Health Organization (WHO) recommendations. Today, they are no longer endemic with the active form. This has been the case since 2017. The last two districts to receive mass distribution are Touba (Capital of Mouridism in the Diourbel region) and Saint-Louis, (Northern Region of Senegal) according to Mactar Dieng Badiane, an ophthalmologist by training and coordinator of the national programme for the promotion of eye health in Senegal responsible for Trachoma.
Prevalence: At least 33,000 cases of trachoma expected

Based on the latest surveys on prevalence, at least 33,000 cases of trachoma are expected. These figures on prevalence enable planning in the field. The new strategy with the World Health Organization is to cover the whole country. This involves covering all households and visiting people aged 10 years and over and screening them, performing surgery if necessary. “It takes almost 22,000 cases to reach rate of 0.20%.

For both indicators the active form must be less than 0.5%. For serious forms, the few isolated cases that specialists encounter in facilities are well below the threshold. Difficulties arise in the capitalisation of collective hygiene”.

What matters, notes Dr Badiane, is a multi-sectoral struggle. Access to water and sanitation at the heart of this struggle would be a determining factor. With the emergency community development programme, access to water has been provided in several localities. Latrines have also multiplied in addition to the efforts of the hygiene service. Capitalising on these actions is what is lacking, the trachoma coordinator also reports. Human resources exist and are used rationally. The Ministry has signed agreements with partners, which means that support exists, but much more support in terms of logistics will better cope with this pathology.

Dr. Mouctar Dieng Badiane directs the eye health promotion programme and is responsible for Trachoma. He gives an overview of the disease in this video...

LEPROSY, A DISEASE UNDER CONTROL BUT...

In Senegal leprosy is a disease under control. It was eliminated as a public health problem in 1995 according to the World Health Organization standard.

The WHO stipulates that any country that registers less than one case per 10,000 inhabitants has eliminated the disease. Nevertheless, the distinction between elimination and eradication must be stressed. There are still cases of leprosy in the country, explained Dr Louis Hyacinthe Zoubi, coordinator of the National Leprosy Elimination Programme. According to him there is a disparity with some regions reporting many more cases than others. Isolating lepers took place during monotherapy and despite taking the molecule they were still contagious. It was following this that States where there were cases decided to park the patients. Today, these resettlement villages have no reason to exist. Since 1982, with new molecules, leprosy patients can be cured.

The current epidemiological situation shows a partial state of affairs in 2020. In 2019, notes the coordinator, 189 new cases were recorded. That is based on the passive screening strategy. In other words, health workers go looking for new cases in the population. The new WHO strategy, which is a reference manual for member countries, aims to have a leprosy-free country. It should be noted that the 189 are treated at care centre level. Medicines are given free of charge to leprosy patients. The WHO donates them to countries.

Constraints...

There are constraints. Especially in terms of awareness-raising, “in order not to lose what we have achieved, we must continue to raise awareness even if we are in the elimination phase. Individual and collective hygiene, talking about prevention and the behaviours to adopt
when you catch the disease. People must also understand that when you are with a leprosy patient you can be free of infection. Only close and prolonged contact can be dangerous. If the patient is treated in time, after 48 hours they are no longer contagious. This is why a spot on the skin should be seen by a specialist at an early stage. Otherwise the mutilations are active. Taking the medication on time for six months may be the solution. Despite everything, optimism about eradication is still the most widely shared feeling... Our country has eliminated leprosy and is targeting eradication.”

Dr. Zoubi discusses the response in this video

Yandé Diop
With a background in communications and international relations, Harouna Drabo is a fact-checking journalist at Fasocheck, an editorial initiative dedicated to the practice and promotion of fact-checking in Burkina Faso. His passion for blogging earned him the title of best blogger in Burkina Faso in 2019 for his publications on water and sanitation issues. Focusing on public development policies and accountability issues, Harouna Drabo has been an independent contributor to the treatment of socio-political news from Burkina and the sub-region for various media outlets since 2015.
At the age of 44, with lymphatic filariasis in his right foot, Hamidou Sarba, a farmer, livestock breeder or mason according to the circumstances and the ups and downs of the disease he has been suffering from for so long, lives in Bayé, a village 17 km from Solenzo in western Burkina Faso, near the Malian border. After three decades fighting lymphatic filariasis, a condition that has weakened him physically and financially, Hamidou has finally resigned himself.

In a compound teeming with animals, littered with animal excreta, with an uncovered traditional well in the centre, from which drinking water is drawn for the whole household, Hamidou, the husband of two wives and father of nine (09) children, welcomed us and told us about his life as a sick man.

Hamidou explained that since the onset of his illness, he had spent considerable time and money seeking traditional remedies. “I started treatment in Ouagadougou (the capital city) and then an older brother took me to Bobo Dioulasso (the country’s second largest city). Traditional healers tried everything, but to no avail. I spent more than CFA F 100,000 at one time.”

What happened next was even more unbearable. “You know when you are suffering from an illness you don’t understand, and you hear about a healer, you don’t think, you just go. That’s what I’ve been doing all this time. I’ve seen it all. Once, a traditional practitioner made me lie in the sun for hours. I nearly lost my sight,” said Hamidou.

One thing led to another: “I had to sell my animals, even the cow I use for field work, in order to pay for the cost of traditional medicine and quack doctors. At one point I couldn’t take it any longer.” How much did he spend in all? It was difficult to say exactly, but it was “well over a million CFA francs,” he added bitterly, his gaze fixed on the sky. Acute phases of the disease often resulted in paralysis, leaving him unable to go about his daily activities, especially during the rainy season. “Due to the symptoms of the disease, I missed a lot of growing seasons. Attacks could last at least 20 days. During those 20 days, all I could do was lie on my mat and writhe in agony. My foot would swell up, and greenish liquid would come out of the pores. All my skin would fall off, from my knee to my toes.”
A Discovery and a relief

It was only in 2017, in his forties, after thirty years with the disease, that he was able to find a treatment that worked on those acute attacks, thanks to the head doctor of the health centre in his village, Hamidou Ouattara.

“At one point I was really at the end of my tether. I had lots of powders, leaves and decoctions of all kinds. As a result of using them, my skin had become even darker. Then three years ago, the village doctor suggested an injection in my foot, which helped me a lot. It cost me less than CFA F 1000. My foot doesn’t swell up like it did before. I also have a painkiller that I take to help me cope with the pain when it comes.”

Why only in 2017? Why wasn’t he offered this solution from the start? The head nurse of the health district, Hamidou Ouattara, simply replied, “We don’t know the disease well enough ourselves, because they don’t talk enough about it in health school. After coming back from a seminar on the subject, since I knew the patient, I told him about the treatment options. He agreed immediately.” The treatment available in the Bayé health district is an injection of benzatyl benzylpenicillin, plus diclofenac.

However, medication is not everything. There is also personal hygiene. The foot needs to be washed several times during the day to keep it clean. Hamidou often does this. But with unsafe well water. The village is not connected to the drinking water supply. Moreover, the wells are in an unsanitary state and not covered. Rubbish from the surrounding area can easily fall into them.

By using unsafe water, Hamidou runs the risk of catching additional infections and even worsening of his filariasis. To make matters worse, the pain pill he takes comes from the street market and not from the pharmaceutical depot, for the modest sum of CFA F 150.

Harouna Drabo
Neglected Tropical Diseases (NTDs). These diseases are so overlooked that their names rarely mean much to most people. And yet, according to the WHO, approximately one billion people around the world suffer from them. In Burkina Faso, the fight against these diseases is built around the programme for the control of neglected tropical diseases (PLMTN). Out of the twenty or so NTDs recognised by the WHO, Burkina Faso treats nine, five of which are treated with preventive chemotherapy. According to Christine Sawadogo, health attaché with the programme, many milestones have been achieved, but the biggest obstacle over the past five years has been terrorism, which keeps teams from going where they are needed. In addition to insecurity, the programme’s actions were impacted by the coronavirus health crisis in 2020. Interview.

How is the fight against neglected tropical diseases organised in Burkina Faso?

In Burkina Faso, neglected tropical diseases are part of the national health development plan, which includes a project to combat these diseases. The programme is responsible for:
- Defining orientations,
- Coordinating the fight against NTDs, and
- Promoting research in the fight against NTDs.

In Burkina Faso, which NTDs are targeted by the most actions in the field?

Of the 20 NTDs identified by the UN, 19 are present in Burkina Faso. But only 9 are targeted by actions in the field: lymphatic filariasis, onchocerciasis, trachoma, intestinal worms, schistosomiasis, human African trypanosomiasis, leprosy, Guinea worm disease and dengue fever. Five others are included in the programme’s strategic plan but are still awaiting funding to determine their prevalence.

It appears that the prevalence of NTDs varies from one region to another, how can this be?

Several factors explain this situation. First of all, there is the socio-economic status of the population (diseases of poverty), people’s perceptions of the diseases, the climate, and the environment (lack of hygiene). Lymphatic filariasis can be found throughout the country. The South-West region has the highest rate for this disease. The Centre follows in second place and the Eastern region ranks third. The Sahel region is highly endemic for schistosomiasis, even though it is a water-related disease. While the region lacks sufficient water, there are many nomads in the area, and they often use surface water.

Are some NTDs taken more seriously than others?

I would say instead that, due to the response strategies, there is more of a focus on preventive chemotherapy NTDs. This approach is aimed at breaking the cycle of transmission, freeing certain areas from disease and protecting future generations. There are five: lymphatic filariasis, onchocerciasis, schistosomiasis, intestinal worms and trachoma. Our partners have prioritised this strategy to maximise their impact.
Preventive activities protect people by breaking the chain of transmission. As for intensive case management, the second strategy, these diseases require larger budgets. For filariasis and trachoma, both types of strategies are used. That is why most partners focus on the first strategy.

What is preventive chemotherapy?

Preventive chemotherapy is the distribution of medications to the population via campaigns. For some diseases, a single compound is given and for others, a combination of compounds must be used.

On the ground, are there NGOs that try to subsidise these operations? Are they operational, effective?

We have partners who support us, and they have helped us through a sub-regional project on malaria and NTDs in Mali, Niger and Burkina Faso. This support has enabled us to hold surgery camps and, under USAID support, to provide ambulatory surgery for trachomatous trichiasis. In the latter case, they go right out to the compounds and take the affected people out for surgery and care at the CSPS (health and social promotion centre). Some of our partners have provided resources that we have passed on to operating facilities to allow them to routinely take in patients free of charge. Unfortunately, not all areas are covered, and it is also for a limited time only.

Sur le terrain, il y’a des ONG qui tentent de subventionner ces opérations, est ce fonctionnel, efficace ?

Nous avons des partenaires qui nous accompagnent et nous en avons bénéficié dans le cadre d’un projet sous régional de lutte contre le paludisme et les MTN qui regroupent le Mali, le Niger et le Burkina Faso. Cet appui nous a permis de faire des camps de chirurgie et dans le cadre de l’appui d’USAID, nous avons eu un appui pour la chirurgie ondulatoire de trichiasis trachomeuteux. Là, ils vont carrément devant les concessions, font sortir les personnes atteintes pour la chirurgie et les soins de relais passés au CSPS (centre de santé et de promotion sociale). Il y en a qui nous ont donné des ressources que nous avons mis à la disposition des blocs opératoires pour leur permettre de prendre en routine les malades gratuitement. Mais toutes les zones ne sont malheureusement pas couvertes et c’est aussi pour un temps limité.

Is the national budget for NTDs substantial?

Mobilising resources to implement activities remains a major challenge. You see, only the first strategy activities have been covered, while the other NTDs that require intensive case management are still on hold.

Broadly speaking, have resources been reduced due to the overall COVID-19 health situation?

No, but adjustments have been necessary to accommodate barrier measures in the implementation of some of the activities. Some partners have supported the programme to implement these measures by providing gel and masks. However, in general, the budgets drawn up at the outset did not take physical distancing into account. This meant that for every two or three vehicles planned for outings, we ended up needing four to reduce the number of people per vehicle. These adjustments were made due to the barrier measures imposed by COVID-19.

What are common bottlenecks in actions to address NTDs at programme level?

These are mainly insufficient resources, socio-cultural perceptions and, in recent years, the security situation that blocks us from conducting activities in certain regions.

How do you evaluate the impact of preventive drug distribution at your level?

Impact assessments carried out each year have shown a decrease in the transmission of NTDs.

Has COVID-19 had an impact on preventive chemotherapy campaigns?

With the appearance of COVID-19 in the first quarter, due to barrier measures, we had to suspend all our activities at the Ministry of Health level. Staff were requisitioned to provide support for the CORUS (centre for operations in response to health emergencies) to control the disease, so there was a negative impact. Activities resumed towards the end of the second quarter, so mass treatment activities were deferred to the third quarter.
Has this delay led to an upsurge of NTDs in some regions?

No, because they are focal diseases, not diseases with epidemic potential. For these diseases to spread, the conditions need to be there for the development of the vector, and most importantly, the prevalence of the NTDs had already dropped considerably. It takes quite a long time for a resurgence phenomenon to be noticeable; two or three months are too short.

Has the programme implemented any activities related to the second strategy?

As we speak, most of the actions carried out have been related to the first strategy. Because there are impact activities that are very important, but the majority of our activities have been implemented.

Based on what you tell me, Burkina Faso is on the road to NTD eradication, what have you achieved and what challenges still lie ahead of you?

Some NTDs need to be eradicated, eliminated or controlled. Eradication means there are no more cases, elimination means reducing the disease below a certain threshold so that it is no longer a health problem. Control means working to control the progress of the NTDs.

As for our achievements, we have implemented regular mass treatment campaigns for NTDs. The campaign on filariasis began in 2001 and regular quantitative evaluations are conducted on the impact of treatment. Qualitatively, we can cite the eradication of Guinea worm disease since 2011; in 2019, 61 districts out of 70 had stopped treatment for lymphatic filariasis; and trachoma transmission has been halted since 2017. Regarding schistosomiasis, in 62% of districts, the prevalence rate has been zero since the 2017-2018 period. As for intestinal worms, the prevalence rate is very low (5%) and the WHO considers that we no longer need to treat them.

What are the challenges?

They include insufficient resources, the security situation and a lack of communication to bring the population on board with health services.

Harouna Drabo
INTESTINAL WORMS, A BURDEN FOR AFRICAN YOUTH

Neglected Tropical Diseases (NTDs), found almost exclusively in Third World countries, are silent killers because they are not treated with the same degree of urgency as other diseases. The NTD group includes intestinal worms and parasites, which, according to the Ministry of Health of Burkina Faso, were the reason for more than 600 million consultations in health centres in 2019. Every year, they cause more than 100,000 deaths worldwide. The youth segment of the population in Africa is the most severely affected, with serious socio-economic consequences. What are intestinal worms? How are people infected with them? How do worms destroy our bodies? What are their socio-economic repercussions? Dr Mamoudou Cissé, a parasitologist and researcher at the MURAZ centre, a national health research institution in Burkina Faso, explains that it is primarily a matter of poverty and personal and community hygiene.

1. Put simply, what do we call intestinal worms, and why are they considered a neglected tropical disease?

Intestinal worms or intestinal helminths are parasites that live in the human digestive tract. They cause diseases called intestinal helminthiases. The main intestinal worms infesting humans are soil-transmitted helminths (also known as geohelminths: hookworms, nematodes, roundworms, pinworms, and whipworms), tapeworms, intestinal schistosomes (or bilharzia), intestinal flukes and liver flukes. The intestinal worms classified as neglected tropical diseases (NTDs) are soil-transmitted helminths, intestinal schistosomes and liver flukes. They are NTDs because they mainly affect the poorest population groups, living in remote rural areas, slums or conflict zones. NTDs are driven by poverty and almost exclusively affect poor people in developing countries. People suffering from NTDs are not a public health priority because they lack significant political clout. Moreover, the lack of reliable statistics makes it difficult to raise awareness of these diseases among the general public.

2. How are people infected with them?

There are two routes of contamination: the oral route and the transcutaneous route. Humans can be contaminated through the oral route either directly through dirty hands (containing the infective form of the intestinal worm), or indirectly by consuming food or drinking water soiled by human faeces containing the infective form of the intestinal worm. Contamination can also take place indirectly by eating infested raw vegetables (watercress) or infested freshwater fish that has been lightly cooked or smoked.

As for the transcutaneous route, contamination usually occurs when walking barefoot in muddy or damp soil or through contact with fresh water (during swimming, fishing, rice farming, etc.).

3. What types of intestinal worms are most common in the Burkinabe population? And which are the most dangerous?

Nowadays, Schistosoma mansoni is the most common intestinal worm in the Burkinabe population and it is also the most dangerous in terms of the complications it can cause in infested people. In the past, soil-transmitted helminths were also common. However, their prevalence at national level is now 1.3% thanks to the positive impact of various de-worming campaigns implemented in Burkina Faso since 2001. Higher prevalence rates are found in five regions of the country: Centre Ouest (3.8%), Centre Est (2.8%), Hauts-Bassins (2.1%), Cascades (1.9%) and Est (1.6%).

4. Which population segment is most affected? Children? Youth? Seniors? And in what proportions?

Infestation with Schistosoma mansoni mostly affects the younger segments of the African population. These include pre-school children (1-5 years old), school-aged children (6-15 years old) and young people aged 16-25 years old. A recent study in Tanzania reported respective prevalence rates of 54.9%, 86.1% and 57.1% among pre-school and school-aged children and young people between the ages of 16 and 25 (5). In Burkina Faso, the prevalence of Schistosoma mansoni infestation was 26.2% among school-aged children in 2013 (6) while prevalence among pre-school children was 81.1% in 2020 (Dr Cissé, personal communication). Soil-transmitted helminths affect both pre-school and school-aged children in Africa. For instance, the overall prevalence of geohelminths in school-aged children in Nigeria and Ethiopia was 54.8% and 48.4% respectively, with roundworm predominating. A predominance of roundworm was also noted among pre-school children with prevalence rates of 18.3% and 19.2% observed in South Africa and Ethiopia, respectively.
5. How life-threatening are intestinal worms?
Mortality related to intestinal worms is usually observed in cases of Schistosoma mansoni infestation. Every year, 130,000 deaths related to complications of Schistosoma mansoni infestation are recorded worldwide (2,4).

6. How can you get rid of them?
To get rid of intestinal worms, you need to see a doctor, who will make a diagnosis and start an appropriate course of treatment. The curative treatment used against intestinal worms depends on the type of worm found in the patient.

7. What are the socio-economic consequences of these diseases for young people?
Intestinal worms are linked to poverty, which leads to persisting in their morbidities (anaemia, malnutrition, stunted growth, impaired cognitive functions, etc.) (11,12). The economic consequences are severe for already poor rural populations. Economic losses are caused by unproductivity due to illness and the costs of medical care. In the Kou Valley (Houet Province), daily economic losses due to Schistosoma mansoni infestation are estimated at CFA F 14,600/day for fishermen and CFA F 22,000/day for merchants. In addition, the average period of inactivity is 12 days.

8. Is the problem taken seriously by the population, and particularly by young people?
In view of the high prevalence of intestinal worms in rural areas, it is fair to say that the problem is not taken seriously by the rural population. This may be due to socio-cultural factors.

9. What are the potential solutions on the community and individual levels?
There are several potential solutions to successfully control intestinal worms. Recommended individual measures include:

- Personal hygiene: washing hands before meals and after using the toilet;
- Food hygiene: eating uncontaminated fruit and other foods, and drinking clean water;
- Wearing closed shoes or boots (for rice growers);
- Avoiding contact with fresh water (ponds, backwaters and rivers); and
- Using individual chemoprophylaxis against intestinal worms.

- The following measures can be envisaged on the community scale:
  - Fighting faecal peril (latrine building, sanitation);
  - Supplying households with drinking water;
  - Combating molluscs;
  - Mass treatment of the population with albendazole or praziquantel;
  - Proper case management; and
  - Community health education for lasting behaviour change.

Harouna Drabo

Références bibliographiques
1. OMS. Pourquoi qualifie-t-on de “négligées” certaines maladies tropicales? [Internet]. [cited 2021 Jan 18]. Available from: https://www.who.int/features/q58/fr/
In Ouagadougou, it is very common to eat out at street restaurants (known familiarly as “restaurants on the ground”) or at neighbourhood stands. With these everyday habits come high health risks, however, due to the sanitary conditions in these eateries. Regular customers of these makeshift restaurants are mostly young people, from unserviced neighbourhoods, often living below the poverty line. Caught up in a vicious circle, they have to some extent resigned themselves to “make do” with what is available to them, with little regard for what could well happen. ‘Today is today, tomorrow we’ll see.’ Yet intestinal worms spread through unsanitary conditions - particularly by consuming contaminated food or water - cause more than 100,000 deaths worldwide.

CFA F 100, for a dish of rice with sauce or beans (cowpea)! While the menu may not be very varied in the “restaurants on the ground” that abound on the street corners of Ouagadougou, the least that can be said is that they are within the budget of many people in Ouagadougou. These restaurants are even a “necessary evil” in the words of Dramane Sana, a geography student at Joseph Ki-Zerbo University in Ouagadougou. Like him, thousands of students rely on “restaurants on the ground” for their daily pittance. “For people like us, who live alone, it’s hard to do without university canteens and food stands,” says Dramane. Customers of these outlets are well aware of the health risks associated with intestinal worms in particular. Sometimes located next to sewage infested gutters, illegal rubbish dumps, or public toilets, hygiene is hard to come by on the cutlery, the operators’ hands or the furniture. Some operators are itinerant vendors, with poorly covered food at the mercy of dust and more.

Even when they suffer from intestinal worm diseases after visiting one of these cheap restaurants, customers have no choice but to return. This was the case of social worker Herman Bassiere, who suffered from both roundworms and typhoid fever a few years ago when he lived in Zorgho (a town in central Burkina Faso). He remembers his ordeal as if it were yesterday. “I had stomach worms several times. The first time it happened I had fever, constipation and stomach aches... When it happened, I couldn’t work anymore. And the doctor told me it was undoubtedly due to the water I used to drink and the raw food I ate.”

“In addition to the lack of financial resources, the lack of time to make home-made meals is another reason why people eat “on the ground”. “Especially for single people,” says Aboubacar Zida, who nevertheless recognises that “slapping a quick meal together at home is better than eating out every day, because at home you can control your hygiene.”

Bibata Yanogo is a roadside food vendor in her forties, who sees her “social trade” in a different light. Her customers are mainly pupils from nearby high schools, who come to eat at noon before going back to class, as well as shopkeepers from the surrounding area. “People say we are not clean. At least I make efforts to keep my place of business clean. But I admit it’s difficult. The cost of living is high. The dishes we sell start at 100 francs. Our profits are too low to invest in sanitation all the time,” she says.

The modus operandi of these “silent killers”

Due to their lifestyle, many people harbour intestinal worms. Contamination can be oral or transcutaneous. Doctor Thierry Kiswendtisida Guiguemde, a parasitologist at the Charles

Image 1: Ouagadougans in a restaurant © Frédéric KAMBOU

Image 2: Des eaux de lavage impropre dans un restaurant en bordure de rue © Jordan Meda
De Gaulle University Paediatric Hospital in Ouagadougou explains that flatworms and roundworms such as ascaris, hookworms and nematodes are widespread in developing countries. But in Burkina Faso, Schistosoma mansoni is the intestinal worm most commonly found in the population, adds Dr Mamoudou Cissé, a parasitologist and researcher at the MURAZ centre, a national health research institution in Bobo-Dioulasso.

According to Dr. Guiguemde, intestinal worms are “silent killers” due to their modus operandi. They are everywhere in nature (on food, on the ground, in dust, etc.) in the form of eggs. A person can harbour them for 5 to 10 years without showing any particular symptoms. They develop and grow in the body and lay new eggs that are excreted in stools. When worms multiply, they can clog the intestines, causing complications that often require surgery.

The unsuspected socio-economic repercussions of this neglected tropical disease

The youngest segment of the population is the most vulnerable to intestinal worms. They include pre-school children (aged 1-5 years) and school-aged children (6-15) as well as young people between the ages of 16 and 25. The prevalence rate of intestinal Schistosoma mansoni worm infestation in Burkina Faso was 26.2% among school-aged children in 2013, while its prevalence in pre-school-aged children was 81.1% in 2020, says parasitologist-researcher Dr Mamoudou Cissé.

The repercussions are significant but “neglected”. According to the parasitologists we consulted, intestinal worms are a cause of malnutrition in children, which has an impact on their growth and their cognitive abilities, affecting their academic performance. Young people and children are at high risk due to their daily routines. “The parasites also weaken the immune system, allowing other diseases to take hold in the human body,” says Dr Guiguemde. This leads to higher numbers of sick people and rising health costs. This situation has serious socio-economic consequences at family, community and national levels. According to a study describing the mode of transmission and socio-economic impact of schistosomiasis in the Kou Valley (Houet Province), daily economic losses due to Schistosoma mansoni infestation are estimated at CFA F 14,600/day among fishermen and CFA F 22,000/day among merchants. This neglected disease heightens the socio-economic vulnerability of a population that is already living in poverty. Especially in rural areas and slums.

Resistances pose an even greater health risk

The most widely used de-worming agent in Burkina Faso today is albendazole. However, according to Dr Guiguemde, albendazole is ineffective against protozoa, including amoebas, which are responsible for intestinal amoebiasis. “These protozoa can cause amoebiasis hepatitis, which can lead to cirrhosis and liver cancer,” notes the parasitologist.

Individual and community hygiene: a necessity to overcome intestinal worms

Intestinal worms persist in countries with low levels of sanitation and access to drinking water. In Burkina Faso, 70% of the population practices open defecation, 24% has no access to drinking water, and the sanitation rate is 23% (Wateraid Burkina). A paradise for parasites.

To overcome this sanitary situation, each individual should make efforts to meet personal hygiene standards, eat healthy and clean up their living environment. At the government level, the cross-cutting nature of WASH should be taken into account in public policies by improving access rates to drinking water and sanitation.

Harouna Drabo
A NEGLECTED TROPICAL DISEASE (NTD):
OUNOU’S LIFE OF PAIN

57 years of suffering! This simple phrase could sum up Ounou Boniface Dao’s life. A farmer, Ounou has been living with a hydrocele (an accumulation of serous liquid around the testicles) since his childhood in Badinga, 5 km from the town of Balavé in Solenko Province, located in the Boucle du Mouhoun region in western Burkina Faso. At this point, Ounou has only one desire, “to taste a normal life before leaving this world”.

“My illness started when I was a child. I on my way home from Bouaké (a town in northern Côte d’Ivoire) when I noticed that one of my testicles had grown bigger,’ says Ounou Dao. At the time, the symptom was not taken seriously, until after a few months his scrotum had grown disproportionately large. ‘People have told me that it’s probably a hereditary disease, but to this day, I don’t even know what the cause of the disease is,” says Ounou.

No treatment, no wives, no children. And despair…

Years went by without Ounou receiving “any medical treatment”. An opportunity to get rid of his ailment seemed to present itself through a free surgery campaign. It was a disappointment: “When I arrived there, they told me they could not treat what I had.”

In the last growing season, the quinquagenarian managed to harvest approximately 46 kg of millet and a sack of groundnuts. This is not enough to feed him for the year.

“I want the end of my life to be peaceful”

Even though he no longer has close relatives nearby, Ounou is not a complete recluse. Sebastien Kienou, a local councillor from the village, looks after him and helps him to live reasonably decently. He admits that he is at his wits’ end. “Every time we hear a free surgery campaign is coming, I take him there by motobike, but it’s always a disappointment. None of the doctors have told us what to do either, except for one who told us about an operation. We asked around and it costs at least 50 thousand CFA francs. That is a lot of money for us.” In the meantime, Dao’s only hope is that there will...
be someone willing to finance the operation, or finally, a free surgery campaign that can treat his case.

“I’m really tired. All I want at my age is for the end of my life to be peaceful.”

Image 3: One of the community wells in Badinga © Jordan Meda

Badinga is a landlocked village located 5 km from the town of Balavé (Banwa Province), in the Boucle du Mouhoun region in western Burkina Faso, near the Malian border. The area is remote and almost inaccessible. It takes an hour’s drive to cover the 25 km that separate Solenzo, the provincial capital, from the town of Balavé. The rest of the way is travelled by motorbike, which is the ideal way to deal with the challenging 5 km from Balavé to Badinga. The village has no drinking water supply. Open defecation is practised there. All the wells are traditional and uncovered, open to contamination. The inhabitants are primarily farmers and stockbreeders.

Harouna Drabo
Adjovi Nadia Edodji was born in Togo in 1995. After earning an undergraduate degree in sociology at the University of Lomé, she learned journalism on the job. Since 2018, she has worked as an editor in a private daily newspaper in Lomé.
On average, 70 people in Togo suffer from Buruli Ulcer (BU) each year. Anani, a young farmer in his thirties, is a victim. He has had a wound on his right foot for about six months, which is a burden for him and his entourage. Afflicted with an illness not linked to BU but which prevents him from speaking, his sister, who has been with him since the start of this unfortunate time in his life, tells us about his life with the disease.

“They call me Adjo and my brother’s name is Anani. We are both farmers in Akoumapé (editor’s note - Vo Prefecture, Maritime Region, Togo). It was during the previous agricultural season (editor’s note - September) that the problem began. He hadn’t been stung or bitten, he had no health problems but we noticed that his foot was swelling and had a wound that kept on growing. When the disease began, we dismissed it at first, saying that it would pass. We then used some medicinal plants to try and cure him. But since his foot wasn’t getting any better, we went to a clinic.

We thought that it was an ordinary illness, and that once he was treated in hospital he would be cured. It never occurred to us that his foot would become a big wound, but that’s what happened.

We therefore went to a clinic with the support of one of our brothers. We spent a lot of money there but the wound kept growing, covering more and more of the foot. After several weeks without any convincing results, our doctor finally recommended the centre (editor’s note - National Buruli Ulcer Reference and Treatment Centre -CNRTUB). When we went to the centre, he was given a test and we were told that he had BU. We were told that there must have been sewage on the road we take to get to the field. Which is true. The treatment we are getting has been effective so far. We are staying here. His bandages are changed daily. We are pleased.

Because of his illness, we have both stopped working in the fields. The disease has paralysed us completely since we can no longer go about our business. Fortunately we received financial support otherwise we wouldn’t have been able to make it. It’s also a good thing that the treatment here at the centre is free, otherwise we would have had difficulty paying as we spent a lot of money on the treatments we had done”.

TOGO, FREE CARE IN MANY FORMS TO SAVE LIVES

To fight against the Buruli Ulcer (BU), in 2008 Togo set up a national reference and treatment centre in the Maritime region, which is the most endemic of the country. Combining the WHO treatment protocol, free care and raising awareness among others, the country has reduced the ratio of severe forms of the disease.
Considered to be the result of a spell in rural communities, BU continues to spread panic in Togo. Indeed, in areas where the disease is endemic, traditional practitioners continue to be the first recourse for populations faced with a case of BU. “If someone has a wound that doesn’t heal, people say it’s sorcery,” says Ebèkalisaï Piten, head of the National Buruli Ulcer Reference and Treatment Centre (CNRTUB).

The disease has, according to him, been “stationary” for some years, claiming around 70 victims in the country each year. The Maritime region is most affected, followed by the Central region. “Epidemiologically, the Buruli Ulcer is found in swampy areas, wetlands. Since the centre was created, over 90% of confirmed cases have come from the Maritime region. It’s true that there are sporadic cases in other regions, but then you realise that they are cases imported through internal migration or from neighbouring countries,” he describes.

There is a certain degree of terror in populations faced with BU. Even the name given to the disease in the local language says a lot about how people feel (for example, in Ewe, the dominant language in the Maritime region, the disease is called “abì mákú mákú”, i.e. “the wound that does not heal”). Having BU is a social burden. Firstly because it is very disabling, secondly because of the way others consider it, and thirdly because of the expenses arising from it, not to mention the cessation of income-generating activities that it entails. Patients can be discriminated against in many ways. “Sometimes parents forbid their children from playing with another child who has the disease,” says Ebèkalisaï Piten. Bakowé Ayelou, a clinical psychologist at Kara University Hospital (North) who carried out Masters and DESS research into the experiences of patients with the disease between 2008 and 2010, can still remember the words of some patients. “As they showed me their disease-ridden arms, one person said to me, “This disease is worse than death because you are alive but can’t do anything, because look what my arms have become”. Another said, “I have become poor because I put all my savings into health care, it’s over but I’m not cured”. He continues, “People affected experience despair, difficulties with expensive care, feelings of shame and social devaluation. They also suffer from impoverishment because the treatment is expensive, destroying able-bodied arms with disabling after-effects”.

Since it was created in 2008, the CNRTUB in Tsévié (about 35 km north of Lomé, the Togolese capital), has been receiving cases of BU identified throughout the country. Their approach is focused on the issue of care. Before them, BU cases were admitted to surgery, financially supported by the patient. Today patients are treated free of charge. “From consultation until the patient is discharged, they pay absolutely nothing”, says Ebèkalisaï Piten, who adds, “You must understand that the cases here are complicated. Cases that are not do not even come to the centre. We support them in the communities. In addition to the basic treatment, we also offer functional re-education since the disease is deforming. The need to amputate the affected limb is very rare, but when the case arises, we also take care of it”. The centre also offers food kits to patients during their stay. The head of the CNRTUB estimates that the cost of treating a complicated case of BU, from treatment to rehabilitation, not counting the fitting of a brace if this should occur, is around $1,100 (over 400,000 Fcfa).

While BU is known to be caused by a microorganism called “Mycobacterium ulcerans”, the way it is transmitted is not known, making primary prevention, let alone a vaccine, impossible. Consequently, it is only early diagnosis followed by treatment that limits the damage. “BU is not a fatal disease, but it is very disabling. It deforms people significantly, leaving huge after-effects. Hence the need for early action. When the patient is diagnosed very early and comes to the hospital, we give them medication, they heal easily and social reintegration is easy,” says Piten.

Thus, the message of the awareness campaigns is: “as soon as a plaque, oedema, nodule or small wound appears, go to the hospital”. The CNRTUB has trained health workers in the country, in health centres and in communities to convey this message and to diagnose cases early for rapid treatment.

This action has reduced the number of complicated cases. “We have gone from about 40 complicated cases out of 70, or more than half of the cases recorded, to about 15 complicated cases out of 70 today,” says Ebèkalisaï Piten.
In short, people are encouraged to diagnose the disease early, while leaving aside the spiritual aspects of the disease. “We invite them to forget concepts such as ‘BU comes from sorcery, from a spell’” “The Buruli Ulcer does indeed exist in Togo. What is important is that when you have a small lesion or spot on your skin, run to a health centre for a diagnosis”. Bakowé Ayelou adds, “People must quickly consult health care structures to reduce the adverse effects of the disease. For those who still have the disabling after-effects, life is still possible provided there is a good socio-professional reintegration”.

Togo aims to more effectively control the Buruli ulcer by 2030. The aim is to have fewer and fewer cases, but above all for there to be no more cases with serious after-effects.

Nadia Edodji
Resolution WHA50.29 of the World Health Assembly, the Global Programme to Eliminate Lymphatic Filariasis (GPELF), and the WHO roadmap for the prevention and control of neglected tropical diseases (NTDs) all urge member states to eliminate lymphatic filariasis as a public health problem by 2020. The target year has come and gone, and some countries have still not met that goal. Not so, Togo, which was already receiving congratulations from the World Health Organization in 2017. What can be learned from Togo’s experience?

“It was truly a remarkable achievement from the standpoint of public health. By eradicating this debilitating disease, the country has also made a major cause of poverty a thing of the past.” This was WHO Regional Director for Africa Dr. Matshidiso Moeti’s jubilant reaction to the announcement that lymphatic filariasis (LF) had been eliminated in Togo in 2017. In 2017, with 8 endemic health districts detected compared to 40 in 1998, the country was able to remove LF from its list of public health problems, becoming the first country on the continent to successfully tackle the disease.

Good practices

It took Togo nearly two decades to wipe out LF. Togo owes its impressive performance to a strategy based on 5 main points. According to Dr Kwamy Togbey, Coordinator of the national programme on Neglected Tropical Diseases (NPNTD) the steps taken included: “incorporating WHO recommendations into Ministry of Health policy; community-based mass treatment by community health workers (CHWs) using a door-to-door strategy; and monitoring mass treatment in each village.” He added, “After mass treatment, a rapid evaluation was conducted in the villages covered to quickly gauge the geographical coverage of mass treatment so that, at the same time, treatments could be caught up in villages where the entire target group was not covered. Because the parasite responsible for lymphatic filariasis is transmitted by mosquitoes, insecticide-treated mosquito nets distributed by the National Malaria Control Programme (NMCP) also helped to control the disease (filariasis).”

According to the NPNTD, Togo followed WHO recommendations and used a combination of albendazole and ivermectin for mass treatments against filariasis over a period of 5 to 9 years according to the district. Various programmes on malaria (using treated mosquito nets), onchocerciasis (with the administration of ivermectin), and intestinal worms (with the administration of albendazole) have also contributed to Togo’s successful fight against LF.

It should also be pointed out that the relatively low number of districts where LF was endemic contributed to the elimination of the disease. Special mention should also be made of the men and women working in the health care sector, who have helped to bring the prevalence of the disease below the elimination threshold.

It was not an easy feat. Among the difficulties encountered, the NPNTD Coordinator cited “delays in data collection in some districts and insufficient guidelines for each stage in the process — very few guidelines existed when Togo reached the various programme stages.” He also mentioned the lack of financial resources post elimination, which could have been used to ensure the sustainability of the results achieved. “What is particularly unfortunate is how difficult it is to mobilise funds once elimination has been achieved: partners show less interest in supporting the country to manage the disease once it has been declared eliminated, especially in the absence of guidelines,” he explained.

What Comes Next?

At this juncture, it is important for Togo to remain vigilant. The NPNTD is well aware of that fact. “None of Togo’s immediate neighbours has eliminated lymphatic filariasis so far, although they have made progress in that direction. Given the migratory movements of the populations between our countries, we can understand that there will always be a risk of resurgence as long as the other countries have yet to achieve elimination,” noted Dr Kwamy Togbey, who went on to say that “Togo has already conducted surveys among migrant groups to ensure that the disease has effectively been eliminated. Post-validation monitoring continues to detect any potential cases of the disease in the community in time to take the necessary steps to prevent a potential resurgence of the disease.”

Follow-up care for people who still suffer from the consequences of LF is another important challenge to be met. Public and private practitioners, in turn, provide mobile surgery clinics to help patients who are still suffering from the
after-effects of the disease but are too poor to pay for surgical treatment. Hydroceles are the main focus of these campaigns. According to Dr Kwamy Togbey, “Lymphoedema treatment has been included in the minimum package of activities of healthcare facilities to guarantee the sustainability of the progress made in terms of treatment. All of the actors at all levels of the healthcare pyramid contribute to identifying and treating patients with swollen feet (lymphoedema) and referring patients with enlarged scrotums (hydroceles) to surgical centres for surgery. Patients are also taught self-care to ensure proper hygiene for swollen feet to reduce the incidence of painful episodes and superinfections.”

At the same time, actions implemented to combat malaria, onchocerciasis and intestinal worms in the country will help to maintain the results achieved.

**Zero LF, Zero NTDs**

Although its visibility is declining, LF should not be overlooked. One easy way to prevent it is to avoid mosquito bites. Dr Kwamy Togbey made the following recommendation: “to protect yourself from lymphatic filariasis, you should sleep under an insecticide-treated net to prevent mosquito bites.” A simple method that can prevent a serious disease.

Overall, in its fight against NTDs, in addition to LF, Togo has also eliminated Guinea worm (2011) and sleeping sickness (2020). The focus is now on other pathologies. “Our country’s vision is to free ourselves from the burden of NTDs. Our main objectives are to eliminate onchocerciasis in particular, but also the other preventive chemotherapy NTDs (trachoma, soil-transmitted helminths and schistosomiasis), by 2025; and, with regard to three case-management NTDs (CM-NTDs), to eliminate leprosy, control Buruli ulcer and eradicate yaws, by 2030,” said the Coordinator of the NPNTD.

It is to be hoped that other countries in Africa will soon overcome LF. Dr Kwamy Togbey is encouraging in this respect, “It is possible to eliminate LF, and other NTDs, when mass treatment is properly carried out in endemic districts.” It is also to be hoped that the other NTDs can be eradicated as well. The well-being of our people depends upon it.

*Nadia Edodji*
Alain Tossounon holds a Master of Journalism & Media and has been a journalist for some fifteen years. Editor in-Chief then Editorial Director of a weekly newspaper specializing in decentralization and local governance, “Le Municipal”, he earned a number of certificates in water management, natural resources and sanitation before becoming a senior reporter on the themes of water, hygiene and basic sanitation (WASH). Working on these concerns over the past few years, he has covered key events, including the 1st World Sanitation Forum in Mumbai, India in 2009, the 6th World Water Forum in Marseille in 2012 and the 7th Daegu Forum in South Korea in 2015. Today, he has built a solid reputation, winning numerous awards, both in Benin and internationally, including the prestigious WASH Media Award in 2012 in Stockholm, for his publications on water, sanitation and hygiene. Alain is also known as an advocate for issues linked to water, hygiene and sanitation. He currently leads the West Africa WASH Journalists Network (WASHJN), which includes 15 countries in West Africa and Cameroon.
NANA DJOUA : CHRONICLE OF A LIFE DESTROYED WITH AN UNKNOWN DISEASE

Nana DJOUA is a 37-year-old single woman from the commune of Kouandé, more specifically from the district of Chabi-couma in the north of Benin. When we met in Djougou, a town not far from her home where she has been living with her older sister for 8 years, she remembers, like it was yesterday, the painful ordeal she went through after contracting a disease she doesn’t know and which ended up ruining her whole life.

It all began one evening, when she was returning from the marigot where she went every morning along with her younger sisters to find water. On the way home, she suffered a sudden insect bite. Once home, desperate and distraught, Nana Djoua resorted to lemon, which she applied to the bite wound to reduce the pain. But after a few minutes, a spot appeared on her foot like the spots often caused by mosquito bites. But the spot was accompanied by itching. Over time, her foot began to swell.

“To begin with, my parents and I were completely unaware of this illness and thought it was a spell” she confides. Looking for way to cure her illness, the only thing she could do was to go to a traditional healer, Davougon, who lives in the Couffo department more than 400 km from her commune. The effort was wasted since the healer tried everything in vain. The hope for relief was brutally and completely extinguished.

Atrocious pain, a wound for life

As time passed, her health continued to deteriorate. There was still a wound on her deformed foot. The foot became heavier and heavier because its skin continued to grow. As a result, it became difficult for her to move around and go about her daily business. “The pain was so excruciating that the painkillers I was taking sometimes didn’t work”. In addition to the pain, she was also stared at by relatives and neighbours, which became unbearable. “I hardly left my room any more because I was ashamed of the way others looked at me”, she said, with tears in her eyes. Desperate after her stay with the traditional healer, Nana sank further into depression. Now she had no other solution available to her and those around her, who were also constantly wondering about the origin of this disease, and had begun to tire of her. “My family couldn’t bear to see me suffer like that”, Nana tells us.

A burden on the family

Among her family and loved ones, there was incomprehension, faced with a disease nobody knew about. To start with, several family members were almost convinced it was witchcraft. But their search for a spell to ward it off came to nothing. For her older sister, 45 years old and mother of 3 children who wished to remain anonymous, her younger sister’s life with this disease is quite simply a drama. Since the illness, she has been unable to carry out her activities. For her, a cereal seller at the market in Djougou, her life has also almost come to a standstill. “It’s an ordeal for me because in addition to my mother and my children, I also have my sister who used to help me a lot. She hardly moves any more”, she confides. Very touched to see her younger sister in this state
every day, the older sister adds bitterly: “I am sad to see her ill and disabled. Her condition and situation sometimes stop me from eating, especially since the man who wanted to marry her has rejected her because of this illness”. Like all members of her family, the older sister is also completely unaware of what is happening to her sister. “At first I didn’t know how serious the disease was. It was over time that I noticed she was having difficulty walking. My sacrifices and determination to help my sister regain her health have been in vain so far”, she says. Psychologically affected and severely hit, she tried everything to save her sister. “We have gone from healer to healer without finding the solution”, she says.

One year later, hospital as a last resort

After trying everything, and especially following unsuccessful traditional treatment by the healer, Nana D. finally decided to go to the hospital as advised by some family members. Once at the hospital in Kara, Togo, and following several tests, the doctor finally told Nana what she was suffering from. It was elephantiasis. A disease she had never heard of. In discussions with the doctor, it became clear that it is a rare disease, but one that ruins the lives of people who suffer from it. Following treatment, the pain is less severe than it was to start with. But, despite everything, my foot is still numb. Even though she now knows what she is suffering from, Nana’s life is not easy. Not completely healed, Nana has now turned to God and is praying to put the wound behind her for good and regain her mobility. For her older sister, the disease is a disaster and not one she will forget any time soon. “I wouldn’t even wish this disease on my enemies” says her sister. Because they have lost everything, including their savings.

Alain TOSSOUNON (Benin)
Abdullahi Tsanni is a science journalist based in Abuja, Nigeria. He has reported on science, health, agriculture, and biotechnology issues in Nigeria for publications including Nature, AllAfrica, Cornell Alliance for Science, Nigeria Health Watch, and African Newpage. Abdullahi has interviewed top scientists across sub-Saharan Africa, detailing stories about their research, workspace, and scientific enterprise on the continent. His story on how rancorous debates about genetically modified organisms affect public sentiments in Nigeria won the 2019 Open Forum on Agricultural Biotechnology in Africa Science Media Award in the print/online category. He works as a volunteer with Science Communication Hub Nigeria and African Science Literacy Network, helping with communications and providing input on media partnerships. He has a degree in biochemistry and is a prospective master’s student in science communication at Imperial College London.
Neglected Tropical Diseases, commonly known as NTDs, are a group of diverse parasitic and bacterial diseases that affect about 1.9 billion people worldwide. NTDs are largely present in Africa, Asia and Latin America, often in communities that lack access to water, sanitation and hygiene (WASH) facilities. These debilitating diseases such as trachoma, schistosomiasis (bilharzia) and onchocerciasis (river blindness) are preventable and treatable. However, they continue to cause severe disfigurement, blindness and other long-term disabilities in millions of people, posing a serious impediment to poverty reduction, socioeconomic development, and achieving Universal Health Coverage (UHC) according to the World Health Organization (WHO).

Mass Drug Administration in COVID-19

There are five strategies to prevent and control NTDs according to the World Health Organization (WHO). This includes preventative chemotherapy, individual case management, vector control, veterinary public health, and water, sanitation and hygiene. They implement some of these strategies through community-based approaches that rely on health workers and outreach in endemic communities.

As the coronavirus disease, COVID-19, spreads across African countries with fragile health systems, it prompted most countries to take drastic public health measures, including locking down of major cities to reduce the spread of the virus. But this preventive and containment measures such as lockdowns came with a costly price for other health issues including NTDs.

The COVID-19 pandemic resulted in disruption of NTDs prevention and control programmes worldwide. Medical services for people living with NTDs were ceased because of the travel restriction measures put in place by governments around the world. Besides the inability of NTDs pharmaceutical donors to maintain drug manufacturing for complexity of the supply chain of active ingredients, drug supply was also affected because of the closing of airports and increased costs of freight. In Africa’s most populous nation Nigeria, regular supply of drugs such as praziquantel used to treat schistosomiasis - one of several NTDs - was abruptly cut off, leaving affected communities unprotected against the disease.

Mass drug administration clearly plays an essential role in community-based interventions to address the burden of NTDs based on the WHO-developed strategy; it is central in the control and elimination of NTDs. However, as part of efforts to reduce the risk of COVID-19 transmission associated with large-scale community-based health interventions, WHO issued a general recommendation postponing mass treatment campaigns, active case-finding activities and population-based surveys for NTDs, in April 2020.

Subsequently, in May 2020, WHO reaffirmed its position on the postponement of mass treatment campaigns in another document entitled: “Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic.” The document recommended that countries should monitor and re-evaluate the need to delay NTD programmes at regular intervals. Other recommendations were conduc-
ting risk-benefit assessment of planned community-based NTD activities on an event-by-event basis before restarting NTD campaigns, and consideration of the capacity of health systems to provide safe and high-quality healthcare amidst the COVID-19 pandemic.

In July 2020, WHO introduced a decision-making framework for implementing NTD programmes in COVID-19 pandemic. They planned the framework to provide guidance to health authorities and NTD programme managers based on two steps: a risk–benefit assessment, to decide if the planned NTD activity should proceed, and an examination of a list of precautionary measures, to decide how the planned activity should be executed. The risk–benefit assessment aims to guide governments and NTD programme managers in decision making on the resumption of planned NTD activities, and in taking precautionary measures to decrease the risk of transmission of COVID-19 associated with the planned NTD activities.

The WHO further recommended that NTD interventions should proceed if the associated benefits exceed the risks, and precautionary measures should be considered, with the aim of decreasing the risk of COVID-19 transmission associated with the intervention.

**Restarting NTD programmes**

A study published by Sightsavers, a UK-based non-profit dedicated to ending NTDs around the globe, had warned that not restarting mass drug administration could enhance the risk of NTD transmission, and fail to leverage behaviour change messaging on the importance of hand and face washing and improved sanitation – a common strategy for several NTDs that also reduces the risk of COVID-19 spread. They call this the “hybrid approach.” According to the report, if adopted, the ‘hybrid approach’ would see NTD practices such as behavioural change messaging and water, sanitation and hygiene interventions also help prevent the spread of COVID-19.

The fallout of the COVID-19 pandemic has had a significant effect on several gains made in the control and elimination of NTDs, including on the roadmap toward ending various NTDs around the world. Thus, the resumption of mass drug administration is essential to reaching the targets of the new Roadmap 2021-2030 for the elimination of NTDs, and it requires the use of new tools and approaches for restarting NTD programmes amidst COVID-19. Thanks to Sightsavers, and partners, a new set of COVID-19 Risk Assessment and Mitigation Action (RAMA) tools, is helping countries, including Nigeria, restart mass drug administration programmes. The RAMA tools – one for treatment distribution, a second for disease specific surveys, and a third for case finding and surgical outreach – are based on WHO’s risk assessment tool on mass gathering; they complement WHO’s COVID-19 interim guidance document on considerations for implementing mass treatment campaigns for NTDs. Citing the benefits of RAMA, Philip Downs, technical director for NTDs at Sightsavers, notes that RAMA tools help NTD program managers to document and verify the command and control structure that will monitor the COVID-19 trends in areas where treatments are taking place, and use the risk communication strategy that will involve community leaders in the planning of NTD activities as well as enable independent technical advisors to evaluate the written standard operating procedures (SOPs) for how activities will be modified.

In September 2020, after conducting a rigorous assessment process in line with WHO’s guidance, Sightsavers resumed mass NTD treatments in some states in Nigeria. Additionally, to ensure treatment distribution is COVID-safe, trained local volunteers and drug distributors go from house to house, rather than distributing medicine in a central location, while observing strict guidelines on social distancing, hygiene, protective equipment and other safety measures outlined by the Nigerian government and WHO.

The interim suspension of NTD programmes and morbidity management services because of the COVID-19 pandemic has threaten NTD gains made so far. However, the restarting of mass NTD treatments through the use of innovative tools such as RAMA, is a great step in ensuring that the fight against NTDs continues in the time of COVID-19 pandemic. There is a need to strengthen health systems and disease surveillance as well as leverage new tools for restarting of NTD programmes, including change behavior messaging and handwashing, in the global fight against COVID-19.

Abdullahi Tsanni is a science journalist based in Abuja, Nigeria. This reporting is part of the #LinesofImpact Project on Neglected Tropical Diseases (NTDs) in commemoration of World NTD Day, supported by Speak Up Africa.
Based in Dakar, Senegal, Speak Up Africa is a strategic communications and advocacy organisation dedicated to catalysing African leadership, driving policy change and raising awareness around sustainable development in Africa. Through our programmes, networks and with the help of our partners, we ensure that decision-makers meet the actors on the ground, solutions are presented and every sector - from citizens and civil society groups to financial partners and business leaders - critically contributes to the dialogue and strives to take concrete action for health and sustainable development on the continent.
In November 2019, Speak Up Africa launched the ‘No to NTDs’ movement, which brings together individuals, political leaders, private sector companies and civil society organisations (CSOs) to raise awareness, ensure NTDs are prioritised at the government level and strengthen the commitment of all to accelerate the control and elimination of these diseases. More specifically, the movement aims to:

1. Increase overall political commitment to NTDs in order to increase national financial resources for these diseases
2. Strengthen the capacity of civil society organisations to make decision-making spaces on NTDs more inclusive
3. At the national level, create an enabling environment to make the elimination of NTDs a priority
LINES OF IMPACT

SpeakUpAfrica.

NO NEGLECTED TROPICAL DISEASES

For more informations, please visit www.notontds.org