Casualties of War: MSF Surgeons Treat Wounded Iraqis
Dear Friends,

Helping those struggling to survive today’s most acute conflicts and epidemics remains the focus of Doctors Without Borders/Médecins Sans Frontières’ (MSF) work. But accomplishing this objective in some of the world’s most hostile environments is becoming increasingly difficult and dangerous. On June 11, tragedy struck the MSF family. Elsa Serfass, a 27-year-old MSF logistician, was fatally struck by a bullet while traveling with an MSF team to evaluate health needs in the Ngaoundai region of northwest Central African Republic. Her tragic death is a terrible shock for MSF and we mourn her loss.

As the space for independent humanitarian assistance becomes smaller in many conflicts, MSF is adapting its programs and finding new ways to reach people trapped by wars and epidemics. There has been no clearer example of this requirement than in the case of the war in Iraq.

MSF teams pulled out of Iraq in November 2004 as targeted assaults on aid workers and indiscriminate attacks on civilians mounted. Although MSF could no longer provide lifesaving medical care within Iraq, the organization continued its efforts to develop a way to assist victims of the relentless violence.

In the summer of 2006, MSF’s desire to bring some measure of assistance to Iraq’s war-affected population was met with the courage and dedication of a small group of Iraqi surgeons. These surgeons reached out to MSF and described how they, along with their families and colleagues, were being targeted for assassination and kidnapping.

These Iraqi physicians told MSF that, after being injured in an attack by an explosive device or bursts of machine-gun fire, civilians were transferred to medical facilities where they encountered numerous difficulties in receiving proper treatment beyond initial emergency care. In this issue of Alert, you’ll read about a reconstructive surgery program for war-wounded Iraqi civilians that MSF has established in Amman, Jordan.

Also in this issue, you will read about the deteriorating situation in eastern Chad, where fighting has displaced more than 150,000 people, and the coming rainy season foreshadows a desperate situation. The MSF team in Thyolo, Malawi, will describe the challenges of delivering life-prolonging antiretroviral treatment for people living with HIV/AIDS. This issue also includes updates on MSF’s efforts to combat meningitis outbreaks and to fill the gaps in research and development for tuberculosis treatment.

As always, you can visit doctorswithoutborders.org to learn more about MSF’s efforts to help victims of the war in Iraq and in other conflict zones around the world. Thank you for your continued support.

Nicolas de Torrenté, PhD
Executive Director
US Section of Doctors Without Borders/Médecins Sans Frontières (MSF)
The car bomb sheered off nearly half of eight-year-old Ahmed’s face, stealing his left eye and amputating his left foot. Ahmed was so disfigured by the bombing last October that his father and uncle spent half an hour in the same Baghdad hospital room without recognizing him. The boy, in shock from the blast, was left speechless.

“He was there alone,” says Ahmed’s father through an interpreter. “He had an amputation without company from anyone in his family. No one knew him. He was just a child inside a hospital.” It would be three days before the father and son would be reunited.

After enduring several failed procedures to reconstruct his face, including multiple skin grafts, Ahmed and his father arrived in December 2006 at the Red Crescent Hospital in Amman, Jordan, where Doctors Without Borders/Médecins Sans Frontières (MSF) has run a reconstructive-surgery program for war-wounded Iraqis since August 2006.

By April 2007, the young victim had already undergone two extensive microsurgeries and was scheduled for at least three more procedures aimed at reconstructing his nose and lips. Ahmed is just one of 210 patients admitted to the program since its inception.

MSF has begun providing essential medicines and medical supplies to a number of hospitals inside Iraq; yet, the Amman-based surgical program—staffed largely by Iraqi surgeons—is the organization’s most direct attempt at aiding Iraqis since the organization was forced to withdraw its staff from Iraq in November 2004 in the wake of the deteriorating security situation there.

CRIPPLED HEALTH SYSTEM

The Iraqi health system is among the gravest casualties of Iraq’s violence. Hospitals, especially in Baghdad, do not have enough medicines, surgical supplies, or even electricity. Beyond the material needs, the Iraqi Medical Association estimates that, of the 34,000 Iraqi physicians registered prior to 2003, more than half have fled the country and at least 2,000 have been killed.

“It’s almost impossible right now to get operated on in Iraq,” says Dr. Bassam, an Iraqi orthopedic surgeon working for MSF. “All the more so since many doctors have gone farther north or left the country, looking for someplace safer. As a result, there are fewer and fewer specialists, and—on top of everything—they are being particularly targeted. Many of them were kidnapped after the war began in 2003. They are caught between a rock and a hard place.”

These factors have conspired with crippling effect to devastate Iraq’s health system. This scenario plays out almost daily: After a multiple-casualty attack, medical facilities are overwhelmed...
with wounded. Patients are often simply patched up, stabilized, and sent home, only later to face medical complications. Some people are afraid to go to hospitals that are operated by certain religious or political parties, or by armed groups.

“We have a very serious problem with the whole emergency medical system, from the time of the injury, to the evacuation, to the emergency rooms, until the final or elective surgeries,” says Dr. R., MSF’s medical coordinator in Amman and one of Iraq’s top orthopedic surgeons. “We see many cases of undiagnosed or mistreated injuries and many examples of complications of surgeries that should have been performed in a different way.”

GETTING TO AMMAN

Amman offers a secure environment in which MSF surgeons can work and in which patients, like Ahmed, can recover from surgery. A network of surgeons in Iraq refers patients to the program. Each patient’s medical history is reviewed carefully by the MSF team. Once the patient has been admitted into the program, MSF arranges all of the transportation and paperwork required to transfer him or her to Amman, a difficult and time-consuming process.

HIGH-TECH PROCEDURES FOR DEVASTATING INJURIES

The complexity and severity of the injuries endured by Iraqi war-wounded demand the most sophisticated and innovative surgical techniques practiced today. To repair Ahmed’s face, an MSF surgeon grafted skin and muscle from Ahmed’s back. MSF maxillofacial surgeons use three-dimensional computer models for preoperative planning and preparation.

“For plastics cases, we are dealing with difficult burns, scars, and contractures (lack of mobility),” says Dr. R. “We are not doing aesthetic surgeries; we are dealing mainly with functional surgeries. We have surgeries that last 11 or 12 hours. Some of the patients need six or seven surgeries, and they are admitted from four to six months.”

DRUG-RESISTANT INFECTIONS

Nearly half of the patients needing orthopedic procedures arrive in Amman with severe bone and wound infections, which are often resistant to multiple antibiotics. Unhygienic conditions in Iraqi hospitals and significant delays in receiving treatment make patients susceptible to infection.

“We are receiving patients with very difficult infections from Iraq,” says Dr. R. “In Iraq, the mismanagement and misuse of antibiotics all lead to the appearance of resistant bacteria. These bacteria are resistant to almost all antibiotics except one or two. And these are the new generation of antibiotics that are very expensive.”

JUST THE BEGINNING

On average, 40 new patients arrive at the Amman program each month, and MSF aims to more than double the capacity of the program. Even then, however, MSF’s workload will represent a fraction of the number of Iraqi civilians in desperate need of proper surgical care. Other MSF teams are still assessing ways to provide direct assistance to Iraqis still caught in the conflict.
“People here need water, food, and shelter,” says Franck Joncret, MSF head of mission in Chad. “They have been weakened by precarious living conditions, and when they fall ill, access to care is extremely limited. If nothing is done to improve the situation quickly, we could soon face an emergency and high loss of human life.”

Joncret has every reason to worry. Since late 2005, a conflict between government forces and rebel groups has been raging in the eastern part of the country. In addition, Chad and Sudan wage war on each other by sending armed militias across the border. Villages have been attacked, livestock and other possessions seized, and civilians killed. Violence intensified during the second half of 2006 and continues, causing residents to flee. The number of internally displaced villagers is climbing—it grew from 40,000 in June 2006 to nearly 150,000 today.

Emmanuel Drouhin, MSF’s program manager for Chad, says, “In the east, aid is concentrated primarily on refugees from Darfur, ignoring the displaced persons. Today, organizations are starting to focus on them but sufficient assistance has yet to arrive. The international community must step up to its responsibilities and send more aid to eastern Chad quickly. In two months, the roads will be impassable because of the rains, and it will become much more difficult to reach the displaced populations there.”

In Dar Sila, the region most affected by the conflict, more than half of the population—124,000 people—have settled in unhealthy camps clustered around cities and villages, including Goz Beïda, Adé, Dogdoré, and Koukou. On March 31, a deadly attack on the villages of Tioro and Marena—resulting in 250 to 400 casualties, according to the International Committee of the Red Cross (ICRC)—prompted residents to take to the road.

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“Armed men attacked early in the morning. They killed my husband and burned everything. Almost all the donkeys were dead, so I left on foot,” said a woman who, with her children, walked 40 kilometers (25 miles) to Koukou, where they and others set up a displaced persons camp, the third in the town. For lack of water, several died of dehydration along the way.

LIMITED RESOURCES IN SETTLEMENT AREAS

Displaced persons are settling wherever and however they can around the villages where they have sought refuge. Makeshift huts of straw and branches have been assembled in local fields, which will undoubtedly create tensions with residents during planting season. These flimsy shelters do not protect against daytime high temperatures that can reach nearly 46 degrees Celsius (115 degrees Fahrenheit) in the shade and drop precipitously at night.

They are also no match for the sand and rain storms that are beginning in the region. In February, a World Food Program survey estimated that merely six percent of families had received plastic sheeting to reinforce their shelters. Other distributions are scheduled but will not meet all the needs.

The towns hosting the displaced persons are unprepared to handle an influx of this scale. More than 50,000 refugees have settled in Goz Beïda, a town of 10,000. The gap is even wider in Dogdoré, with 2,000 inhabitants and nearly 30,000 displaced persons. There is little cultivable land, and water supplies are inadequate. Traditional wells are drying up and, in the best cases, provide only muddy water that is unfit to drink. Many of the rivers, known locally as wadis, are dry by now and any water lasting into the dry season is of poor quality. The systems that aid organizations have set up to provide additional water are also inadequate.
“Despite the presence of many aid organizations in Goz Beïda, the quantity of potable water is only 3 to 8 liters per person per day, while the minimum daily need is 20,” Joncret says.

**NUTRITIONAL SITUATION WORSENING**

MSF teams have already noticed an increase in the number of cases of child malnutrition. The displaced persons often leave their villages abruptly and are unable to bring food with them. They struggle every day to feed their families.

“We go into the bush to gather bales of straw or bunches of sticks to sell at the market,” says a displaced woman. Others work in brick factories to earn enough to buy a few kilograms of millet and pay the miller to grind it into flour.
Distributions like those scheduled as part of the United Nations’ three-month emergency plan, set up in early April in collaboration with the ICRC, supplement these survival strategies. However, the total calories provided are lower than the standard food-aid ration, and the population of certain camps has been underestimated, resulting in distributions that will meet only around half the daily need.

In response to the nutritional situation in Dogdoré, MSF will provide a month’s supply of ready-to-use therapeutic food to all children under age five (approximately 6,000) until September, the end of the rainy season. The team will also vaccinate all children under age 15 (about 13,000) against measles, a highly contagious virus that can spread like wildfire among displaced children and can exacerbate malnutrition. To increase the supply of water, MSF has brought in a drill that will help boost distribution to 20 liters per person per day.

Beyond shelter, food, and water, health care is a primary concern. For the most part, health centers and public hospitals are too small to address the needs of displaced persons and residents. The Goz Beïda hospital, with 40 beds, will not be able to serve the many patients who are expected to arrive as soon as the rainy season starts, with sicknesses that result from poor living conditions in the surrounding camps.

“Diarrhea, respiratory illnesses, and malaria are the most common illnesses here,” says Dr. Alberto Kalume Otshudiongo, who is part of the MSF team in Dogdoré. “I am worried because the rains have started and we will soon see a sharp increase in malaria and acute respiratory infections, which are particularly dangerous for children.”

**AID NEEDED BEFORE RAINY SEASON**

In general, despite the presence of many aid organizations, assistance to displaced persons in eastern Chad remains inadequate, while the needs are enormous. MSF is working to strengthen its assistance to the displaced populations in four key areas: access to food, medical care, and water, and shelter improvements in anticipation of the rainy season.
In late January 2007, Raul Gutierrez, a nurse from Mission Viejo, California, started his first assignment with MSF in Adré, Chad, where MSF runs a 40-bed hospital. The MSF team working in Adré Hospital provides the only surgical care in a region that has been wracked by fighting. On the morning of February 1, less than a week into his assignment, intense fighting broke out in Adré town between rebel and government forces. Gutierrez recalls the scene.

The day started out like any other. We were all in the hospital getting ready to start consulting with patients. Then we started to hear gunfire, which is actually a fairly normal occurrence in the area in and around Adré. But then there was a little bit more. It was 8:30 a.m. on a Thursday. Thursdays and Sundays are market days in Adré, and hundreds of people were in town by the market stalls when the fighting broke out.

We were in the building and all the hospital workers came into the room, as the “boom, boom” of explosions could be heard in town. The hospital is in the center of town not far from the Chadian army base. Via radio, we warned the team members who had gone to the airstrip that morning not to come back to the hospital. The entire hospital team huddled in the brick building and we tried to support each other.

"After the second round of fighting finished, all of the war wounded started pouring into the hospital."

The fighting stopped at 9:45 a.m. and then restarted at 10:20 a.m. for another hour. I remember because I was writing down my thoughts while the attack was taking place outside. When there was a lull in the fighting, four or five wounded people were brought to the hospital. Family members carried them through the gateway. A 21-year-old woman was brought in on a stretcher. I remember her distinctly because when I lifted up the cover of her blanket her legs were nearly amputated. There was also one child whose head had been grazed by a bullet.

After the second round of fighting finished, all of the war wounded started pouring into the hospital. I was overwhelmed. Back in Mission Viejo, California, the maximum number of patients admitted into our trauma center was five at one time and that would be for a car accident. And we had a huge team of doctors and nurses working in the trauma center there to handle just those five trauma patients.

I was still in a state of astonishment when I said to myself: “You have training in this kind of trauma care.” With the hospital having only a 40-bed inpatient capacity, we were putting the wounded anywhere we could find space. There were tarps being thrown down. It was very hectic with the mass of people arriving. Hospital workers who had had the day off came in to help out. The Chadian Red Cross volunteers in the town who have basic medical training also came to help out the MSF team. All the injuries were blast injuries or penetrating injuries like gunshot wounds in the belly and chest. We were putting in chest tubes and using other emergency techniques. There were several spinal cord injuries, including a soldier who was paralyzed from the neck down.

It was very chaotic because you had people who wanted to see their wounded relatives. We had to keep the soldiers’ weapons out of the hospital compound. At the hospital, we only have a surgeon and an anesthesiologist, and they provide the only surgical care for miles. They worked until midnight to care for the wounded. In all, the MSF and Red Cross staff treated 180 people—soldiers, rebels, and civilians alike. I left Adré in April, but the situation in the area remains tense.
EPICENTER: THYOLO, MALAWI

Taking AIDS Treatment Out of Hospitals

Worldwide, Doctors Without Borders/Médecins Sans Frontières (MSF) is providing life-prolonging antiretroviral (ARV) treatment to more than 80,000 people living with HIV/AIDS in 32 countries. By the end of 2006, MSF was treating roughly 11,000 of those people in Malawi through programs in Chiradzulu, Dowa, and Thyolo districts. Below, the MSF team in Thyolo writes about the challenges of decentralizing HIV/AIDS treatment in an effort to provide even more people with ARVs while there is still time to save their lives.

The Thyolo region of southern Malawi is a verdant area of tea estates. Bright green tea fields are cut through by reddish tracks, linking the many small villages. One of 28 districts in the country, it is also the area that is perhaps hardest hit by HIV/AIDS, with 20 percent of the population now testing positive for HIV.

Despite this grim statistic, concerted efforts are being made to provide treatment in this district of 575,000 residents, and the conditions for such an effort are right: The Malawian Ministry of Health has a national program to address HIV/AIDS; there is currently a supply of drugs for patients; and, MSF has worked in the Thyolo health district since 1997, helping to organize and provide effective care for those suffering from the disease.

While there have been many successes, establishing an efficient system of care delivery has been challenging, particularly given the rising number of people presenting themselves for treatment. HIV/AIDS education, testing, and successful treatment of opportunistic infections—conditions such as pneumonia that can claim the lives of people with HIV—have enabled more people to survive the virus. There are now more than 10,000 people in the district without access to antiretroviral (ARV) treatment who urgently need these life-prolonging drugs.

Accessing ARV treatment has not been easy for all who need it, particularly because the national treatment policy initially allowed drugs to be dispensed only at hospital-based clinics. However, the two hospitals in Thyolo district are wholly insufficient to handle the thousands of people who need ARV treatment. Moreover, for many people with HIV/AIDS, hospital-based care
is inconvenient and cumbersome. Long trips to the hospital by foot are expensive and unrealistic for people who aren’t feeling well, increasing their risk of forgoing or discontinuing treatment.

One patient living in Namileme, 25 kilometers (16 miles) from the nearest hospital, describes her experience: “I left at 3:30 a.m. on foot to Thyolo Hospital to try to get antiretroviral medicine, arriving after four hours of hard walking. I waited in the group counseling room until noon and as I was very hungry and thirsty, I left to the market to find something small to eat. When I returned, I was told the session was already over and I must return one week later. I now had to walk back home for another four hours without anything! Now I must walk back twice to Thyolo Hospital, once for a group counseling session and then again for an individual counseling session before I can get ARVs. The nurse says this is to make sure I will be committed to taking ARVs, but I already know very well that I really need the ARVs and I am ready to take the medicines. It’s just so hard to get them.”

The usual process for obtaining ARVs involves educational group counseling, followed by a one-week period during which patients consider making the commitment to treatment. Patients then return for individual counseling to understand how to take their ARVs properly. With these activities based in district hospitals, many people lose valuable hours they need to earn a living. On children’s clinic days, both mothers and children were exhausted upon arrival, practically falling asleep during counseling sessions!

OFFERING PATIENT-CENTERED CARE

Having set a goal of providing ARV treatment to 10,000 people by the end of 2007, it became clear that MSF needed a new approach in the Thyolo program. MSF needed to get drugs to many more people before their disease progressed to the point where they required more intensive medical care. And MSF also needed a faster, less cumbersome, and more patient-friendly system.

MSF’s solution was to decentralize ARV treatment, moving follow-up services for patients who were stabilized on treatment out of the hospitals and into nine local health centers. To maintain quality care, MSF developed criteria for eligible patients and health centers. All staff who would be providing ARV treatment were also required to undergo training. These workers are supported by a mobile MSF team that travels to the health centers for supervision of treatment, counseling, and dispensing of ARV drugs. The health center teams continue the regular follow-up activities with continuous support from MSF.
Patients wait to be examined at a hospital in Thyolo District, Malawi, where MSF has run an HIV/AIDS and TB-support program since 1997. 2006 © Julie Remy

A pregnant woman is tested for HIV at the hospital in Thyolo District. 2006 © Julie Remy

Nurses take the blood pressure of pregnant women at a hospital in Thyolo District, where MSF has implemented a program to prevent mother-to-child transmission of HIV. 2006 © Julie Remy
This approach is helping to “de-medicalize” HIV, empowering individuals and community members to be more involved in caring for those who have the virus. Communities are developing networks that engage in a range of supportive and innovative activities, such as checking in with peers at community meetings to make sure pills are being taken properly, and taking life-affirming “before and after” photographs of people on treatment and living with HIV, which helps to reduce the stigma of the disease.

Today there are more than 2,000 people who have formed an association linked to the National Association of People Living with AIDS (NAPWA). Members are identifying ways they can help one another, undertaking projects such as organizing vegetable, maize, and fish farms to help feed people who are poor and unwell, and creating vocational training and income-generating activities for HIV/AIDS orphans.

A DEARTH OF HUMAN RESOURCES

The numbers show that decentralization is working—in one village alone MSF rapidly went from 20 to 150 people on ARV treatment. But this new approach also comes with its own challenges, the most serious being the lack of adequate and well-trained medical personnel. As in many other African countries, there is a chronic shortage of human resources here. Malawi graduated only 16 new doctors in 2005, and only one remains in the country. The government is permitting us to train medical assistants to provide ARV treatment at the health-center level because there simply are not enough medical doctors or clinical officers to do so.

The pre-existing health center staff who are now involved in community-based HIV activities are understandably feeling overstretched. HIV care is an added activity when they have many other responsibilities and administrative duties. Other priorities—primary health care, vaccination programs, training workshops, or providing relief for colleagues on annual leave—compete with HIV care and sometimes result in clinics not opening when they are supposed to. Absenteeism among medical staff is also a problem and can be attributed, in part, to low salaries.

Although MSF has raised health staff salaries as compensation for the increased workload, there is a limit to how much work one can do in one day. The lack of human resources is the most significant obstacle to our decentralization effort.

SIMPLIFIED TREATMENTS CRUCIAL

As MSF now begins to initiate treatment at local sites, simplified treatments will be the backbone of successful decentralization.

This is the most practical response in the face of human-resource shortages and will give patients and caregivers as much control as possible for their care.

ARV drugs must be: effective and meet international standards; easy to administer (consisting of a fixed-dose, three-in-one combination pill taken twice a day); and child friendly (easily breakable, for example) for young patients. In this resource-poor setting, drugs requiring no refrigeration are needed, as is a schedule of drug intake that has no relationship to mealtimes.

REACHING MORE PEOPLE, SAVING MORE LIVES

Scaling up access to ARVs to treat more people is a challenge, especially as the caseload increases. Decentralization is not an easy process, nor is it inexpensive to provide patients with treatment. Research and development into pediatric diagnostic tools and drugs, simplified treatment protocols, and affordable second-line medications for those who need to change drugs will really help us leap forward.

But despite the limitations and multiple constraints on resources, decentralization is proving to be a good approach for getting treatment to more people who, quite literally, will not live without it. Our staff sees a visible difference in the health and vibrancy of the patients MSF treats as a result of their having access to the care they need.

From one of our patients at a treatment site in Milongwe: “I spent a lot of money trying to access ARVs at Thyolo, but I did not succeed. The first two weeks of taking ARVs are wonderful. I feel the difference. I actually can feel life coming back.”
My Life with HIV: Zoila Ibone Meija

Living with HIV/AIDS doesn’t have to be a death sentence. Most people living with the disease who receive antiretroviral (ARV) treatment are healthy and can lead fulfilling lives. MSF gave cameras to people living with HIV/AIDS in eight countries and asked them, with the help of their friends and relatives, to document their lives in photos and words. Here is Zoila’s story from Villa El Salvador, Peru. Other stories can be viewed at doctorswithoutborders.org.

I discovered that I was HIV-positive when I was pregnant with my youngest child, José. My husband died on March 5, 2004. He had AIDS and died of tuberculosis. I live in Villa El Salvador with my three children.

Before I started the treatment I was just lying in bed all day long. I didn’t have the energy to do anything. After the death of my husband I was sure that I would be the next to die. I was always thinking, Today is my last day.

When I gave birth to José I didn’t believe he would live past his first birthday. That’s what they told me at the hospital, so I started collecting mementos of him. I kept his umbilical cord and his hospital bracelet. I also kept the syringe I used during the first weeks to give José his medicines. And I started keeping a diary. The photograph in this picture was taken on his first birthday. We had a huge cake because it was a very special party for us.

I had to give José a medicine syrup. He was crying and I felt so bad; he was only a baby and he had to take medicines because of me and my illness. Someone told me that there was a center in town where mothers with HIV could get milk for their children. Early one morning I went downtown to look for this center, called San Camilo. I saw that I was not the only mother with HIV. I felt lucky because I had a house for my children.
These are my three children in our bed. We sleep together and when I go to bed they fight because they all want to be next to me. Celebrating their birthdays reminds me of my reason for living. They are all my life. The one in the middle, who is pretending to be asleep, is my eldest. His name is Jhon Jhonson and he’s 10 years old. I got pregnant when I was only 16 and I had to leave school. Jelin is the little girl on the left and she’s really asleep. She wants to be a doctor. She said, “I don’t want to see any more people sick and suffering like you and dad, I want to take care of sick people.” I want to give her opportunities, I want her to go to school and have a better life than mine. José is two years old and today I found out that he’s HIV-negative.

In February 2004, I started to take antiretrovirals (ARVs) and my life changed. After a few days I felt a new energy. Before, when I opened my eyes I just wanted to close them again and stay asleep all day. Now I wake up and I want to do things. I have the strength to take care of my children, to work, and to walk around. The ARVs give me the chance to see my children grow up and this is the most important thing for me.

In 2004, I started to take antiretrovirals (ARVs) and my life changed. After a few days I felt a new energy. Before, when I opened my eyes I just wanted to close them again and stay asleep all day. Now I wake up and I want to do things. I have the strength to take care of my children, to work, and to walk around. The ARVs give me the chance to see my children grow up and this is the most important thing for me.

Everybody in my barrio knows that I’m HIV-positive. I am not afraid of talking about it because I want to show that people living with HIV can have a normal life if we have access to medicines. It is so important for us. This picture represents my future and my hopes. I’m training to become a counselor for people living with HIV. To get on the course, I had to pass a psychological test. I want to learn more about AIDS, opportunistic infections, ARVs, and so on. I want to help people like me. This is my goal today, and I know I still have a lot to do.

All photos: 2006 © Zoila Ibone Meija
A patient co-infected with HIV and multi-drug-resistant tuberculosis (MDR-TB) takes her drugs at Blue House, an MSF clinic on the edge of Mathare, one of Nairobi’s largest slums. MSF began treating MDR-TB in Kenya in May 2006 and is the only treatment provider in the country. © Brendan Bannon
Symposium Offers Concrete Proposals to Tackle Tuberculosis Crisis

In January, Doctors Without Borders/Médecins Sans Frontières (MSF), supported by Weill Cornell Medical College, held a symposium in New York City aimed at speeding up the development of drugs to treat tuberculosis (TB), a disease that kills nearly two million people each year in developing countries and for which there is woefully inadequate research and development (R&D) taking place.

Titled “No Time to Wait: Overcoming Gaps in TB Drug Research and Development,” the meeting convened more than 100 TB specialists, drug developers, policy makers, and TB activists to discuss and deliver concrete responses to this health crisis. Day 1 consisted of presentations from participants outlining the root problems that curb R&D. Day 2 consisted of group discussions and workshops, and the presentation of the group’s conclusions.

Participants agreed that securing more funds to fight TB is absolutely critical. An estimated $900 million per year is needed, a nearly five-fold increase from the mere $200 million invested in 2005. Meanwhile, the disease is becoming harder to combat. Nearly half a million new cases of multidrug-resistant TB, termed MDR-TB, occur every year, and an extremely drug-resistant form of the disease, XDR-TB, is also spreading. Annually, nine million people contract TB, and two million die from the disease, which affects the lungs, causing shortness of breath, persistent cough, and chest pain.

“We are failing people with TB,” said Dr. Tido von Schoen-Angerer, director of MSF’s Campaign for Access to Essential Medicines. “The urgency for new tools could not be greater.”

Today, the diagnostic test used for TB is 120 years old; its accuracy rate is 45 to 65 percent, and even less for those co-infected with TB and HIV/AIDS. First-line drugs for the disease were developed 50 years ago and require patients to take daily supervised treatments for six to eight months.

New treatments are in the development pipeline, but there should be many more, and the process should be accelerated, all of which requires funding. Only $20 million is spent annually on clinical trials for TB drugs worldwide—compared to the $300 million for HIV drug development in the US alone.

A sad irony is that TB kills 30 percent of the 40 million people living with HIV/AIDS by invading their weak immune systems. The archaic treatment for co-infected persons requires the ingestion of up to 16 pills per day.

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“In TB research, there needs to be a convergence of innovation, incentive, and access,” said Dr. Carl Nathan, Rees Pritchett Professor of Microbiology and Chairman of Microbiology and Immunology at Weill Cornell Medical College. “We need to see openness, leadership, and collaboration among all TB actors.”

That most people living with TB are in developing countries means that there is little potential for monetary gain and thus little incentive for the creation of more efficient drugs and diagnostics. Participants voiced support for current discussions at the World Health Organization for a treaty that addresses who should pay for essential medical R&D and that separates incentives from drug prices. Rewards would be based instead on the benefits of new inventions to health care.

Participants also advocated an innovative concept that addresses the problem of slow drug discovery, known as “open-access drug-discovery entities.” These entities would be contract-based sites where scientists from academia or other institutions would work with pharmaceutical-industry scientists to combine resources and knowledge and ultimately speed up the development process.

The crucial clinical-trial phase of R&D was also discussed in detail. “We need increased clinical-trial capacity, fast-tracked clinical trials, and criteria for compassionate use of important candidate drugs,” said Dr. von Schoen-Angerer.

Participants supported expanding clinical trials into developing countries where they are most needed. “Compassionate use,” or the provision of drugs awaiting official approval to extremely sick people, was also advocated as a way to shorten the time between clinical drug development and use. Speedier delivery could be especially helpful in the case of MDR-TB, where the disease is spreading so rapidly, there literally is no time to wait.
EMERGENCY DESK: ARUA, UGANDA

Responding to a Meningitis Epidemic in Uganda

Over three weeks in February 2007, MSF responded to an epidemic outbreak of meningitis in the West Nile region of Uganda by providing a mass-vaccination campaign that reached 624,000 people and treated 2,802 already infected with the disease.

In early January, an MSF team running an HIV/AIDS treatment center in northern Uganda’s Arua district learned of suspected meningitis cases in the area and immediately began to investigate. This region is just south of Africa’s “meningitis belt”—a swath of land that stretches from Senegal in the west to Ethiopia in the east and is highly prone to epidemic outbreaks—so the appearance of the disease was “a red flag,” said MSF nurse Molly Sweeney. The MSF team on the ground began to track cases and look for others. Soon, an additional 17-member emergency team, including Sweeney, was dispatched to coordinate the vaccination campaign, treat the sick, and monitor the epidemic.

Early data confirmed that the outbreak was caused by the A strain of meningococcal meningitis—the most common strain—and that people aged 2 to 30 were at the greatest risk of infection. MSF, working with the Ugandan Ministry of Health (MoH) and the World Health Organization (WHO), helped organize a vaccination plan targeting that age group and making sure there was enough of the vaccine available. Right away, there were concerns about securing adequate doses.

“There is a shortage of the vaccine worldwide,” said head of mission for MSF in Uganda, Renaud Leray. “There are only seven million doses for 2007 that have been put in stock for emergency preparedness for the entirety of the meningitis belt. Our worry is that it will not be enough to cover all the needs.”

Simultaneous outbreaks across the meningitis belt this year, predominantly in Burkina Faso, Sudan, Democratic Republic of Congo, and other parts of Uganda, increased that fear. Meningococcal meningitis, a potentially fatal infection of the brain membrane that is carried in the nasal passages, is highly contagious. The disease is spread through the air by sneezing and coughing and can be contracted by sharing close quarters with an infected person or sharing eating and drinking utensils. One can have the infection without showing any signs, and death can occur within hours of the onset of symptoms.

With more than 75 staff members on the ground, the vaccination team went to work on February 2. Twenty days later, the team had supervised the immunization of 291,000 people and had assisted the Ugandan MoH in immunizing 333,000 more in the Arua and Koboko districts. Vaccinations were carried out in schools, churches, health centers, and even under mango trees. One vaccinator working with assistants who prepare the vaccines can immunize up to 1,500 people per day. At one of the vaccination sites, MSF nurse Theanne Theopoulius explained the need for efficiency.

“Here we have four vaccinators because there are so many people, and three or four preparers as well,” she said, “So we want to keep things running consistently like a machine.”

TREATING THE SICK

Meanwhile, the challenging business of treating those already infected with meningitis was also in full gear. Three doctors made daily rounds to 29 regional health care centers and hospitals in the Arua, Koboko, Adjumani, and Yumbe districts. Of the 2,802 patients who received treatment, 74 did not survive. A 2.5 percent fatality ratio is considered relatively low, and MSF’s treatment strategy was successful. However, any loss of life to this preventable disease is frustrating.

Dr. Okonta Chibuzo, a Nigerian physician who is part of MSF’s emergency pool and regularly responds to epidemics, lamented the death of a 27-year-old patient he had examined the previous day. “We did everything we could within our limits,” he said. “It’s an unfortunate few who don’t make it. Usually the ones who end up dying are those who arrived too late, and we can’t really do much at that point. They’re just too far gone already.”
MSF’s goal was to reduce the number of fatalities by reducing the time between the onset of symptoms and treatment. If a patient is treated within 72 hours of the appearance of symptoms, his or her chances of survival are greatly increased. Symptoms can include sudden, intense headache, fever, nausea, vomiting, photophobia, and stiffness of the neck. Mental disturbances and neurological disorders can also occur.

Treatment of meningitis usually involves a single-dose injection of the antibiotic oily chloramphenicol. After receiving this shot, most infected people improve enough within 24 to 48 hours to go home and eventually fully recover. Treatment for young children and pregnant or lactating women consists of one daily injection of the antibiotic ceftriaxone. Five to 10 percent of patients who receive treatment are nevertheless left with neurological after-effects such as deafness or mental retardation. Without treatment, about 50 percent of infected persons will die.

Unstable Vaccine Supply
The limited amount of vaccine to protect against the A&C strain of meningitis is of major concern. For the moment, the entire supply of vaccine is dependent on one supplier, Sanofi-Pasteur. In May 2006, Sanofi-Pasteur announced that it was suspending vaccine production while it transferred its manufacturing capacity to another site, leaving only 25 million doses for the 2007 meningitis season. That quantity is extremely worrisome considering that in Nigeria in 1996 more than 13 million people were vaccinated over the course of the epidemic there.

From 1995 to 1997, Africa experienced more than 250,000 cases and 25,000 deaths from meningitis, the largest recorded meningitis epidemic in history. While the outbreak this year has not come close to that level, the limited supply of meningitis vaccine will be an ongoing concern until alternative sources become available. The unpredictable supply of vaccine usually slows the response to epidemics since all requests for emergency supplies of the vaccine must be approved by an interagency body called the International Coordinating Group (ICG) on Vaccine Provision for Epidemic Meningitis Control, of which MSF is a member. The ICG was formed to protect the limited stock of available vaccines and prioritize their use for countries experiencing epidemics.

In the meantime, there is some hope on the horizon. A new vaccine that remains effective in the body for longer than the current three-year period is currently in clinical trials. However, it probably will not be available widely until 2012. MSF is working with the World Health Organization to find alternative sources of the current vaccine until the new one is available, but no results are expected before next year.
In March, Bangladeshi authorities requested that hundreds of Rohingya refugee families evacuate Tal, a makeshift camp—without providing an alternative place for them to go. Ultimately, the government did not force the families to leave, but the threat cast a spotlight on Tal camp’s squalid conditions. For decades, members of the Rohingya Muslim minority group have been fleeing to neighboring Bangladesh to escape what they say is government oppression in Myanmar. Some 26,000 Rohingya refugees live in official UNHCR refugee camps while thousands live in unofficial settlements such as Tal. Here, families have constructed a sea of crude shelters, 79 percent of which are flooded by river overflow during the rainy season. Diarrhea, respiratory infections, and malnutrition are prevalent. In 2006, MSF responded by opening a medical clinic, where 140 consultations are conducted each day, and a therapeutic feeding center, where about 40 children are fed daily.

However, the terrible conditions remain. The government request for evacuation stemmed from its effort to clear the sides of roads throughout Bangladesh. Many of the Tal shelters were moved closer to the river, some of them into the mud.