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Babies who are born prematurely or underweight are under special observation in Lugala Hospital and receive more intensive care.
The heavy burden of Southern Africa

The birth of a child is a very special, joyous moment for the parents-to-be. Yet, when the baby is born prematurely, a period of fear and uncertainty begins. A birth prior to the 37th week of pregnancy is classified by the WHO as a premature birth. Many advances have been made in medical care for premature babies. Their chances of survival and healthy development are high. However, this requires necessary care immediately after birth.

The chances of survival still primarily depend on the place of birth. Premature children in Africa have disparately lower chances of survival than a premature infant born in Switzerland. Whereas in Africa, in countries with low and medium incomes, in many locations there is inadequate basic health care for premature infants, in Switzerland even preemies born before the 28th week have good chances of survival and development.

Sub-Saharan Africa carries a heavy burden with 28 percent of global premature births. Premature infants, especially in rural Africa, die much more often. And even if they survive, they often suffer from developmental disorders and poor health.

Luckily, appropriate care for premature infants and babies with low birth weight does not have to be expensive. One scientifically researched and practised method is the kangaroo care method, in which the mother establishes close skin-to-skin contact with the premature infant and breastfeeds it exclusively. Among other things, mother’s warmth prevents hypothermia in the little baby. SolidarMed recently introduced this method in the rurally located Lugala Hospital in the District of Malinyi in Tanzania, and successfully expanded the premature infants ward. Its success speaks for itself. Significantly more premature infants now survive the crucial first days.

Word of the good treatment has quickly spread. More and more mothers, even from far-away villages currently travel to the ward with their prematurely born infants. The medical need is substantial.

Thank you for helping us care for premature infants with the kangaroo care method, thus significantly increasing their chances of survival.
In the spotlight

Tanzania

Inhabitants  56'319'000
Doctors per  1,000 inhabitants  0.46
Infant mortality (under 5 years of age) per 1,000 births  48.7

Susanna gave birth to her little boy at home in the village just under 16 days ago: birth weight 1.8 kg, in the 34th week of pregnancy. A premature birth, with a low chance of survival. Yet Susanna quickly reacted and sought help immediately after giving birth in the new premature infants ward in Lugala. That was the baby’s salvation. The young woman’s gratitude is etched on her face, since her little boy is

Lugala Hospital’s premature infants ward in Tanzania has been a success story since its opening in July 2019. Premature infants survive thanks to the kangaroo care method and simple medical measures. After just a few months, the ward has reached its capacity, so it has to be urgently expanded.

Tanzania’s sun mercilessly beats down upon the country. Susanna Lemak provides shade to her kanga-wrapped baby and enters the premature infants ward in Lugala. It’s time for another check-up. The women, clad in their colourful garments, the traditional Tanzanian kitenges, glance laughingly at the young mother and her son. It’s hot and damp inside there too.

Skin-to-skin contact with the mother and breast-feeding are essential for premature infants’ health.

Ensuring the survival of preemies
drinking heartily and constantly gaining weight. The scale reads 2.2 kg today. Susanna is beaming.

The premature infants ward at Lugala Hospital is a SolidarMed success story. Luna Pescia, a newly qualified doctor from Ticino, set it up together with SolidarMed project leader Peter Hellmold and Lugala Hospital. When it opened in July 2019, the ward had five beds. Yet after just a few days, two more beds, and later mattresses too, had to be added. Today, the little ward is already filled to the brim and urgently requires expansion. On average, there are currently about 20 premature infants and their mothers in the same room at the same time. 40-45 premature infants are treated here each month.

Warmth for the littlest ones
Neonatology in a place like Lugala is not high-tech, cutting-edge medicine. Rather, it focuses on what is simple, useful, and feasible. The basis here is the so-called kangaroo care method, originally developed in Bolivia. The mother carries her child directly against her skin as many hours a day as possible. This is so the mother’s body heat can prevent impending hypothermia in the child. Scientific studies have shown that this method can be as effective as a modern incubator. In addition, the ward was built with glass windows to maintain a constant temperature in the room and prevent the premature infants from experiencing hypothermia. The respiratory movements from the mothers’ rib cages stimulate the new-borns’ breathing. This reduces the risk of respiratory arrest episodes in the premature infants whose lungs are often still poorly developed.

The kangaroo care method has actually been part of the official Tanzanian health policy since 2008, but unfortunately, it is still not used in very many places. Since the ward opened in Lugala, district healthcare officers have already visited the hospital many times and were impressed. Today, the ward is fitted out with a lot of equipment that can ensure the survival of premature infants: suction units for lung secretions, oxygen concentrators, but also a ventilation device for premature infants (so-called CPAP devices). A phototherapy device for treating jaundice is also often used.

“The kangaroo care method gives rise to a different way of thinking in Tanzanian mothers.”
Peter Hellmold, Project Manager for new-borns, Malinyi

Supporting mothers
And that is also urgently needed since the new-born mortality rate in Tanzania is still extremely high. Half of all children who do not live through their first seven days die immediately after

The premature infants ward at Lugala Hospital
Lugala Hospital is located in Tanzania, in the southern region of Morogoro, in the remote district of Malinyi. The living conditions of the population in the catchment area of Lugala Hospital are fraught with poverty, health problems, low literacy rates and the daily struggle to meet basic needs. The catchment area of Lugala Hospital is home to some 160,000 people, primarily in the districts of Malinvy and Kilombero. The premature infants department has a team of seven nurses who care for patients round the clock, working in three shifts.
birth within the first 24 hours. The babies admitted to the kangaroo mother ward are not all born in Lugala, but rather some are also transferred to Lugala from other healthcare facilities in the district or taken there right from home.

Peter Hellmold, who has worked for SolidarMed in Lugala for years, and himself is married to a Tanzanian woman, emphasises that the new ward is not only medically valuable and useful: “The kangaroo care method changes Tanzanian mothers’ way of thinking”, Hellmold says. “They learn to trust that even babies weighing just 1,000 g can survive if properly cared for.” Just now, a baby was born in the 25th week of pregnancy. In rural Tanzania, this child would otherwise not have any chance of survival. In contrast, in the kangaroo ward, the chances are really good, says Hellmold. Crucial for premature infants’ survival is not only heat, but also regular nutrition through breast-feeding every two to three hours. Registered nurse and midwife Habiba Nyagongo also guides the women in breast-feeding. If the baby is not yet able to suckle, the registered nurse carefully places a feeding tube through its nose to provide it with breast milk.

Creating a foothold and support
Supporting the women however goes beyond just medical care. In this vulnerable phase, the young mothers also need emotional support. Their stay in the ward offers certainty and confidence for the baby’s well-being. At the same time, being far from home is also a huge burden, since there is often a field waiting to be tended, and a hungry family. A difficult dilemma for the women.

The risk of premature death of the premature infant is still present. That is why many of the new-borns in the ward don’t have a name yet. That lessens the pain when the child does not make it through the first few days. A few tears, a prayer, then the women have to “function” again, and take care of the other children and their family at home. There is not much time left for goodbyes and mourning. Even though these sad moments exist, thanks to the premature infants ward, they are becoming less frequent.

With the daily weight checks, the mothers see how their children are gaining weight and their health is stabilising. The community with the other women, the daily routines such as washing the kangas and kitenges, laughing and speaking with one another – all of this gives the mothers firm footing to weather the trying time.

As soon as a baby has reached the required birth weight, its lung function has developed enough and its condition is determined to be stable, the women and their children return to the village community.

Expansion of the premature infants ward
Doubling the size of the existing ward makes it possible to further enhance safety for premature infants. But the necessary equipment for this is still lacking: beds, lung machines (CPAP), oxygen measuring devices, baby scales. In addition, the health care personnel’s training needs to be intensified. Typically, 25 people take part in a course unit which provides training over 5 days, for 2 hours a day. This allows clinical operation to continue despite the training. Additional training courses are planned at the 14 healthcare centres in the district of Malinyi, to raise midwives’ and nurses’ awareness of this method.
Expansion of the kangaroo premature infants ward

The demand for care is much greater than originally planned. Now women from other healthcare stations as well are coming to Lugala in case of complications after birth. For this reason, the building is now being expanded by another room. This will provide the mothers and their babies more space; at the same time, the adjacent building can be used as a ward for babies with birth defects, acute oxygen deficiency, blood poisoning or pneumonia. Dividing these two wards serves to isolate infected babies from those with low or very low birth weights. "An important step towards being able to save more lives," says Peter Hellmold.

You’ll find more photos of the premature infants ward in our image gallery:

solidarmed.ch/en/kmc

Facts and figures

Low birth weight and premature births are associated with a high mortality rate. 16% of all babies in Tanzania are born with a low birth weight. Of the 45,000 new-borns that die each year in Tanzania, 86% have too low a birth weight and 27% are premature. 50% of all deaths among new-borns occur during the first 24 hours after birth, whereas 75% die within the first week of life. 48% of the population of the district of Malinyi is under 15 years old. The official mortality rate in children under 5 years old in Tanzania is 54 per 1,000 live births, of which 50% die in the first month of life.

Susanna Lemak’s baby was born in the 34th week, weighing just 1.8 kg. Two weeks later, during the follow-up check-up, he already weighs 2.2 kg.
SolidarMed makes a difference

Assisting expectant mothers

SolidarMed supports expectant mothers during their pregnancy. The goal is safe births and lower maternal mortality. Here’s how SolidarMed makes a difference in Mozambique.

6. Follow-up check-up

If the pregnant woman is in a healthcare centre when labour begins, she is not only provided with medical care during labour, but also in the critical first few days thereafter. The new-born also receives the necessary care.

5. Birth

Births at healthcare centres are safer than in the village. In case of complications, the mother cannot receive medical assistance in a remote village.

4. Waiting buildings for mothers

In some healthcare centres, there are waiting residences for expectant mothers. There, the mothers receive assistance from a midwife and spend the last few days prior to birth. This provides safety, especially in case of at-risk births, e.g. multiples.

SolidarMed provides continuing education to healthcare personnel in primary care and obstetric emergency care. After birth, the mother receives a baby package containing soap and a tub. These tools support caring for the child and also serve to create an incentive for women to give birth in healthcare centres.

SolidarMed is currently building an operating theatre in the healthcare centre in Namuno for caesarean sections. This allows women with at-risk births and birth complications to safely give birth.

SolidarMed promotes the operation and construction of waiting residences for mothers as a measure for safe births. Such facilities are still lacking at many healthcare centres.
SolidarMed makes a difference

1. Family planning

At the local healthcare centres, young adults will find a point of contact in a space specially designed for this purpose to be able to ask their questions about sexuality, contraception, and pregnancy. SolidarMed tries to promote “Youth Corners” at all healthcare centres, since counselling adolescents is an important contribution towards preventing unwanted teen pregnancies.

2. Screenings

Ideally, a pregnant woman undergoes four check-ups at a healthcare centre. She is accompanied by the traditional midwife from her village. The expectant mother receives a mosquito net to protect her and her family from malaria.

SolidarMed raises awareness in traditional midwives in the villages to support check-ups at healthcare centres and medically assisted births. The check-ups are continuously improved through monitoring and further education of the healthcare employees. In addition, SolidarMed supports midwives in their role of accompanying expectant mothers during their pregnancies.

3. The way to the healthcare centre

For a medically assisted birth at the closest healthcare centre, expectant mothers often need to undertake kilometre-long treks on foot. No easy task, especially when they’re going through labour.

SolidarMed makes transport to the healthcare centre possible for pregnant women with the e-bike ambulance or the Oka taxi when complications arise, or contractions start. Both means of transport allow pregnant women to get to the healthcare centre free of charge. When the Oka taxis are not in use, drivers can use them to provide for-charge rides.
Projects

Vocational training courses go online

**Hyderabad** In India, many schools and vocational training offerings are still closed due to the corona crisis. The local partner organisation was searching for an innovative solution to continue to offer the training courses. Now three programmes of a vocational training centre in Hyderabad are offered online. The courses are mainly aimed at school leavers, single mothers, teenagers with HIV and young women saved from forced prostitution. The various courses teach e.g. computer and English skills or skilled trades. After completion, the graduates have acquired a mastery of their trade which allows them to succeed on the labour market. This clearly sets the courses apart from many training programmes offered by other skill training centres. Of the more than 1,200 graduates, just under 90 percent find a job as soon as they finish the programme. The former Aids and Child Foundation supported vocational training for around 40 young women. The project is now being continued under the umbrella of SolidarMed. ■

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New maternity ward in rural Tanzania.

**Tanzania** In cooperation with the local health authorities and the local village community, SolidarMed successfully converted an empty building at the Mwaya Health Centre in the district of Ulanga into a new maternity ward with a birthing room and 25 beds. The official opening of the new ward is set to happen soon. With over 1,000 births per year, including caesarean sections, the birthing ward was often overfilled, jeopardising the hygiene and medical care. This project expands on SolidarMed’s activities in the same region, which are aimed at improving the health situation of pregnant women, new-borns, and adolescents. ■

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Successful implementation of HIV self-tests in rural Lesotho

**Lesotho** Together with his team at Swiss TPH and SolidarMed employees, Niklaus Labhardt, president of SolidarMed, developed a strategy with which HIV test coverage could be increased by 20 percent. It combines house calls with HIV self-tests. This procedure is a crucial component on the path to ending the HIV/AIDS epidemic. In Lesotho, one out of every four adults is infected with HIV. According to estimates, around 15 percent of infections remain undetected, thus contributing to further spreading the virus. Two studies on this strategy were published - in The Lancet HIV and the Journal of the International AIDS Society. ■
Inauguration of the first mobile clinic on wheels in Butha-Buthe.

Lesotho In order to provide high-quality health care right in the remote villages in the mountains, SolidarMed, in cooperation with the Canadian partner organisation Bracelet of Hope and the Lesotho Ministry of Health converted a rugged car with four-wheel drive into a mobile healthcare clinic. The vehicle is equipped with the most crucial instruments and medicines. The mobile response team consists of a driver and a local registered nurse hired by SolidarMed. This team now visits remote villages in the district of Butha-Buthe and provides primary medical care in HIV, mother-child health, diabetes, and high blood pressure. This way, people who would otherwise have to undertake hour-long and arduous journeys on foot for medical treatment in the next healthcare centre can be reached.

App to reinforce HIV care in Zimbabwe

On 7 September 2020, Laura Ruckstuhl, SolidarMed country coordinator for Zimbabwe presented a new app at the Digital Health Forum of Medicus Mundi Switzerland (MMS) in Berne. SolidarMed Zimbabwe developed it in collaboration with the Ministry of Health and Child Care in Masvingo. This smartphone app supports clinical mentoring of Health Care Workers in the field of HIV with a digital platform. It provides the mentors with timely information so they can increase the skills and competencies of health care workers in HIV management in a targeted way.

Using this app, the mentors can gain an overview about the healthcare facility and healthcare personnel in order to eliminate weak points in a targeted manner during the next visit. An overview page provides health authority decision-makers with a summary about the quality of the facility. In particular, in the rural province of Masvingo, where SolidarMed focuses its activities, over 130,000 people with HIV benefit from this digital health project.

The aim of the Medicus Mundi Forum, in collaboration with the Swiss Agency for Development and Cooperation (SDC) is to promote exchanges and foster further development between NGOs and academic institutions in the field of digital health. SolidarMed follows an integrated approach with locally developed digital tools customised to meet specific needs. The foundations for this app were developed as part of an interdisciplinary hackathon in Masvingo.
Meaningful research for children with HIV


Tanzania and Lesotho We meet at the end of August at a cafe in Basel to talk shortly before her departure to the St. Francis Hospital Ifakara, Tanzania. Jennifer Brown was already there once before, this spring, for exactly one night. And then she had to make an emergency return to Switzerland by order of the Government. Covid-19 pandemic.

Even now, the uncertainty is significant. Before her departure, she’ll have to take a Covid-19 test to even be permitted to board the flight for Tanzania. Corona has delayed the research by months, says the doctoral student, calmly. “But now I want to finally work together with the local people.”

Jennifer Brown studied cellular and molecular biology at ETH Zurich. Yet she quickly noticed: Research with lab mice are not her thing. “I was looking for research work that could directly help people.” And so, she remained at ETH after completing her masters and directly enrolled in a post-graduate degree at NADEL, the
Centre for Development Cooperation. Her aim: research work in which she can combine her newly acquired laboratory expertise with matters of global health.

Niklaus Labhardt, HIV specialist at the Swiss Tropical and Public Health Institute (Swiss TPH), is able to make her wish come true. In 2018, he sent Jennifer Brown to Lesotho for her project mission to further develop a laboratory to measure viral medicine resistance at Seboche Hospital. Training personnel, securing reagents, optimising laboratory processes “I was already very familiar with Southern Africa”, says the 29-year-old researcher with roots in South Africa.

Impressive working culture
Jennifer Brown is establishing a modern diagnostic laboratory together with the SolidarMed Lesotho Team, the laboratory team in Seboche and the Group for Molecular Virology at the University of Basel to measure drug resistance in the blood of HIV patients. “The personal atmosphere and working culture at SolidarMed in Lesotho have really impressed me”, the researcher says. She was also quickly impressed with the role SolidarMed is able to play in Lesotho as a partner of the Health Ministry. “New scientific knowledge is quickly implemented in the national health care practices. This benefits the patients.”

The project seamlessly transitioned into her doctoral thesis which she is currently completing at Swiss TPH and the University of Basel. She is studying an important aspect in the treatment of adolescents with HIV: the formation of resistance to HIV medicines. In HIV patients, for example, who do not take their medicines regularly, the medicines become ineffective. The HI viruses form resistance, with an impending outbreak of AIDS. Switching to other, often more expensive medicines becomes necessary. In addition, these medicines are often more difficult to tolerate and thus are an additional burden for the patients.

In Switzerland, drug resistance is discovered with costly laboratory equipment. In many parts of Africa, this technology is not available. This makes the doctor’s decision to switch to other drugs more difficult. Jennifer Brown is now studying in adolescent patients in Tanzania whether using laboratory equipment in these parts of the world could be clinically expedient and cost-effective. Her work thus also calls into question the current stance in global health that certain modern methods and technologies cannot be implemented in Africa for practical or financial reasons. “The question is open”, she says. “My research work should provide a basis for making decisions.” The results will help healthcare policy-makers in African countries as well as the WHO to better implement the limited financial resources to effectively treat HIV patients.

Creating added value for HIV patients
Jennifer Brown planned the study, drafted the research application for sponsors, obtained permits from the ethics committees and headed the training together with the clinical teams in Tanzania and Lesotho. Just to name a few of the many tasks as part of her research. A lot of responsibility rests on the shoulders of the young researcher. What she hopes for from all this effort: “I want to create added value for HIV patients.” Now she’s excited that the study can finally get under way in Tanzania as well after starting in Lesotho in the spring. Hopefully Covid-19 won’t once again throw a wrench into her plans. ■

“My research should contribute to effective-ly using scarce financial resources in the treatment of HIV.”

Jennifer Brown speaking with two nurses at Baylor Clinic in Mokhotlong 299

givemove.org
In many rural regions, a “mobile clinic” provides the population’s health care.

Thabang Letsie* accompanies his wife and child to a routine check-up of the infant in a “mobile clinic” in the village of Makanyaneng near Seboche, Lesotho.

*Name changed by the editorial staff
Expansion of the SolidarMed Board

The 94th annual general meeting elected Laura Frick, Bettina Maeschli and Bernadette Peterhans to the Board.

The 2020 annual general meeting had a hard time of things. Due to Covid-19, it had to be postponed to 5 September. In order to accommodate the increased risk awareness, we moved the meeting with just under 50 attendees to Bourbakki Cinema at short-notice. There, using a protection concept, including mask requirements, we were able to safely take the attendees through the 2-hour event and the following drinks reception. For the first time, members also joined in remotely via Zoom, discharged the board and elected the new board members. One member even joined in from Butha-Buthe in Lesotho, located 8,660 km away. The recording is now also available for viewing on our website.

Three new board members will now support SolidarMed with their knowledge, experience, and network. Laura Frick is a project manager at a company in Liechtenstein and previously worked for the Liechtenstein government. Bettina Maeschli was a trustee of the Aids and Child foundation until July 2020. Professionally, as managing director, she manages the business of the Swiss Hepatitis Association. Bernadette Peterhans heads the Department of Professional Development at the Swiss Tropical and Public Health Institute (Swiss TPH) in Basel. Among other things, she advises students in a master’s programme in international public health. The three women bring fresh know-how in the areas of finances, fundraising and public health to the Board. We warmly welcome all three of them.

The members of SolidarMed are the basis of all of this organisation’s activities. They not only elect the Board, but they also participate in the organisation’s decision-making. Join us too: via e-mail, telephone or at our website under menu item “Donations.”

The next annual general meeting, complete with an exciting supporting programme, is scheduled for Friday, 18 June 2021.
Covid-19: Major challenges and serious consequences

The wide-ranging consequences of Covid-19 can already be perceived in many African countries. Many people in these countries already suffer from underlying diseases such as malaria or tuberculosis. The local economy has been severely weakened by the measures to contain the virus.

Facts about Covid-19 in our project countries:
• The challenges of a pandemic are compounded. There is only one doctor for every 10,000 people. In comparison: in Switzerland, this figure is 42. We therefore invest in training local healthcare personnel.
• Medical personnel are often concerned with getting infected themselves. There is a shortage of protective masks, disinfectants and running water. We provide the materials which are in short supply.
• Due to the fear of corona, people are now staying at home more: Children are no longer being immunised, chronically ill patients are not collecting their medicines. That’s why the WHO expects 2 million additional deaths caused by malaria, HIV, and tuberculosis in the next 5 years. We’re continuing to dedicate ourselves to properly treating underlying diseases.

Help us by donating for our projects. Thank you for your invaluable support.

Meaningful gift-giving with the SolidarMed gift certificate

Christmas is getting ever closer. Still don’t have gifts for your loved ones or employees? Perhaps SolidarMed’s gift donation is just what you need? You give a certificate and support a SolidarMed health project on behalf of the recipient.

You’re not only bringing a smile to the gift recipient! You’re also making a sustainable contribution towards the health of people who really need it. We’re happy to advise you and adapt the certificates to your needs.

More info at: solidarmed.ch/en/certificate

Your donation works.