Hiv in Eastern Europe. The epidemic is out of control

A rapid increase in the number of people living with HIV infection has been recorded in Eastern Europe and Central Asia. In marked contrast to the rest of the world, the number has risen by 250% since 2001, increasing from 401,000 cases in 2001 to 1.5 million in 2010 (see figure). The cases registered in Russia and Ukraine (with a prevalence of HIV infection of approximately 1%, with the highest concentration among drug users) account for 90% of cases in the entire area and are double the number of all other cases in Western and Eastern Europe taken together. In the rest of Europe, including Italy, the infection continues to spread at an unacceptable pace. It is paramount to keep a high level of attention in order to monitor ongoing developments in the situation.

Cover illustration: "Birth-day" by Ramon Pezzarini. For many women and for many children the lead up to the day of birth is a real labyrinth in which access to care presents many difficulties. The course resembles a fine, tangled thread, rather like an umbilical cord, where knots and tangles are smoothed out with force and determination, taking mother and child to their birth day.
A year ago, in the presence of the President of the Italian Republic, Mr. Giorgio Napolitano, we solemnly undertook to help the most vulnerable, underprivileged groups in Africa: mothers and children.

Last 5th November, a great event in Padova marked the tangible start of a major five-year project, concentrated in four Sub-Saharan African countries, to guarantee access to safe delivery for mothers and neonatal care, free of charge. The health ministers and their senior officers, bishops of local dioceses, national and international institutions present at the event were welcomed and accompanied by the great “CUAMM family” network. A great Alliance. Over one thousand people, young and old, doctors with years of experience, others training to leave on a mission, volunteers from the North and South of Italy, all greatly involved and committed to this great challenge.

Aber (Uganda), Wolisso (Ethiopia), Tosamaganga (Tanzania), Chilo (Angola): the 4 hospitals with their respective healthcare districts, including 22 peripheral health centres, from which the project to provide free access to delivery and neonatal care will start. The population of approximately 1,300,000 inhabitants will be directly involved in the scheme. We will eliminate healthcare fees for mothers who have to give birth, enabling them to access care without the anxiety of being unable to pay.

The programme addresses the healthcare priorities of Sub-Saharan Africa: maternal and neonatal mortality rates give no signs of decreasing. An ethical challenge centred on equity. Maternal mortality and access to reproductive healthcare services are the key indicators of inequality between the rich and poor, within individual countries and among different countries. We are well aware that the new programme will demand a major commitment on the part of the institutions involved. The involvement of public and government partners, accompanied by institutions and international agencies, will be supported and strengthened in these four local church hospitals.

Lastly, this will be a very demanding fight, including its economic aspects. The average cost of a standard delivery or caesarean section is approximately 40 euros. The objective is to double, in five years, the number of assisted deliveries from the current 16,000 to over 33,000 per year.

A major, exciting challenge lies before us. But we do not fear! We are rational and determined, obstinately rooted in the confidence that has always guided us and still remains a source of inspiration and action.

First and foremost our history and our roots. We were established in 1950, the war was just over, Italy had been devastated and reduced to poverty, people were experiencing enormous difficulties. Professor Canova was not afraid to propose, to the Church and country, the challenge of a College (or rather, CUAMM) devoted to the training and transfer of healthcare professionals to the most needy countries on the planet. Italy was poor, but had not lost its sense of solidarity; our economic resources were not great, but we were clear about the meaning of commitment, sacrifice, fatigue and sharing with the less fortunate; care for the poorer and weaker, near or far, was considered a personal “obligation” that was part and parcel of family and civil life, a binding duty, as solemnly declared in the second article of the Italian Constitution.

Not to mention the Gospel! As urged by the inscription, euntes curate infirmos (Mt. 10.8), engraved on the walls of our headquarters in Via San Francesco since its establishment. Going and telling the good news is indissolubly linked with caring for and serving the poorest of the poor. Jesus never considered the former without the latter. He who came, “to serve and to give his life for all”, (Mk. 10.45). Servants, porters, waiters, labourers, workers of another, more dignified, more equitable world for all. People in overalls, as suggested by Mgr. Tonino Bello just before he died. We do not intend to yield or reduce ourselves to an aggressive, attacking style of overbearing pushiness or satisfied indifference. We wish to find our roots and freedom in the Gospel, which is the Lord Jesus, the good Samaritan, with the defenceless gentleness and confident hope of those who wish to live their lives not as an achievement but as a gift, to be shared.

We cannot face this great challenge alone. Together, with the help of all, we are confident that we will be able to face it and win it.

“Mothers and children first”: it is possible, together.
Target number 4 of the Millennium Development Goals launched by the United Nations in 2000, focuses on the health of boys and girls and aims to reduce mortality by two thirds in children under the age of five (<5) by 2015 (compared to 1990 figures). According to global data updated to 2011, <5 mortality fell from 11.6 million to 7.2 million, with a mean annual reduction rate of 2.2%, i.e. half the rate required to achieve the Goal by 2015. Results differ considerably throughout the world, but overall there is absolutely no chance of the target being achieved.

In Asia and Latin America, notable successes have been achieved in China and Vietnam (with reduction rates of 5.6 and 6.7%, respectively), in addition to Peru, Chile, Cuba and Brazil (with reduction rates of 5.2, 5.0, 4.7 and 4.4%, respectively). However, many other countries in these two continents will have to wait a few more decades to achieve the Development Goal.

The most critical (and tragic) situation, as has been known for some time, is that of Sub-Saharan Africa. In 1990 approximately one third of <5 mortality occurred in this part of the world; in 2011 there was a slight reduction in the total number of deaths (from 3.9 to 3.5 million), but the percentage of total deaths rose to 49%.

The bulk of Sub-Saharan African countries will have to wait decades to achieve Development Goal number 4, but not all countries lay the same emphasis on policies to curb child mortality. This was shown by a recent report (Budgeting for Children in Africa) which assessed how 52 African governments performed in protecting child wellbeing, based on investments in 4 key sectors: health, education, social protection and development in early infancy.

To make an overall assessment of the political will of African governments to fulfil their commitments towards children, the authors of the report developed an index (the Budget Commitment Index), which is a heterogeneous measure formed by the following indicators: a) public health expenditure as a percentage of total public expenditure; b) total public expenditure on education as a percentage of GDP; c) the percentage of the public budget invested in the Enhanced Programme for Immunization (EPI); d) military expenditure as a percentage of GDP; e) the percentage variation in government health expenditure from 2004.

The first 3 countries in the Budget Commitment Index top ten were Tanzania, Mozambique and Niger, which exhibited the best use of available resources for child wellbeing. The other top-ten governments were Gabon, Senegal, Tunisia, Seychelles, Algeria, Cape Verde and South Africa. Tanzania achieved the highest score for having allocated, amongst things, a large percentage of its internal resources to healthcare, through a significant increase in its direct contribution to national immunization programmes, and for having further reduced military spending, which was already relatively limited.

At the bottom of the league table stood the governments of the Republic of Central Africa, Guinea, Angola, Sierra Leone, the Comoros, Burundi, Eritrea, Guinea-Bissau and Sudan. Sudan displayed a particularly negative performance compared to other countries, by committing the lowest proportion of GDP to education (0.3%) and failing to make any direct contribution to immunization programmes, in spite of the country’s unfavourable health indicators.

As shown by Budgeting for Children in Africa, a country’s per capita income does not correspond to its ability to efficiently commit resources to child wellbeing. The report’s key message is that resource allocation capacity does not depend on the wealth of a country but is “primarily and simply a question of political will”.

NOTES


PADUA, NOVEMBER 2011

Last 5th November, over one thousand people crowded into the “Papa Luciani” Congress Centre in Padua for the international meeting, “Mothers and children first,” promoted by Doctors with Africa CUAMM to launch their programme to provide free access to safe delivery and neonatal care in Sub-Saharan Africa. Four countries are involved: Angola, Ethiopia, Tanzania and Uganda. “We are here in such large numbers to show that we are committed — stated Don Dante Carraro — to doing whatever it takes to do our part, with perseverance and regardless of the difficulties. It is a commitment we have made.”
**FORUM**

**“STOP MALNUTRITION IN WOLISSO” PROJECT**

The aim of the “Stop malnutrition in Wolisso” project is to reduce child mortality in the South West Shoa zone (Ethiopia). The nutritional rehabilitation program lasts on average four weeks and requires considerable commitment on the part of both the staff involved and the children’s families.

TEXT BY / ALESSANDRO PEZZIN / DOCTORS WITH AFRICA CUAMM

St. Luke’s hospital in Wolisso is the reference health centre of the South West Shoa zone, with a catchment area of 1,200,000 people and various patients from areas decidedly further afield, including the capital which lies 120 kilometres from the hospital. The hospital is a not-for-profit institution belonging to the Catholic Church of Ethiopia whose capacity has gradually increased over the years. It currently has 192 beds, distributed in the following wards: Medicine (35 beds), Surgery (23 beds), Paediatrics (65 beds), Obstetrics and Gynaecology (37 beds), Orthopaedics and Traumatology (32 beds). The outpatient clinics deliver specialist medical, surgical, paediatric, gynaecological, orthopaedic and ophthalmic services. Diagnostics are provided by an analysis laboratory and by radiological and ultrasound services. There are five operating rooms: 2 for general surgery, 2 for orthopaedic and traumatology procedures, and 1 for ophthalmological and ENT services.

The hospital also has a clinic for chronic patients (mainly HIV/AIDS patients on antiretroviral treatment) and a psychiatric outpatient clinic.

The medical staff is formed by local and expatriate specialist doctors. Among the five local specialists there are: 2 general surgeons, 1 orthopaedic doctor, 1 gynaecologist, and 1 ophthalmologist, in addition to 2 general practitioners. There are three expatriate doctors: the health director, 1 paediatrician and 1 public health expert. Volunteer specialists regularly arrive on short missions and are prevalently Italian surgeons and orthopaedic doctors. The majority of nursing and support staff are Ethiopian.

The nursing school is annexed to the hospital and forms an integral part of the institution, with 89 students undertaking a three-year course. A midwifery school with 16 students has also just been inaugurated.

The hospital contributes substantially to the training of local personnel through the organization of theoretical-practical courses for healthcare staff at all levels, in cooperation with the Ethiopian Ministry of Health and the Universities of Jimma and Addis Abeba.

Doctors with Africa CUAMM has contributed to the construction of the entire facility and, since its inauguration, continues to support it by sending qualified healthcare personnel and funding. The presence of Doctors with Africa CUAMM has, over the years, guaranteed the presence of specialist Italian healthcare staff, coverage of part of running costs, extension of the hospital building and the start of public healthcare initiatives in the local area.

**CHILD MALNUTRITION IN ETHIOPIA**

Ethiopia is among the countries with the highest rate of childhood malnutrition in Sub-Saharan Africa. Eleven percent of Ethiopian children under the age of 5 are affected by acute malnutrition. This percentage has remained unchanged in the last few years. The rate of hospital mortality due to acute malnutrition exceeds 20% since the children often reach hospital from rural areas, in some cases very distant, when their condition is already very serious.

The level of malnutrition in the South West Shoa zone, which accounts for most of the hospital catchment area population, is essentially comparable to the national rate. The only available data are provided by Wolisso hospital and a care programme for children affected by serious acute malnutrition is currently being run at the paediatrics ward.

Over recent years the number of paediatric admissions due to severe malnutrition has remained high, as shown in table 1. The start of mother-child healthcare schemes by the hospital’s Department of Public Health in the local area should foster the identification and care of malnourished children by community health providers, with referral to hospital of the more serious cases.

The forecast of improved access to hospital services has prompted the construction of a new facility adjacent to the paediatrics ward. The new childhood Therapeutic Feeding Centre was inaugurated in February 2010. This unit, managed by qualified nursing staff coordinated by an Italian paediatrician, has two rooms with 16 beds and two open spaces dedicated to family healthcare education and recreational activities for children who have got over the most critical stage. An outpatient clinic has also been set up for following up children who have completed nutritional rehabilitation.

The unit, which is the reference centre for paediatric malnutrition for the whole zone, collaborates with the Public Health Department and with local healthcare providers to assist patients and their families once they have returned to their communities of origin.

**THE “STOP MALNUTRITION IN WOLISSO” PROJECT**

The aim of the “Stop malnutrition in Wolisso” project is to reduce child mortality in the South West Shoa zone, by guaranteeing care
for children who are severely malnourished or referred to St. Luke’s hospital in Wolisso. The nutritional rehabilitation programme lasts on average four weeks and requires considerable commitment on the part of both the staff involved and the children’s families. The patients who come to the attention of the Paediatrics Department are often affected by severe malnutrition, associated with infectious complications which lead to the death of the child if not immediately attended to. The complexity of the situation demands the presence of highly qualified, specially motivated personnel ready to cope with very humanly demanding situations. One particularly delicate aspect is the actual nutritional rehabilitation, which takes place in various stages and requires the careful use of therapeutic milk with a modified protein and calorie content. The prolonged stay in hospital entails considerable sacrifices on the part of families: prevention from caring for the other members of the family, interruption of work in the fields, expenses for own support. These difficulties have forced some families to stop treatment before it is complete, with all the consequences that brings.

The aim of the “Stop malnutrition in Wolisso” project is to address the globality of the above problems through “adoption” of severely malnourished children admitted to the Therapeutic Feeding Centre. This covers the costs of the stay and prevents it from putting an additional burden on the budget and the very life of families who are already very hard hit.

### Table 1 / Numbers on Paediatric Malnutrition at St. Luke’s Hospital (2006-09)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paediatric Admissions</td>
<td>1.682</td>
<td>1.787</td>
<td>1.793</td>
<td>2.523</td>
</tr>
<tr>
<td>Paediatric Admissions due to severe malnutrition</td>
<td>429</td>
<td>479</td>
<td>502</td>
<td>356</td>
</tr>
<tr>
<td>Paediatric Ward Mortality</td>
<td>8.5%</td>
<td>7.4%</td>
<td>6.3%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Paediatric Ward Mortality due to severe malnutrition</td>
<td>7.3%</td>
<td>6.2%</td>
<td>7.2%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

### Table 2 / Detail of Costs for Each Admitted Malnourished Child (Average Stay of 2 Weeks)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost (Euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualified Local Staff (Clinical Care, Family Healthcare Education)</td>
<td>40</td>
</tr>
<tr>
<td>Medication and other healthcare materials</td>
<td>16</td>
</tr>
<tr>
<td>Food for the child in the final stage of rehabilitation</td>
<td>10</td>
</tr>
<tr>
<td>Environmental hygiene costs</td>
<td>4</td>
</tr>
<tr>
<td>Food for the accompanying family</td>
<td>20</td>
</tr>
<tr>
<td>“Follow up” at hospital and at the home of rehabilitated children</td>
<td>20</td>
</tr>
<tr>
<td>Administrative and patient management costs</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
</tr>
</tbody>
</table>

For children who are severely malnourished or referred to St. Luke’s hospital in Wolisso.

HOW TO LEAVE

Students deciding to leave on a mission must possess adjustment skills and sensitivity enabling them to have the right approach to a culture that differs considerably from the western experience.

What is the procedure to follow before leaving on the “Wolisso Project”? All information can be found on the [www.wolissoproject.org](http://www.wolissoproject.org) website, from which this short guide is drawn.

Students deciding to leave on a mission must possess good adjustment skills and sensitivity enabling them to have the right approach to a society and culture that differ considerably from the western experience. Students will follow and accompany the facility’s medical staff and will be supervised by them in all activities carried out there. All medical and nursing staff speak English, facilitating positive student integration in daily hospital activities. During their stay in Wolisso students will receive training in all wards in the facility.

Students can leave for Wolisso in any month of the year, but the best time is during the dry season (September-May); in the other months it may be difficult to move around the rural areas surrounding the hospital.

The departure dates are decided with the Directors of St. Luke’s Catholic Hospital, taking into account the needs of the hospital. They are published on the “Wolisso Project” website and usually plan for participants to arrive at the beginning of the month.

Training usually lasts four weeks, although the actual duration of the stay can be arranged individually. However, it is considered essential to stay for at least three weeks. The maximum number of students for each training period is two, unless otherwise specified or in the event of different arrangements with the hospital management team.

Anyone interested in leaving for Wolisso should read the instructions on the website, fill in the application form and send it within two months of the date they would like to leave. Candidates will be contacted by the departure group, which will provide all the information required to carry out the training period, any vaccinations to have done, in addition to travel and accommodation arrangements.
TRAINING AND ACCESSIBILITY TO SAFE DELIVERY

The Catholic University of Beira (Mozambique) is an important example of how training plays a role in accessibility to safe delivery. Doctors with Africa CUAMM specialists active in the field also serve as lecturers to train future African doctors according to problem-based learning, i.e. starting from clinical cases and searching for possible diagnoses and therapies in the literature.

TEXT BY / CHIARA DI BENEDETTO / DOCTORS WITH AFRICA CUAMM

What is the relationship between training and accessibility to safe delivery? Two horizons that are apparently distant, yet closely linked to each other: the quality of service provision and the professional skill of in-service medical and paramedical staff are, instead, paramount in safe delivery.

In Sub-Saharan countries, where healthcare systems are fragmented and fragile, women have to overcome many different obstacles to safe delivery. The first is the perceived need for care and the decision to contact a healthcare centre; the next stumbling block is the possibility – often denied them – of arranging transport to the place of care; the third step in the chain is whether or not they receive adequate professional help (delay 3 in Figure 1).

This highlights the pivotal role of education in the training of professionals able to promptly and effectively treat women and children. Qualified delivery assistance is the most effective determinant in reducing maternal and neonatal mortality and is a strong indicator of healthcare system performance.

QUALITY OF INTERVENTION

The critical points in African healthcare systems concern, on the one hand, the lack of healthcare facilities, drugs, equipment and financial resources, and on the other, the considerable shortage of skilled, motivated staff.

Rossella Giudi Peruzzi, specialist in Obstetrics and Gynaecology, working for roughly ten years as a doctor and lecturer in the field in Africa, helped us to portray the current situation in Mozambique in terms of medical and healthcare resources present at local level. “The data for the whole country speak of lack of human resources and facilities, with considerable differences in distribution between rural and urban areas. The doctor/inhabitant ratio is 1/37,000 with a marked gap between urban (1/3,000) and rural areas (1/45,000). In the city of Beira, which has approximately 500,000 inhabitants, 6 health centres are able to provide assisted delivery. Only one doctor is present in each of these centres, who takes charge of all facility work (care of children and women during pregnancy and the puerperium, HIV and TB prevention, vaccinations) in addition to being head of the delivery room. There are over 2,000 deliveries and over 20,000 outpatient examinations per year in each of these facilities; in addition to the doctor, the staff includes two or three midwives and ten mother and child health nurses. Furthermore – as Peruzzi points out – remuneration often does not correspond to professional level and salaries in peripheral centres are lower still although there is no shortage of work”.

The result is that many maternal prevention and care services are low in quality, often inefficient and in some cases dangerous compared to envisaged quality standards. Clinical guidelines and tools – such as cartograms – developed by the WHO are not applied at peripheral level. In terms of service quality this results in many missing opportunities to save lives.

HUMAN RESOURCE TRAINING

To fill this deep gap, Doctors with Africa CUAMM has opted to invest in the development of human resources as central to sustainability, through support for basic training (nursing and midwifery schools, universities), training in the field, and the improvement of the working conditions of local providers.

A specific training course has been undertaken by the Catholic University of Mozambique, in Beira. There, specialists working in the field in Africa also serve as lecturers to train future African doctors.
The aim of the training project offered to young medical students at Beira University is to support training according to the problem-based learning method – continues Dr. Peruzzi – i.e. starting from clinical cases and searching for possible diagnoses and treatments in the literature. Students often have relatively good theoretical training, but since it is concentrated in a short period of time, it does prepare them to cope on their own with all problems that can occur in clinical practice. Accordingly, practical hospital training is offered during the 5th and 6th years: since hospital doctors do not have time to follow and train students, our role becomes essential; we become ‘facilitators of practical learning’.

Doctors with Africa CUAMM intends to continue its intervention in this direction, i.e. by seeking measures to counter the lack of healthcare staff in Africa, partly in cooperation with the local authorities. It will continue to support nursing and midwifery schools and local universities and to increase the number of trained providers; it will promote staff recruitment in the poorest, most destitute areas; it will introduce an incentives scheme (e.g. house, bonuses, etc.) partly linked to performance; it will work towards improving the quality of services, particularly obstetric and neonatal emergencies, through training in the field, supervision and auditing.

The overall aim is to confirm the profound association between health personnel training and quality of care for the community: accessibility to health also requires education.

THE TEN POINT STRATEGY

Doctors with Africa CUAMM has set forth its position on maternal and neonatal mortality, with a strategy that aims to guarantee access to safe delivery and neonatal treatment free of charge.

Doctors with Africa CUAMM continues its journey into strengthening healthcare systems, as part of its strategy to achieve the Millennium Development Goals. In particular, it considers maternal and neonatal mortality to be indirect indicators of healthcare system functioning in terms of service coverage, equity and quality of intervention. To materialize its commitment, the NGO has laid down its position in ten key points.

- To contribute to the reduction of maternal and neonatal mortality by strengthening district healthcare systems through application of the 2008-2015 strategy.
- To guarantee delivery of preventive and treatment services of proven efficacy according to the continuum of care model.
- To promote the development of human resources as central to sustainability, through support to basic training (nursing and midwifery schools, universities), training in the field and improvement of the working conditions of local healthcare providers.
- To increase access to assisted delivery by eliminating hospital fees (delivery free of charge) and contributing to the establishment of solidarity-based forms of financing mother-child care.
- To support the public-private partnership by integrating government with not-for-profit sector health services (catholic and other healthcare facilities).
- To measure and monitor coverage rates, quality and equity of maternal and neonatal services with validated tools and indicators.
- To boost innovation.
- To take part in thematic and research networks in support of the global strategy for maternal-child health.
- To inform, involve and force civil society, companies, foundations and national and local public institutions to actively promote the safeguard of the right to health of women and children.
- To give account of the results achieved and experiences acquired to local and international communities and institutions.

NOTES

A Kenyan woman prepares a red ribbon for the World Day against AIDS. Throughout the world, about 40 million people are affected by this disease, most of whom live in Africa. The countries most affected are the ones lying South of the Sahara – the ones where Doctors with Africa CUAMM has chosen to work – such as Mozambique, where 12.5% of the population aged between 15 and 49 years are affected by HIV. The consequences of this disease are devastating not only at physical but also at social level. Those who contract it, be they men, women or children, have to reckon with community stigma and discrimination.
QUALITY OF MOTHER-CHILD CARE AT WOLISSO

Doctors with Africa CUamm has set a team of professionals the task of assessing the quality of mother-child care at Wolisso Hospital (Ethiopia), with a view to making improvements. The control was made by a board formed by two doctors and a nurse using a checklist of about one hundred items.

TEXT BY / FABIO UXA / NEONATOLOGY CONSULTANT AT THE WHO “COLLABORATING CENTRE FOR MOTHER AND CHILD HEALTH”

What does “assessing quality” mean, particularly in the African setting?

When we talk of the quality of the healthcare offer, we immediately think of trained, updated staff, in sufficient numbers at local level, adequately available diagnosis and treatment facilities and means, constant service delivery, and a well-balanced cost/benefit ratio.

The quality of medical treatment, however, is not only a synonym of access to technology: quality care should be available even when resources are scarce, by taking care to comply with and to guarantee the following basic elements:

- coverage, i.e. the vast majority of the population has access to care;
- equity, making sure there are no differences between the care available to the poorest and to the richest members of the population;
- service efficiency, bearing in mind the dignity and medical and socio-cultural needs of the “end users”.

The control was made by a board formed by two doctors and a nurse using a checklist of about one hundred item to control, each of which is divided into a dozen or so sections.

The tool has been adapted to guarantee efficacy in Ethiopia, where the setting differs from previous ones (few healthcare providers in facilities dotted around the local area, minimal availability of resources). The assessment was carried out by a supervisory board formed by a gynaecologist, a nurse and a neonatologist (Monica Piccoli, Paola Stillo and Fabio Uxa, respectively). The use of observation, listening and interviews enabled the analysis grid to be completed in three days, revealing that the quality of care provided was fairly good and pinpointing the need for several targeted actions on individual aspects (Table 1).

只 by meeting these fundamental values and providing constant services can a health system gain the confidence of the community and maintain high demand for health care. These are the very reasons why the standard of child delivery care is often considered a very sensitive indicator of health service quality.

Assessment of mother-child care at St. Luke’s Hospital was based on the, “Assessment tool for the quality of perinatal care,” previously developed by our team and already used in many Balkan and Central Asian countries. The tool consists of a check list of about one hundred items to control, each of which is divided into a dozen or so sections.

The assessment was carried out by a supervisory board formed by a gynaecologist, a nurse and a neonatologist (Monica Piccoli, Paola Stillo and Fabio Uxa, respectively). The use of observation, listening and interviews enabled the analysis grid to be completed in three days, revealing that the quality of care provided was fairly good and pinpointing the need for several targeted actions on individual aspects.

### TABLE 1 / RESULTS OF THE ASSESSMENT OF ST. LUKE’S HOSPITAL IN WOLISSO

<table>
<thead>
<tr>
<th>TABLE 1 / RESULTS OF THE ASSESSMENT OF ST. LUKE’S HOSPITAL IN WOLISSO</th>
<th>SCORING</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL ASSESSMENT</td>
<td>1.74</td>
</tr>
<tr>
<td>RELEVANT INFORMATION AND STATISTICS</td>
<td>2.0</td>
</tr>
<tr>
<td>DRUGS</td>
<td>1.0</td>
</tr>
<tr>
<td>EQUIPMENT AND CONSUMABLES</td>
<td>1.25</td>
</tr>
<tr>
<td>LABORATORY</td>
<td>2.25</td>
</tr>
<tr>
<td>BASIC INFRASTRUCTURES</td>
<td>2.0</td>
</tr>
<tr>
<td>MATERNAL INPATIENT AREAS</td>
<td>1.9</td>
</tr>
<tr>
<td>NEONATAL INPATIENT AREAS</td>
<td>2.8</td>
</tr>
<tr>
<td>ROUTINE DELIVERY CARE</td>
<td>2.0</td>
</tr>
<tr>
<td>CAESAREAN SECTIONS</td>
<td>1.7</td>
</tr>
<tr>
<td>MATERNAL COMPLICATIONS</td>
<td>2.0</td>
</tr>
<tr>
<td>ROUTINE NEONATAL CARE</td>
<td>1.7</td>
</tr>
<tr>
<td>CARE OF PATHOLOGICAL NEWBORN INFANTS</td>
<td>1.45</td>
</tr>
<tr>
<td>INFECTION PREVENTION</td>
<td>1.8</td>
</tr>
<tr>
<td>PATIENT MONITORING</td>
<td>1.2</td>
</tr>
<tr>
<td>PRESENCE OF GUIDELINES AND AUDITING ACTIVITIES</td>
<td>1.5</td>
</tr>
<tr>
<td>POPULATION ACCESS TO HOSPITAL CARE</td>
<td>1.35</td>
</tr>
</tbody>
</table>

The score assigned to the individual items ranges from 0 where the assessment is totally negative, to 1 indicating the urgent need for major improvements, to 2 where improvements are appropriate, to 3 where requirements are met. The value given to each of the 13 sections is derived from the mean of the individual scores; the overall assessment of the Hospital is calculated in the same way.

### ASSESSMENT OF MATERNAL CARE

Management of physiology and obstetric complications was correct and efficient, but did sometimes suffer from a lack of drugs (magnesium sulphate for eclampsia, for example) and because the laboratory, although well organized, was unable to perform some routine analyses: e.g. the 24h urinary protein test.

The determining factor in the healthcare pathway is, as we all know, easy access to care for all women. The number of pregnant women who give birth at St. Luke’s – and not at home or in peripheral healthcare centres, both of which are unable to provide the minimum requirements for correct care – proved to be rather low due to unreliable transport, preventing women from being readily mobile in a very extensive region. Most maternal deaths were recorded in pregnant women who reach hospital in an already critical condition, after giving birth at home: transportation difficulties represent the real cause of death for these patients.
Assessment of neonatal care revealed more critical areas. The delivery room and post-partum ward were relatively unprepared to perform any necessary resuscitation, heat loss prevention was lacking and breast feeding was not sufficiently facilitated. During their stay, newborn infants classified as “healthy” did not have their weight and temperature checked and there was not even a dedicated diary. Neonates with some problems were not given additional attention. Objectively, this is attributable to the difficulty the only paediatrician present at the time in the hospital has in responding to all paediatric, maternal and delivery-room service requirements; besides, consideration must be made of the anthropological and cultural aspects of the African setting, in which newborn infants are perceived differently compared to our culture. The third important finding raised by the analysis is that the hospital has a good system for collecting and periodically analysing data in addition to providing updated statistics on key indicators.

FROM ANALYSIS TO ACTION: GUIDELINES FOR IMPROVING SYSTEM EFFICACY

Data collection, analysis and assessment were performed by a working group at St. Luke’s, yielding indications and actions designed to practically improve the work of healthcare personnel. These included the need to introduce simple protocols to cover the essential needs of “healthy” newborn infants (resuscitation, temperature, hygiene, breast-feeding). The care problems of “underweight” neonates will subsequently be addressed once experience has been built up in this way. This will require, on the one hand, more temperature monitoring equipment, monitored oxygen therapy, some laboratory micromethods, enteral and parenteral feeding and, on the other hand, specific attention by dedicated, motivated staff (permitting introduction, for example, of the “Kangaroo Mother Care” method, in which premature babies remain in continuous skin-to-skin contact with their mother, keeping them warm, stimulated, breast fed, protected from hospital infections, and not separated from her as they are with an incubator). In addition, it was discussed how to improve organization of the materials and equipment needed in emergency situations, how to improve the clarity of maternal clinical records and how to introduce a concise neonatal clinical chart and a simple discharge letter.

There was also an acknowledged need for a periodic update programme, particularly on resuscitation, hand washing and hygiene, the start of breast feeding in the first hour of life, and temperature control.

MONITORING: ST. LUKE’S HOSPITAL ONE YEAR LATER

Just over one year later, the same staff returned to St. Luke’s where, thanks to the hard work of many expatriates and natives, the level of clinical services proved to be very high. The number of assisted deliveries was on the rise (despite being less than 10% of the total number of deliveries in the region), as was the number of infants born at home who were subsequently taken to hospital for check-ups or treatment.

Clear, marked improvements were observed in neonatal care – i.e. the key critical point identified the previous year. These include the building of a treatment room for newborn infants with problems, the order of new equipment, the introduction and use of a clinical diary sheet for each child.

All infants are examined before discharge and a programmed follow-up has been implemented with at least one consultation before 20 days of life. The first protocols have been drawn up, mothers can keep the smallest infants in the “kangaroo” position more often, and practice sessions in neonatal resuscitation have recently been repeated.

The positive experience of the assessment conducted at Wolisso shows that external observation among peers may be well received and form a shared starting point for subsequent reassessments, for comparing strategies over time and for quantifying results. A frank discussion of documented and shared strengths and weaknesses, enabled the team to identify actions to take to make improvements, often without or with only minimal outside contributions.

NOTES

2 It should be pointed out that, in the assessment, a distinction was always drawn between whether the results depended on St. Luke’s or on the many external difficulties and shortages, such as supplies or the poor regional transport system.
3 It is not easy to convince an African community that it is right to promote neonatal survival. In many Sub-Saharan cultures, neonates are simply ancestors who have decided to take another look at their land and community. In the early days of their new life, they are not fully “reincarnated”: their earthly experience is still temporary; they decide whether they are in positive surroundings, in keeping with tradition. If, for some reason or negative influence or discord in the community, they sense any distress or obstacles, the ancestor’s spirit is not definitively reincarnated, but withdraws and the ancestor-child “decides” to let him/herself go and dies.
**KUPLUMUSSANA GROUP OF BEIRA, MOZAMBIQUE**

Maternal-fetal transmission of HIV. The Kuplumussana experience demonstrates that interaction between support groups and healthcare facilities plays a pivotal role in drawing women further towards preventive health programmes and in recovering children to follow-up. The mothers in the group also seek to provide mothers and children with the means they need in order to be re-integrated into the social fabric.

**BACKGROUND**

Each year, throughout the world, approximately 370,000 children contract HIV infection and an estimated 42,000 to 60,000 women die from the disease. Prevention of mother-to-child transmission (PMTCT) programmes include antenatal care (ANC), HIV testing and care, provision of appropriate antiretroviral treatment for the mother and her child (for at least six weeks after the birth, until her sero-status has been stabilized according to polymerase chain reaction - PCR), and support for the choice of neonatal feeding. Unfortunately, despite endeavours to extend this intervention, less than 45% of African women receive the care needed to reduce MTCT and prevalence and AIDS mortality data still remain very high.

In Mozambique, as in the majority of African countries, the Ministry of Health has implemented PMTCT programmes. However, despite these programmes and in spite of the efficacy of antiretroviral treatment (ARV), epidemiological data are not improving as expected.

Specifically, according to data drawn from a serobehavioural survey conducted in 2009 in the province of Sofala, the prevalence of HIV in the 15-24 age group in this region was found to be 13.1%, one of the highest in Mozambique. Under-five mortality remains high both in the country (141 per 1,000) and in the province (138 per 1,000) and, in 2008, 9.9% of deaths of children in this age range was caused by AIDS.

The data presented in the latest WHO report, *Partnership for maternal and newborn care* and several other assessments of PMTCT programme uptake in Mozambique, have shown that where the data on ANC examinations (an essential factor in access to PMTCT programmes) is satisfactory, the percentage of women undergoing HIV testing (an essential time for understanding whether or not to refer women to the PMTCT programmes) falls from the mean of 33% to 14%. Obviously, as a direct consequence of the lack of HIV diagnosis, the percentage of women and children who receive the necessary treatment is also very low (1-2%).

It is clear therefore that despite the good spread of PMTCT programmes, major barriers still exist, be they logistic in ensuring the constant presence of drugs, be they to access because PMTCT is only provided in health posts and in the main hospitals, hindering access to women and children in rural communities, be they for social reasons: HIV still carries social stigma and is a factor for discrimination; to obviate these consequences, many women avoid having the test or, if they do have it, refuse to accept the result or keep it secret, being unable to tell their
husband. This makes it impossible to take part in PMTCT programmes and women tend to give up. These barriers prevent appropriate, continuous access (continuum of care) to the above health programmes. This suggests that an exclusively clinical and pharmacological approach to PMTCT programmes is insufficient.

One attempt to address this limitation, as an integral part of the PMTCT programme developed from 2004 onwards by the Ministry of Health, UNICEF and other partners, has been the expansion of support groups for seropositive mothers formed by other mothers who have had the same experience. The main objective is to reduce the incidence of paediatric HIV/AIDS.

THE BEIRA EXPERIENCE (SOFALA PROVINCE): THE KUPLUMUSSANA GROUP

In 2005 a peer-to-peer support group was set up, formed by HIV-positive mothers, with the purpose of strengthening the work of the paediatric hospital in the city of Beira. The group took the name of Kuplumussana (literally “those who help each other”), managing to develop into a proper association in 2009 and to extend, in 2010, to the city’s health centres (thus becoming closer to communities and families). The purpose of the association, in collaboration with the healthcare units where Doctors with Africa CUAMM operates, is to accompany clinical care with guaranteed psychological and social support for seropositive women (who are pregnant or have just given birth), help them overcome socio-cultural barriers and discrimination and follow antiretroviral treatment. In addition, special attention is focused on the more vulnerable children, usually orphans and poor children, who have greater difficulty complying with treatment on account of their destitute family conditions.

By supporting medical intervention, the Kuplumussana mothers serve as a connecting link between the PMTCT programme, the health centres and the seropositive women, promoting integration of mother-child healthcare services with HIV monitoring services. The Kuplumussana mothers are present at all times in the health centres to offer support, help and explanations to mothers accessing these facilities. While mothers wait to be examined, the Association organizes training and educational meetings on the development of the disease, the importance of being tested, antiretroviral treatment, the importance of compliance, nutrition and breastfeeding.

Within the rural communities their main educational role is to make the men aware of the need to play an active role in the antenatal care of their child: to accompany their wife to the first visit and to take the test together. The Kuplumussana mothers also seek to build a social fabric where future mothers are not forced to hide positive test results in order to avoid harsh repercussions, such as abandonment by their husband, and to get women’s partners to participate in the prevention and treatment of the disease, with a view to increasing participation in and permanent compliance with PMTCT programmes.

To strengthen compliance with treatment (poor compliance is the main predictive factor for treatment failure, progression towards AIDS and death), besides training meetings and psychological support, the Kuplumussana mothers have also embarked on the intense “active search” for children exposed to HIV who...
had contacted the health centres, but had then eluded medical observation. To assess the impact of the interventions undertaken by this mothers’ support group (MSG) and to understand how their work to care for and treat paediatric HIV could be developed and how they could act as intermediaries for PMTCT programmes, an analysis was made of the 2010 annual activity report to assess the Association’s contribution to the identification and recovery of children exposed to HIV who have eluded medical follow-up treatment at the reference centre.

RESULTS

To trace children who were at risk but had been missing from medical follow-up for over three months, the 29 mothers in the Kuplumussana group began an intense home-visit programme. This scheme gave rise, from January to December 2010, to a total of 2,692 examinations in the catchment areas of three health centres involved, with a total of 1,767 children identified in the community.

Of these children, 414 were found to have been lost to follow-up for the following reasons: death, transfer to other health districts or confirmation of a negative HIV test. As many as 732 (54%) of the remaining 1,354 were reintegrated in the follow-up programmes, with which they actively complied.

CONCLUSIONS

The Kuplumussana experience demonstrates both that interaction between support groups and healthcare facilities plays a pivotal role in drawing women further towards health prevention programmes and in recovering children lost to follow-up, and that mothers’ support groups can provide added value to the treatment of paediatric HIV. The development of Kuplumussana – from a simple group to an association able to organize and support itself independently, in order to provide the community with guaranteed, extremely successful support – is a fine example of emancipation in the history of African women and of the promotion of women’s role within society. Its organization and commitment to self-sufficiency make this model of activity extremely “cost-effective” and readily “transferable” to other situations. Interestingly, in its extreme simplicity, the Kuplumussana group of mothers constitutes support for 4 of the United Nations Development Goals, since their activities promote gender equality, reduce child mortality, promote maternal health and combat HIV/AIDS.

NOTES

1. UNAIDS, Global plan towards the elimination of new HIV infection among children by 2015 and keeping their mothers alive, 2011.
Estimates fluctuate and vary according to source and calculation methods. The least certain ones come from the poorest countries, where data recording systems are less sophisticated. What is for sure is that under-5 mortality throughout the world is falling. The most quoted estimate for 2011 is 7.2 million deaths, i.e. a decrease of 38% compared to the 11.6 million recorded in 1990. This is undoubtedly a sign of progress; but it is not enough to achieve the Millennium Development Goal (MDG) by 2015: a 67% reduction compared to the 1990 rate. Sometimes when it comes to distributing food, some get it all while others get none. The same applies to under-5 mortality. Vis-à-vis a mean global decrease of 2.2% per annum (2.6% in the last decade, thanks to MDG), rich countries, with 1.4% of deaths, recorded a fall of 3.6%, the Asiatic tigers of over 5%, North African countries of over 4%, Latin American states of over 3.5%, while in Sub-Saharan Africa we are below the world average with a paltry 0.5% per year. Some African countries even recorded a negative sign (Equatorial Guinea, Lesotho, Swaziland). Sub-Saharan African nations also have the highest mortality rates. In rich countries these stand at around 5 per 1,000 live births (3.4 in Italy); Equatorial Guinea has a rate of 191 per 1,000, followed by Guinea Bissau (170), Chad (168), Niger (161), Republic of Central Africa, Mali and Burkina Faso (157), with many other countries above 100 per 1,000, including Mozambique (137) and Angola (134). With such high rates, so few downward trends and a population that grows faster than elsewhere, it is not surprising that in Sub-Saharan Africa the percentage of the world’s under-5 deaths increased from 33% in 1990 to 49% in 2011. It is not certain when the majority of these countries can expect to achieve the MDG, but it will definitely be later than 2040.

Inequalities are, however, found not only between states and continents but, in many cases, within individual countries. There is a deteriorating trend between the 20% richest and the 20% poorest members of the population of any country, and this is also the case within rural and urban areas. Access to services and many health indicators, including under-5 mortality, are better in urban than in rural areas. However, in many urban areas, particularly the more densely populated ones, where there is a higher immigration rate, large sectors of the population have little or no access to services and present very similar health indicators to those of rural areas.

Lastly, there are differences by age group within the under-5 mortality category itself. The most rapidly decreasing rates relate to children aged between 1 and 4 years and between 1 and 11 months. The decline in mortality in the first month of life is instead much slower. Whereas neonatal deaths in 1990 amounted to approximately 30% of all under-5 deaths, these had increased to 40% in 2011. In Sub-Saharan Africa, where post-neonatal mortality is still high, neonatal deaths stand at roughly 26-30% of the total, but this rate is proportionately growing. In the future it therefore becomes essential to focus on mothers and their newborn living in the most marginal urban and rural areas.

NOTES

- Unicef, Progress for Children: Achieving the MDGs with Equity, n° 9, September 2010.
USE OF MISOPROSTOL IN POST-PARTUM HAEMORRHAGE

Misoprostol is a possible alternative to oxytocin as a uterotonic drug: it is inexpensive, can be taken orally, does not require refrigeration and has a long shelf life. A fundamentally important tool in deliveries not assisted by qualified staff.

DIFFICULTY IN MANAGING AND ADMINISTERING UTEROTONIC DRUGS

Post-partum haemorrhage (PPH) is the leading cause of maternal death. Throughout the world, 99% of deaths attributable to this cause occur in poor countries, in women who rarely receive adequate prophylaxis, since the delivery takes place outside of a healthcare facility. At the origin of PPH is almost always uterine atony, a pathology that can be prevented and treated, most notably through administration of uterotonic drugs, the most commonly used of which is oxytocin. Unfortunately, in poor countries, oxytocin is difficult to manage, on account of its properties (injectable, unstable at high temperatures, requires refrigeration, must be administered by qualified healthcare personnel), and because most deliveries take place at home.

MISOPROSTOL

Misoprostol, an analogue of prostaglandin E1, is a possible alternative to oxytocin as a uterotonic drug; it is inexpensive, can be taken orally, does not require refrigeration and has a long shelf life. The international federation of gynaecologists and obstetricians has approved its use, in poor countries, as the only valid defence against PPH when a delivery takes place at home, attended by untrained staff.

SCIENTIFIC LITERATURE

Malcolm Potts et al. share and totally support this position, which is corroborated by many studies conducted “in the field” in poor countries and in settings where deliveries take place at home without the assistance of a qualified midwife. The authors do, however, stress inconsistencies in some “randomized” trials conducted in tertiary-level hospitals, such as the multicentric study by Mariana Widmer et al. In this work, misoprostol, administered double-blind with placebo to treat PPH in women who had already been infused with oxytocin, proved ineffective. Potts maintained that a trial of this type cannot be implemented in poor countries, not only for logistical and financial reasons, but also because to do so would be ethically unacceptable: a placebo for PPH cannot be used when the uterotonic action of misoprostol has been demonstrated in many studies. Potts and colleagues advance the hypothesis that failure to guarantee community distribution of misoprostol will preclude achievement of Millennium Development Goal no. 5 (Reduction of maternal mortality) in Sub-Saharan Africa.

WHO

The WHO takes a more cautious, structured stand. The organization maintains that “in the absence of active management of the third stage of labour, a uterotonic drug (oxytocin or misoprostol) should be offered by a health worker trained in its use for prevention of PPH”. Stress is laid on the value of misoprostol in terms of efficacy and ease of administration, particularly in settings where intravenous infusion is not feasible. The lowest effective dose has not, however, been defined (the only important trial, conducted in India, used oral doses of 600 µg), which is an important point, since at high doses the drug could cause adverse effects that would overshadow the benefits. Potts et al. base their response on historical findings: misoprostol has been used for many years as an antacid, at even higher doses (800 µg) and the only important side effects were fever and shivering.

NOTES

1 Potts et al., Maternal mortality: one death every 7 min, Lancet 2010, 375:1762-63. 
FINANCIAL BARRIERS TO SAFE DELIVERY IN AFRICA

On the subject of financial barriers to safe delivery in Africa, the specialist literature indicates several tenets and works in progress. The problem is not whether or not to remove financial barriers but how to go about it.

TEXT BY / GIOVANNI PUTOTO / DOCTORS WITH AFRICA CUAMP

THE TENETS

Financial barriers are an important social determinant of access to obstetric services, in many cases the most significant one. This largely explains the wide gap between the poorest and the richest quintiles in terms of obstetric service usage. Total direct (user fees) and indirect costs (transportation, food, care, corruption, loss of earnings) absorb a significant proportion of family income. Poor families adopt a multitude of coping strategies vis-à-vis these high costs: sale of food and domestic animals, use of savings, recourse to credit. The cost of an obstetric emergency, such as a caesarean section, can be high enough to cast the family into abject poverty. Studies, be they few, have been carried out on the mid- and long-term outcomes of the cost to families of “near misses”. They reveal serious deterioration in the social, economic and psychological conditions of women and children, affecting the children and impairing their developmental ability. On the basis of this evidence, health policies have been designed to promote universal coverage (World Health Assembly 58.31 and 58.33, 2005) and provide maternal and infant services free of charge at the point of delivery (Partnership for Maternal Newborn and Child Health consensus statement, Geneva, 2009), by means of financing mechanisms at the level of supply and demand.

WORK IN PROGRESS

A recent review analysed 8 study cases characterized by: different intervention levels (community, district, national); different beneficiaries (coverage extended to all pregnant women or just to poor women); different settings (Africa, Asia and Latin America). Results show an overall rise in the use of assisted delivery services, ranging from 4% (Senegal) to 33.8% (Mauritania), particularly in non-hospital facilities. Significant increases were also reported in the caesarean section rate (despite being below the putative threshold of 5%). The only exception was Cambodia, where the use of vouchers involved less than half of suitable women. The unit cost of the services provided was relatively uniform: 18-21 dollars for standard deliveries, 154-165 dollars for caesarean sections. The effects on maternal and perinatal mortality and perceived quality were only rarely measured and to a limited extent. The abolition of user fees seemed to significantly facilitate higher social categories (should the determinants of chronic poverty be sought elsewhere?). The impact on healthcare providers is underrated (e.g. low incentives, insufficient skill, increase in workload) and health facility management (e.g. frequent interruptions in the drug supply chain), particularly in rural areas. Other studies generally report the same outcomes, but also highlight critical situations in reference systems (Mali), lack of awareness within the community about the abolition of user fees (Niger), inefficient fund allocation and inadequate systems for reimbursing the delivering parties (Senegal), insufficient operating procedures and underestimation of quality aspects (Ghana). As usual, concern was expressed in all cases about the sustainability of the intervention.

CONCLUSIONS: OPENING THE PANDORA BOX OF HEALTH SERVICE DELIVERY

Overall policies to partially or totally remove financial barriers to safe delivery have led to a positive increase in the use of obstetric services, particularly when accompanied by measures to support supply and demand. The problem is not whether or not to remove financial barriers but how to go about it, stressing the need to make way for experience and the generation of new evidence.

NOTES

Established in 1950, Doctors with Africa CUAMM was the first NGO in the healthcare field to receive recognition in Italy (pursuant to the Cooperation law of 1972) and is the largest Italian organization for the promotion and safeguard of the health of the African populations. It implements long-term development projects, intervening with the same approach in emergency situations, with a view to ensuring quality services that are accessible to all.

**HISTORY**

In its 60 years’ history:
- 1,328 people have departed to work on projects: 367 of these departed on more than one occasion. The total number of departures was therefore 1,908;
- 4,330 years of service have been carried out, with a mean of 3 years per expatriate person;
- 950 students have been accommodated at the college: 640 Italians and 280 from 34 different countries;
- 279 doctors have departed from the Veneto region in almost 60 years;
- 211 hospitals have been served;
- 38 countries have benefited from intervention;
- 150 key programmes have been carried out in cooperation with the Italian Foreign Ministry and various international agencies.

**IN AFRICA**

Today we are in Angola, Ethiopia, Mozambique, Sierra Leone, Southern Sudan, Tanzania, Uganda with:
- 80 providers: 47 doctors, 4 paramedics, 29 administrative and logistics staff
- 40 key cooperation projects and about a hundred minor support interventions, through which the organization assists:
  - 15 hospitals
  - 25 districts (for public healthcare activities, mother-child care, training and in the fight against AIDS, tuberculosis and malaria)
  - 3 motor rehabilitation centres
  - 4 nursing schools
  - 3 universities (in Uganda, Mozambique and Ethiopia).

**IN EUROPE**

Doctors with Africa CUAMM has for years been actively implementing projects and building networks at European level, with the aim of building public awareness on the subject of equality of access to treatment and healthcare systems. Specifically, from 2011 to 2014 the organization has been coordinator of the European project, "Equal opportunities for health: action for development", on which it has been working with 18 other partner organizations from 7 European countries. Universities, student associations, non governmental associations in Italy, Poland, Latvia, Bulgaria, Romania, Malta and Hungary are working together to give room and voice to training in Global health and to promote greater awareness about the relationships between health and development, both individually and collectively.

**NOTICE TO READERS**

Support and take part in our commitment to Africa, in one of the following ways:
- Post office current account no. 17101353 under the name of Doctors with Africa CUAMM
- Bank transfer IBAN IT 91 H 05018 12101 000000107890 at the Banca Popolare Etica Padua
- Credit card call 0039.049.8751279
- Online www.mediciconlafrica.org

Doctors with Africa CUAMM is a not-for-profit NGO. All donations are therefore tax deductible. They can be indicated for this purpose in the annual tax return statement, attaching the receipt for the donation made.

**HEALTH AND DEVELOPMENT** offers studies, research work and documentation which are unique to the Italian editorial world. Our publication needs the support of all readers and friends of Doctors with Africa CUAMM.
EVERY YEAR IN SUB-SAHARAN AFRICA:

- 4.5 million children die before reaching five years of age, for preventable diseases that can be treated at low cost;
- 1.2 million newborn children die in the first month of life through lack of treatment;
- 265 thousand women die from pregnancy- and delivery-related problems.

Doctors with Africa CUAMM operates in

- SIERRA LEONE
- SOUTHERN SUDAN
- ETHIOPIA
- UGANDA
- TANZANIA
- ANGOLA
- MOZAMBIQUE

where it offers treatment and help to these women and their children. Helping us do this is a silent, forgotten war.

- With 15 euros you can ensure transport by ambulance for a woman in labour.
- With 25 euros you provide for treatment to prevent HIV transmission from mother to child.
- With 40 euros you provide a mother with assisted delivery.
- With 80 euros you fund a week’s training course for a midwife.