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CUAMM



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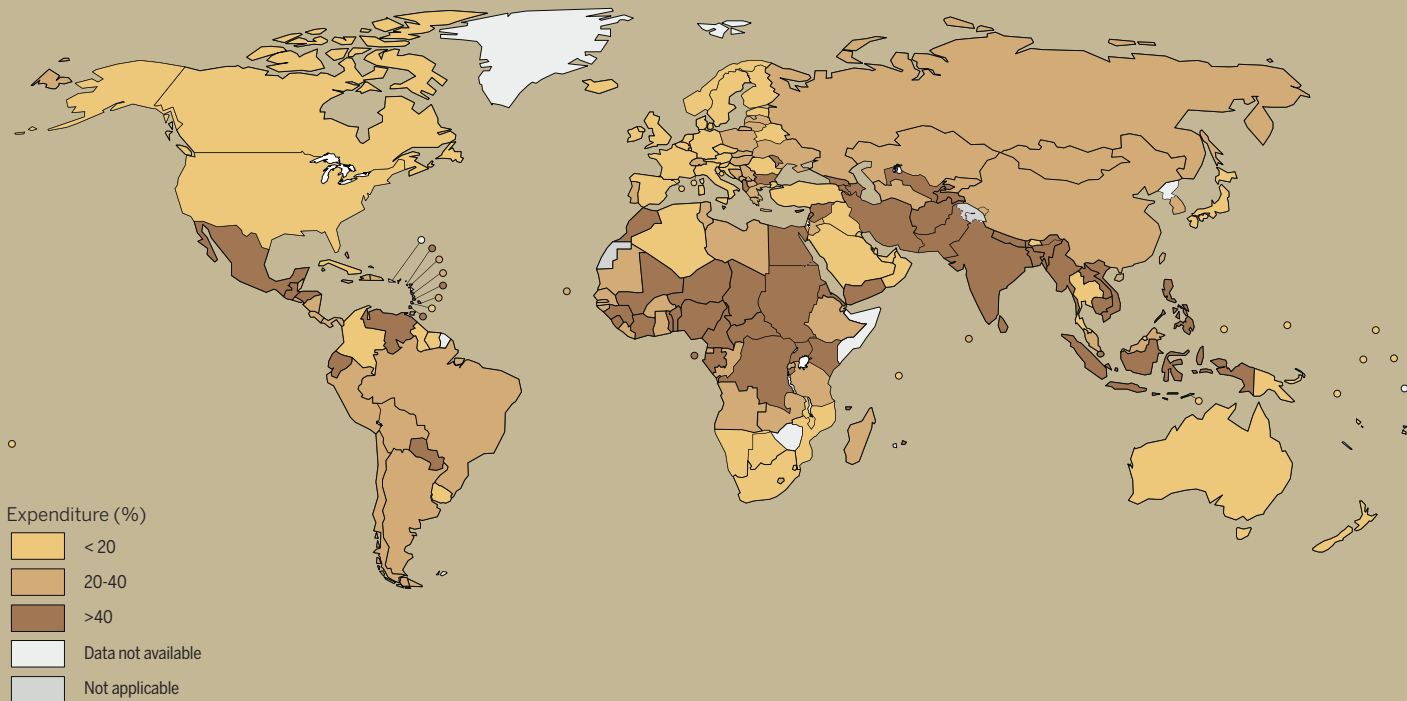
NEWS

Direct payment of health services

“Member States are called upon to ensure that health financing systems evolve so as to avoid significant direct payments at the point of delivery and include a method for prepayment of financial contributions for health care and services as well as a mechanism to pool risks among the population in order to avoid catastrophic health-care expenditure and impoverishment of individuals as a result of seeking the care needed.” This was part of a United Nations General Assembly resolution on universal health coverage, approved on 12th December, 2012. The **Figure** below shows that the “out-of-pocket” component of health expenditure (direct payment of health services) is much higher in the poorest countries¹.

¹ WHO, *The World Health Report 2013, Research for Universal Health Coverage*, Geneva

FIGURE / OUT-OF-POCKET EXPENDITURES ON HEALTH AS A PERCENTAGE OF TOTAL EXPENDITURE ON HEALTH, 2013



Note: based on WHO data February 2013, Research for Universal Health Coverage

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TRANSLATION

Joanne Fleming

Cover illustration by Ramon Pezzarini.
The deadline for the Millennium Development Goals is fast approaching. The countdown forces healthcare stakeholders to reflect on the successes and failures of the programme and to strive to ensure inclusion of Global Health in the post-2015 Development Agenda. The magazine takes a look at strengths, weaknesses and unsolved problems.



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DIALOGUE

THE ROLE OF NGOs IN THE NATIONAL HEALTH SYSTEM

Opening the national health system to private “profit” is not the solution, but certain private-social sector agencies, founded on a wave of emotion, also risk to create parallel, segregating pathways for poorer members of the population, giving cause to diminish the responsibility of the public service and make it even more fragile.

TEXT BY / DON DANTE CARRARO / DIRECTOR OF DOCTORS WITH AFRICA CUAMM

Doctors with Africa CUAMM is firmly convinced that health is not a consumer good to be bought and sold, but a fundamental human right to fight for. Accordingly, access to health services cannot be the privilege of a chosen few but is a right for all, particularly the poorest members of society. This applies to Africa, where our work is concentrated, but also to Europe and our own country of Italy, where the current economic crisis is increasingly threatening the welfare system¹.

There is a growing tendency in the national debate and in public opinion to believe that national health service costs in Italy are unsustainable and that alternative solutions are needed to produce savings. The population is indeed ageing and the cost of medicines and diagnostic tests is rising. Yet available data depict a different picture. At present, the percentage cost of the national health service as a proportion of gross domestic product is below the European average and projections indicate that this cost will rise to 7.1% of GDP in 2020 and to 7.4% in 2030: which does not appear all that catastrophic². But that is not all. In Italy there is a large, perhaps excessive, number of hospitals and specialist centres which could be merged, with each one serving a larger catchment area, at the same cost and with higher quality. Waste, associated with corruption and incompetence, is undoubtedly rife but, with intelligence and common sense and by applying the standard costs method, its sources could be identified relatively easily. Much of primary care could be transferred from doctors to nurses, thereby getting closer to patients and considerably reducing costs. There is plenty of room for improvement in our national health service and some organizational changes are needed - and immediately so. Nonetheless, our health and social care system is one of the most equitable in the world and one of the few to guarantee excellence in treatment for all. Accordingly, each one of us, at the institutional and civil society level, must commit to defending and supporting the system. Opening up to private profit in health, through insurance companies or other providers, is not the solution. Well-known, documented experiences, as that of the United States, where health costs 17% of GDP and excludes approximately 30 million people out of a total population of just over 300 million, despite Obama's latest health reform, shows that private profit is a false solution.

Likewise we must avoid other deceptive, vague shortcuts which in turn risk to weaken the national health service. Newspapers and television programmes (some even culturally advanced) frequently report attempts to find solutions for the health situation which, for the poorer sectors of the public, can sometimes be dramatic. They are private-social sector agencies that seem to be founded on a wave of emotion or to stem from other interests rather than based on clear thinking and profound knowledge of the subject. I am referring to the establishment of outpatient and health facilities that claim to respond more appropriately than public services to the health needs of the poorest, most vulnerable sectors of the population and to cost less³. This type of non-profit body risks to become the perfect excuse for a public service anxious to abdicate its constitutional duty to guarantee the right to health for everyone in the country, be they citizens or non-citizens, rich or poor. They risk to create parallel, segregating pathways for the poorest members of the population, giving cause to diminish the responsibility of the public service and make it even more fragile. The private-social sector can and must assume a strengthening, stimulating role vis-à-vis the public sector, by accompanying it, collaborating with it, creating links between services, informing and training, and avoiding overlaps and substitutions. This is the style of many outpatient services delivered to the very poor in various Italian towns and cities (dioceses). Charity must strengthen rights (justice), not weaken them. As stated by the Second Vatican Council, “What is already due in justice is not to be offered as a gift of charity”⁴.

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DIALOGUE

UNIVERSAL HEALTH COVERAGE. AN INSUPPRESSIBLE RIGHT

Approximately one billion people throughout the world cannot afford a doctor when they are sick, safe child delivery when they are pregnant, or a surgical procedure when they are in a road accident. It would take forty billion dollars to guarantee free access to a minimum package of essential services.

TEXT BY / GAVINO MACIOCCO / DEPARTMENT OF PUBLIC HEALTH, UNIVERSITY OF FLORENCE

On 12 December, 2012, the United Nations General Assembly approved a resolution on Universal Health Coverage asserting:

- the importance of universal health coverage in national health systems, particularly through primary healthcare and social protection mechanisms, to provide access to health services for all, in particular for the poorest segments of the population; [...]
- universal health coverage implies that all people have indiscriminate access to all nationally defined preventive, treatment and rehabilitation services and to essential, safe and effective, low-cost medicines of assured quality, with the guarantee that by using these services, patients, particularly the poorest, most vulnerable ones - are not exposed to economic hardship; [...]
- the need to continue to promote, implement or strengthen multisector national policies and plans to prevent and control chronic diseases and to apply these policies and programmes more and more widely, acknowledging the importance of universal coverage within national health systems.

In an editorial on the work of the United Nations, the Lancet wrote, "Certain concepts resonate so naturally with the innate sense of dignity and justice within the hearts of men and women that they seem an insuppressible right. That healthcare should be accessible to all is surely one such concept. Yet in the past, this notion has struggled against barriers of self-interest and poor understanding"¹. The reawakening of the United Nations – and before it WHO - to the importance of universal health coverage is certainly welcome, albeit rather late in coming. For at least two decades – the 80s and the 90s – structural changes and the privatization of services (now called "austerity measures") were allowed to devastate health systems in the poorest countries, with consequences that are all too plain to see. A UN document rightly asserts that, "Member States are called upon to ensure that health financing systems evolve so as to avoid significant direct payments at the point of delivery and include a method for prepayment of financial contributions for health care and services as well as a mechanism to pool risks among the population in order to avoid catastrophic healthcare expenditure and impoverishment of individuals as a result of seeking the care needed." However, the poorest countries have for years been unable to introduce prepayment and risk pooling systems, with healthcare expenditure falling almost entirely on the budgets of families. The Figure accompanying the "News" item above clearly shows that the "out-of-pocket" component of healthcare is much higher in the poorest countries. This has serious consequences not only on health but also on the household economy. According to WHO estimates, in 2010, 150 million people were faced with catastrophic expenditure for health care and 100 million were driven below the poverty line for this reason². Many people in poor countries do not have the means to pay for any healthcare at all, and even very low user fees can pose an insurmountable barrier to access.

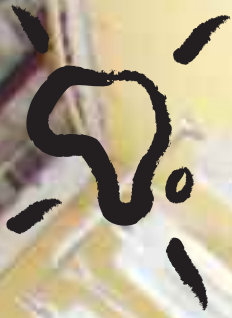
"The lesson, however, is to avoid the lazy thinking that small user fees ... will usefully require households to avoid wasteful use of health services, or induce poor households to value the services more, or cover the operating costs of local clinics," maintains the economist, Jeffrey Sachs. "Even nominal copayments can lead to massive exclusion of the poor from life-saving health services"³. According to Sachs, approximately one billion people throughout the world cannot afford a doctor when they are sick, safe child delivery when they are pregnant, or a surgical procedure when they are in a road accident. When will universal health coverage be achieved? In the meantime, Sachs continues, 40 billion dollars of aid are needed to guarantee those billion people free access to a minimum package of essential services. Through cooperation for development, which in Italy has completely disappeared from the political agenda for some time now. We are bottom in everything. Particularly in this.

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AN EPIDEMIC OF CHOLERA IN CHIULO, ANGOLA

Bad news: a terrible epidemic of cholera is spreading in Chiulo. Ten new cases reach the hospital each day and are immediately placed in quarantine. The staff of Doctors with Africa CUAMM and local resources are doing their utmost to contain the cases but regrettably there are two or three deaths per day. "The situation is very worrying and there is an extremely high risk of the epidemic and the number of deaths reaching frightening proportions," states Fabio Capello, a CUAMM doctor in Chiulo. "We have distributed information to the population so that they know how to act. But more needs to be done at all levels to manage this terrible situation, together with the authorities, the media and individual people."







AN EMERGING NEED: CANCER SCREENING

Over one million women throughout the world are estimated to have cervical cancer. Most have not been diagnosed or do not have access to treatment. In August 2012, Doctors with Africa CUAMM launched an integrated pilot project for HIV, TB and breast and cervical cancer screening.

TEXT BY / ANDREA ATZORI, MARINA TRIVELLI / DOCTORS WITH AFRICA CUAMM

Cancer is the second cause of death in low/middle income countries (LMCs), ranking higher than respiratory infections and diseases related to the HIV/AIDS virus, diarrhoea or tuberculosis^{1,2}. Experience in developed nations has shown that extensive, well planned screening programmes can significantly reduce the number of new cases of cervical cancer and the associated mortality rate. The lack of these programmes in LMCs explains the enormous differences in incidence and cervical cancer-related mortality rates between developed and developing countries^{1,2}. The main reasons for higher incidence and mortality in developing countries are as follows²:

- limited access to healthcare services;
- lack of functional referral systems;
- lack of awareness of cervical cancer among the population, health providers and authorities;
- lack of or poor quality screening programmes for precancerous lesions and tumours in the early stages.

The difference between developed and developing countries reflects stark inequalities in health status and is a challenge for health services³.

EPIDEMIOLOGY OF CANCER IN ETHIOPIA

In East Africa, cervical and breast cancer account for 24 and 14% respectively, of all malignant tumours in women². The only significant data relating to Ethiopia come from a retrospective study carried out in November 2011 by the University of Addis Ababa in collaboration with the University of Halle-Wittenberg in Germany⁴: of the 40,000 cases of cancer seen by the country's only tumour centre between 2006 and 2010, cervical cancer proved to be the most prominent malignancy, followed by breast cancer.

THE EXPERIENCE OF ST. LUKE'S CATHOLIC HOSPITAL, WOLISSO, SOUTH WEST SHOA ZONE, OROMIA, ETHIOPIA

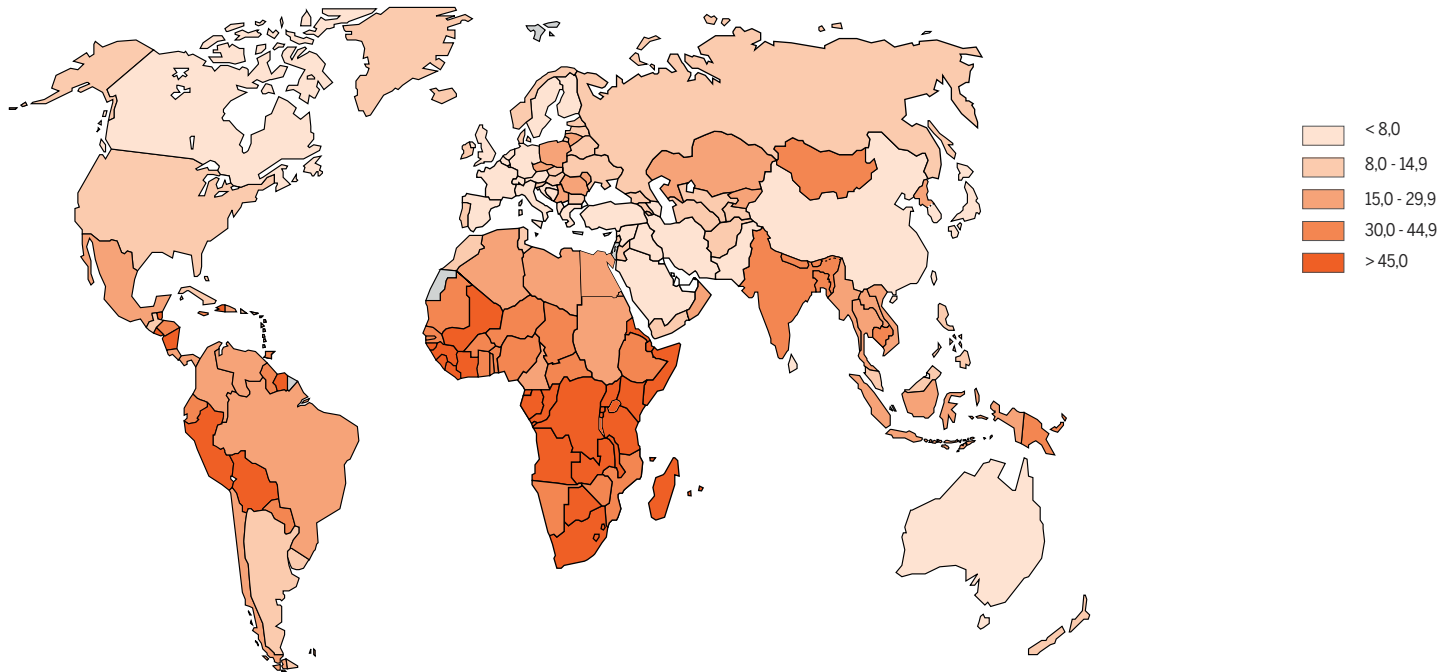
Between 2006 and 2010, approximately 0.5% of all patients seen in hospital were women with malignant tumours. Among them, 16% had breast cancer and 23% had cervical cancer. Between March and August 2012, at least 31 of the 824 women

presenting at hospital with gynaecological problems, had cancer of the uterus (3.7%) and 64 had various breast pathologies (7.7%). Of these, 15 had a diagnosis of breast cancer (1.8%). In August 2012, Doctors with Africa CUAMM launched an integrated project for HIV, TB and breast and cervical cancer screening⁵. It consisted of an early detection component, conducted at the local health centre, and a treatment and diagnosis component, conducted in hospital. HIV and TB were integrated with cancer screening to create synergies with activists and groups/associations already operating at local community level, whose activities include cancer awareness building, peer to peer support and a system of referring women to health centres and hospital.

The women admitted to screening for cervical cancer were aged between 25 and 50 and between 20 and 55 for breast cancer. Special attention was paid to HIV-positive women. In their case, screening became part of the treatment centres' monitoring protocol.

- **The breast cancer screening procedure:** All women accessing hospital or health centres are invited for a breast examination and taught by general practitioners and health officers to self-examine their breasts on a monthly basis. If anything pathological is detected, the patient is referred to the hospital's general surgeon, who decides on the treatment needed (antibiotics for mastitis, basic recognition of fibrocystic mastopathy, etc). When a suspect nodule is found, the patient is admitted to fine needle aspiration or biopsy and the collected sample is sent to a pathology lab in Addis Abeba, with which the hospital has a contract. After two/three weeks, the pathology report is e-mailed back to the hospital and the women are informed of the results. If the test is positive for a tumour pathology, the woman is contacted and follows the available treatment pathway.
- **The cervical cancer screening procedure:** All women accessing hospital or health centres are invited for a gynaecological examination either in hospital or at one of the health centres. This includes screening according to WHO⁶ criteria, based on the VIA method. If the VIA test is negative, the women are advised to return for a check-up after three years. If it is positive, they are referred to Wolisso hospital. The gynaecologist repeats the VIA test in all suspect cases and, according to the results, decides to carry out a smear test

FIGURE / WORLD INCIDENCE RATE OF CERVICAL CANCER PER 100,000 WOMEN (OF ALL AGES). AGES STANDARDIZED USING THE WHO POPULATION STANDARD (2005)



or to directly refer the patient for loop excision, based on the following procedure:

- negative VIA: check-up after three years
- positive VIA with apparent dysplasia: direct referral for LEEP (electrosurgical loop excision)
- positive VIA without apparent dysplasia: smear test

In both positive cases, the cytological or biopsy specimen is sent to the pathology lab in Addis Abeba. According to the results, the practitioner decides whether or not to admit the woman for further surgery or to refer her for home-based treatment.

CONCLUSIONS

The adopted model, which integrates screening activities for infectious with non-infectious diseases, was acceptable in Wolisso,

even though the introduction of screening required additional resources, such as staff training, since it was a completely new area of expertise.

The nursing staff found it easy to learn and apply the new techniques they had learned, such as the VIA method. However, after initially high numbers, related to the novelty of the practice, health officers tended to apply the breast examination less and less often during routine visits. This was not for cultural reasons but because the examination is time consuming and health officers were unable to guarantee its inclusion due to their heavy workload.

The screening results themselves were encouraging. Not only were the two procedures accepted by the local population but they also enabled 84% of women with tumour or precancerous lesions to be treated or to prevent cancer onset. In addition, breast cancer screening enabled the diagnosis of 12 cases of primary breast tuberculosis which would probably not otherwise have been diagnosed.

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STEP (SUDAN TROPICAL EXCHANGE PROJECT)

The Project was founded in Sudan in 2009 to provide international students with the opportunity to investigate the pathological and clinical characteristics of Tropical Diseases. Equity and health, to which all individuals have a right, are the building bricks of this Project.

TEXT BY / IVANA DI SALVO / SISM - ITALIAN SECRETARIAT OF MEDICAL STUDENTS

STEP (Sudan Tropical Exchange Project) was set up in Khartoum, where the two branches of the Nile merge: the Blue Nile in the East and the White Nile in the West. Its aim is to provide mainly European medical students with tools to recognise, clinically manage and treat Tropical Diseases and to study the debilitating effects of Neglected Diseases.

SUDAN

The cultural diversity of the inhabitants of Sudan is extremely broad: the Muslims of Nubia, Beja, Fur and Dinka in the North. The Nuer, Shilluk and Nuba in the South, the Arab tribes of Darfur and Kordofan, the Dervishes and the various Christian communities. The Arabs and Dinka people are among the largest groups in their respective regions. All these ethnic groups are in turn divided into tribes or other types of community.

Each person has a unique cultural and spiritual heritage unlike anyone else. This diversity is often cause for contrast and is reflected in years of internal conflict, culminating in the separation of the North from the South on 9th July, 2011. Despite peace agreements between Sudan and South Sudan, there is a prevailing sense of tension combined with hope of a stable future. Sudan is one of the poorest countries in the world, with two-thirds of the population living in rural areas and over 60% living in poverty and extreme health conditions. In addition, the stigma attached to some tropical disease-related conditions prompts the need to educate patients on their rights and on available treatments.

Thirteen of the Tropical Diseases considered to be neglected at world level are present in Africa and in Sudan. Examples include leishmaniasis, schistosomiasis, onchocerciasis, trachoma, human African trypanosomiasis (also known as sleeping sickness) and filariasis.

HIV, malaria and tuberculosis, to name but a few, also form part of the background. WHO mortality data for 2011 showed that 44% of deaths in the total population of 435,551,941 were from communicable, maternal, prenatal conditions and malnutrition, while rates were far lower for non-communicable diseases, as diabetes (2%), respiratory illnesses (3%), tumours (4%) and cardiovascular diseases (23%).

THE STEP PROJECT

Tropical Disease control programmes are part of a global strategy to reduce poverty. They include health policy strategies to promote effective drug distribution to those in need and research into these diseases, which are often forgotten by the scientific community.

Data, information and descriptions will be discussed during the project in order to make it a worthwhile experience. The aim will be to build awareness among students, teach them to become critical, give them an idea of the training experience and show them how the doctor-patient relationship fits into the social setting and health system of the place of operation.

The Project was founded in 2009 thanks to the work of the student A. Mergani and several fellow Sudanese students desirous to welcome international students and give them the opportunity to investigate the pathological and clinical characteristics of Tropical Diseases.

The Sudanese students sought a global perspective right from the start, setting health as a priority not only of the individual country but also of the international community as a whole. The principles of equity and health, to which all individuals have a right, form the foundation of this project and can be observed in the work of the Medical Mission, involving both students and local residents.

Between 2009 and 2013, the Sudan Tropical Exchange Project has been improved by the advice of the students and two student associations (IFMSA NL from Holland and SISM from Italy) with which MedSIN Sudan has entered into an important transnational collaboration.

Italy and the Netherlands were very interested in the organization of the project, taking an active role right from the first year of its establishment. The various sociocultural and economic aspects of the country, the cordiality and hospitality of the Sudanese people, and the quality of the teaching make this an ideal student training project. This year the Project will also include a course on Global Health, during which the Sudanese health system will be compared to health systems in other countries throughout the world, including Africa. The focus will be on the country's main problems associated with citizens' socioeconomic conditions, disparities and rural areas.

OBJECTIVES

According to the principles of the IFMSA (International Federation of Medical Students' Associations), students do not take part in voluntary work to fill up their spare time but to become more culturally engaged, to focus on training gaps and turn them into projects, such as taking active part in STEP. Training objectives are achieved through lectures, practical workshops, research, hospital ward duty and surgical procedures. Students are supervised by Professors of the Faculty of Medicine of Khartoum University, doctors from the Institute for Endemic Diseases, the University Hospital of Soba, Khartoum Teaching Hospital, Omdurman Hospital for Tropical Diseases, and by senior students in their final year at university, who have already been trained in the content of the project. This latter supervision comes under the umbrella of "Peer education".

Through its pioneering work, the University of Khartoum has made a very extensive contribution to university education in Africa and the Middle East and to the development of Sudan. The STEP project provides students with experience not only at the university and in the capital but also in rural areas.

The medical mission of Omdurman, which provides diagnoses and conducts health research, education and treatment in rural areas of Sudan, free of charge, opens its laboratory doors to young students, who give a hand and participate for a week in the health education programme, under Sudanese guidance.

The Medical Mission is formed by two small clinics, a pharmacy and a laboratory. The exhaustive scientific programme provides adequate training and prepares students to work there.

Each participant will be invited to implement the notions they have acquired, demonstrating to the organizers and themselves that they have developed a good level of knowledge in Tropical Diseases. They also learn to recognize the limits to practicing medicine in a rural tropical area and how to communicate with local people, bearing in mind cultural differences and needs. Knowledge of Tropical Diseases is not limited to the disease *per se* but takes account of each person's background, the community they live in and the individual him or herself. To understand Tropical Diseases, it is crucial to closely observe and analyse the social determinants of the diseases, their development and their consequences for the patient.



SISM IN SUDAN

Medical students travelling to Khartoum. A sense of the distances and dangers involved in the journey, the passing of time and the daily emergencies.

TEXT BY / LUCIANA LEPORE / SISM - ITALIAN SECRETARIAT OF MEDICAL STUDENTS

We have been in Khartoum for three weeks now. The STEP experience is drawing to a close. We are about to leave for the Medical Mission organized by the Sudanese students. The death of one of them in an accident made us rethink our journey. Travelling by car is pretty dangerous. The bus instead is strangely adorned with drapes that look rather like coffin linings.

We head south to Khartoum. The journey is endless. We are searched several times and it seems we need a police escort. It's not such a bad thing. The Sudanese sing and play. We finally arrive. There is neither light nor water. We are on the Nile. We are told to use mosquito nets because the mosquitoes are quite fierce around here. I fall asleep and don't worry about it. It's six in the morning. We're off again. Another bus, more drapes, a few of the students are perched on top of the bus. I fancy joining them but they don't let me. We reach our destination. The village is wonderfully calm, neat and tidy, and we are free of the incessant voice of the muezzin we've been hearing for weeks. There are lots of people to see and knowing what African time-keeping is like, we won't get round to all of them. The booking table is suddenly taken by storm. I am assigned to the laboratory so I start on the first withdrawals and slides. The outpatient surgery is next door, opposite the Adult Health Education room, where a children's lesson is about to begin.

There are lots of cases of pharyngitis, a patient with Horton's disease, an African albino, a few plasmodia. Time flies by and we manage to see everyone. At the end of the day the village women bring us trays loaded with *fool medamas* and water from the Nile. We add our *praziquantel*. We're off again. Our return journey takes us past the same ass carcass we encountered in the morning. We meet a man on a bike, on this deserted road in the middle of nowhere. It is impossible to imagine where he can be headed yet there is something essential about the whole experience. Like everything else that day. An essentialness that doctors, and even more so mankind, cannot do without.



ON THE FRONT LINE IN THE FIGHT AGAINST HIV/AIDS

On 1st December, Mozambique's second largest city, Beira, remembers World Aids Day. A lively, colourful parade march through the city, where one in three adults is HIV positive and only 34% of seropositive children have access to antiretroviral treatment. Equity in access to prevention, treatment and care for women and children is one of the priorities of Doctors with Africa CUAMM. The Association intervenes in Beira at health centre and central hospital level to prevent and treat HIV/AIDS. Moreover, since 2009 it supports Kuplumussana, an association of HIV-positive mothers with children receiving HIV treatment, whose have turned their motto, "let's help each other" into a daily commitment.



DE LUTA CONTRA
SOBRE O DISCRIMINAÇÃO
E A MORTE POR
HIV-SIDA





EXPERIENCES FROM THE FIELD

NON COMMUNICABLE DISEASES: MANAGING COMORBIDITY

Chronicity is a “forgotten” epidemic, comorbidity a “hidden” one. From being a great challenge demanding profound changes in healthcare organization and a grassroots cultural evolution among healthcare professionals of various backgrounds, it has turned into a real emergency.

TEXT BY / CARLA PERRIA / PUBLIC HEALTH PHYSICIAN

“In the absence of urgent action, the rising financial and economic costs of these diseases will reach levels that are beyond the coping capacity of even the wealthiest countries in the world,” declared Margaret Chan, Director General of WHO, in her introduction to the Global Status Report on Non-Communicable Diseases, in 2010¹.

Parallel to the epidemic rise in the prevalence and incidence of chronic pathologies, most notably diabetes and respiratory and cardiovascular diseases, much evidence has accumulated in recent years on the causal role of the risk factors involved in disease genesis. In many cases the underlying aetiopathogenetic mechanisms have also been determined, opening up a new knowledge front and revealing the enormous potential for restoring and gaining health through systematic implementation of community-based preventive interventions in living and working conditions.

This wealth of knowledge has been repeatedly ignored by the governments of the majority of highly developed countries, while global and national health policies have failed to stem the exponential growth in chronic diseases. Or rather their global spread has been fostered, in the best case-scenario, through decision-making inertia in implementing intersector and multidisciplinary programmes to fight risk factors.

Consequently there has not only been a dramatic rise in chronic diseases, but comorbidities associated with the same risk factors, have also multiplied in the same people. These have become the world’s true health scourge, threatening to undermine the sustainability of all health systems, as alarmingly announced by Dr. Chan in the above-mentioned report.

A series of articles published in the *Lancet* in 2005 described the epidemic of chronicity as “forgotten;” comorbidities are instead “hidden” because of the paucity of statistical data on the phenomenon and the difficulty of tracing them through classical epidemiological indicators.

From being a great challenge demanding profound changes in healthcare organization and a grassroots cultural evolution among healthcare professionals of various backgrounds, it has turned into a real emergency.

A few findings. In the United Kingdom, multiple pathologies are a relatively common occurrence: 42.2% of the population are affected by a chronic pathology, 23.2% present comorbidities and 8.3% have comorbid physical and mental disorders. Women are more affected and, as might be expected, the presence of multi-

morbidity progressively increases with age (at around 65 years, the majority of people have at least two chronic pathologies). However, wholly unexpectedly, the absolute number of people with two or more pathologies is higher in those younger than 65, of whom two-thirds present both physical and mental health disorders².

The situation is worse still in the USA, where almost three out of four people aged over 65 have two or more chronic pathologies, as do 1 in 4 in people aged under 65, confirming that chronicity is no longer limited to the frail elderly³. This underinvestigated topic was recently studied in an Australian survey showing that approximately 42% of subjects with multimorbidity were younger than 60, including 15% of people aged between 40 and 59 years⁴.

Chronicity is, however, truly epidemic in developing countries, due chiefly to its rapid spread at all population levels. Some 80% of chronic disease-related mortality is concentrated in middle-low income countries. In Africa, where the leading causes of death are infectious illnesses, perinatal diseases and malnutrition, mortality rates for chronic diseases are getting dangerously close to those for developed countries, with projections suggesting that death rates for acute and chronic diseases will almost equal out by 2020.

The burden of disease from chronic pathologies also leads to a rise in the (not always appropriate) demand for specialist health services, including hospital admissions, and in drug consumption, accompanied by inevitable side effects. This is even more evident in multimorbidity. Many people consume a vast quantity of drugs and require repeated clinical and instrumental controls, not to mention accessory and support treatments, with costs often incurred entirely by the individual patient.

These new and pressing challenges for health open a rather complex scenario. The only way to manage its complexity is to divide it into components. The aim is not to fragment the overall view and individual pathways but to define the responsibilities, roles and functions of health policy bodies entrusted at the various levels to make decisions about service management, not to mention individual professionals variously involved in healthcare processes.

The main components of a multidimensional approach to the complexities of multimorbidity can be summarized by the following key words:

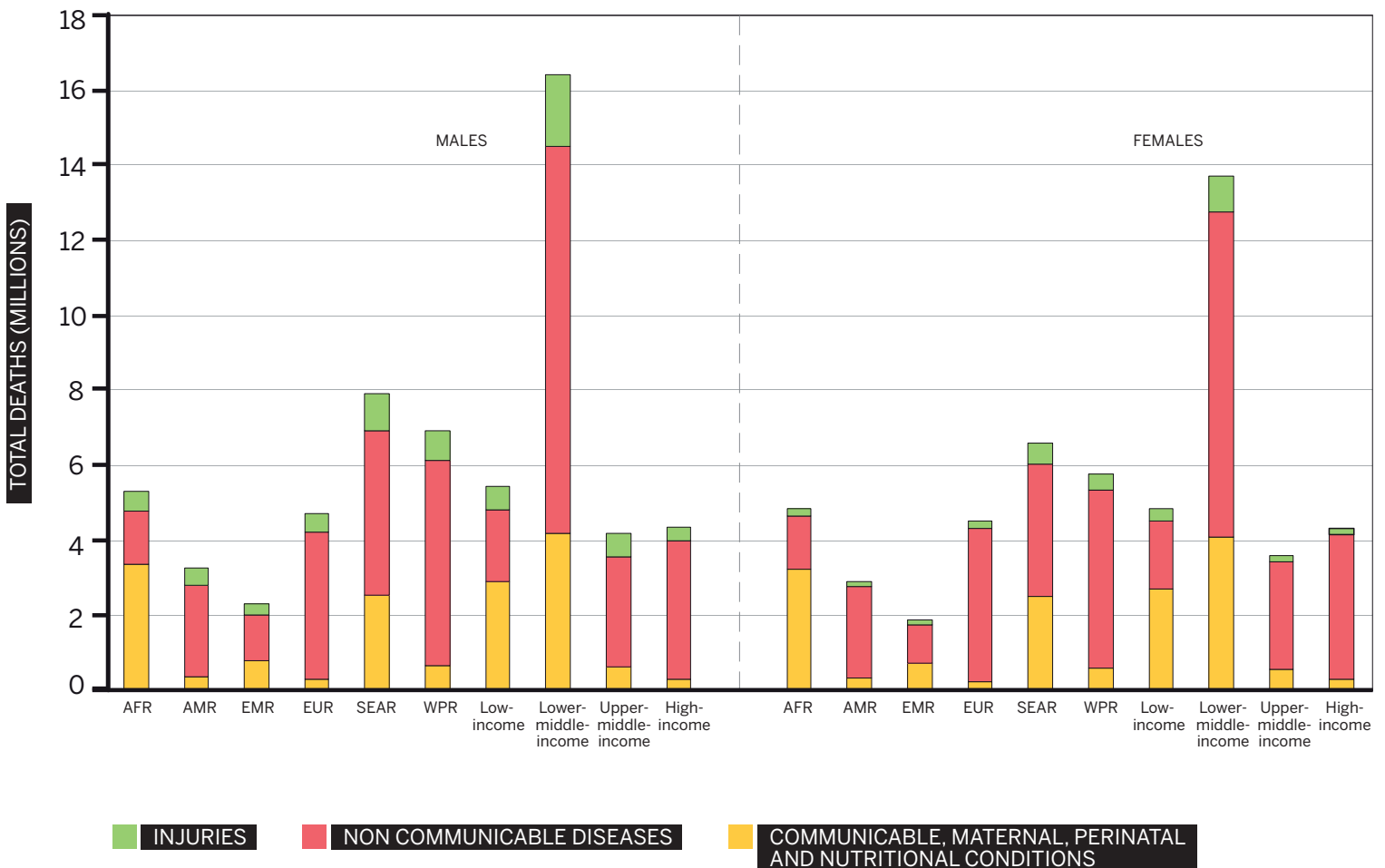
- *Policy.* The overriding aim of healthcare policy strategies should be to safeguard the health of the population, focusing

particularly on high-risk population subgroups, with multiple, complex needs.

- *Primary care.* Strengthening primary care is universally recognized as a key governance strategy to manage health problems with a major social and health impact in all settings.
- *Evidence-Based-Prevention.* Preventive interventions of proven efficacy must effectively permeate modern health systems in order to help move the axis of care more and more towards management of the early stage of chronic pathologies.
- *Health statistics.* Sophisticated information systems need to be designed to intercept complex needs and identify the most fragile population groups, taking socio-economic aspects into account. These groups contribute more than the rest of the population to the increase in healthcare costs.

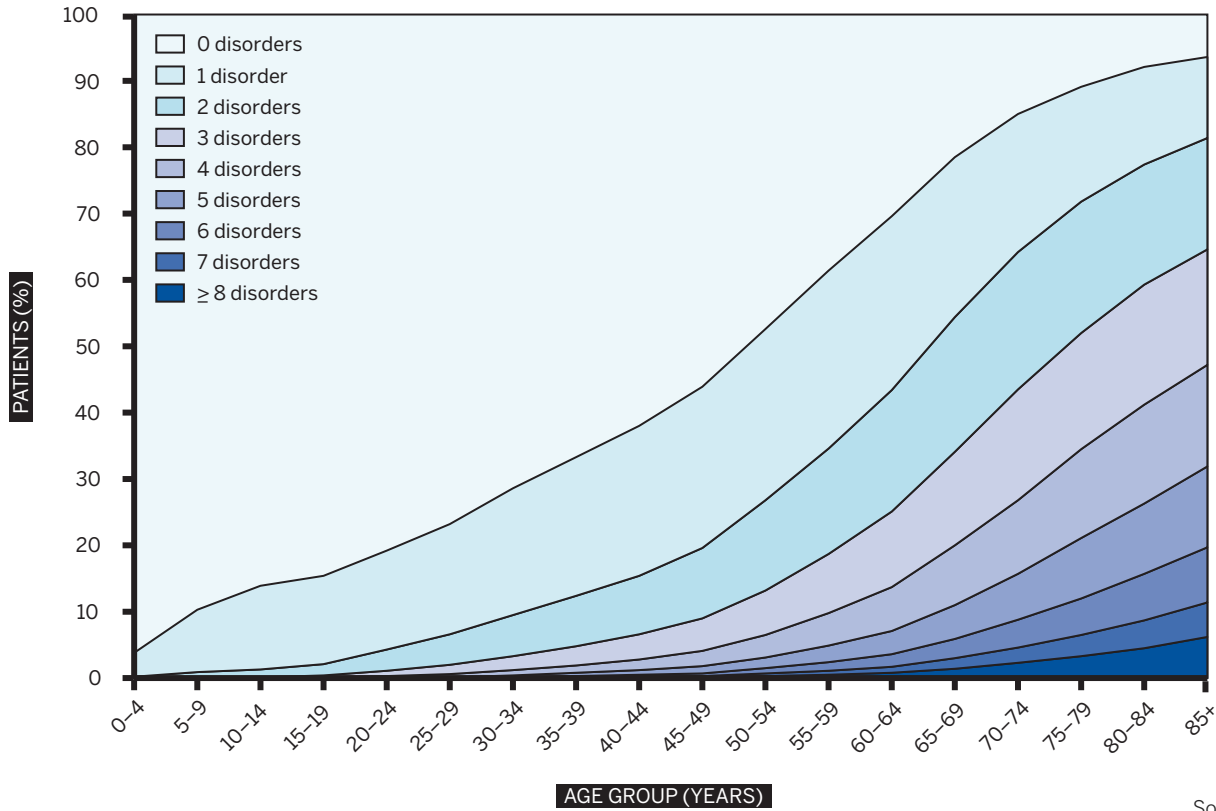
- *Research and evidence.* It is common knowledge that patients with multimorbidity are excluded from clinical trial populations. Hence the importance of developing research lines to gather evidence on multimorbidity and complex patients, encompassing both the effects of polypharmacy and research into effective organizational care-delivery models.
- *Education.* Medical training programmes need to be re-shaped to develop skills, abilities and attitudes related to the management of patients' health problems as a whole. Besides the presence of a given disease, patient health also depends on complex interactions among the various aspects and factors involved (e.g. multiple drug treatments) and involves the psychological sphere, in some cases affecting mental health.

FIGURE 1 / DISTRIBUTION OF THE MAIN CAUSES OF DEATH IN THE VARIOUS REGIONS OF THE WORLD, BY GENDER AND LEVEL OF INCOME, 2008.



(Notes: AFR = African Region, AMR = Region of the Americas, EMR = Eastern Mediterranean Region, EUR = European Region, SEAR = South-East Asia Region, WPR = Western Pacific Region).

FIGURE 2 / DISTRIBUTION OF MULTIMORBOSITY BY AGE GROUP



Source: Barnett K et al, Lancet, 2012

Decidedly tackling the ever growing burden of chronic diseases is increasingly becoming a question of responsibility. It cannot be limited to a few voluntary schemes or debated solely at aca-

dem or expert meetings, but requires urgent priority action now that it is unequivocally acknowledged that the majority of chronic diseases are preventable.

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EXPERIENCES FROM THE FIELD

COMMUNICABLE DISEASES: UNSOLVED PROBLEMS

Despite numerous technological advances, the challenge posed by infectious endemics in limited resource countries remains to be met.

Poor accessibility and service coverage and the contraction of financial resources by donor countries risk to nullify any scientific discoveries.

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Thanks to the development of diagnostic and therapeutic technologies, together with new strategies to control the major infectious endemics of limited resource countries (HIV, tuberculosis, malaria, intestinal parasitosis and other tropical pathologies that come under the umbrella of Neglected Tropical Diseases – NTD), the international scientific (and lay) community has become very optimistic about containing and even eradicating these diseases. Nevertheless the global burden remains enormous and WHO has launched an urgent appeal for continued investment in disease control¹. It recommends a pragmatic approach and is aware that stronger health systems increase control programme efficacy and vice versa. Following this advice, the paper analyses the main goals achieved in the scientific and operational field and the problems that remain unsolved.

MAIN SCIENTIFIC AND OPERATIONAL GOALS IN RECENT YEARS:

- **HIV/AIDS:** in addition to significant improvements in the survival and morbidity of people affected by HIV, the treatment of women during pregnancy and breastfeeding and the provision of prophylaxis in the newborn have brought about a drastic decline in the rate of mother-fetal transmission (to below 2%). Wider availability of these strategies has significantly reduced the number of children infected with HIV (and their mortality), so much so that UNAIDS estimated an annual number of 409,000 new paediatric cases by the end of 2012, meaning a 43% reduction compared to 2003². This has raised hopes that mother-fetal transmission can be totally eliminated, and paediatric HIV subsequently eradicated³. Similarly, controlled studies have demonstrated that HIV-positive patients undergoing antiretroviral treatment become less contagious, suggesting that a strategy to actively identify all patients with HIV infection and treat them immediately (universal test and treat approach) could achieve a zero transmission rate and eradicate the epidemic⁴.
- **Tuberculosis:** there have recently been some incredible breakthroughs in the field of TB diagnostics and treatment. The availability of highly specific diagnostic tests that require no (or very limited) technical skills, facilitates detection of the disease. The fully automated system⁵ is designed not only to make a very rapid diagnosis (within a few hours) on biological material but

also to diagnose resistance to rifampicin (associated with multiresistance), and at the same time provide the therapeutic regimen. The appropriateness of introducing this method into rural Africa has already been assessed⁶ and WHO considers the technique appropriate and cost effective even in rural areas of Africa⁷. New treatment drugs⁸ designed not only to effectively treat multiresistant strains but also to shorten treatment are currently being tested (it is hoped to reduce it to 3 months and then to just a few weeks).

- **Malaria:** Funding to combat malaria significantly increased at the start of the 21st century, leading to the increasingly widespread, rapid distribution of reliable diagnostic tests (as rapid tests), effective antimalarial drugs (combinations based on derivatives of artemisia) and appropriate antivevector measures (as mosquito nets treated with prolonged-action insecticide). The results of this financial effort by the governments of endemic countries and by cooperation policies was to significantly reduce the number of cases of and deaths from malaria at both global level and in sub-Saharan Africa⁹.
- The **Neglected Tropical Diseases** form a WHO category grouping together a series of parasitic and non-parasitic infections (as leprosy and trachoma), which are doubly tied to poverty. Besides being bidirectionally linked to a region's development (the poorer the region, the more widespread the pathology and vice versa), they are relatively unknown and tend to be forgotten. Africa bears 90% of the burden of the approximately 500,000 deaths per year globally, and yet effective treatments are available at sustainable costs for these pathologies. Mass treatment strategies could effectively bring these diseases under control, potentially eliminating or even eradicating them in some areas, as in the case of Guinea worm infestation¹⁰. A low-cost integrated approach (estimated at 0.40 dollars per person per year), would have an enormous impact, given the possibility to influence achievement of some of the Millennium Development Goals (MDG)¹¹.

UNSOLVED PROBLEMS

Despite undeniable progress, many problems, primarily service accessibility and coverage, clearly remain unsolved and risk to nullify any scientific discoveries. One such problem is **access to**

antiretroviral drugs, which are instrumental in the fight against HIV in terms of both treatment and prevention. Despite a significant, unprecedented escalation in the number of people being treated (in 2011, 8 million people were receiving therapy throughout the world, marking a 21% increase compared to 2010), UNAIDS² has estimated that in low-middle income countries only 54% of eligible patients are being treated (with a restrictive criterion based on a lower CD4 count than envisaged in early diagnosis and treatment strategies). Similarly, access in sub-Saharan Africa to strategies to prevent mother-to-child transmission is as low as 59%. Another problem is type of antiretroviral drug. First generation drugs are available in low income countries and have a much higher toxicological profile compared to the antiretrovirals administered in western countries. This not only limits the safety of long-term treatment strategies, it also imposes the need for complex laboratory follow-up. The lab is also needed to determine when to start treatment (CD4 lymphocyte count), to define therapeutic success/failure (HIV viral load) and the treatment regimen of choice (genotype resistance test), particularly in the case of failure. Access to the above methods is so difficult that the availability of a reliable laboratory is the major deterrent to access to effective treatment in most of Africa.

The main problems surrounding **tuberculosis** are access and laboratory-related. In spite of the exceptional 41% decrease in TB mortality rates since 1990, there were an estimated 8.7 million new cases at the global level in 2011, with 1.4 million deaths¹². Despite the supply of one million Xpert tests in 2011, 2/3 of cases of TB go undiagnosed globally. The advent of a significant epidemic of multiresistant strains (over 600,000 cases in 2011, approximately 5% of all diagnosed cases) prompts the need for second-line drugs, very long-term treatment strategies and, above all, a laboratory equipped to guide the new treatments by means of sensitivity tests. In this case scenario, the Xpert system cannot completely replace conventional culture systems and antibiograms: resistance to first-line (pirazinamide, ethambutol) and second-line drugs is not due to a single genetic mutation and cannot as a result be detected by molecular biology tests. The avail-

ability of drug sensitivity tests will become even more urgent when new antitubercular molecules and updated regimens are introduced¹³.

The financial resources provided by donor countries are another major problem. On the **malaria** front, there was renewed hope of globally eradicating the disease, a dream abandoned in the 1960s (after the initial failures with chloroquine and DDT). More specifically, WHO was essentially planning to globally curb malaria through universal coverage of control measures supported by annual funding of 5.1 billion dollars. Regrettably, funding plateaued at the beginning of the second decade (1.8 billion dollars in 2012), accompanied by a slowdown in the distribution of control measures and a halt in the reduction of morbidity and mortality from malaria in many sub-Saharan African countries. This will prevent achievement of the main goal of reducing the incidence of malaria by 75% by 2015.

Trypanosomiasis is emblematic of the **neglected tropical pathologies**¹⁴. Burdened by high mortality, this disease has, since ancient times, been recognized as the main cause of underdevelopment in rural Africa where the vector insect (tsetse fly) is present, preventing the establishment of human settlements and stock farming (animal trypanosomiasis). During the last decade, the availability of state-of-the-art diagnostic methods (serological screening and ultrasensitive parasitological detection methods) and less toxic drugs made it possible to restore control of the major epidemics that had broken out in sub-Saharan Africa after independence, linked to socio-political instability and the subsequent collapse of health systems. There is, however, evidence that transmission persists in more remote endemic areas, not regularly reached by control programmes as a result of reduced funding.

To conclude, we live in an age where major technical and scientific developments enable us to control the major infectious epidemics that historically scourge sub-Saharan Africa. However, numerous organizational and financial problems risk to undermine these doubtless benefits. The role of international cooperation and NGOs therefore continues to be pivotal.

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TAKING A CLOSER LOOK

THE ROLE OF WHO IN THE POST-2015 AGENDA

The World Health Organization views the social determinants of health as its guiding force and Universal Health Coverage (UHC) and non-communicable diseases as its main axes of operation, but at the risk of opening the door to the private sector and insurance-oriented model and ousting communities from governance of their own health.

TEXT BY / MARIANNA PARISOTTO, ALICE FABBRI, CHIARA DI GIROLAMO / INTERNATIONAL AND INTERCULTURAL HEALTH STUDY AND RESEARCH CENTRE, UNIVERSITY OF BOLOGNA

On the eve of the deadline for achieving the Millennium Development Goals (MDGs), the very United Nations declared that, "The MDGs represent a lost opportunity to provide guidance on how to address the root cause of poverty"¹. Defined and applied through a top-down process and based on the premise that development means economic growth, the MDGs have failed to challenge the neoliberal paradigm underlying the imbalance in resources and power. They have focused instead on measuring short-term outcomes rather than processes that ought to have guided the desired changes².

A High Level Panel was appointed to draw up the post-2015 global development agenda and a "global conversation" through thematic consultations at national, regional and global levels was launched online³. The latest working date was in September, during the 68th United Nations General Assembly. But general trends have already started to take shape. While the social, economic and environmental dimensions of sustainable development are central to the global agenda, the World Health Organization (WHO) views the social determinants of health as its guiding force and Universal Health Coverage (UHC) and non-communicable diseases as its main operating axes⁴. The crux of the matter is that, according to WHO, UHC equates to financial coverage for access to health services rather than to ethics, participation and equity. Accordingly, WHO is opening the door to the private sector and to the insurance-oriented model thereby promoting fragmentation of health systems and ousting communities from governance of their own health⁵. In the meantime this area has been retrieved by the World Bank. At the last WHO assembly the Bank's newly appointed director, Dr. Jim Kim, passed UHC off as the development and practical application of Primary Health Care, concealing his institution's role in the negation of the principles of Alma Ata. As concerns the role of NCDs, the action plan proposes to segment the MDGs into isolated targets: four pathology categories (cardiovascular, chronic respiratory, diabetes and tumours), associated with four behavioural risk factors (smoking, poor diet, alcohol abuse, physical inactivity), considered harmful individual choices, but disregarding how risk and vulnerability are structurally shaped. Inviting the multinationals to join the international debate means leaving the responsibilities of the big pharmaceutical, food and agricultural, beverage and alcohol corporations out of the health-disease equation. Yet building Health for All, which WHO is bound to promote, extends beyond the theoretical framework of social determinants⁶: health for all implies reorganizing political and economic relations at both the global and local level, so that everyone can resume their rights and have the power to negotiate them; it means community participation in decision-making processes; it means filling the theoretical framework of human rights with everyday practice and with the political commitment to achieve them.

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REPORT

FRAGILE HEALTH IN FRAGILE STATES

The weak relationship between governance and citizens, typical of fragile states, impacts on the management of humanitarian interventions, which require cooperation with the leaders of local civil society organizations.

TEXT BY / SILVIO DONÀ AND DAVIDE POCCHIESA / DOCTORS WITH AFRICA CUAMM

Within the debate to determine the strategies of the post-2015 development agenda and since none of the fragile states has achieved a single one of the Millennium Development Goals (MDGs)¹, it is now urgent to understand the structural characteristics of fragility. While the majority of fragile states had a low-income economy until 2010, almost 50% have gained middle-income status in 2013². This finding demonstrates the difficulty of setting common labels and categories. The fragility of a region cannot be unequivocally defined by income. The same applies to GDP growth rate, life expectancy (with a 20-year gap between the states with the longest and shortest longevity), capacity to attract foreign investments (which is higher in resource-rich countries), and amount of foreign debt or foreign currency reserves. This is also true of geographical origin, although the highest concentration of these states is in sub-Saharan Africa.

Common characteristics include low demographic density, weak material and non-material infrastructure, highly concentrated exports and poor human development. Low public investment in human development is reflected in dysfunctional education and health systems. Although many fragile states have reduced military spending, this has not translated into a rise in health and education expenditure.

According to OECD, "A fragile region or state has weak capacity to carry out basic governance functions, and lacks the ability to develop mutually constructive relations with society. Fragile states are also more vulnerable to internal or external shocks such as economic crises or natural disasters."³

The weak nature of the pact between governance and citizens also hampers management of aid flow and humanitarian interventions. In fragile states, official development assistance (ODA) from Development Assistance Committee (DAC) donors is the

main source of financial flow. In 2010 it reached 50 billion dollars, equating to 38% of total ODA.

Health intervention in fragile countries must include "diplomatic" support and cooperation with local civil society organization leaders⁴. Health ministries must receive guarantees that data collection is reliable and permits assessment of aid effectiveness. Local providers must be supported and trained in accountability. They must be able to leave their offices, "go out into the public domain" and actively collaborate at institutional headquarters with representatives of international agencies.

Erik Solheim, Norwegian politician and current Chairman of the OECD Aid for Development Committee, defined the approach to health systems in fragile countries as a "New Deal," citing the example of South Sudan and Sri Lanka⁵, where peace-building and maintenance are guaranteed by national leadership support to ensure ownership of agendas. As the Finance Minister of South Sudan remarked, "Nothing about us without us."

Aid in a fragile setting must also be guided by the principle of "Do not harm." It is better to accept modest short-term results in development and progress, rather than risk heightening social divisions and increasing existing corruption. This prompts the need to make a preventive analysis of the setting of intervention and to set a very long time horizon against which to measure performance^{6,7}. The appropriateness of these strategies is supported by experiences in Sierra Leone, the Democratic Republic of Congo and Afghanistan⁸. The positive outcome of these interventions seems to confirm the hypothesis that strengthening health systems positively influences conflict transformation in fragile countries ("Can we kill two birds with one stone?"). To date, evidence of this relationship is merely anecdotal. "Scientific" evidence requires in-depth analysis of the intervention setting to guarantee quality performance and to achieve the key goal of improving health services.

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COMPLEX AID MANAGEMENT: THE CASE OF HAITI

Following the devastating earthquake of 2010, international aid efforts were not coordinated with the existing health infrastructure, but used to build vertical, non-uniform programmes which are unsustainable in the long term, in a country presenting significant inequalities in access to healthcare.

TEXT BY / FEDERICA POZZI / SPECIALIST IN INTERNAL MEDICINE, AID WORKER IN HAITI

Haiti is the latest example of the complexities of the health response presented by an enormous humanitarian crisis.

Even before the devastating earthquake of 12 January, 2010, Haiti with its 2.7 doctors per 10,000 population, had the worst health indicators of the entire western hemisphere, with an overall proportion of skilled birth-attendant assisted deliveries of 15% in rural areas and a maternal mortality rate of 630 per 100,000 live births^{1,2}.

Immediately after the catastrophe, which claimed 250,000 deaths in the urban areas of Port au Prince, over 500 health NGOs installed themselves in the country, but only 1.1% of the 5.3 billion dollars raised worldwide was managed in accordance with the local authorities. Organization of the Health Cluster to coordinate aid contributed to further exclude the Ministry of Health (MSPP) from emergency management planning. The massive concentration of interventions in the urban area of the capital (and epicentre of the quake), successfully limited the number of victims. Conversely it underestimated the fact that prior to the event Haiti was one of the countries with the highest inequalities in access to services among the urban population and the majority of the population living in rural areas (53%).

While 180,000 displaced people moved towards the countryside, adding further pressure to the almost inexistent Primary Health Care system, the NGOs lured local health providers to more remunerative posts in the capital, facilitating abandonment of the peripheral healthcare facilities³.

The international aid community also forgot that in 2002 Haiti was among the world's bottom 12 countries for access to adequate sanitation services, with only 10% of the rural population benefiting from them⁴.

While the CDC was creating a surveillance system of all displaced person camps to address growing concern about overcrowding in Port au Prince, one of the worst epidemics of cholera in recent

years broke out in the northern Department of Artibonite, a rural, densely populated area⁵. On 6th December, 2012, the National Cholera Surveillance System reported 621,660 cases of infection and 7,759 deaths in the country as a whole⁵. The apparently higher fitness and environmental survival advantage conferred by El Tor Vibrio Colherae 01, probably introduced into the country from Asia by human activity, explain the persistence of the epidemic, with outbreaks more marked during the rainy season and after the passage of hurricanes. This has contributed to slow down even further the difficult transition between the response to the emergency and the development of long-term healthcare programmes⁶.

Today, three and a half years after the earthquake, the continued presence of NGOs and major agencies in the country has created free, parallel, redundant health systems that compete with the public service supply system. While access to health services has improved, it is linked to vertical programmes not uniformly distributed over the country; hence it is not universal and not sustainable in the long term. Particularly considering that, to date, Haiti's public health expenditure stands at 5.3% of the country's GDP, corresponding to 8 USD per capita per year⁷.

It is not surprising therefore that over the last year the World Bank and USAID have directly allocated the first major round of funding to the Haitian government to radically reform the health system, according to the Pay for Performance model. Irrespective of the success of this model, the case of Haiti demonstrates the need even, and most notably, in emergency situations to closely coordinate efforts with the country's existing health infrastructure. Particularly when the emergency becomes protracted, it is necessary to rethink how aid can really represent an opportunity to strengthen rather than replace a country's health systems, giving the Ministry of Health a key role and enabling it to resume coordination of the post-emergency period as quickly as possible⁸.

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DOCTORS WITH AFRICA CUAMM

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:

- **1,408** people have departed to work on projects: 396 of these departed on more than one occasion. The total number of departures was therefore 2,250;
- **4,590** years of service have been carried out, with a mean of 3 years per expatriate person;
- **1,500** students have been accommodated at the college;
- **481** doctors have departed from the Veneto region in almost 63 years;
- **216** hospitals have been served;
- **40** 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:

- **157 providers:** 96 doctors, 16 paramedics, 45 administrative and logistics staff
- **33 key** cooperation projects and about a hundred minor support interventions, through which the organization assists:
 - 15 hospitals
 - 23 districts (for public healthcare activities, mother-child care, training and in the fight against AIDS, tuberculosis and malaria)
 - 3 motor rehabilitation centres
 - 5 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
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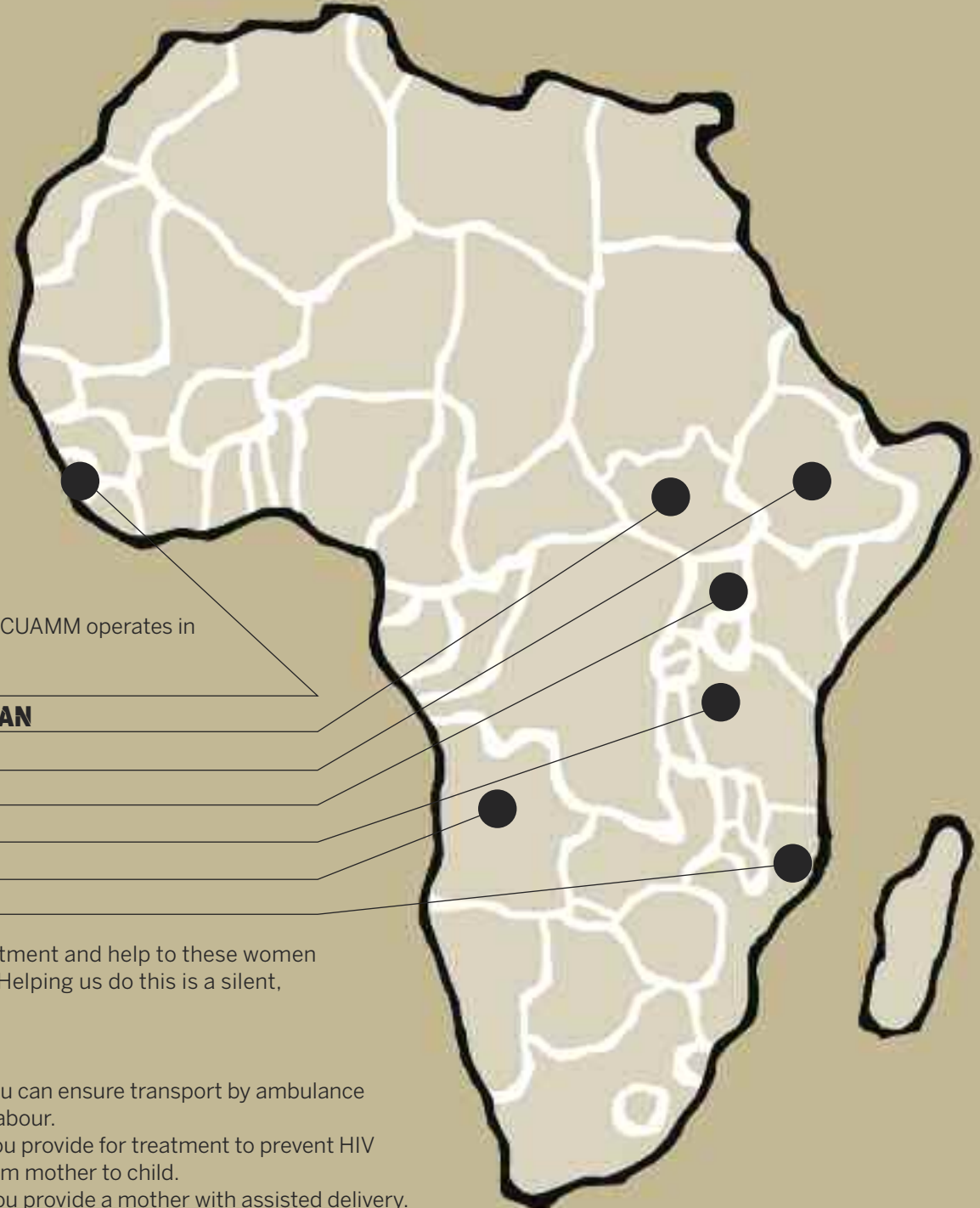
HEALTH AND DEVELOPMENT offers studies, research work and documentation which are unique to the Italian editorial world. Our publication needs the support of all readers and friends of Doctors with Africa CUAMM.



NEEDY AFRICA

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.



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