



WORLD **DIABETES** FOUNDATION

TABLE OF CONTENTS

ADAPTING TO CHANGE	4
MAKING HEALTH EVERYONE'S BUSINESS	6
ADVOCATING FOR DIABETES AND NCDS	8
THE UNSPOKEN LINK	12
"JANCH SE BACHE DO JAN" - SCREENING CAN SAVE TWO LIVES	16
THE WORLD WALKS THE TALK	18
ONGOING ACTIVITIES 2010	21
THE LOCAL CHAMPIONS BEHIND KENYA'S DIABETES COMMITMENT	26
KENYA LAUNCHES AFRICA'S FIRST NATIONAL DIABETES STRATEGY	28
BUILDING A BASE FOR DIABETES CARE IN SUDAN	30
SUDAN'S TIRELESS DIABETES ADVOCATE	32
THE POWERHOUSE AT AUGUSTA VICTORIA	34
MICRO-CLINICS BECOME PART OF A NATIONAL STRATEGY IN JORDAN	36
ASPIRATIONS FOR THE FUTURE	38
MAKING A DIFFERENCE	40
ANNUAL ACCOUNTS 2010	42



THE WORLD DIABETES FOUNDATION FOCUS AREAS

The World Diabetes Foundation is prioritising its work to support the overall objectives of the Millennium Development Goals. The Foundations project funding is heavily skewed in favour of the poor and disadvantaged people living in developing countries – the ones least able to withstand the burden of the disease. It is an integral part of the World Diabetes Foundation's strategy to work with “neglected areas” of diabetes care, which are important both from a health and socio-economic standpoint and are of particular relevance to the poor, namely prevention of needless foot amputations, blindness as a consequence of diabetes, mothers and diabetes and the recent scientific link between diabetes and tuberculosis. These, among other focus areas, have thus far not received adequate attention from the international diabetes community.

IMPROVED ACCESS TO CARE



MOTHERS AND DIABETES



CHILDREN WITH DIABETES



DM & TB



THE COMING GENERATION
(PRIMARY PREVENTION)



DIABETES AND EYE CARE



DIABETIC FOOT CARE



ADVOCACY – BUILDING A
GLOBAL ALLIANCE



ADAPTING TO CHANGE



WHEN THE WORLD DIABETES FOUNDATION WAS ESTABLISHED IN 2002, IT WAS WITH THE OBJECTIVE OF OPENING A WINDOW OF HOPE IN THE DEVELOPING COUNTRIES BY SUPPORTING SUSTAINABLE PROJECTS AT THE LOCAL LEVEL. OUR FOCUS WAS ON DIABETES AND THE ASSOCIATED COMPLICATIONS AND OUR AIM TO PLACE DIABETES ON NATIONAL HEALTH AGENDAS BY APPLYING A BOTTOM-UP APPROACH. THE OUTREACH AND INFLUENCE OF THE WORLD DIABETES FOUNDATION TODAY TELL US A STORY OF A FOUNDATION IN TRANSFORMATION, CONTINUOUSLY ADAPTING AND RESPONDING TO THE CHALLENGES AHEAD.



*Prof. Pierre Lefèbvre,
Chairman, World
Diabetes Foundation*

Right from the start the World Diabetes Foundation has seen itself as a catalyst for change. Rather than initiating our own projects, we have established partnerships and provided funding to projects with local ownership, thereby ensuring long-term sustainability. In fact, many projects have started as grassroots initiatives, which have had a ripple effect, catering for significant changes on the local public health agenda. The projects may not have formed a movement in the classical sense, but they have played a demonstrative role in pushing the national and global agenda of diabetes, turning local projects into national programmes and turning small-scale interventions into cross-boarder best practices and models for replication.

Taking a pioneering role

To date, the World Diabetes Foundation has funded 253 projects, which have undoubtedly responded to an urgent need in the developing countries and paved the way for improved access to care and relief to those impacted by diabetes, better screening facilities, capacity building and saved millions of people from unnecessary disability and lifelong indebtedness. When we look at what has been achieved and what has yet to be achieved, we feel absolutely certain that local grassroots initiatives will continue to play a significant role in improving access to diabetes prevention and care.

The Foundation has assumed this pioneering role, working towards the same goal as the international donors: to alleviate poverty, but using diabetes as the entry point. Few things are more convincing than real life stories, successful practices and achievements. During the last nine years, the Foundation has contributed to numerous networking activities and sharing of

better practices, and this has helped open the eyes of local policy-makers and inspired countries in Africa such as Uganda, Tanzania and especially Kenya with the recent launch of the first National Diabetes Programme to lead the way in including chronic diseases in their national health policies.

Strong international and national networks are essential for influencing policy changes, attracting resources to non-communicable disease (NCD) programmes and for developing and supporting sustainable programmes for prevention and care. By demonstrating through our projects that solutions can be found, we try to act as a catalyst for larger initiatives at the national level.

Addressing the barriers and working towards the MDGs

One of the greatest barriers to controlling diabetes is ignorance and apathy, not only amongst lay people, but even amongst policy-makers. With only five years left to achieve the Millennium Development Goals (MDGs), world leaders must intensify their efforts and investments in health. Health is intrinsic to development, and this link was acknowledged in 2000 by three of the eight goals specifically addressing health issues, namely child mortality, maternal health and infectious diseases such as tuberculosis, HIV/AIDS and malaria. However, there is a significant disconnect between the health issues covered in the global development agenda and the global health landscape of today. Not one of the eight MDGs mentions the conditions causing the most death and disability, namely: NCDs.

Because diabetes and the other NCDs are not explicitly mentioned in the MDGs, diabetes in pregnancy continues to be a neglected cause of maternal and infant morbidity and mortality. There are an estimated four million cases of gestational diabetes mellitus (GDM) every year in India alone¹. GDM causes life threatening delivery complications and adverse pregnancy outcomes and women with GDM and their offspring are at increased



risk of developing type 2 diabetes later in life. As an immediate response to mitigate the disastrous surge of maternal and infant morbidity, the World Diabetes Foundation has funded 24 maternal health care programmes and interventions addressing maternal malnutrition and diabetes during pregnancy with an integrated approach. These programmes will reach well over 6 million beneficiaries; including women of child-bearing age, self help groups, public health care personnel and health care professionals with potentially far-reaching health and economic benefits². While funding is important in providing care, the Foundation has taken an innovative and active approach through its advocacy platform by bringing these issues to the forefront at the donor and policy level and is lobbying to integrate diabetes screening and care in maternal health programmes.

A new focus area

While the association between diabetes and tuberculosis (TB) has been known for centuries, new scientific evidence shows that people with diabetes are at an increased risk of tuberculosis. For the purpose of achieving the MDGs related to tuberculosis control, it is important in low-resource countries to focus not only on improved access to diagnosis and treatment of TB and on HIV/AIDS, but also on the burgeoning epidemic of diabetes as a significant risk factor. The Foundation has therefore targeted its efforts on establishing collaboration to understand this dual burden and funded several pilot programmes to develop sustainable models for an integrated approach in Malawi, India, China, Nigeria, Brazil and Cameroon.

These projects will directly influence the prevention and care of people living with diabetes and TB, thus increasing awareness of the dual burden among health care professionals and provide vital data that will pave the way for guidelines and improving care.

The link to TB and HIV/AIDS, moreover, makes diabetes the most suitable bridge for integration of NCDs in the established primary care settings. An effort to create awareness of these conditions has therefore become a core objective of the World Diabetes Foundation.

In addition, the World Diabetes Foundation also contributed to the preliminary approval of a Collaborative Framework for Care and Control of TB and Diabetes developed by the Stop TB Department at the WHO and the International Union against Lung Diseases and Tuberculosis (IUALTD). The dialogue and the

advocacy process to this document was catalysed and supported by the World Diabetes Foundation.

At a tipping point

We believe addressing the prevention and control of chronic NCDs and communicable diseases in an integrated approach offers a window of opportunity to create healthy development. Unless this opportunity is seized by the donors, heads of states and governments, the current progress on the internationally agreed development goals will be undermined and countries will face unbearable costs to their economies and health systems. The world is thus at a unique tipping point in the history of public health, an opportunity that will rapidly fade if no timely action is taken.

It is therefore with much anticipation we await the forthcoming UN General Assembly Special Session on NCDs in September 2011, which presents a major opportunity to put diabetes and other chronic NCDs on the global health and development agenda. It is a huge opportunity for heads of states and governments to harmonise funding towards NCDs and reviewing the MDGs. Governments, international donors and stakeholders will need to focus on strengthening health systems as part of a holistic plan and not in "piece-meal" projects. We cannot afford to repeat the mistakes of the past. Because how can we save people from dying of malaria, HIV/AIDS and TB only to see them die prematurely because of an unwillingness to address chronic NCDs? The responsibility to act now and stem the tide lies with us all and our pledge is to support this process.

To date, the World Diabetes Foundation has funded 253 projects in 96 countries, focusing on awareness, education and capacity building at the local, regional and global levels. The total project portfolio has reached USD 233.5 million, of which USD 77.8 million was donated by the Foundation.

¹ International Diabetes Federation.

² As of December 2010, the above-mentioned impact numbers are extracted from semi-annual reports and field visit reports emanating from World Diabetes Foundation implementing partners and the Secretariat.

MAKING HEALTH EVERYONE'S BUSINESS



WITH CHRONIC DISEASES ACCOUNTING FOR 35 MILLION DEATHS EACH YEAR – CORRESPONDING TO 60% OF ALL DEATHS WORLDWIDE – OF WHICH APPROXIMATELY 80% OCCUR PREMATURELY IN LOW AND MIDDLE-INCOME COUNTRIES, IT IS NECESSARY TO TRY TO ENGAGE EVERYONE IN THE BATTLE TO REVERSE THIS TREND AND MAKE HEALTH EVERYONE'S BUSINESS.



*Dr. Anil Kapur,
Managing Director,
World Diabetes
Foundation*

The World Health Organization (WHO) estimates that in 23 countries over 30% of the national health expenditure is funded by donors¹, and in low income countries the proportion of external funding for health increased from 11.1% to 14.5% between 2000 and 2005. While health-related development assistance (HDA) has been on the rise it has mainly focused on a few priorities within communicable diseases.

As stated by Dr. Ala Alwan, Assistant Director General for NCDs and Mental Health at the WHO: "Health has never enjoyed the priority it has today within the global development agenda. Several health priorities are currently well-established globally, but we are still missing NCDs as a major health challenge for poverty reduction and sustainable development".

This is supported by recent data, which indicate that despite accounting for about half of the disability adjusted life years (DALYs) - a measure of the disease burden in the population, in low and middle-income countries, funding for NCDs was 78 cents per DALY compared to USD 16.4 for all DALYs and USD 23.9 for DALYs related to HIV/AIDS, TB and malaria. In the context where developing nations are unleashing ambitious plans for growth and development to eradicate poverty, resulting in urbanisation, mass migration and consequent changes in the way people live and work. Societies and economies in rapid transition show these changes most visibly; here lifestyles and culture are quickly catching up with the changing landscapes resulting in an unprecedented increase in disease burden due to NCDs. If uncontrolled, this rising health and economic burden from NCDs will also quickly negate the economic gains and enhance impoverishment as indicated in the World Economic Forum's global risk reports for 2009 and 2010. The omission of NCDs from

the global health and development agenda is a stumbling block to an inclusive and overall development, particularly for countries heavily dependent on external development assistance for health and this anomaly must be set right as early as possible.

Any development that is disconnected from its impact on population health is not only unhealthy but also unsustainable. We need a holistic approach to human development if we are not to lose on the swings what we are gaining on the roundabouts. There is an urgent need to bridge the gap between the population burden of chronic diseases and the financial and political commitment to address its prevention and care. Also as the origins of NCDs do not rest solely within the health system, the solutions to tackle it would have to be broadly based. This change will require an innovative approach and make health everyone's business.

Building bridges and alliances

The origins and causative factors for NCDs and their link to poverty and development are complex, not easy to grasp and often at odds with individual and societal development aspirations. Creating advocacy to address these issues requires building alliances with a broad range of stakeholders and linking the NCD agenda to their issues.

Over the last eight years the World Diabetes Foundation has contributed substantially to building local capacity by funding grassroots initiatives in 96 developing countries. Apart from changing the lives of millions of impoverished people with diabetes in countries where no access to prevention and care was previously available, these projects have also helped create and empower local champions for the cause of diabetes and related NCDs in many countries where none existed before.

In addition, the World Diabetes Foundation has helped build advocacy platforms at the regional and global level by

providing funding and technical assistance to many initiatives such as Diabetes Action Now, the IDF Diabetes Atlas, IDF Africa Clinical Practice Guidelines and Training, promotion for the UN Resolution on Diabetes, and the initiative on Women Diabetes and Development. The World Diabetes Foundation has funded and organised regional diabetes summits in Hanoi, Nairobi, Chennai and Salvador, which have provided a significant platform for the creation of a network for advocacy and sharing of best practices.

In this context, I would particularly like to mention a selection of advocacy meetings which have played a prominent role in bringing diabetes and NCDs on the global agenda in 2010.

Donors and development assistance were in the spotlight when the World Diabetes Foundation in partnership with Danida hosted the International Conference on the Emerging Burden of Chronic Diseases and its impact on Developing Countries in Copenhagen in April 2010. The conference gathered 140 leading public health and development assistance professionals, ministers of health and high-ranking government representatives from North and South to present and discuss the implications of NCDs in low and middle-income countries – the consequences of inaction and not facing up to the reality of the pandemic.

In June 2010, the World Diabetes Foundation organised the Diabetes Summit for Latin America with the co-sponsorship of the Brazilian Ministry of Health and the Pan American Health Organization. The Summit, supported by a wide range of prominent organisations, encouraged governments, policy-makers and funding bodies to prioritise prevention and care and to implement much-needed sustainable solutions to address the burden of diabetes and related NCDs. The summit was attended by more than 250 senior representatives from 42 countries, primarily from the Latin American Region.

Social determinants of health

The link between maternal and early childhood health and the future development of NCDs is becoming increasingly better understood. Similarly, the link between communicable and non-communicable diseases is much stronger and direct than the artificial division of diseases apparently seems to suggest. These linkages often arise from social determinants such as poor education, female gender, low social class, poverty and lack of equity. Those least able to withstand the burden of ill health are often the most vulnerable, and disease risks and the burden aggregate and amplify within these vulnerable sections.

A classical example is the unfortunate link between diabetes, TB and HIV/AIDS, which can no longer be ignored. As described in a separate article in this Annual Review, a change in how we

address and approach communicable and non-communicable diseases is therefore required. Rather than seeing them as isolated challenges, we must address them as closely interlinked, where collaboration between efforts for prevention and control of both will be needed. It is therefore with much anticipation that we await the UN General Assembly Special Session on NCDs in September 2011, which might pave the way for an integrated and holistic approach to prevention and care of diseases.

Improving child and maternal health

The third, fourth and fifth MDGs are about promoting gender equality, reducing child mortality and improving maternal health in developing countries. At the World Diabetes Foundation we see these goals closely related and linked to our work in diabetes and its impact on women and children. During the last few years the World Diabetes Foundation has launched several initiatives to address the special needs of these vulnerable groups. Gestational diabetes (GDM) entails risks for the mother as well as for the child, contributing to increasing maternal and child morbidity and mortality. Moreover, malnutrition and infections during pregnancy cause low birth weight, which paradoxically is associated with a high risk of the offspring developing metabolic syndrome later in adult life.

In this Annual Review you will read about a GDM project in India supported by the World Diabetes Foundation in collaboration with Jagran Pehel, the Strategic Social Initiative wing of Jagran Prakashan Ltd., one of the leading media conglomerates in India. The partnership with Jagran Pehel is a unique example of how broadening stakeholders and advocacy approach contributes to placing diabetes and its risk factors on the health agenda. At the same time the project aims at building a demand for improved services through awareness and education while creating pressure on the policy-makers to offer the services and at the same time helping build capacity to provide the services through civil society involvement.

At the World Diabetes Foundation we take great pride in being a catalyst for change by empowering local champions and creating alliances to raise awareness, build capacity, share learning and explore new opportunities to strengthen existing health systems and create sustainable models for the prevention and care of chronic diseases. We therefore continue to look forward to your collaboration and partnership in the New Year. On behalf of the Board of Directors and Secretariat of the World Diabetes Foundation, we thank our sponsors for their goodwill and support and our project partners for their outstanding commitment and dedication.

¹ Source: Seven Challenges in International Development Assistance for Health and Ways Forward

REACHING OUT TO THE AFRICAN AND MIDDLE-EAST REGION

Diabetes and NCDs were on the agenda in the Sub-Saharan Region at the Leadership Forum Africa, 2010 in Johannesburg. The Forum was jointly hosted by the South African Department of Health on behalf of the Government of the Republic of South Africa, and by the World Diabetes Foundation. The Forum was supported by the International Diabetes Federation and sponsored and co-organised by Novo Nordisk. Among the many distinguished guests who attended the Forum were the First Lady of the Republic of South Africa, Madam Bongi Ngema Zuma, the Minister of Health, Dr. A. Motsoaledi, ministers and senior government officials from other African countries and several senior leaders from within the region and abroad.



In December 2010, diabetes in the Middle East and North Africa Region was in focus when the World Diabetes Foundation co-hosted the Leadership Forum in collaboration with the United Arab Emirates Ministry of Health, the executive board of the Health Ministers' Council for GCC States, and the World Bank Group. The meeting was supported by the IDF, the Emirates Diabetes Society, and the Gulf Group for the Study of Diabetes and the MENA Health Policy Forum. It was co-organised and sponsored by Novo Nordisk A/S. The Leadership Forum was a unique high-level advocacy meeting aimed at confronting the diabetes pandemic and exploring ways to implement policy changes and endorse national action plans for the entire region.

Some of the most distinguished and prominent key note lectures were delivered by the former President of the United States, Mr. Bill Clinton, founder of The William J Clinton Foundation, and His Royal Highness Crown Prince Frederik of Denmark.



WHILE MOST STAKEHOLDERS MAY KNOW THE WORLD DIABETES FOUNDATION FOR ITS SUPPORT TO PROJECTS WITHIN DIABETES PREVENTION AND CARE IN DEVELOPING COUNTRIES, **CREATING NETWORKS IS AN ESSENTIAL PART OF THE FOUNDATION'S ADVOCACY WORK.**

In 2010, the World Diabetes Foundation organised and co-hosted two major events for extending the networks with the aim of strengthening the fight against NCDs and diabetes in developing countries amongst policy-makers and donors. In April, the International Conference on the Emerging Burden of Chronic Diseases and its Impact on Developing Countries was organised in Copenhagen, Denmark, and in June the Diabetes Summit for Latin America took place in Salvador, Bahia, Brazil.

A Copenhagen call to donors

In collaboration with the Danish International Development Agency (Danida), the World Diabetes Foundation organised the Copenhagen Conference. The conference was formally supported by the World Bank Group, the International Diabetes Federation (IDF), the World Heart Federation (WHF), the International Union against Cancer (UICC), the Norwegian Agency for Development Cooperation (NORAD), the Norwegian Directorate of Health and the Danish National Board of Health.

Danida was an important partner, representing bilateral donors, as one of the objectives of the conference was to include the donor community (like-minded donors) in the NCD debate. The conference was designed to encourage a discussion on the relevance and importance of NCDs as a development issue and create advocacy for more equitable distribution of health-related development assistance to address this huge problem in the developing world. Unfortunately, amongst the dozens of donor agencies invited, only a handful showed up. The hope is that they will serve to spread the message and ensure that NCDs assume their rightful place on the global health and development agenda.

Gap between burden and commitment

A key theme was the gap between the increasing burden of NCDs in low and low-middle-income countries and the disproportionately meagre resources and attention paid to the area. Facts presented at the conference showed that more people in developing countries die from NCDs than from communicable diseases such as malaria, tuberculosis and HIV/AIDS. But the problem is that NCDs are not part of the health priorities as defined in the Millennium Development Goals (MDGs). Currently, funding for the prevention and treatment of NCDs accounts for less than 1% of official development assistance (ODA) for health.

Among the 140 leading public health and development assistance professionals and high-ranking government representatives from North and South gathered at the Conference were the Ministers of Health from Mozambique, Uganda and Denmark as well as the Minister for Development Cooperation from Denmark. They were accompanied by high-ranking representatives from the WHO, the World Bank, Norad, IDF, WHF and UICC.

This is not a competition

In his opening address, Dr. Ala Alwan, Assistant Director General for NCDs and Mental Health at the WHO, made it clear that "We are not talking about competition with the development agenda or communicable diseases; they can - and should be - mutually reinforcing and complementing each other. But we need to realise that NCDs pose enough of a threat to the future development and security of the world that they warrant a large and commensurate response."



Benefits of economic development may be nullified

- And what is the threat Dr. Alwan was referring to? By using examples from studies in India, Senior Public Health Specialist from the World Bank, Dr. Michael Engelgau, pointed out that health care in the majority of low and middle-income countries is financed out of pocket, i.e. by the patients themselves. This puts the people suffering from NCDs in these countries at great financial risk resulting in impoverishment. Reading between the lines, the message from Engelgau's presentation was that the benefits of economic development to lift people from abject poverty will be nullified if due attention is not paid to health financing and the rising burden of NCDs.

The Health Minister of Mozambique, a country which has an HIV/AIDS prevalence of 15%, Dr. Ivo Garrido spoke of the increasing burden of NCDs in his country. He mentioned urbanisation and the emerging economic development in Mozambique as the main reasons why Mozambicans are exposed to the risk factors leading to NCDs. Mozambique has taken action on this and included NCD components into the National Strategic Plan for Prevention and Control of Communicable Diseases.

Yet, the list of challenges for dealing properly with this issue is extensive: lack of human resources, lack of health care infrastructure and lack of involvement of international donors resulting in no budget, no resources and very little attention paid to the area.

Busting the myth that NCDs affect only the urban rich and affluent as believed by many, Prof. Srinath Reddy, President of the Public Health Foundation India, said "As socio-economic and health transitions advance within each country, the social gradient for NCD risk factors and NCD events progressively reverses till the poor become the most vulnerable, dominant victims."

Need for a paradigm shift in thinking

The State Minister for Health of Uganda, Dr. Richard Nduhuura, was quite frank when he said, "Uganda is experiencing an epidemiological transition characterised by a sharp increase in the incidence of NCDs. This affects the most productive sections of our population with serious and adverse human, social and economic consequences at the individual, community and national levels. Given current misconceptions in both public and donor circles, we face a threat of a disastrous double epidemic of communicable and non-communicable diseases. If we are to reverse this trend, we need to shift our way of thinking."

Delinquency or action?

Throughout the conference, one question loomed large: "Despite the evidence and arguments, is nothing being done to address the problem?" Research Fellow at the University of Oxford, Dr. David Stuckler¹, phrased the consequences of not responding to the funding gap between non-communicable and communicable diseases very clearly: "We stand today where we were with HIV in the 1980s – we can look at the next two decades and intervene to make a huge impact on human lives. Are we going to be delinquent? Unless we heed the Paris Declaration and focus on shared interconnected risks that trap households in poverty and sickness, we will not achieve basic goals of human development."

Donors intervening to bring NCDs on the agenda

Dr. Paul Fife, Director of the Department of Global Health and AIDS at Norad, represented one of the few bilateral donors present at the conference. He assured that during Norway's forthcoming term of office on the WHO Board (2010-2013), they will seize the opportunity to see how they can intervene strategically. And he kept his word. In Norway's WHO Strategy, "intensifying efforts



BON BON CAT

We are happy kittens
and love to play and go
everywhere together
we are naughty kittens
and we go on adventures.



to combat NCDs" is one of the five areas which Norway will particularly focus on.

Almost one year into Norway's term of office, Dr. Paul Fife reiterates the position laid out in the strategy: "In Norway's view, there should be greater focus on NCDs, mental health, accidents and violence. It is important that the health authorities implement effective measures to limit the risk factors associated with chronic disorders, while at the same time ensuring that health systems are better enabled to serve a population with complex problems."²

Chief Technical Advisor at Danida, Mr. Esben Sønderstrup, uttered similar arguments: "What Danida will do is to bring the problem of NCDs onto the health and development agenda in the countries where we work. Specifically, this means bringing it up in the annual review round with the health ministries and, more importantly, arguing for its inclusion in the five-year country programmes," he said.

The ripple effect

There is a clear sense that NCDs are much more visible on the health agenda these days due to the fact that a UN General Assembly Special Session on NCDs will now be held in September 2011. When asked what effect the NCD conference had on moving the agenda forward, Dr. Anil Kapur, Managing Director of the World Diabetes Foundation replied "as it is with all advocacy efforts, it is difficult to measure their individual impact and so it might be inappropriate and hypothetical to talk about the impact of the NCD Conference. Yet, every tiny ripple working in sync can help create a wave and certainly the NCD conference did create more than a tiny ripple."

DIABETES SUMMIT FOR LATIN AMERICA IN BAHIA 2010

From 30 June to 2 July, the World Diabetes Foundation organised the Diabetes Summit for Latin America in Salvador, Brazil. It was co-hosted by the Brazilian Ministry of Health and the Pan American Health Organization (PAHO). It gathered more than 250 leading global health experts, national health authorities, health care providers, state health secretaries, NCD officials and representatives from PAHO member countries and ministries of health as well as regional media to what was considered by many as Latin America's largest diabetes event to date.

The magnitude of the problem in Brazil

In his opening remark, the Minister of Health of Brazil, Mr. José Gomes Temporão, addressed the magnitude of the problem in Brazil: "The most recent research shows that 40% of the Brazilian population are overweight and 15% are obese. It is estimated that 11 million people have diabetes, of whom only 7.5 million are aware of their diagnosis. This is why we stress the need to change lifestyle by eating appropriate food and taking regular physical exercise. It is without doubt a source of great satisfaction to welcome specialist from 34 countries at this summit, during the biggest event on diabetes in Latin America," he concluded.

A major policy window

Representing PAHO, Dr. James Hospedales, Senior Adviser for Prevention and Control, emphasised the priority which PAHO and WHO give to diabetes and NCDs. "People with diabetes outnumber those with HIV by a factor of 10, and many experience a lifetime of disability. However, the importance of diabetes and other NCDs is still not fully acknowledged in Latin America, or even in North America. PAHO is preparing a road map towards the 2011 UN Summit and Special Session on NCDs, including information gathering, engagement and advocacy, and supporting

developing countries to prepare briefings for representatives at the UN summit. The Diabetes Summit is a major policy window. It will raise awareness of diabetes, mobilise political commitment and resources, and stimulate the necessary inter-sectoral action," he said.

Counterproductive to ignore NCDs

Dr. Luis Perez, Senior Public Health Specialist at the World Bank, Buenos Aires, Argentina, reminded the audience that "as the developing world acquires wealth, it also acquires the health problems of developed countries. The unhealthy lifestyles associated with economic gain, such as increased consumption of refined foods and reduced physical activity, are the basis of many chronic diseases. The prevalence of risk factors for NCDs increases in line with national income, and the poor are worst affected."

Dr. Perez spoke of NCDs as anti-economic growth. The logic being that a healthy workforce is essential for economic growth, and it is therefore counterproductive to ignore the burden of NCDs. In wealthy countries, health insurance and state funding meet many of the costs of health care. But in developing countries, individuals and families bear a disproportionate share of the cost of health care, and out-of-pocket spending by patients and their families forces them into poverty. Financial protection for patients is critically important. "The World Bank recognises that such 'catastrophic spending' and impoverishment are becoming more common and pose a real challenge to developing economies," Dr. Perez concluded.

The Bahia Summit – short and long term

Managing Director of the World Diabetes Foundation, Dr. Anil Kapur was highly satisfied with the summit: "The summit was a clear demonstration of the need for action and the willingness to take this action to address the burden of diabetes. This was made very clear from the breadth of the participants. Clearly, the summit was one of the largest diabetes gatherings in Latin America. This in itself brings focus on issues and highlights that action is required," he said.

While the summit only lasted two days, Dr. Kapur has a long term vision for the outcome of gathering so many stakeholders: "I hope that the platform we provided for interaction between different layers of policy makers, media, care providers and academic institutions will serve as a fertilizer to generate more effective and sustainable initiatives. We provided real examples from projects where partners shared their successes along with the difficulties and challenges that people encounter in addressing these issues. Learning from each other may help avoid or overcome the challenges faster, and thus accelerate the process of developing meaningful sustainable initiatives," he said.

Spreading the message through the media

The 45 journalists who participated from 14 countries in the region did their utmost to spread the message from the summit. More than 190 newspaper articles, online articles, radio interviews, television coverage and pod-casts have been published and broadcasted. The number of articles and emissions produced are a witness that the subjects discussed ignited the interest of the journalists – who in return showed eagerness to learn more and share pertinent knowledge with their audience.

¹ Stuckler is author of the paper "Drivers of inequality in millennium development goal progress", <http://www.ncbi.nlm.nih.gov/pubmed/20209000>

² http://www.helsedirektoratet.no/vp/multimedia/archive/00307/Norwegian_WHO_Strat_307109a.pdf, p. 33.

COMMUNICABLE AND NCDs HAVE TRADITIONALLY BEEN DIVIDED INTO TWO SEPARATE SILOS, BOTH IN TERMS OF PREVENTION AND DISEASE MANAGEMENT AND IN TERMS OF FUNDING. NOW, A GROWING CONSCIOUSNESS OF WHAT HAS BEEN NAMED AN “UNHEALTHY PARTNERSHIP” IS STARTING TO GAIN GROUND AS THE IMPLICATIONS OF A DIABETES-DRIVEN RESURGENCE OF TUBERCULOSIS ARE THREATENING TO START A NEW TUBERCULOSIS EPIDEMIC, AND STILL MORE CASES DEVELOP THE RISK OF DIABETES AS A CONSEQUENCE OF HIV/AIDS TREATMENT.

The increasing number of World Diabetes Foundation-supported projects addressing the double disease burden of communicable and NCDs demonstrates in itself a growing consciousness of the unspoken link.

Despite a massive effort to control TB, this deadly disease remains a major cause of mortality in developing countries. The link between TB and HIV/AIDS is widely recognised and in many countries addressed with integrated health programmes designed to reduce the joint burden of the two diseases.

However, a study from India suggests that whereas HIV/AIDS accounts for 3.4% of adult TB incidence¹, the proportion attributable to diabetes is 14.8%². A recent analysis in Mexico even concluded that, in the population studied, 25% of pulmonary tuberculosis was attributable to diabetes³.

Still a neglected issue on the global health agenda

A widely held misconception exists among policy-makers, multilateral donors and even public health experts, particularly in the developed world, that diabetes is a rich man's disease. However, the fact is that the low and middle-income countries undergoing rapid urbanisation are witnessing the strongest growth in diabetes rates, and among the worst affected are the urban poor in these countries. In this context, diabetes and TB share many risk factors and socio-economic determinants of poor health outcomes. The two conditions are therefore likely to be found in the same subpopulations.

The MDGs do not mention diabetes. However, the sixth MDG calls for the incidence of communicable diseases like TB and HIV/AIDS to be halted and reversed by 2015. If we are to reach this goal, governments in developing countries must focus on diabetes as a significant epidemiological risk factor:

“A focused, coordinated action is needed to prevent a diabetes-driven resurgence of TB. With the rapid increase in prevalence of diabetes, we are facing a potential risk of global TB spread with serious implications for TB control. Moreover, the consequences of mismanagement of TB in a patient with diabetes can be severe and is likely to result in a double disease burden of epidemic proportions,” says Prof. Jean Claude Mbanya, who is currently leading a World Diabetes Foundation-supported programme exploring the co-morbidities of diabetes, HIV/AIDS and TB in Cameroon.

Screening is essential

A systematic review⁴ concludes that screening for active TB in people with diabetes can hasten case detection. This can lead to earlier therapy and prevention of transmission. Besides, screening for diabetes in patients with TB can improve case detection, early treatment, prevention of diabetes related complications, as well as better TB specific outcomes.

According to the WHO, India ranks first in TB prevalence. Dr. Vijay Viswanathan from the M.V. Hospital for Diabetes and Diabetes Research Centre in Chennai, India is leading a World Diabetes Foundation-supported screening, education and training project for TB health personnel in Tamil Nadu for the purpose of preventing and controlling diabetes in TB patients.

“As diabetologists we are used to seeing diabetes patients with TB. Now we are doing it the other way around by addressing patients with TB and screening them for diabetes, the rationale being that if their diabetes goes undetected, it will result in failure of their TB treatment,” says Dr. Vijay Viswanathan and explains that the ultimate aim of the project is to help establish a dialogue and a collaborative framework between the national TB programme with the national diabetes control programme as has been the case between HIV/AIDS and TB.

Providing documentation across the world

A similar project funded by the World Diabetes Foundation is in progress in China for the purpose of investigating the association between TB and diabetes and improving the treatment of patients with both diseases. Two pilots have been conducted in the Yishui and Tancheng counties, demonstrating a prevalence of diabetes in TB patients of 6.8% and 7.2%, respectively. The interim project results were displayed at the Diabetes Leadership Forum 2009 China, and a report was posted at the official website of the Chinese Center for TB Control and Prevention. Further screening along with the training of 400 TB health care workers and the dissemination of educational materials are now taking place. Ultimately, the hopes are that the project will reach one million people with awareness activities addressing the link between TB and diabetes.

“The project has a very high priority, and the interest shown by the health care personnel undergoing training demonstrates that the link between diabetes and TB is a real world issue they can re-





late to while understanding the implications of inaction," says Prof. Ma Aiguo from the School of Public Health at the Medical College of Qingdao University, underlining the need for a screening model and capacity building to address this double disease burden.

Recognising the link in Mexico and Brazil

The importance of timely identification and management of diabetes in TB patients is likewise recognised by the government of Brazil and the US-Mexico Border Commission. Together with the Pan American Health Organisation (PAHO), they are launching a project supported by the World Diabetes Foundation to address the double disease burden of diabetes and TB in the Americas. Initially, the project will run as pilots in Mexico and Brazil.

"We estimate that more than 31,000 patients develop TB as a consequence of being diagnosed with diabetes each year. We believe this will have an impact on the control of TB in the entire region and that there is a high risk that these patients will spread the disease if they go undetected," says Dr. Alberto Barceló, Regional Advisor at the PAHO.

The downside of HIV/AIDS treatment in Malawi

A similar link to that of TB and diabetes is seen between HIV/AIDS and diabetes. HIV/AIDS itself and the antiretroviral drugs used to treat it can cause metabolic syndrome, which causes the development of new cases of diabetes or deterioration in glycaemic control in existing patients with diabetes.

The prevalence of HIV/AIDS in Malawi is high, and because of the interaction between HIV/AIDS and diabetes, many adults are suffering with both diseases. However, as diabetes does not have its own separate code in the Malawian health care system but is grouped under "medical conditions", the Malawian Ministry of Health has no way of knowing how many people have diabetes. A new diabetes register supported by the World Diabetes Foundation is therefore being implemented to measure the burden of diabetes and understand the scale of the problem.

"We did a prevalence survey in our diabetes clinic in 2007, which showed that 13% of our adult diabetes patients had HIV/AIDS as well. At that time antiretroviral medicine had only been available for two or three years. Now we have many more patients who have

APPLYING THE DOTS MODEL

As an example of a cost-effective model for detecting and controlling TB, the IUATLD and WHO have developed and advocated the DOTS framework for TB control – DOTS referring to Directly Observed Treatment Shortcourse (DOTS).

The model, which has allowed structured, well-monitored services to be delivered to millions of TB patients in some of the poorest countries of the world, consists of three steps:

- 1) identify TB patients through passive case finding,
- 2) diagnose TB through sputum smear examination and
- 3) referring the patients to anti-TB treatment.

both diabetes and HIV/AIDS," explains Dr. Theresa Allain from the Department of Medicine at the College of Medicine in Blantyre, Malawi.

"In addition, we have reason to believe that not only do the antiretroviral drugs lead to a deterioration of diabetes control, but they may also increase the complication rate. We are concerned that microvascular and neurological complications will worsen when the conditions co-exist. It is therefore extremely important to obtain optimal diabetes management and control in order to identify which patients with diabetes also have HIV/AIDS," concludes Dr. Theresa Allain.

Paving the way for integrating care in Malawi

As part of the current project setup, the World Diabetes Foundation decided to co-fund an electronic registry for a primary care component in collaboration with the International Union Against Tuberculosis and Lung Disease (IUATLD). The objective is to test if the diabetes programme could benefit from the learning from the successful DOTS framework and whether it was possible to integrate elements of the two programmes.

Prof. Anthony D. Harries, senior advisor at the IUATLD, explains about the applicability of the model: "In a resource poor-country like Malawi, the DOTS model was successfully adapted for scaling up and monitoring antiretroviral therapy to people living with HIV," he says and continues: "This model can be adapted to encompass NCDs, such as diabetes as well. With treatment cards and registers, it would be feasible to make comprehensive quarterly reports on diabetes treatment outcomes, which would include the monitoring and evaluation of co-morbidities such as TB," he concludes.

Strengthening the evidence base in Cameroon

The effects of chronic use of antiretroviral drugs are currently being analysed in 5,000 HIV/AIDS patients in Cameroon. The retrospective study, which is being carried out by the Health of Populations in Transition Research Group in Cameroon, will increase the evidence base for the association between HIV/AIDS and diabetes and the possible effects on diabetes severity and treatment outcomes.

"The analysis will provide us with insight into when patients across the different regimes of antiretroviral therapy start developing dyslipidemia and glucose intolerance and how that influences the prevalence of diabetes. This will allow us to identify which medical drugs are more prone to causing metabolic syndrome," says Prof. Jean Claude Mbanja, project manager.

Integrating care in South Africa

The early identification and management of diabetes and impaired glucose tolerance in HIV/AIDS patients is also the aim of a World Diabetes Foundation supported project in South Africa.

FACTS ABOUT DIABETES & TUBERCULOSIS

People with diabetes are more likely to contract serious infectious diseases, and less likely to recover from them. People with diabetes are two to three times more likely to develop TB than the general population⁵.

People with conditions like HIV/AIDS and diabetes are more likely to contract TB because their immune systems are impaired⁵.

According to the WHO; between 9.6-13.6 million people live with TB and 1.1-1.7 million people die from the disease every year. Studies have documented that diabetes not only increases the risk of TB, but also exposes co-affected patients to increased risk of poor outcomes, including higher death rates⁵.

An assessment of the prevalence and risk factors of dysglycaemia in HIV/AIDS patients will be used to develop a strategy for reducing diabetes-related morbidity among HIV/AIDS patients in treatment with antiretroviral therapy. Part of that strategy involves developing a cost-effective tool for identifying the HIV/AIDS patients most at risk of developing diabetes.

"With these efforts, we aim to minimise the long-term complications of HIV/AIDS patients and improving their health care delivery. An estimated six million people are HIV/AIDS-infected in South Africa and the number of people with diabetes is increasing dramatically. A targeted effort is therefore essential to reduce their diabetes-related morbidity," explains Prof. Naomi Levitt from the Department of Medicine at Groote Schuur Hospital in Cape Town, South Africa.

The way forward and addressing the MDGs

The sixth MDG specifies that the incidence of infectious diseases such as TB should be halted and reversed by 2015. As emphasised above, to succeed in achieving this target, it is important to focus not only on communicable diseases but also on the burgeoning epidemic of diabetes as a significant epidemiological risk factor.

"Diabetes, TB and HIV/AIDS are interlinked, and our efforts to fight these diseases should be as well. By funding projects, documenting effective strategies and building health care capacity for screening and management of diabetes and other NCDs within existing health structures, we seek to pave the way for developing models and guidelines for an integrated approach to screening and treatment," explains Dr. Anil Kapur, Managing Director of the World Diabetes Foundation.

"Going forward, it is crucial that governments, technical agencies, funding agencies and donors recognise the link between diabetes and TB as well as the potential risk of blood glucose abnormality and diabetes as a consequence of treatment of HIV/AIDS; and encourage closer collaboration between the various national programmes and stakeholders to strengthen health systems. This would benefit people with communicable diseases as well as people with NCDs and especially the ones facing a dual or triple burden of diseases," he concludes.

¹ Corbett EL, Watt CJ, Walker N, Maher D, Williams BG, Ravigione MC, Dye C: The growing burden of tuberculosis: global trends and interactions with the HIV epidemic. *Arch Intern Med* 2003, 163(9):1009-1021

² Stevenson et al. Diabetes and tuberculosis: the impact of the diabetes epidemic on tuberculosis incidence. *BMC Public Health* 2007, 7:234

³ Ponce-De-Leon A, Garcia-Garcia Md Mde L, Garcia-Sancho MC, Gomez-Perez FJ, Valdespino-Gomez JL, Olaiz-Fernandez G, Rojas R, Ferreyra-Reyes L, Cano-Arellano B, Bobadilla M, et al.: Tuberculosis and diabetes in southern Mexico. *Diab Care* 2004, 27(7):1584-1590

⁴ Jeon, Christie Y. et al. Bi-directional screening for tuberculosis and diabetes: a systematic review. *TMIH*. 2010; 15:11:1300-1314

⁵ http://www.un-ngls.org/spip.php?page=article_s&id_article=2490

"JANCH SE BACHE DO JAN" SCREENING CAN SAVE TWO LIVES



Photo: Neeraj, Jagran Pehel

IN 2010, THE WORLD DIABETES FOUNDATION EMBARKED ON ITS SECOND PROJECT IN COLLABORATION WITH THE INDIAN MEDIA PARTNER, JAGRAN PEHEL. THE RATIONALE WAS BASED ON EXPERIENCE FROM A PREVIOUS PROJECT WITH THE SAME PARTNER SHOWING THAT MEDIA CAMPAIGNS CAN EFFECTIVELY MOVE THE DIABETES AGENDA.

In the first mass media campaign for awareness on prevention and care of diabetes in India carried out by Jagran Pehel, the social wing of Dainik Jagran with the support of the World Diabetes Foundation, diabetes was found in 13.8% of more than 110,000 people screened in 14 states. The campaign reached more than 350,000 people through awareness activities under the Hindi slogan "Janch Se Bache Jan", meaning Screening can save life.

This follow-up project is intended to create awareness on gestational diabetes mellitus (GDM) and its management in association with local stakeholders within the public health delivery system. The primary target group is women of child-bearing age and pregnant women. This project launched under the slogan "Janch Se Bache Do Jan", meaning Screening can save two lives, will be rolled out in four states in Northern India (Punjab, Delhi, Uttar Pradesh and Jharkand), targeting more than half a million people.

Advocating for antenatal checkups

Antenatal checkups provide an opportunity for pregnant women to be screened for their overall health situation and assess any potential risks to the health of the mother and the baby in the womb. Yet, in India at the national level only half of women show up at all three available antenatal checkups, and in Jharkhand and Uttar Pradesh the attendance is even lower - only around one third of all pregnant women undergo all three antenatal checkups, and only one in every five women delivers at a health care facility.¹

Ms. Rubina Tabassum is the local Jagran Pehel Project Coordinator based in Dhanbad in the state of Jharkhand. She is optimistic on behalf of the rural population: "This type of wide media campaign is reaching beyond literate people and into every corner of the district to rural masses who are unaware of pre- and antenatal checkups. The campaign advocates checkups as a right for all pregnant women and facilitates discussions about diabetes symptoms, precautions and risks, etc."

Ms. Rubina further elaborates "I believe that media can trigger the mind of individuals through mass awareness campaigns and create a platform for people from medical and non-medical backgrounds to address health issues. Furthermore, the involvement of the government health machinery in disseminating information about screening inculcates the importance of checkups - including for diabetes - during pregnancy in their mind. The whole campaign reinforces the message of maternal and child health care and in addition makes people aware of diabetes and gestational diabetes."

With the exception of the renowned World Diabetes Foundation-supported flagship project on GDM in Tamil Nadu, which found an overall GDM prevalence of 13.9%, there are very few instances of structured interventions on GDM in the country, despite the fact that other areas are reporting similar high prevalence rates. Since screening for diabetes in pregnant women is not institutionalised, no reference data regarding prevalence of GDM is available across the country.

Work already in progress

The mass media GDM project consists of four main components:

1. Mass awareness on gestational diabetes management through multimedia campaign.
2. Education of future mothers through educational institution intervention on GDM.
3. Advocacy through structured events at district, state and national level through multi-stakeholder forums.
4. Creating a discussion and information-sharing online forum through micro-site and blogs and engagement of doctors and other stakeholders involved in this project.

The Pehel project team is already well into implementing the activities. A series of articles on GDM have been published in all editions of the Dainik Jagran newspaper reaching more than 50 million people. Preparatory workshops have been held in Delhi, followed by district forums which has been held in six out of seven districts involving local organisations as well as government officials. Spots at villages, schools and colleges have been identified for the project van to conduct awareness activities. Finally, a GDM website featuring videos by experts has been incorporated in the Jagran Pehel-run website, www.onlymyhealth.com.

Government involvement

At the project launch in Delhi in August, the Minister of Health and Family Welfare of India, Mr. Ghulam Nabi Azad, brought up the three priority areas of the Ministry of Health Ministry: Population stabilisation, immunisation and diabetes. The Ministry is launching

a programme in 100 districts of 20 states for screening and treatment of diabetes, hypertension, stroke and cardiovascular diseases. The government's commitment to address gestational diabetes, in particular, is reflected in the new Maternal and Child Health Card, where free testing for diabetes is one of the five key services being offered for pregnant women from poor families availing antenatal checkup services at primary health centres.

A triggering effect through local partners

When asked about the importance of the collaboration between Jagran Pehel and World Diabetes Foundation to address the issue of GDM, Dr. Amarjit Singh, Executive Director at the Population Stabilization Fund in the Ministry of Health and Family Welfare of India, said:

"Diabetes as a disease is spreading at a very fast pace in a developing economy like India, where a large population is undergoing a transition in lifestyle pattern. In recent years, the Government of India has given due attention to non-communicable diseases through programmes and policies reiterating our commitment to address this issue. But still, the government initiatives need the complimentary role of non-government players and the larger civil society for creating awareness at the community level, which is really the key to addressing the diabetes problem. I am happy to know that the World Diabetes Foundation in association with local players like Jagran Pehel is trying to generate a triggering effect through scalable and replicable projects and programmes."

Addressing both sides of the equation

For initiatives to succeed and become sustainable, it is important that both the demand side and the supply side of the equation work effectively. Mr. Anand Madhab, National Head of Jagran Pehel, emphasises the strength of using the Dainik Jagran network: "Health care service providers cannot make a desirable change, unless the community has access to the right information and gets involved. Knowledge and information on GDM are key to controlling the problem, and communicating it to larger masses has always been a challenge for government and non-governmental projects and programmes. With our network, we have the advantage that we can influence the demands at the community level while simultaneously building pressure at the policy level," Mr. Madhab concludes.

PEHEL - A SOCIAL INITIATIVE

Jagran Prakashan Ltd. (JPL) is India's biggest media house, but besides producing news, they have also ventured into social work by establishing the Pehel Foundation: A Division of Shri Puranchand Gupta Smarak Trust. 'Pehel' literally means 'initiative' and on the Foundation's website the meaning is explained as "signifying our effort as a change agent for inclusive social development and our commitment towards amplifying people's voices."

PROJECT IMPACT

This joint Jagran Pehel project supported by the World Diabetes Foundation is estimated to reach 510,000 people through a media awareness campaign on GDM. More than 124,500 female students from 498 secondary schools and colleges will be sensitised and educated on GDM. In addition, 500 stakeholders will participate in 14 district level advocacy forums on GDM.

¹ National Family Health Survey (NFHS 3). Mothers who had at least 3 antenatal care visits for their last birth was 50.7% at the national level; 36% for Jharkhand and 26.3% for Uttar Pradesh. <http://www.nfhsindia.org/pdf/India.pdf>

THE WORLD WALKS THE TALK



THE GLOBAL DIABETES WALK ON WORLD DIABETES DAY 2010 WAS A RESOUNDING SUCCESS! A DEBT OF GRATITUDE IS OWED TO THE HUNDREDS OF WALK COORDINATORS IN OVER 50 COUNTRIES, THE HUNDREDS OF INDIVIDUALS AND STAKEHOLDERS WHO ORGANISED EVENTS, AND THE THOUSANDS OF PEOPLE WHO WALKED TOGETHER TO DISPLAY SOLIDARITY AND CREATE ADVOCACY FOR THE MORE THAN 300 MILLION PEOPLE CURRENTLY LIVING WITH DIABETES AND THE MANY MORE AT RISK AROUND THE WORLD.

For the seventh consecutive time, the World Diabetes Foundation marked World Diabetes Day on 14 November by organising and facilitating the Global Diabetes Walk platform. A total of 221 registered walks and an estimated 320,707 participants took part in this year's Global Diabetes Walk. For some walk coordinators, it has become a recurring event; for others 2010 was the year of their first walk. Here we provide some snapshots from around the world to give you a flavour of the many impressive activities displayed.

In Africa, the Global Diabetes Walk was marked with large events in Kenya, Mali, Nigeria, South Africa and Uganda counting for an estimated 12,500 people.

Kenya

Residents of West Mugirango in the Kenyan province of Nyanza celebrated World Diabetes Day sensitising and educating each other on the fast spreading disease. In his speech, Dr. James Gesarni, Public Health Assistant Minister and area Member of Parliament, urged the residents to take action on unhealthy lifestyles and exercise regularly as well as to get tested for diabetes.

Around 1,000 people participated in the walk, which was organised by the Diabetes Management and Information Centre in collaboration with the Ministry of Health. The event received wide media coverage and was broadcast on the Kenyan National TV channel and streamed on YouTube.

Mali

The Diabetes Association in Mali's second largest city, Sikasso, plays a unifying role for all the local diabetes associations at the district and department level. On World Diabetes Day the diabetes associations of each department in Sikasso organised free diabetes screenings as well as diabetes walks. In total, seven screening camps and seven diabetes walks took place, involving more than 3,000 people and more than 1,500 people joining the walks. Throughout Mali, 15 screening camps in 15 other locations of the country took place on the same day. These events were made possible through the support by the non-governmental organisation Santé Diabète Mali.

South East Asian Region

India alone accounted for an estimated 79,000 participants, who took part in the Global Diabetes Walk and awareness activities. In the Pathanamthitta District in Kerala, India, the regional film actor Captain Raju flagged off the Walk to Health organised by Dr. Vijayakumar from the Medical Trust Hospital and Diabetes Care Centre at 9.30 in the morning on 14 November. Hundreds of students, teachers and health workers took part in the Walk to Health held in connection with the World Diabetes Day celebrations. Captain Raju took part in the Global Diabetes Walk to make people, especially youth, aware of the importance of regular exercise and morning walks. Accompanied by various socio-political and cultural leaders in and around Pandalam, Captain Raju led the walk. The Walk to Health was part of a 45-day campaign targeting school children in 300 schools.



China

The International Diabetes Federation, in collaboration with the Chinese Diabetes Society (CDS), marked World Diabetes Day with a large-scale celebration in China, the country with the largest number of people with diabetes. Highlights included a ceremony at the Great Hall of the People in Beijing and an awareness rally at the Great Wall of China, where thousands wore blue and promoted the blue circle for diabetes awareness. CDS also coordinated awareness activities in over 20 cities throughout China, making this World Diabetes Day celebration the largest the country has ever seen.

Western Pacific Region

In Indonesia, 13 walks were registered with an estimated 20,000 participants. The largest event took place in the capital city Jakarta where more than 5,000 people made the street look like one big colza landscape with their yellow shirts, caps and banners with the Global Diabetes Walk logo. The events organised by the local diabetes associations also offered blood glucose tests for those joining the walks.

Latin American Region

The largest events took place in Brazil and Mexico. The World Diabetes Foundation project partner in Brazil, the Brazilian Juvenile Diabetes Association (ADJ), organised awareness activities in Sao Paulo throughout the month of November.

On Saturday 13 November, a group of children and adolescents with diabetes from the ADJ carried the Unite for Diabetes banner in front of 37,000 spectators at the Pacaembu Stadium in Sao Paulo. They did so before the soccer match between Corinthians and Cruzeiro and were given a standing applause for their appearance. In addition, ADJ organised six other events in Sao Paulo related to the World Diabetes Day.

Mexico

In the Mexican city of Culiacán in the Sinaloa Region, Dr. Raquel Bañuelos has been organising World Diabetes Day activities for the last ten years. Initially, the activities consisted of glucose testing, but five years back they organised the first Diabetes Walk to sensitise the population of Culiacán. For the last three years, the walks have also included rural communities – this year in San Pedro. Over time, various private and public institutions at the municipal and state level have become part of the organising group. More than 2,000 people participated in the activities in the Sinaloa Region.

Middle East Region

A spectacular event was conducted for the fourth consecutive year in Abu Dhabi in the United Arab Emirates. More than 15,000 people walked five kilometres around the F1 track at Abu Dhabi's YAS Marina Circuit on Friday, November 26. The UAE Walk is an annual event organised by Imperial College London Diabetes Centre as part of the award-winning public health awareness campaign under the patronage of Her Highness Sheikha Fatima bin Mubarak.

Small ideas empower people

The Global Diabetes walk platform has become a powerful demonstration of how small ideas evolve into major interventions that empower individuals, non-governmental organisations, local diabetes associations, World Diabetes Foundation projects partners, industry partners and the media to promote healthy living and primary prevention. We therefore encourage you to visit our website where hundreds of photos and amazing impressions have been posted from around the world.

Please visit: www.globaldiabeteswalk.net

GLOBAL DIABETES WALK



A group of children and adolescents with diabetes from the Brazilian Juvenile Diabetes Association carried the Unite for Diabetes banner in front of 37,000 spectators at the Pacaembu Stadium in Sao Paulo before the soccer match between Corinthians and Cruzeiro.



World Diabetes Day walk at the seaside promenade in Morecambe, Lancashire, United Kingdom. The walk was organised by Diabetes Educator Anna Jesson as part of the Expert Patient Programmes in North Lancashire Primary Care Trust. Walks are organised on a monthly basis in the local area.



The Global Diabetes Walk organised in Ibadan, Nigeria was named "Walk Diabetes Out" and mobilised 500 people. The event was organised by the institution for Improving Diabetes Care in Nigeria (SIDCAIN).



More than 4,500 people participated in the 'Beat Diabetes Walkathon' organised jointly by the Qatar Diabetes Association, the Landmark Group and the Qatar Foundation at the Corniche on Friday 26 November.



The diabetes walk in Tirunelveli, Tamil Nadu, India, mobilised 310 participants. The event was organised by Dr.N.S.Balakrishnan.



The Indonesian Diabetes Association (PERSADIA) organised a walk for 450 people in Malang, East Java, Indonesia. A flying blue circle lifted by balloons opened the ceremony.

ONGOING ACTIVITIES 2010

Global

- 1 Diabetes Action Now
- 2 Post MDG conference
- 3 Diabetes outcomes from UN NCD Summit

Latin American and Caribbean Region

Barbados / St. Lucia

- 4 Step-by-Step foot care training

Bolivia

- 5 Prevention and early diagnosis of retinopathy
- 6 Foot care

Brazil

- 7 Diabetes treatment and resource mobilisation
- 8 Living with diabetes – training of health personnel
- 9 Nutritional education in schools
- 10 Diabetes care capacity building

Brazil/Mexico

- 11 Addressing the burden of DM & TB

Caribbean

- 12 School-based intervention programme

Central America

- 13 Integrated chronic disease management model

Chile

- 14 E-access to diabetes education and information

Colombia

- 15 GDM project, Vida Nueva

Cuba

- 16 Regional diabetes centres
- 17 Strengthening care for gestational diabetes
- 18 Provincial centre for education and care

Guatemala

- 19 Diabetes care in Mayan descendants

Haiti

- 20 Increased access to diabetes care

Jamaica, Belize, St. Lucia

- 21 Management of DM in youth

Jamaica/Panama

- 22 GDM diagnosis and treatment

Mexico

- 23 Training of diabetes educators
- 24 Diabetes prevention in schools
- 25 Tri-state border DM prevention project
- 26 Primary care capacity building

Nicaragua

- 27 Improving GDM screening
- 28 Youth diabetes camps

Peru

- 29 Training of trainers, five provinces

Regional

- 30 E-learning for health professionals
- 31 Quality improvement initiatives for diabetes
- 32 Prevention of foot complications, Andean community

African Region

Benin

- 33 Prevention and care for diabetes

Botswana

- 34 Improving care for diabetes and foot complication

Burkina Faso

- 35 Strengthening diabetes care capacity

Burundi

- 36 Community health care and education network
- 37 Improving quality of care

Cameroon

- 38 Prevention and treatment of diabetic retinopathy
- 39 Screening and management of GDM
- 40 Diabetes and HIV/AIDS
- 41 Changing diabetes in children

Central African Republic

- 42 Improving access to diabetes care

Congo, Brazzaville

- 43 National replication of Diabcare

DRC

- 44 Improving diabetes care
- 45 Integrated diabetes care
- 46 Integrated management of Type 1 DM children
- 47 Decentralisation of diabetes care

Eritrea

- 48 Reduction of the diabetes burden

Ethiopia

- 49 Improving diabetes eye care
- 50 Establishing diabetes outpatient services

Ghana

- 51 Community diabetes
- 52 National diabetes programme

Guinea Conakry

- 53 Improvement of access to diabetes care
- 54 Integrated management of Type 1 DM children

Kenya

- 55 Diabetic foot care
- 56 Diabetes care in Nairobi slums
- 57 National diabetes programme
- 58 Diabetic eye disease outreach programme

Kenya/Sub-Saharan Africa

- 59 Regional paediatric diabetes care capacity building programme

Liberia

- 60 Improving access to diabetes care

Madagascar

- 61 Strengthening diabetes care

Malawi

- 62 Improved diabetes care
- 63 Diabetes care in southern Malawi
- 64 Support to primary diabetes prevention

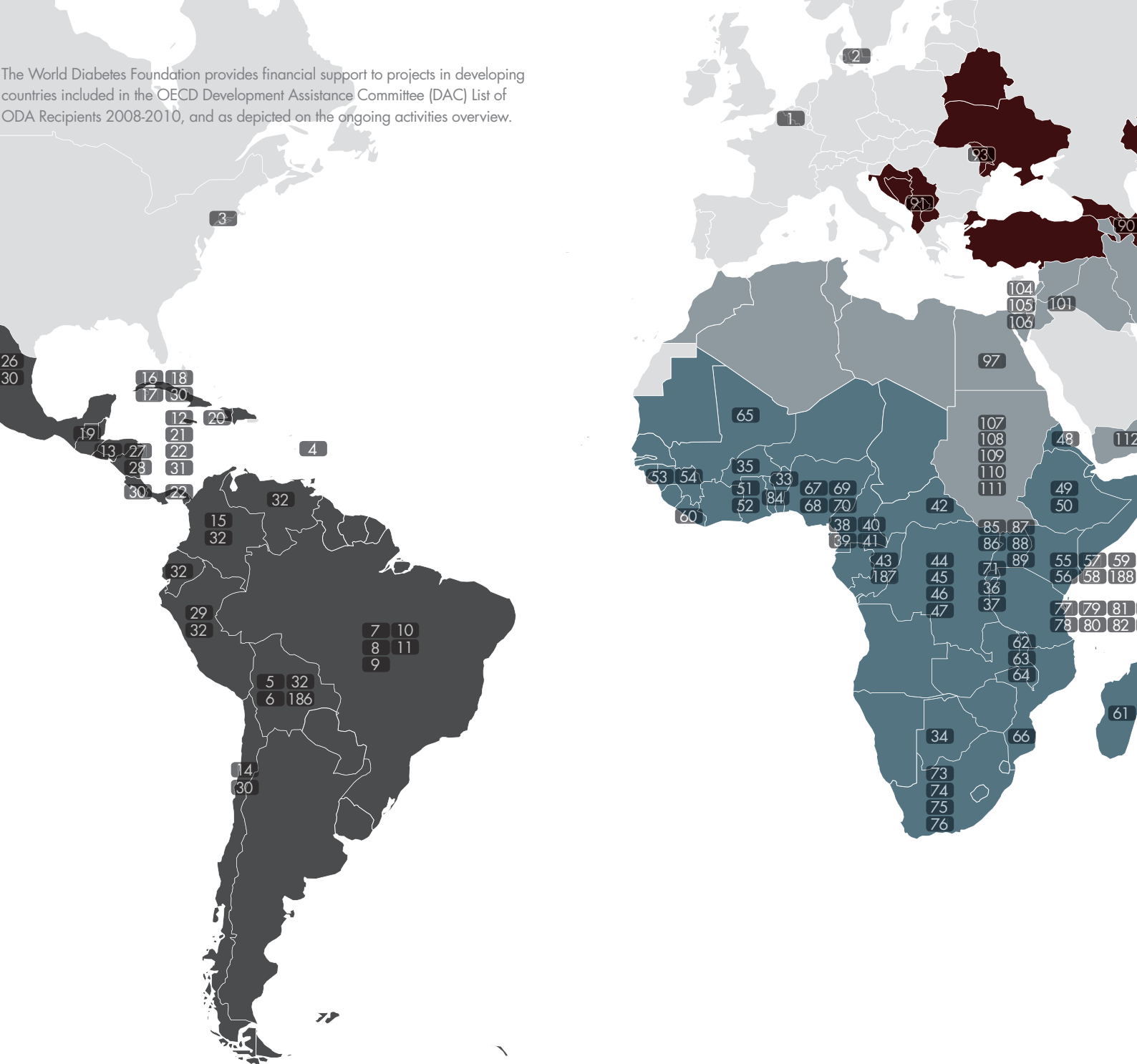
Mali

- 65 Improving diabetes prevention and care

Mozambique

- 66 Improving diabetes care

The World Diabetes Foundation provides financial support to projects in developing countries included in the OECD Development Assistance Committee (DAC) List of ODA Recipients 2008-2010, and as depicted on the ongoing activities overview.



Nigeria

- 67 Strategies for improving diabetes care
- 68 Improving diabetes care in Oyo State
- 69 Mobile diabetes education and care, Lagos State
- 70 Diabetes detection in TB patients

Rwanda

- 71 Training of health care providers and educators

Seychelles

- 72 Clinical management of diabetes

South Africa

- 73 Early identification of diabetes in HIV-positive people
- 74 School-based intervention programme
- 75 Diabetes outreach – agents for change
- 76 Smart living: Teenage diabetes awareness

Tanzania

- 77 National Diabetes Programme
- 78 Diabetes awareness, care and referral in Lake Zone
- 79 A step ahead of Step-by-Step
- 80 Training of orthopaedic surgeons

- 81 Improving diabetes eye care
- 82 Community and school outreach
- 83 Changing diabetes in children

Togo

- 84 Diabetes awareness educators

Uganda

- 85 National diabetes prevalence study
- 86 Improving diabetes care in ten districts
- 87 National Diabetes Programme
- 88 Arua district community outreach
- 89 Integrated management of Type 1 DM children

Europe and Central Asian Region

Azerbaijan

- 90 Establishment of diabetes schools

Kosovo

- 91 Improvement of health care for patients with diabetes

Kyrgyzstan

- 92

Moldova

- 93

Uzbekistan

- 94

- 95

Mali

- 96

Afghanistan

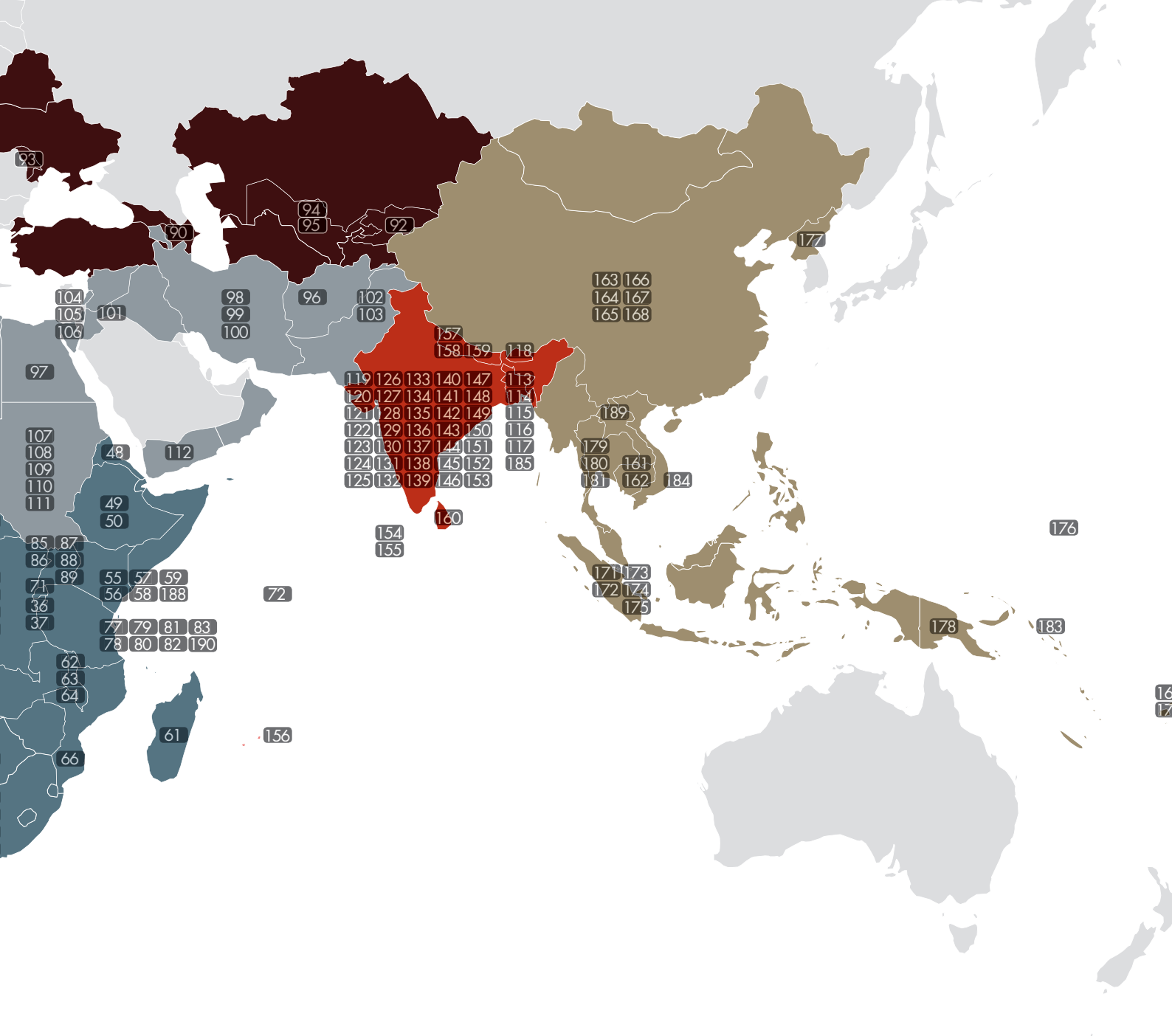
- 97

Egypt

- 98

Iran

- 99



Kyrgyzstan

92 Improving diabetes prevention and care

Moldova

93 Diabetic eye and foot care

Uzbekistan

94 Prevention of amputations
95 Children living with diabetes

Middle East and North African Region

Afghanistan

96 National Diabetes Programme

Egypt

97 Preventive foot care

Iran

98 Diabetes clinics
99 Diabetes foot care

100 Diabetes sight saving action

Jordan

101 National micro-clinic and training project

Pakistan

102 National diabetes and foot programme
103 Integrated and comprehensive management of T1DM

Occupied Palestinian Territories

104 Community-based diabetes management
105 DM management in UNRWA clinics
106 Improved diabetes care in Southern West Bank

Sudan

107 Gestational Diabetes
108 Eye care for children with diabetes
109 Prevention of major amputations among people with diabetes
110 Childhood diabetes programme
111 Promotion of diabetes associations

Yemen

112 Centre for diabetes care and control

South-East Asian Region

Bangladesh

- 113 Improving nutrition education
- 114 Primary prevention of diabetes
- 115 Improving diabetes management through educators
- 116 Improving diabetes care at Thana level
- 117 Extension of diabetic eye care

Bhutan

- 118 Improving diabetes care Phase II

India

- 119 Rural and semi-urban diabetes prevention and control
- 120 Diabetes awareness camps
- 121 Tele-screening for diabetic retinopathy
- 122 Preventing diabetes and its complications in rural areas
- 123 Prevention of obesity and diabetes in school children
- 124 Rural diabetic foot care
- 125 Diabetes eye care III
- 126 Diabetic retinopathy integrated programme
- 127 Community-based diabetic retinopathy services
- 128 Diabetic retinopathy project
- 129 Strengthening national diabetes care services
- 130 Rural diabetic retinopathy treatment
- 131 Primary prevention of diabetes
- 132 Samvedana eye care
- 133 Diabetic foot programme
- 134 Prevention of blindness
- 135 Gestational diabetes II
- 136 Comprehensive eye care model
- 137 Capacity development project
- 138 Mumbai diabetic retinopathy project
- 139 One step ahead – a diabetic foot campaign
- 140 Gestational diabetes among rural and tribal people
- 141 Diabetes training for TB health personnel
- 142 Reduction of blindness due to diabetes
- 143 Eye care at the doorsteps of rural India
- 144 Eye care
- 145 Prevention of diabetes through IT
- 146 Improved wound care
- 147 Comprehensive diabetes and eye care
- 148 Improving foot care in semi-urban areas
- 149 Diabetes prevention programme
- 150 Mobile treatment for diabetic retinopathy
- 151 Multimedia campaign on gestational diabetes
- 152 Institutional empowerment for diabetic foot
- 153 Gestational diabetes

Maldives

- 154 Project 200 islands
- 155 Diabetes eye care

Mauritius

- 156 National service framework for diabetes

Nepal

- 157 Diabetes clinics
- 158 Teleconsultation for diabetes care
- 159 Eye care

Sri Lanka

- 160 General diabetes care

Western Pacific region

Cambodia

- 161 Model for diabetes services
- 162 Provincial diabetes peer trainer network

China

- 163 Diabetes prevention programme
- 164 Diabetes prevention programme in Qingdao II
- 165 Diabetes education at community hospital level
- 166 Screening for diabetes in TB patients
- 167 National chronic wound care training
- 168 Gestational diabetes centres

Fiji

- 169 Save the diabetic foot
- 170 Improved diabetes eye care

Indonesia

- 171 Primary health care
- 172 Diabetic foot care
- 173 Prevention and control of diabetes
- 174 Diabetic retinopathy training and treatment
- 175 Integrated and comprehensive management of T1DM

Marshall Islands

- 176 Education in lifestyle diseases

North Korea

- 177 Diabetes care

Papua New Guinea

- 178 Development of diabetes services

Thailand

- 179 Behaviour modification in Thai urban working population
- 180 Mobile eye care
- 181 Advanced foot care

Tonga

- 182 Reducing diabetes complications

Solomon Islands

- 183 Improving diabetes care

Vietnam

- 184 National diabetes project

Fundraising projects

Bangladesh

- 185 Take Action! Children's Programme

Bolivia

- 186 Community health care and education network

Congo

- 187 Take Action! Children's programme

Kenya

- 188 Take Action! Children's programme

Laos

- 189 Improving access to diabetes care

Tanzania

- 190 Take Action! Children's Programme

The primary funds allocated to the fundraising activities are donated by Novo Nordisk employees and management & through the 'Take Action' programme, an employee volunteer programme where employees raise funds by taking unique initiatives or donate a monthly amount from their salary to support specific projects. For full details on the projects funded by the World Diabetes Foundation, please visit: www.worlddiabetesfoundation.org

THE LOCAL CHAMPIONS BEHIND KENYA'S DIABETES COMMITMENT



BEHIND THE RECENTLY LAUNCHED NATIONAL DIABETES STRATEGY IN KENYA, A RANGE OF IMPORTANT PARTNERS AND PERSONALITIES HAVE PULLED THE STRINGS. IN THIS ARTICLE WE PROVIDE PERSONAL PORTRAITS OF LOCAL CHAMPIONS WHO OPERATE ON A TOP-DOWN AND POLITICAL LEVEL, AND AT THE GRASS ROOTS AND COMMUNITY LEVEL IN ORDER TO GARNER SUPPORT TO BUILD CAPACITY AND EMPOWER PEOPLE LIVING WITH DIABETES.

Dr. William Maina, Deputy Director of Medical Services & Head of Division of NCDs at the Ministry of Public Health & Sanitation

Motivated to do things differently, to venture where others are shunning, Dr. William Maina has taken up the challenge of using his experience and knowledge in medicine and public health to the benefit of millions of people in his country.

Have you noticed a change in the level of awareness among health authorities, health providers and the population in general during your time in working with diabetes & NCDs?

"I am happy to report that the situation of awareness of diabetes and NCDs has changed drastically in the last three years. We have seen issues of diabetes and NCDs being factored in the Ministry of Health Annual Operations Plans, and this never used to happen before. We have received lots of requests from health institutions to build capacity for their health care providers on diabetes management. Besides these, high-level managers in the health sector have shown a personal interest in issues of diabetes."

Isn't it overkill to launch a specific strategy for diabetes when other NCDs are also affecting the Kenyan population?

"Our focus on diabetes is not a threat to the integrated NCD approach; in fact, it is like a case study to demonstrate that something can be done even in a resource poor set up. With limited resources, it would be futile to spread these resources thinly over an integrated programme that will have no impact on the people. Our diabetes strategy is to provide us with a good entry point to prevention and control of most NCDs as these share common risk factors. We aim to use this model to introduce an integrated chronic care model for our health facilities that will combine diabetes, hypertension, cardiovascular and renal

diseases under the same roof in order to maximise the utilisation of the scarce resources for maximum impact."

Has there been any reaction from international donors to your National Diabetes Strategy?

"The National Diabetes Strategy was launched on 10 September 2010, and we are in the process of disseminating this policy document. We are very optimistic that many donors will come aboard to support this course. At the moment, Centres for Disease Control and Prevention have already indicated willingness to support NCDs and particularly diabetes, and we have presented a proposal for support. We are looking forward to other donors such as DANIDA and USAID to approach us and support the country to roll out the National Diabetes Programme."


Dr. Eva Njenga, Former Chairman, DMI

How big an influence does civil society have on policy-makers and changes?

Civil society has significant impact on the policy-makers. With the new constitution, policy-makers need ideas and support from the civil society, and the government seems to be willing to work with other stakeholders to improve service. A good example is the launch of the National Diabetes Strategy, which was funded by the World Diabetes Foundation through DMI and the Ministry of Health. We have worked very well together, and the Ministry will take the lead in implementing the strategy.

Has the Nairobi Summit in 2007 changed anything in terms of the policy environment?

The 2007 Diabetes Summit for Africa was an eye-opener and gave hope that the policy-makers are interested in the work we



are doing for improving diabetes care in this country. We are very happy with the support granted by the World Diabetes Foundation, and if this continues, we will be able to train adequate numbers of health care professionals and lay educators, who are badly needed in Kenya. In that process our role will be to collect systematic data and to help policy-makers plan their health budget properly.

Ms. Eva Muchemi, Executive Director, the Kenya Diabetes Management and Information Center

What is DMI's role and has its existence changed anything for people with diabetes?

"The DMI Centre's most important role is to raise public awareness on diabetes regarding change of lifestyle and training of both professional health care providers and lay educators. Since DMI started, people with diabetes in Kenya have become more aware of the symptoms and where to seek help. They have more access to diabetes care in their local health institutions. Through the education & training programme funded by the World Diabetes Foundation, diabetes clinics were established and given basic equipment, and this has improved health care services."

Dr. Kirtida Acharya, Chairperson of the Diabetes Kenya Organisation

Participating in the formulation and launch of the national diabetes strategy, policy, clinical care guidelines and education manuals in October this year marked the end of a long journey.

What is Diabetes Kenya's role in the overall diabetes framework in the country?

We are lobbying to improve the lives of people affected by diabetes. We are the national representative body and sole accredited member in Kenya of the International Diabetes Federation. Our vision is to see a diabetes-free Kenya, and our motto is "An Anchor of Hope" against the rising tide (tsunami) of the diabetes epidemic in Kenya. On 1 November 2010, Diabetes Kenya launched the NCD Alliance in Kenya in collaboration with Kenya Cardiac Society, Kenya Renal Association, Kenya Medical

Association, Kenya Association for Prevention of TB and Lung Diseases (KAPTLD) and Kenya Obstetrician and Gynaecology Society (KOGS). The NCD Alliance was launched along with a Diabetes High Alert Campaign run in collaboration with The Kenya Red Cross.

Mr. Vincent Mbugua, Health Educator, the Kenya Diabetes Management and Information Center

As a community rehabilitation officer and later a rehabilitation officer for the blind people, Mr. Vincent Mbugua realised that diabetes played a significant role in blindness and hence went through diabetes education training. Furthermore, he has a strong family history of diabetes after having lost his grandmother, uncle and aunt to the disease.

Who are the people you target with awareness and education activities?

"Out-of-the-office awareness activities are the backbone of our programme. This helps us in discussing risk factors, identifying people at high risk and how to prevent complications. This is done through health talks to religious organisations, such as churches, mosques, corporate bodies and public gatherings. Our school programme has created a pool of ambassadors from the student body who communicate effectively with their parents after having been empowered through the awareness forums."

What has surprised you the most? And how do you measure the impact of your work?

"I still cannot come to terms with how long we waited before being able to make an impact of the seriousness of diabetes in the country. More so, I wonder what could have happened if the World Diabetes Foundation, who I call "brothers", had not come in to assist the Ministry and the DMI to set up the Education & Training programme. Through the Ministry of Health Division of Non Communicable Diseases reporting system, we see a reduction of hospital admissions and more referrals to specialists, and improved quality of life for the patients and formation of community support groups supported by the trained lay educators." he concludes.

KENYA LAUNCHES AFRICA'S FIRST NATIONAL DIABETES STRATEGY



ON 25 AUGUST, KENYA SAW ITS FIRST COMPREHENSIVE NATIONAL DIABETES STRATEGY. IN FACT, IT WAS NOT ONLY KENYA'S FIRST, BUT THE FIRST NATIONAL DIABETES STRATEGY ON THE AFRICAN CONTINENT. IT IS THE RESULT OF YEARS OF DEDICATED WORK BY VARIOUS STAKEHOLDERS IN THE HEALTH CARE SYSTEM.



Kenya's Minister of Health, Ms. Beth Mugo, at the launch of her country's and Africa's first National Diabetes Strategy on 10 September 2010 (Photo: courtesy of National Diabetes Comprehensive Care Programme).

The active presence of the Minister of Health, Ms. Beth Mugo, during the official launch was in itself symbolic for the high-level involvement in placing diabetes on Kenya's national health agenda. In the foreword of the new strategy, her intention is clear: "If the disease is not tackled, it will hinder the attainment of the Millennium Development Goals. In order to achieve effective diabetes control, a coordinated and multi-sectoral approach must be adopted throughout the country. It is our belief that collectively we can make a difference: Let us join hands in the fight against diabetes and strive to achieve a diabetes-free Kenya."

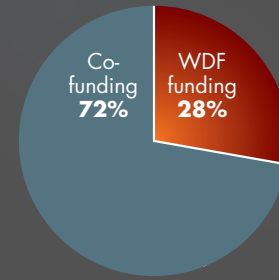
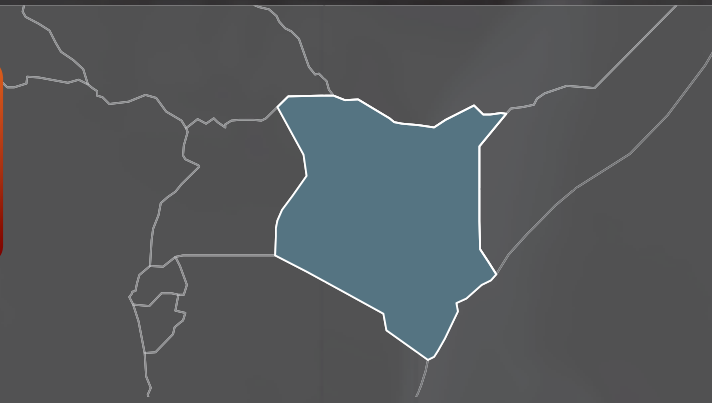
The burden is big enough

There are an estimated 1.6 million people living with diabetes in Kenya today¹. However, it remains an estimate due to poor health records and data collection. Yet, according to Dr. William Maina, Deputy Director of Medical Services & Head of the Division of Non-communicable Diseases in Kenya's Ministry of Public Health and Sanitation, "even without taking the other NCDs into consideration, the burden of diabetes is big enough to warrant special attention."

The overall goal of the National Diabetes Strategy is to 1) prevent or delay the development of diabetes in the Kenyan population and to 2) improve quality of life and reduce complications and premature mortality in people with diabetes. In real terms, this means to roll out the strategy in three phases going from national to regional to district level. The central theme of the strategy is to train health care providers and community health workers to detect and treat diabetes so that, ultimately, they act as 'diabetes ambassadors'. As it is today, often health care providers and patients do not have adequate knowledge about diabetes – if any at all.

A big win

"For the World Diabetes Foundation the launch of this new strategy is a big win," says Dr. Anil Kapur, who attended the official launch. "Several of our partners assured me that this would not have



**ALL WDF PROJECTS
TOTAL FUNDING**
USD 10,931,484

OVERALL RESULTS FOR ALL PROJECTS

215 diabetes clinics established / strengthened
40,264 patients treated through established clinics
870 doctors trained
2,496 nurses trained
4,947 paramedics trained
149,298 people screened for diabetes
352 health care personnel trained in diabetic foot care
7,685 patients screened for diabetic foot
134 feet saved through treatment

WDF SUPPORTED PROJECTS

2005 - 2008 Diabetes Education Programme
2008 - 2011 Diabetic foot care
2009 - 2011 Improving diabetes care in Nairobi slums
2009 - 2015 National diabetes programme
2010 - 2012 Diabetic eye disease outreach programme

come about without the initial support from the Foundation to a project run by the Diabetes Management and Information Centre. That project and the subsequent collaboration with the ministry of health whetted their appetite and built their confidence. We are of course happy to see that our strategy of empowering local champions to take action works. They know what is most relevant for their situation and building the networks that are required to help create an environment in order to get things moving.”

“Implementing comprehensive, integrated and holistic national programmes requires substantial resources – human as well as financial – and the Foundation cannot fund such interventions single-handedly,” says Dr. Kapur. While we rejoice, it is important to keep in mind that sustainability and local ownership are crucial when World Diabetes Foundation decides to grant support and this can only come through when the initiative is anchored within the existing health care system.

The Ministry of Public Health and Sanitation will be the lead partner and responsible for the overall implementation of the Strategy in collaboration with the Kenya Diabetes Management and Information Centre (DMIC). For technical assistance and to ensure cost-effectiveness and sustainability of the project, the Ministry will also collaborate with the WHO, the Kenya Diabetes Association, the Kenya Diabetes Study Group and Kenya Diabetes Educators.

Mainstreaming previous efforts

Under the national programme, nine diabetes clinics have thus far been established in provincial hospitals in all Kenyan provinces, and screening and awareness camps have been conducted. Besides the recently launched National Strategy, manuals and guidelines for comprehensive diabetes care have been

developed. The national programme is the fifth project in Kenya to receive support from the Foundation, and its comprehensive approach nicely wraps up and mainstreams all the previous efforts. In fact, the strategy also envisions integrating treatment of diabetes with that of tuberculosis and HIV/AIDS management and creating links with maternal and child health programmes.

The fact that the National Diabetes Strategy has been prepared by and is anchored within the Ministry’s Division of Non-Communicable Diseases suggests the integrated approach towards the inclusion of other related diseases. Dr. Maina reassures that the focus on diabetes is not a threat to an integrated NCD approach: “The diabetes strategy will provide us with a good entry point to prevention and control of most NCDs which share common risk factors. We aim to use this model to introduce an integrated chronic care model at health facilities to integrate diabetes, hypertension, cardiovascular and renal diseases under one roof in order to better utilise the scarce resources for maximum impact,” he says.

The World Diabetes Foundation has granted support for national programmes in two other African countries, i.e. Uganda and Ghana. Based on the project portfolio and the improved capacity, various other countries might soon have the capacity to launch national programmes. In spite of the current three national programmes in the World Diabetes Foundation’s portfolio, Kenya has now taken the lead in being the first country to publicly announce a strategy and initiate implementation.

¹ Dirk L. Christensen, Henrik Friis, David L. Mwaniki, Beatrice Kilonzo, Inge Tetens, Michael K. Boit, Ormondi B, Lydia Kaduka, Knut Borch-Johnsen. Prevalence of glucose intolerance and associated risk factors in rural and urban populations of different ethnic groups in Kenya. *Diabetes Research and Clinical Practice* 2009; 84: 303–310



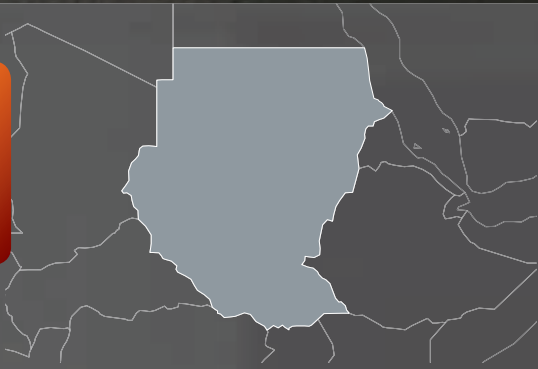
BUILDING A BASE FOR DIABETES CARE IN SUDAN

SIMILAR TO OTHER AFRICAN COUNTRIES, DIABETES IS NO LONGER RARE IN SUDAN. THE COUNTRY'S RESOURCE-STRAINED HEALTH CARE SYSTEM IS FAR FROM READY TO DEAL WITH THE RISING BURDEN OF DIABETES ESTIMATED TO AFFECT 3.3% OF THE COUNTRY'S 43 MILLION INHABITANTS.¹ COMBINED WITH A LONG HISTORY OF INTERNAL CONFLICT, THE CHALLENGES AND BARRIERS ARE MANY WHEN SUPPORTING DIABETES PROJECTS IN SUDAN. NEVERTHELESS, THE WORLD DIABETES FOUNDATION DECIDED TO COMMENCE SUPPORT IN 2004 AND THE EXPERIENCE THROUGHOUT NINE PROJECTS TO DATE HAS BEEN OVERWHELMINGLY POSITIVE.

Supporting local ownership

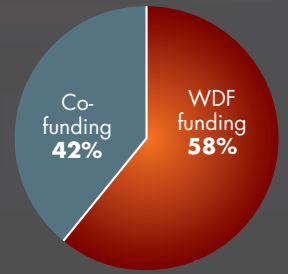
Throughout nine projects, the World Diabetes Foundation has invested almost USD 1.5 million in Sudan. Apart from the quantifiable results in terms of diabetes clinics established and health care personnel trained, attention is now being paid to the problem in a populous country with a high disease burden. "We have empowered local stakeholders, who see this as their

initiative. We have created an environment where the Federal Ministry of Health has become aware of the issue and is now participating at all levels. The story of diabetes projects in Sudan has become a success story, and people always want to be part of a success," says Programme Coordinator and responsible for projects in Sudan, Ms. Hanne Strandgaard from the World Diabetes Foundation. The nine projects supported by the World Diabetes Foundation in Sudan are targeted to reach more than



OVERALL RESULTS FOR ALL PROJECTS

- 115 clinics established or strengthened
- 44,000 patients treated through established clinics
- 378 doctors trained
- 173 nurses trained
- 367 paramedics trained



TOTAL FUNDING
USD 4,762,466

WDF SUPPORTED PROJECTS

Primary care close to people

In the period from 2004 to 2009, the World Diabetes Foundation supported two initial diabetes projects in eight states of Sudan. During the course of these first projects, focus was shifted from secondary to primary care because a greater need was present. What was required was primary care close to people along with upscaling of health care personnel skills at the primary health care facilities. At the completion of both projects, a total of 57 diabetes mini-clinics and 14 diabetes units and centres had been established. Furthermore, 180 doctors and 160 diabetes educators had been trained.

Mobile diabetes care

Under a third project, the level of care in the Northern State was extended to include tertiary care. The diabetes centre in the state capital, Dongola was upgraded to a tertiary referral centre and has become a centre of excellence for treatment as well as for training of medical students. A mobile diabetes clinic forms part of the project and conducts monthly visits to satellite diabetes clinics in the Northern State.

Children with diabetes



World Diabetes Foundation has granted support to two childhood diabetes programmes in Sudan. The first project, Integrated Management of Diabetes in Children (IMDC) was based in the Gezira State; the second is based at the Jabir Abu-Eliz Diabetic Centre in Khartoum and covers almost the entire country. As the childhood diabetes clinic in Gezira was strengthened under the first project, the number of children registered increased from 40 to approx. 1,300. Similarly in Khartoum, the number of children with diabetes registered has grown since 2005 when a group of voluntary doctors were involved and started to improve services at the clinic to also focus on children.

Women and diabetes



Since 2007, the World Diabetes Foundation has supported a project focusing on gestational diabetes mellitus (GDM) based at the Alhaq Yousif Reproductive Health Centre in Khartoum. By training doctors and midwives in GDM protocols and educational material, the project is steadily being extended to five other diabetes mini-clinics in the state of Khartoum beside Alhaq Yousif Reproductive Health Centre. To date, 6,565 women have been screened for GDM. The future plan is to expand the project to all 161 health centres in Khartoum based on the lessons learnt and then replicate it in other selected states of Sudan.

Diabetic retinopathy



The Eye Care project builds on the previous project on Integrated Management of Diabetes in Children (IMDC). Considering the fact that the majority of children with diabetes are experiencing HbA1c-levels above 7.5%, it is realistic to expect that many children will have eye complications and will need earlier attention to prevent blindness and to improve their quality of life. The project is based at the Faculty of Medicine at the University of Gezira and collaborates with the Elsaïm Eye Hospital in Wad Medani (Gezira State). To date, 291 children and adults have been detected with diabetic retinopathy, and 78 of these treated with laser surgery.

Diabetic foot care



A diabetic foot project in Sudan was launched in late 2008 with the aim of reducing the high rates of major amputations due to diabetes. The project is based at the Jabir Abu-Eliz Diabetic Centre located in Khartoum and it aims at establishing 20 diabetic foot clinics at existing health care facilities throughout Sudan following the Step-by-Step model. To date, 10 clinics have been established and 178 health care professionals trained. About 7,500 diabetic foot patients have received diabetic foot care and wound dressing at these clinics.

Strengthening civil society

Initiated in 2010, the aim of the latest World Diabetes Foundation supported project, "Diabetes Associations in Sudan", is to promote diabetes care through strengthening of civil society. The project aims to establish and empower diabetes associations in eleven regions of the country. A recent update from the project reports that four diabetes associations have already been established.

700,000 people.² "If we meet this target, it will be an impressive coverage of people living with diabetes in Sudan," says Ms. Hanne Strandgaard. "Considering that there is no national diabetes programme covering all of Sudan, and considering that with funds from the Foundation alone, we are able to reach the majority of those living with diabetes, I am very positive about the impact our support may have," she says.

Consensus among partners

The main reason for the success of the projects supported by the Foundation in Sudan is the strong collaboration between all partners involved. The active involvement of the Federal Ministry of Health in all projects has ensured strong ownership of all diabetes initiatives as well as sustainability. According to Prof. Mohamed A. Eltom, Secretary General of the Sudanese Diabetes Association, a strong base has been created for venturing into a

nationwide diabetes programme: "Now that we have developed a system and formula for success, there is a level of integration between the different institutions and there is consensus among the partners and disciplines about the levels of care," he says.

Step-wise capacity building

The total portfolio of projects in Sudan has demonstrated how the project partners have addressed diabetes care in a step-wise manner by first establishing diabetes care facilities in clinics and, secondly, upgrading these by empowering diabetes education of

¹ IDF Diabetes Atlas 2009 (<http://www.diabetesatlas.org/map>). According to UN World Population prospects (2008 revision), Sudan's population in 2010 is projected to be 43.192 million.

² According to the latest estimates from the International Diabetes Federation, 675,300 people currently live with diabetes. Local estimates, however, are higher.



patients and health care professionals. Finally, the facilities have been further upgraded to include preventive care (secondary care) and treatment of complications (tertiary care). "Despite soaring conflict and encompassing poverty in Sudan, based on what we have seen, I am confident that these projects have made a considerable impact and will continue to do so in the future," Ms. Hanne Strandgaard concludes.

Poverty focus and trustworthy partners

With Sudan being ranked among the lowest on the UN development index, the country automatically qualifies as a focus area for the World Diabetes Foundation. Although investing in Sudan was linked to a certain risk due to fragile infrastructure, the success of the initial projects proved that risk to be unwarranted.

Overall, the Foundation's ambition for diabetes services in Sudan has been to create a vibrant diabetes grassroots movement led by the patient associations. With the latest approved project, "Promotion of diabetes associations", this ambition conclusively becomes reality. With the gradual geographical expansion, 19 of Sudan's 26 states are covered by or planned to be covered by projects supported by the World Diabetes Foundation.

SUDAN'S TIRELESS DIABETES ADVOCATE



A native of the Gezira State in Sudan, the 57-year-old Prof. Mohamed Ali Eltom, has been a tireless advocate for building up infrastructure and awareness of diabetes care in his country. His portfolio includes posts such as Secretary General of the Sudanese Diabetes Association and the Sudanese Association of Physicians; Coordinator of the National Diabetes Programme as well as authorship of numerous research papers. Prof. Eltom originally did his Ph.D. on thyroid diseases at Uppsala University Hospital in 1984, but he has later shifted to the field of diabetes. "When I was conducting endocrinology in clinical practice in 1986, I realised that diabetes was the main problem in endocrinology, accounting for 70% of the cases. But there were few resources. At that time, there were only four diabetologists in the entire country - and an estimated one million people living with diabetes," he says.

Doing a lot with few means

"Although much is still left to be done, progress has been made. Today, we have 40 diabetologists in the country and the Sudanese



Photo: Ann-Sophie Iuel-Brockdorff

Diabetes Association was recently registered as a member of the International Diabetes Federation. If it had not been for the support we have received from the World Diabetes Foundation since 2004, we would not have advanced from the status we were at in 2003. Although the financial support has been modest, it has facilitated activities and projects to be set into motion. And in these projects, people have managed to do a lot with very few means."

From local to national

The nine projects supported by the World Diabetes Foundation have worked as a pilot for formulating a nationwide programme. "In my view, the prospects for a diabetes programme covering the entire country are very bright. Now that we have developed a system and developed a formula, there is a level of integration between the different institutions, and there is consensus among the partners, the disciplines and the levels of care. All this knowledge and experience now needs to be put into paper and action."

"But it is important that a national diabetes programme is anchored within the Federal Ministry of Health and integrated into a wider NCD-programme. We will need to coordinate with NCD-projects of the same calibre to be implemented in the different states and supervised and managed by the Diabetes Programme

Promotion Organisation, a national NGO. We will also need to involve all the different stakeholders for at least four to five years; and we will need to develop diabetes associations from the roots to advocate for more support. These initiatives need to go hand in hand and with this combination, the diabetes model will be a model for all NCD projects."

Diabetes associations play a vital role

In 2010, the ninth and latest project supported by the World Diabetes Foundation in Sudan, "Promotion of diabetes associations", was launched. Asked about the role of these associations, Prof. Eltom says, "As main partners, diabetes associations have a vital role to play in the design and implementation of diabetes strategies. They can identify the needs of the population living with diabetes and promote acceptable methods of implementation. They can fulfil a vital watchdog role and help evaluate the outcome of programme measures. Finally, they have a powerful advocacy function. But if they are to play their part effectively, they must recruit as many members as possible, and these members need both training and education. Under this latest project we hope to be able to live up to this ambition", he concludes.

THE POWERHOUSE AT AUGUSTA VICTORIA



Photo: Heine Pedersen

“WHAT MAKES MY HEART BEAT – OR MOTIVATES ME – IS THAT I HAVE A “BELIEF” SYSTEM. I WANT TO CREATE A PALESTINIAN SUCCESS STORY. THIS IS WHAT DRIVES ME MORE THAN ANYTHING AVH DOES.”

Mr. Tawfiq Nasser, Chief Executive Officer at the Augusta Victoria Hospital.

Situated between prosperous Europe and impoverished Africa, the health profile of the Occupied Palestinian Territories (OPT) carries the characteristics of both continents. The West Bank alone is home to 2.5 million people¹. An estimated 11.7% of the population live with diabetes and another 16% have hypertension – a risk factor for developing diabetes.² Yet, while diabetes is often mistakenly attributed to an affluent lifestyle, diseases attributable to poverty – such as stunting, pneumonia, perinatal deaths and diarrhoea – also dominate the health profile.

Since 2003, the World Diabetes Foundation has granted support to improve access to diabetes care for the Palestinian population. The first two projects were based in Jerusalem at the Augusta Victoria Hospital (AVH) and focused on capacity building and on establishing a Diabetes Care Centre at AVH. The third and fourth projects moved into the communities in the West Bank. The idea was to reach people where they live and facilitate access to health care for those who may have difficulties reaching Jerusalem. The latest addition, which will commence in 2011, will train UNRWA (The United Nations Relief and Works Agency for Palestine Refugees in the Near East) staff on prevention and care of diabetes to benefit of hundreds and thousands of people with diabetes in the West Bank and Gaza.

Treatment consisted of amputations

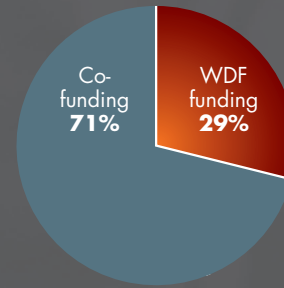
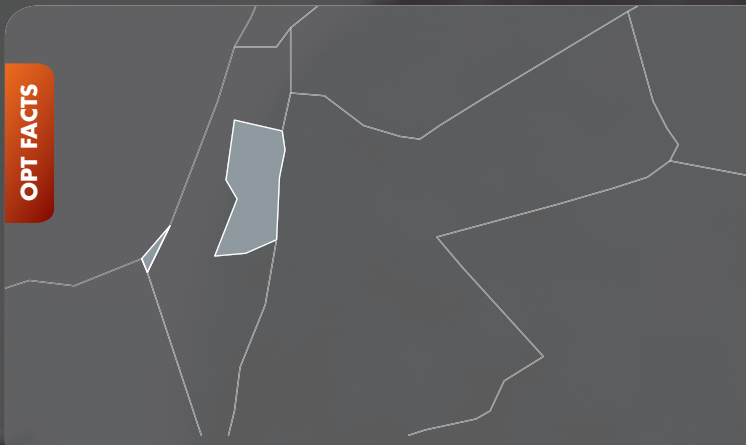
The high prevalence of diabetes in the West Bank imposes a heavy burden on the health care budget, especially for treating complications. The CEO at the Jerusalem-based Augusta Victoria Hospital, Mr Tawfiq has been instrumental in creating capacity

within diabetes care for the Palestinian population: “We made the decision to expand the hospital services to encompass NCDs at the primary level. This meant to speak the language of excellence on tertiary care while at the same time delivering care at community level. I think we had a national as well as ethical obligation to embark on this challenge. Of course, it is important to have and offer tertiary care, but the need begins at community level. AVH should take a leadership role in reducing the complications related to NCDs and diabetes. Therefore, the prevention component is part of our strategy – we want to be leaders in prevention and care.”

“Doing primary prevention is like closing the tap – and there was a huge leakage in the health system. Huge amounts went into tertiary care. We wanted full integration of NCDs in protocols across the board; we wanted to target the population at risk, i.e. those with hyperglycemia, pregnant women, obese people, people with foot problems. The diabetic foot was completely neglected – the treatment simply consisted of carrying out amputations,” he says.

Bringing in new partners – breaking barriers

In 2005, the government (the Palestinian authority in Ramallah) came aboard. They run 440 clinics all over the West Bank and, in addition, UNRWA runs some 50 clinics. In other words, the infrastructure existed, but the agenda was very fragmented. Together, the government, AVH and NGOs set up a national committee with the objective of setting the agenda for NCDs and diabetes. It is fair to say that the AVH has been a driving force



TOTAL FUNDING
USD 6,724,263

OVERALL RESULTS FOR ALL PROJECTS

38 clinics established or strengthened
6,271 patients treated through established clinics
324 doctors trained
260 nurses trained
624 paramedics trained

WDF SUPPORTED PROJECTS

2003 - 2005 Diabetes prevention and nutrition - West Bank
2006 - 2010 Diabetes care and prevention - West Bank and Gaza
2007 - 2010 Community-based diabetes management
2010 - 2013 Improved diabetes care in Southern West Bank
2011 - 2014 Improve management of diabetes in UNRWA health centres

in building diabetes capacity for the Palestinian population. One of their strengths has been the ability to attract international organisations and collaborate with local NGOs with a strong community outreach. As part of the organisation's Middle East activities, the Danish NGO Dan Church Aid has partnered with AVH in four projects supported by the World Diabetes Foundation.

In a project supported by the World Diabetes Foundation, commenced in 2010 to strengthen clinics in Southern West Bank, Danida came aboard as co-funders. The primary implementing partners are AVH and the Juzoor Foundation for Health and Social Development, a Palestinian NGO. A recently funded project by the World Diabetes Foundation will extend the collaboration to UNRWA on providing care to diabetes and related NCDs.

A relief organisation goes into diabetes

While Dan Church Aid (DCA) is known for its immediate relief work, 60% of the organisation's work is long-term. One focus area is health including HIV/AIDS. The background for collaborating with the World Diabetes Foundation was the acknowledgment of diabetes being a severe problem in the Occupied Palestinian Territories (OPT).

"I regard the collaboration with the World Diabetes Foundation as a highly successful pilot project," says Mr. Henrik Stubkjær, Secretary General at DCA. "For example, it has been fantastic to be able to facilitate the most modern dialysis equipment at AVH with support from the Foundation. The first project took off at AVH, but we have now moved into the communities, which is where we want to be. Our philosophy is to build capacity with a bottom-up approach in close interaction with the local authorities," he explains.

"The strength in the collaboration with the World Diabetes Foundation has been the long-term perspective. We have seen a need among our local partners, and the Foundation has replied to

that need with funding and technical expertise. The project in the OPT has succeeded because we have been able to make a long haul, and I therefore regard the World Diabetes Foundation as a co-player which has played along the same strategy as ours," Mr. Stubkjær concludes.

Creating a Palestinian success story

"Our greatest success is that we have created a Palestinian success story in Jerusalem separated from the Palestinian reality. The diabetes programme shines as a bright star for the Palestinians because it moves top-down. It is not a programme created to stay in the hospital, but rather a community-patient programme. With its support, the World Diabetes Foundation helped create a powerhouse at AVH," says Mr Tawfiq Nasser.

"I know my approach is different from the well-known argument of blaming every failure on the occupation. The language of medicine is a powerful one. Let me give you an example: An Israeli soldier enters a bus full of diabetes patients on their way to Jerusalem to get treatment at AVH. When he sees that they are all diabetes patients and have permission to go, it gives him security knowing that they are going to a hospital. In that sense, with medical care, we break barriers – instead of building walls."

One measurable effect of the improved access to and quality of care can be found in the reduced HbA1c levels among patients visiting the Hospital Diabetes Center at AVH. In 502 patients, the HbA1c levels were reduced from an average of 9.1% for the first visit to an average of 8.4% at the third visit within the same year.

¹ State of Palestine Ministry of Health, Mid-year 2010. <http://www.moh.ps/?lang=1&page=4&pid=122>

² UNRWA Health Report 2009, p. 87.

MICRO-CLINICS BECOME PART OF A NATIONAL STRATEGY IN JORDAN



AT THE WORLD DIABETES FOUNDATION, THE AIM OF SUPPORTING GRASSROOTS INITIATIVES AND PLANTING SMALL SEEDS FOR CHANGE HAVE TURNED OUT TO HAVE A RIPPLE EFFECT, CATERING FOR SIGNIFICANT CHANGES ON THE PUBLIC HEALTH AGENDA. BASED ON THE EXPERIENCE FROM A PROJECT IN TWO NEIGHBOURHOODS IN GREATER AMMAN, THE MINISTRY OF HEALTH IN JORDAN IS NOW EXPANDING A PROJECT MODEL – ORIGINALLY SUPPORTED BY THE FOUNDATION – TO NATIONAL LEVEL.

The Global Micro-Clinic Project (GMCP) seeks to empower people to prevent and manage diseases in economically depressed and conflict-ridden areas of the world. The organisation is based around a community-driven philosophy by forming partnerships between health care professionals, academia, government and citizens. The GMCP builds on the principle that civil society involvement is the life blood of functioning communities and the foundation of healthy livelihoods.

Founder and President of the Global Micro-Clinic Project (GMCP), Mr. Daniel Zoughbie, has a background in social anthropology, and consequently his approach to dealing with health care challenges like diabetes takes its point of departure in social networks. “Whether we deal with biologically communicable or non-communicable diseases, many of them are somehow socially communicable. So, if negative behaviour can spread through social networks, so can positive behaviour,” he says.

Micro-clinics

From 2007 to 2009 the World Diabetes Foundation granted the GMCP support for a small project. By the end of the project, 1,000 people living with diabetes had been enrolled in one of 290 micro-clinics. The community-based programme was implemented in partnership with the Royal Health Awareness Society (RHAS), presided by Queen Rania, and with the Ministry of Health of Jordan. Besides the support from the World Diabetes Foundation, the project also received funds from the University of California in Berkeley, the International Diabetes Federation and private donors.

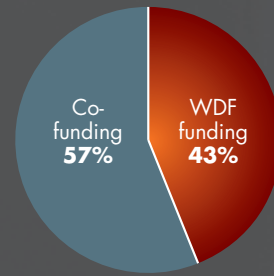
The first project ran in two poor neighbourhoods in greater Amman: Ayn Al-Basha and Jabal Al-Nassar where an estimated 3,650 patients are registered with diabetes and hypertension at the health centres. During the project, all patients who had been detected with high glucose levels were offered to become part of a micro-clinic. A micro-clinic is not a clinic in the traditional understanding of a place where a patient goes to see a health care professional. Micro-clinics are self-selected groups of 3-8 people with diabetes who share education, group support and blood glucose testing, using a glucometer.

Once a person is enrolled in a micro-clinic, he or she undergoes a three-month educational course. The HbA1c level is tested followed by a training course on diabetes management and prevention. Results based on data from the two project sites suggest statistically significant improvements among patients educated in the micro-clinics.

Dispelling prevailing myths

“One of the basic ideas behind the GMCP is that people can care for themselves and positively influence the lives of those around them when medical care is lacking and poverty ever present,” Mr. Daniel Zoughbie explains. Patient empowerment is a crucial aspect for how well patients are able to manage their diabetes.

Mr. Sami Ali Harb is 65 years old and was diagnosed with diabetes at age 52. He has profited immensely from the information and network provided by the micro-clinic setup. “After attending the sessions, I have no fear anymore because the knowledge we



TOTAL FUNDING
USD 1,755,793

OVERALL RESULTS FOR ALL PROJECTS

- 23 clinics established or strengthened
- 9,822 patients treated through established clinics
- 23 doctors trained
- 46 nurses trained
- 23 paramedics trained

WDF SUPPORTED PROJECTS

- 2007 - 2009 Global micro-clinics
- 2010 - 2013 National micro-clinic and training project

got was more than enough in order to deal with and control my disease. Also, my spirit is so high and diabetes is a friend of mine and not an enemy any more," he says.

Part of the patient empowerment is exchanging experience and dispelling prevailing myths about diabetes. For example, one woman told how she had gone to Syria for a foot operation which would cure her diabetes. It turned out that several others had heard similar stories of a supposed cure for diabetes. Another man stood up and told how he always made sure to put a bit of gasoline in his drinking water to cure his diabetes. In the micro-clinics people have the chance to exchange and have such dangerous myths dispelled.

Facing the disease as a community

According to Ms. Nadia El-Kerra, a GMCP Fellow for the first Micro-Clinic Project in Amman, the micro-clinics reach further than the individual; they also affect the community. "The micro-clinics empower the patients to face their disease as a community and help overcome stigmas the community has towards diabetes. It allows for a forum where patients can come together and discuss their struggle with diabetes and it empowers the patients to collectively make lifestyle modifications. The stories shared and the skills learned at the micro-clinics have a much stronger impact on the participants than just walking into an ordinary clinic. Not only do they learn how to deal with the physical aspects of the disease; they also learn to deal with the mental and social challenges of diabetes," she says.

The future is nationwide

Programme Coordinator at the World Diabetes Foundation, Ms. Astrid Hasselbalch visited Jordan in 2009. In her opinion, GMCP has created a momentum in the field of diabetes care in Jordan. "The project has brought together key national stakeholders and brought diabetes to the national health agenda in Jordan," she says. GMCP Founder, Mr. Daniel Zoughbie describes the project as "horizontalising" the relationship between patient and health

care system. As he says, "For many, this is the first time they have been provided with a space to ask questions, learn about diabetes, and support members of their community facing common challenges. In this sense, the support - technical, emotional, and financial - that the GMCP has received from the World Diabetes Foundation has had an impact on the lives of many economically disadvantaged individuals living with diabetes."

The psycho-social rather than purely medical approach of the GMCP has turned out to be so convincing that the Ministry of Health has decided to expand and implement the micro-clinic model nationwide. The World Diabetes Foundation continues its support specifically to train 150 nurses and 54 doctors from primary health care centres nationwide in order to establish diabetes clinics in all 54 health care centres. Alongside, 1,000 micro-clinics are expected to be established

A part of Jordan's NCD prevention strategy

Diabetes is considered to be the second most leading cause of death and disability in Jordan next after cardiovascular diseases. Studies conducted by the Ministry of Health indicate a steady rise in the prevalence of diabetes from 6.8% in 1996 to 16% in 2007.

Dr. Adel Belbeisi is Assistant Secretary General for Primary Health Care in the Ministry of Health Jordan, and the focal point of the micro-clinic project elaborates on the strategy framework. "The Ministry of Health decided to collaborate with RHAS to implement this project as a pilot trial to raise awareness of diabetes patients as a part of the NCD prevention strategy in Jordan. However, the financial limitation being a major obstacle to execute such a project, the collaboration with other governmental and non-governmental sectors has proven to be crucial to achieve our objectives for prevention and management of diabetes. Our evaluation of the first pilot project was excellent and it gave enough evidence to expand it to all health centres under the umbrella of the Ministry," he concludes.

ASPIRATIONS FOR THE FUTURE

THE WORLD DIABETES FOUNDATION IS AN INDEPENDENT TRUST GOVERNED BY A BOARD OF SIX EXPERTS IN THE FIELDS OF DIABETES CARE, ACCESS TO HEALTH AND DEVELOPMENT ASSISTANCE. THE BOARD MEMBERS ARE RESPONSIBLE FOR DEFINING THE STRATEGIC AGENDA FOR THE FOUNDATION AND DECIDE WHICH PROJECTS SHOULD BE GRANTED SUPPORT. IN THE FOLLOWING ARTICLE WE HAVE ASKED THE BOARD MEMBERS TO ELABORATE ON THEIR VIEWS ABOUT THE FUTURE STRATEGIC ASPIRATIONS FOR THE WORK OF THE FOUNDATION.



Vice Chairman, Mr. Leif Fenger Jensen

Mr. Jensen served as the former Managing Director of the World Diabetes Foundation. He presently works for Novo Nordisk A/S and has recently been appointed Corporate Vice President of Global Rewards.

You served as the first Managing Director of the World Diabetes Foundation (2002-2005). What were the challenges in the Foundation's first initial years? And what has changed since?

One of the challenges was to put diabetes in developing countries on the radar and on the international health agenda. We had a lot of ideas and good intentions about what we wanted to achieve; the setup of the Foundation was unique, but we had no experiences to draw upon. Another challenge was the structure and the legal framework. It was important to secure the right setup so that the Foundation could grow steadily. Defining the right framework would increase our chance of success. It was also extremely important to hire the right people – especially because it was, and still is, a small Secretariat. A third challenge was the arm's length principle in relation to Novo Nordisk A/S as the founder of the Foundation, thus ensuring transparency, independence and building trust.

The Foundation has moved things from being mere ideas to becoming reality. Today, we have come much further than what we thought was realistic to achieve, and the need turned out to be even greater than we imagined. Presently, we are one of the largest funding agencies in the area of diabetes and NCDs in the developing world, and we are known worldwide. Once we reach 2014, we on the board have to consider the next crucial steps.



Chairman, Prof. Pierre Lefèbvre

Prof. Lefèbvre is Emeritus Professor of Medicine at the University of Liège and Consultant at the Liège University Hospital. Prof. Lefèbvre is the former President of the International Diabetes Federation.

In the years to come, within which areas should the World Diabetes Foundation focus its investments?

For the last nine years, the action of the Foundation has been governed by two consecutive strategic plans. The staff and board are currently planning the 2011-2013 strategic framework. Some of the first priorities will be to take a few steps back and have an independent evaluation of the work performed since 2002. Preliminary discussions within the board have created backing for prioritising the Foundation's support towards maternal health programmes, a key issue in diabetes and NCD prevention. There is also consensus to increase the focus on dealing with the "double disease burden" of communicable and NCDs through an integrated approach.

We are also considering moving progressively closer towards adapting our role and methodology of working, towards undertaking an international NGO role rather than a mere funding agency. This would require further deepening and advancement of the technical skills of our experienced and efficient staff members. In addition, we will actively support the efforts of the NCD Alliance led by the IDF, which will contribute to sustaining the momentum of the forthcoming UN General Assembly Special Session on NCDs to be held in 2011.



Prof. Ib Bygbjerg

Prof. Bygbjerg is professor at the Copenhagen School of Global Health at the University of Copenhagen, Denmark.

What are the future perspectives for the Foundation to support projects within the areas of tuberculosis, diabetes and maternal health care?

Even if our mandate may sound rather narrow, addressing health problems other than diabetes is an opportunity and a strength, rather than a threat and weakness for the Foundation. As long as diabetes is in focus, it is a golden opportunity to get tuberculosis and maternal health onboard. Now that these links are being recognised by other reputed organizations as well, we should use our catalyst power to bring on board international and national NGOs and donor agencies in joining forces to convince policy-makers to re-visit the future shape and outcomes of the MDGs.

The forthcoming UNGASS declaration is important, but more so the work on the ground. Our support to overcome diabetes and

its co-morbidities should be evidence and research based. We must make an effort to update ourselves and advocate on what research questions should be asked as well as lobby for allocation of funds to answer those questions, as was recently done within the European Commission.



Ms. Ida Nicolaisen

Ms. Nicolaisen is a Senior Research Fellow at the Nordic Institute of Asian Studies, Copenhagen University, and former Vice-Chair of the United Nations Permanent Forum on Indigenous Issues.

The Board launched a revised "Code of Conduct" in 2010. In brief, can we practice what we preach and how do we ensure good governance?

I find it very important that the World Diabetes Foundation has a "code of conduct". I am not sure that we can always ensure good governance at all stages on the ground. This is because of the way we work, i.e., by implementing action through our partners around the globe, and there may be diverging views of what good governance implies in a development assistance context.

I believe the World Diabetes Foundation is doing a great job in its work to adhere to best practices, not only at a more general level but through its close monitoring of projects. The fact that the staff of the Foundation not only communicates with project partners by mail but regularly visit the various projects is a strong message which implies the work is taken seriously and is an important tool in ensuring that the "Code of Conduct" is applied and does not remain a declaration of good intentions only.



Dr. Kaushik Ramaiya

Dr. Ramaiya is Consultant Physician and Assistant Medical Administrator at Shree Hindu Mandal Hospital, Dar es Salaam, Tanzania and Vice President at the International Diabetes Federation.

From a country level perspective, where do you see the Foundations' strengths and weaknesses?

In Tanzania and many other countries in the African region where I have worked, the World Diabetes Foundation has had a tremendous impact on improving diabetes care – be it setting up clinics, increasing awareness, training of health care providers, disseminating guidelines and training manuals, etc. In most of the countries the Foundation has worked with either diabetes associations or local ministries of health.

The strengths have been to reinforce the health care systems to be more responsive to diabetes care. This is the most sustainable way and has had significant effects for provision of diabetes care locally, nationally and regionally. The other very significant development has been the PEER Programme. This particular programme has widened the horizon for people working in the "south" through sharing of best practices and exchange of knowledge, thus ensuring local ownership.

The weaknesses have been few and these are mainly related to very few projects targeting primary prevention, gestational diabetes and eye care projects in an African context mainly due to poor understanding of these issues in the region. The other weakness is the absence of operational research. With such a vast experience and data compilation, focused operational research will benefit the development of strategies for prevention and providing care for people living with diabetes and related NCDs.



Mr. Lars Rebien Sørensen

Mr. Sørensen is President and CEO of the pharmaceutical company Novo Nordisk A/S. Through this position Mr. Lars Rebien Sørensen was the founding father of the World Diabetes Foundation.

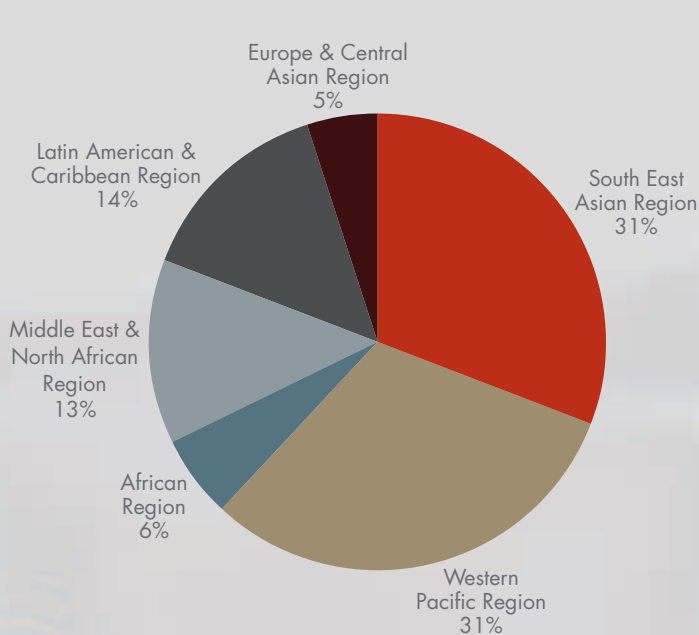
Looking 10 years down the road, what are the most important strategic challenges for the Foundation?

The first initial years were spent on understanding how to make a difference for those with the greatest need, i.e. the poorest, the most exposed, those with least resources to protect themselves and provide them with access to diabetes prevention and care. This focus was a conscious decision from my side. I imagine this will remain one of the main focus areas in the future as well – making a difference for the individual living with diabetes.

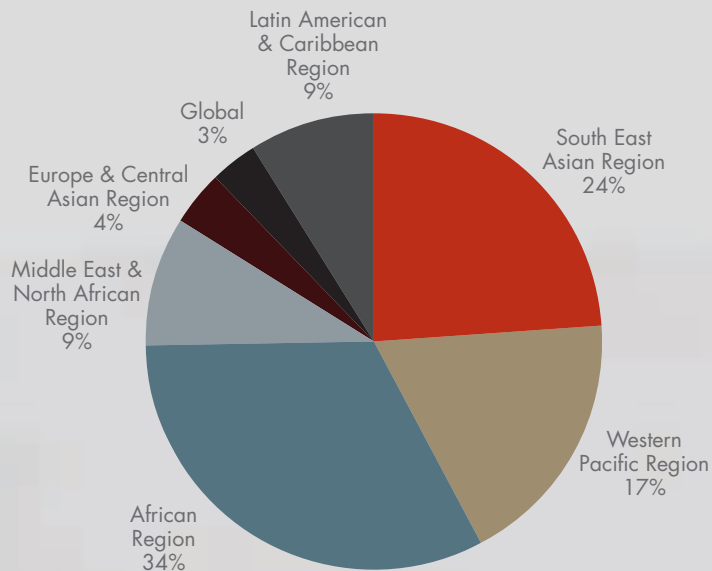
But if we are to have a greater effect, we need to work increasingly at the national and international level to lobby and influence allocation of resources and public health action plans to address chronic diseases including diabetes. We also need to work globally with policy-making and helping local governments and international organisations develop and define suitable diabetes strategies. I expect the Foundation to enter into alliances with other foundations or organisations working in the same area in order to make a stronger impact.

There might also be a need for the Foundation to collaborate with research institutions and organisations with particular focus on lifestyle behaviour and motivation. Appropriate knowledge in this area is crucial to improve impact of health promotion and enhance compliance, thereby improving the level of care within the projects funded by the World Diabetes Foundation.

MAKING A DIFFERENCE



REGIONAL BURDEN OF DIABETES
(World Diabetes Foundation Eligible Areas)
Source: IDF, 4th edition, 2009



FUNDING DISTRIBUTION PER REGION
World Diabetes Foundation 2002 - 2010

WORLD DIABETES FOUNDATION FOCUS AREAS

To date, the World Diabetes Foundation has funded 253 projects in 96 countries, focusing on awareness, education and capacity building at the local, regional and global levels. The total project portfolio has reached USD 233.5 million, of which USD 77.8 million was donated by the Foundation.



Improved access to care

Diabetes screening, awareness camps and the establishment of clinics supported by the World Diabetes Foundation bring diagnostic equipment and trained staff to detect not only diabetes, but some of the most disastrous, yet easily preventable and treatable complications.

Presently, the World Diabetes Foundation has supported the training of 28,862 doctors, 23,158 nurses and 50,375 paramedics. To date, more than 6.5 million people have been screened for diabetes through 12,012 screening camps.*

Documenting the number of people who have received care is often difficult, but based on reports from the project partners, more than 1 million documented cases have been treated at the 2,994 strengthened and established clinics and micro-clinics funded by the Foundation.*



Mothers and diabetes

An important focus area for the World Diabetes Foundation is the issue of women and diabetes. Focusing on gestational diabetes is a low-cost intervention both to improve maternal and child health as well as preventing future diabetes.

Providing screening and care to mothers at risk of gestational diabetes is likely to have a multigenerational impact on the beneficiaries as well as on health care systems and budgets. To date, the World Diabetes Foundation's direct investment in gestational diabetes projects amounts to 6% of its funding – a

relatively small amount compared to other focus areas, partly due to a lack of awareness of this important issue. To date, 15,555 women have been screened for diabetes, and 354 clinics have been strengthened in providing care for gestational diabetes.*



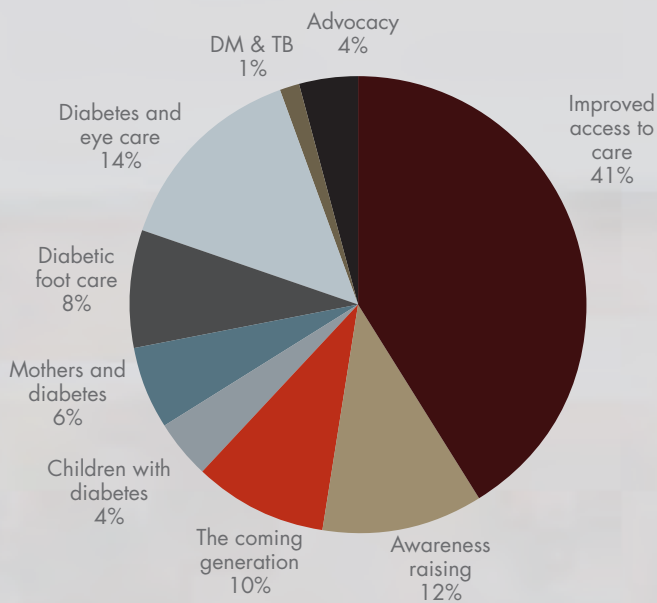
Children with diabetes

Many children in the developing world still die prematurely because their diabetes is not detected in time as their parents do not have access to health care or the resources to obtain care. Or because health professionals do not have adequate knowledge about diabetes, or simply because the health systems fail to realise that making insulin available to these children is not merely about making treatment available. It is a matter determining whether these children will be given a chance to live. The World Diabetes Foundation therefore supports and collaborates with other organisations to develop sustainable initiatives to address these issues as well as lobby local governments to find a long-term solution. Presently, 4% of the Foundations funding is allocated to children living with diabetes, thus providing care to 1,616 children living with type 1 diabetes.*



DM & TB

While the association between diabetes and tuberculosis (TB) has been known for centuries, new scientific evidence shows that people with diabetes are at an increased risk of tuberculosis. For the purpose of achieving the MDGs targets related to tuberculosis control, it is important in low-resource countries to focus not only on improved access to diagnosis and treatment of tuberculosis and on HIV/AIDS, but also on the burgeoning epidemic of diabetes as a significant risk factor. The Foundation has therefore targeted its efforts to establish collaboration to understand this dual burden and funded several pilot programmes to develop sustainable models for an integrated approach in Malawi, India, China, Nigeria, Brazil and Cameroun. Presently, the World Diabetes Foundation allocates 1% of its funding towards this new focus area.*



FUNDING ON FOCUS AREAS
World Diabetes Foundation 2002 - 2010

The World Diabetes Foundation strives to fund projects in areas bearing the brunt of the disease burden and having the least resources to deal with it. The South East-Asia Region and the Western Pacific Region, which combined account for almost 62% of people living with diabetes in countries eligible for World Diabetes Foundation project funding, receive 41% of the Foundation's funds, whereas the African & Middle East Region receives 43% of the funds despite accounting for only 19% of people with diabetes eligible for funding from the Foundation.

These are also the very same regions where resources for diabetes prevention and treatment are scarce and the projected future burden of diabetes is high. Moreover, we allocate our funding to areas where it truly makes a difference. For instance, the largest proportion (41%) of our funding is spent on strengthening health care systems and building health care capacity, followed by creating awareness and primary prevention.



The coming generation (primary prevention)

The World Diabetes Foundation currently supports major primary prevention and health promotion projects in developing countries and allocates 10% of its funding towards primary prevention interventions. These projects aim to develop comprehensive, sustainable models involving lay people, school children and teachers, parents, health care professionals, primary health care centres, non-governmental organisations and development groups, as well as the media in a joint effort to promote healthy living. To date, the Foundation has supported the training of 17,357 school teachers and educated 273,159 children. In addition, 156,796 parents and households have received information about healthy living and lifestyle behaviour.*



Diabetes and eye care

The World Diabetes Foundation allocates 14% of its funding to eye care (prevention of blindness). Training health care professionals in proper screening of diabetic retinopathy and eye care is essential to prevent blindness. To date, more than 593,724 people have been screened, and 113,724 cases of diabetic retinopathy detected for. In addition, 40,248 people have been saved from unnecessary blindness through laser treatment or advanced vitriol-retinal surgery.*



Diabetic foot care

The World Diabetes Foundation allocates 8% of its funding to the diabetic foot (prevention of amputations), as diabetes related lower-limb amputations are among the most devastating complications, and the majority can be prevented by relatively simple measures. The World Diabetes Foundation has facilitated the training of 5,923 health care professionals in diabetic foot care. These specially trained health care professionals have screened more than 267,715 patients with high-risk feet, thus potentially saving 30,825 feet through appropriate treatment and care.*



Advocacy – Building a global alliance

Strong international and national networks are essential for influencing policy changes, attracting resources to NCD programmes and for developing and supporting sustainable programmes for prevention and care. Over the last eight years, the World Diabetes Foundation has contributed substantially in organising advocacy platforms at the regional and global level by providing funding and technical assistance, to many initiatives such as Diabetes Action Now, the IDF Diabetes Atlas, IDF Africa Clinical Practice Guidelines and Training, promotion for the UN Resolution on Diabetes, the Copenhagen Donor Conference on the Emerging Burden of Chronic Diseases and the initiative on Women Diabetes and Development at the UN in New York.*

In addition, the World Diabetes Foundation also contributed to the preliminary approval of a Collaborative Framework for Care and Control of TB and Diabetes developed by the Stop TB Department at the WHO and the International Union Against Tuberculosis and Lung Diseases (IUATLD). The dialogue and the advocacy process to this document was catalysed and supported by the World Diabetes Foundation.

The World Diabetes Foundation has funded and organised regional diabetes Summits in Hanoi, Nairobi, Chennai and Salvador that provided significant platforms to create a network for advocacy, sharing of best practices and bringing the issue of diabetes and neglected focus areas to the forefront at the donor and policy level.

Presently, the World Diabetes Foundation has allocated 4% of its funding towards advocacy and networking activities on a global, regional and local level.*

* As of December 2010, the above-mentioned impact numbers have been extracted from semi-annual reports and field visit reports emanating from World Diabetes Foundation implementing partners and the Secretariat. The depicted graphic icons represent important strategic focus areas supported by the World Diabetes Foundation.

ANNUAL ACCOUNTS 2010

Profit and loss account, 1 January - 31 December 2010

	DKK '000
Donations from Novo Nordisk A/S and others	70,202
Administration expenses	-5,669
Project expenses	-8,801
Profit before financial income and expenses	55,732
Financial income	4,407
Financial expenses	-2,159
Net profit for the year	57,980

Appropriation of net profit for the year

Distributions from the World Diabetes Foundation	57,887
At disposal for future distributions	93

Balance sheet as at 31 December 2010

Assets	DKK '000
Tied-up capital	260
Fixed assets	260
Receivable donations from Novo Nordisk Group	75
Interest receivable	2,678
Other receivables	96
Total receivables	2,849
Bond holdings	83,763
Bank and currency deposits	118,503
Current assets	205,115
Total assets	205,375
Equity and liabilities	
Tied-up capital	260
Disposable capital	32,046
Total equity	32,306
Accrued distributions	171,141
Other provisions	1,928
Total short-term liabilities	173,069
Total equity and liabilities	205,375

The above is a non-audited abstract of the Annual Accounts for 2010.

Administration expenses amounted to 7.60% of the Foundation's total income of 2010.

For full details of the audited annual accounts, please refer to our website: www.worlddiabetesfoundation.org

THE WORLD DIABETES FOUNDATION

The World Diabetes Foundation is dedicated to supporting prevention and treatment of diabetes in the developing world through funding of sustainable projects. The Foundation creates partnerships and acts as a catalyst to help others do more and strives to educate and advocate globally in an effort to create awareness, care and relief to those impacted by diabetes. The World Diabetes Foundation has to date funded 253 projects in 96 countries with a total project portfolio of USD 233.5 million, of which USD 77.8 million has been donated by the Foundation.

The establishment of the World Diabetes Foundation was announced by its founding father, Novo Nordisk A/S, on World Diabetes Day 2001. The Foundation was legally established in February 2002. A donation programme by the founding company of a

maximum of DKK 650 million over a period of ten years was approved by its General Assembly and shareholders in March 2002 (realised 2001 - 2010: DKK 528.8 million).

In March 2008, the shareholders of Novo Nordisk A/S approved an additional endowment of a maximum of DKK 575 million over another ten-year period, bringing the two endowments from Novo Nordisk A/S up to a total maximum of DKK 1.1 billion in the period 2001-2017, i.e. the equivalent of USD 195 million (exchange rate of 5.66). The Foundation is registered as an independent trust and governed by a board of six experts in the field of diabetes care, access to health and development assistance.

For further information, please visit our website at www.worlddiabetesfoundation.org

WORLD **DIABETES** FOUNDATION

CODE OF CONDUCT

Our aim is to alleviate human suffering related to diabetes and its complications among those least able to withstand the burden of the disease.

1. We will recognise people with diabetes and related diseases as dignified humans in all our activities and communications.
2. We will display respect for the culture and values of the communities and countries within which we work.
3. We will facilitate the UN Millennium Development Goals by striving to reduce the beneficiaries' vulnerability – addressing basic needs but also promoting development of sustainable solutions.
4. We will give support regardless of race, gender or creed of the recipients in the developing world based upon assessment of needs and capabilities to meet these needs.
5. We will promote local ownership of sustainable initiatives in co-operation with governments, private institutions and civil society.
6. We will help build and strengthen local capacity to ensure that the recipients are empowered as key players in the development process.
7. We will seek to support and create synergy between both top-down and bottom-up approaches that apply participation and partnership as both a means and a goal.
8. We will be accountable to both those we seek to assist and those from whom we accept resources.
9. We will adopt and require our partners to adopt a zero tolerance policy to corruption and bribery.
10. We will be open and transparent, and report on the impact of our work, and the factors limiting or enhancing that impact.



**WORLD DIABETES FOUNDATION
ANNUAL REVIEW 2010**

Edited by the World Diabetes Foundation Secretariat

E-mail: contact@worlddiabetesfoundation.org

Editor-in-chief Jamal R. Butt
Communication Manager

Co-editor Brit Larsen
Communication Coordinator

Contributions Cohn & Wolfe, Denmark

Proofreading Ad Hoc Translatørservice A/S

Art Direction Spin Doc Design

Photos Jesper Westley

Printing Litotryk A/S



541-740
Printed matter



The World Diabetes Foundation is dedicated to supporting the prevention and treatment of diabetes in the developing world

The World Diabetes Foundation creates partnerships and acts as a catalyst to help others do more

The World Diabetes Foundation strives to educate and advocate globally in an effort to create awareness, care and relief to those impacted by the disease



WORLD **DIABETES** FOUNDATION