The Africa Diabetes Care Initiative (ADCI)
2010-2012

Diabetes in Africa: facing the future with hope for all ages
Acknowledgement

Prepared and written by:
Dr Silver Bahendeka, Chair, International Diabetes Federation Africa Region

Contributions and review:
Professor Jean Claude Mbanya, President, International Diabetes Federation
Ms Tim Noolan, Editor, Diabetes Voice
Dr Kaushik Ramaiya, Vice President, International Diabetes Federation

Facilitated and printed by:
Facilitated and printed by Novo Nordisk A/S, (Global Stakeholder Engagement) in the framework of the Diabetes Leadership Forum Africa 2010, October 2010

Design and layout:
OZ Healthcare Communications

Photography:
James Ewen, Earth Media (Africa)

Printing:
South Africa
Diabetes poses a major threat to global health, healthcare structures and national economies. And the epidemic is taking its toll on the people and economies of sub-Saharan Africa. Indeed, countries throughout the region are faced with a dual burden as they grapple with infectious diseases and the increasing dominance of health by non-communicable diseases (NCDs). There are over 300 million people living with diabetes worldwide and this number is expected to reach half a billion within a generation. Low- and middle-income countries already account for 4 out of 5 cases of diabetes; the World Health Organization predicts that Africa will have the highest relative increase in the number of people with diabetes over the coming decade (27%).

A number of factors compound the impact of diabetes in our region. Essential insulin and other medications remain widely out of reach, due either to their excessive cost or the unreliable and insecure supply chains that make these life-saving supplies unobtainable. Despite the current human and economic burden of diabetes, and its impending escalation, most countries do not have a national diabetes programme. Well-structured and appropriate diabetes education is lacking. Wide disparities in the distribution of healthcare resources leave huge numbers of people acutely vulnerable and underserved.

Undetected, untreated or poorly controlled diabetes results in disabling and life-threatening long-term complications (blindness, lower-limb amputation, cardiovascular disease). The sudden development of short-term complications (ketoacidosis, severe hypoglycaemia – leading to coma and, if untreated, premature death) constitutes a day-to-day threat to the majority of people with diabetes in sub-Saharan Africa.

Most of those affected by the dramatic increase in NCD prevalence are of working age, provoking a significant loss of productive capacity. The impact of these indirect costs, added to the direct treatment costs to individuals and healthcare systems, threaten to undermine already fragile economies and choke development throughout the region.

The African Diabetes Care initiative offers us a way forward. Its focus on maximizing key resources and supporting self-management, with programmes for education and primary prevention, prevention of complications and care, and control of diabetes with a focus on diabetes in children, represents a solid, level-headed plan to fight diabetes – and extend our region’s response to the concomitant threat from other NCDs.

Jean Claude Mbanya
President, International Diabetes Federation
Introduction

Diabetes mellitus is one of the leading health problems in Africa, where an estimated 12.1 million people, or 3.2% of the adult population, are now estimated to have the disease and, alarmingly, only 15% of people with the disease are diagnosed [1]. In most cases, the diagnosis is made when the person presents to the clinic with a complication which is either acute or chronic. More daunting figures are that unless major preventive actions are taken, the number of people with diabetes is expected to double in the next 20 years to 23.9 million in 2030. This year alone, more than 330,000 people are expected to die from diabetes-related causes in the Africa Region, accounting for approximately 6% of all deaths in 20-79 age group. More daunting still are reports that a child diagnosed with type 1 diabetes in sub-Saharan Africa has a life expectancy which varies between 7 months and 7 years, depending on the country, compared to 60 years in Western Europe [2]. Despite these worrying figures, diabetes is not yet included as a priority in the global development agenda; consequently donors and international organizations have yet to pledge support to help developing countries address the emerging problem of diabetes.

It is within the framework of the exclusion of diabetes and other non-communicable diseases from the development agenda that a UN Resolution on the Prevention and Control of Non-Communicable Diseases (NCDs) was in May 2010 voted in favour. This resolution calls on Member States and the international community to convene a high-level meeting of the General Assembly on the prevention and control of NCDs to be held in September 2011, with the participation of Heads of State and Government. It is hoped that this summit will unite currently fragmented efforts by bringing the diabetes, cancer, cardiovascular and respiratory communities together with tobacco control, healthy diets and physical activity advocates.

To support these efforts, IDF Africa Region announces the launch of the Africa Diabetes Care Initiative (ADCI) 2010 – 2012 that calls on leading organizations and experts from around the world to scale up action to combat diabetes and its complications, strengthen global partnerships and help governments plan and implement measures to reduce the burden of the disease.

Context

Developing organized diabetes care has long been a priority for the International Diabetes Federation (IDF) African Region. The African Diabetes Declaration - drafted by the IDF African Region, the World Health Organization Regional Office for Africa (WHO-AFRO) and the African Union and launched in 2006 – called on the governments of African countries and all partners and stakeholders in diabetes to prevent this and other related chronic diseases, to improve the quality of life of those affected, and to reduce diabetes-related morbidity and premature mortality.
The Africa Diabetes Care Initiative is a follow-up to that Declaration. Its over-arching objective is to improve health and healthcare related to diabetes and its complications in the African Region, targeting specific issues of high priority and urgency.

**Goal**

The goal of the Initiative is to identify feasible and sustainable strategies for diabetes self-management in real-world primary care and community settings. The initiative aims to identify key resources and support for self-management (individualized assessment, collaborative goal setting, enhancing skills, follow-up and support, community resources, and continuity of quality clinical care). Over the course of three years, 2010 – 2012, the Initiative hopes to develop strategies, identify appropriate interventions which are effective and sustainable, redefine the interventions based on the lessons learnt and, collaborate with different stakeholders and within to share effective sustainable practices for management of diabetes & its complications across the sub Saharan Africa.

**Performance**

The Initiative calls for people with diabetes, organized interest groups, and multidisciplinary care teams from both the public and private sector, and governments to be involved in the organization of diabetes care. The Initiative is modelled and packaged on three inter-related programs: diabetes education, the care of the child with diabetes, and prevention of diabetes and diabetes complications leveraging on programs of diabetes education and of the diabetic foot. This strategy has been proposed so as to accommodate the diversity of the Africa Region while targeting those communities with little or no provision for diabetes care.

All the three programs in the Initiative are based on a systematic approach to diabetes care in order to improve the outcomes:

- Daily commitment to self-management,
- Support by proactive multidisciplinary team and
- Inter-linkage between self care and access to multidisciplinary team

The program models have been designed so that they may be applied across the Africa Region, based on key resources needed to address diabetes self-management, with flexibility to address local needs and circumstances. In modelling up the programs detailed attention has been and will continue to be paid to key components of a systematic strategy for diabetes care:

- Identifying people with diabetes
- Establishing a diabetes registry
• Developing a systematic recall process
• Use of clinical flow sheets
• Establishing diabetes-focused visits/group visits

Performance structure

It is suggested that each country or community establishes a health facility with an infrastructure that will function as a “Diabetes Centre of Excellence” within patient-centred prevention, treatment, clinical research and education. This perceived Centre of Excellence will function as a “Hub” to accommodate complementary community services including: Patient self management training programme services; Voluntary sector enabling service for patient support groups; Staff training; Diabetes community researchers; promotion and patient education resources.

A three-pronged strategy aimed at fighting diabetes is to be implemented at the perceived Diabetes Centre of Excellence:

• Optimal medical treatment combined with psychological support is to be available to all patients and their families with the goal of enabling patients with diabetes to live with the disease with a maximum quality of life.
• Preventative methods will be developed to curb diabetes in the community. This will require extensive cooperation with a large number of private and public organisations and institutions, universities and the diabetes community in general.
• Emphasis will be laid on self-management support, as a key component of the Chronic Care Model; focusing on providing patients with the skills to make healthcare decisions. Self-management encourages a patient to be responsible for his/her own health care. Because diabetes outcomes and complication prevalence are related to the degree of self involvement in illness care, self-management support is an important component of disease management.

Diabetes Centre of Excellence in the Concept of the Chronic Care Model

All the three parts of the strategy focus on patients with diabetes and their families and on those at risk of developing diabetes. For these tasks to be fulfilled, cooperation is needed between many different professionals and specializations within the health sector as well as other actors such as private companies, patient associations etc. It is also necessary to consider cost effective ways of delivering the treatment. The Africa Diabetes Care Initiative will therefore focus on:

• Increasing the focus on measurable improvements in the quality of the delivery of diabetes care, where the results will be compared with those from other treatment centres to ensure that each centre within the initiative offers the best possible treatment.
• Continuing to offer the best possible medical treatment to all patients adding new elements through the activities in “Health Promotion”. This will focus on the lifestyle-related and behavioural and psychological elements in the treatment of patients.
• Ensuring that research within the Initiative is aimed towards preventing diabetes and improving the prognosis and quality of life of patients and their families. Science on a high level remains a core activity of the Initiative. Establishing Diabetes Centre of Excellence-related education centres in the community using treatment concepts, development of quality and quality of treatment similar to the centre of Excellence.

• The Diabetes Centre of Excellence will create an exemplar for effective high quality diabetes care with many parallels for other long term conditions. This will distinguish itself through being an innovator in research, teaching, and clinical practice, thereby establishing it as a leader in the region and beyond and creating opportunities for attracting additional external funding.

• This unique vision of a Diabetes Centre of Excellence will bring together the complementary elements of teaching and training of both healthcare professionals and patients, enhancing and facilitating high quality self care and service provision all underpinned and informed by relevant clinical research. This will deliver measurable improvements in health outcomes for local people with diabetes, as well raising our national and international profile for world class diabetes care and research.

• The Diabetes Centre of Excellence will function as “Hub” linking other smaller diabetes centres in the community.

Clinical vision

The vision is for integrated services provided in appropriate settings by staff with the adequate skills, that patients are involved in planning their care and trained in self-management to promote healthy life styles and improve diabetes control and increase their life expectancy. The Initiative is meant to provide a stimulus for support to upscale primary and community care staff and provide expert support for practices with populations with the worst diabetes health to help address capacity issues and population differences.

1. Culturally appropriate Diabetes Education
   • Provide a pre-diabetes patient education programme to help people at risk achieve healthy life styles and reverse pre-diabetes
   • Increase uptake of type 1 and type 2 diabetes patient training programme
   • Provide patient training in locations, at times and in different ways to respond to the needs of different localities and population groups.
   • Provide support for locality patient/peer support groups for people from rural and disadvantaged communities

2. The Child with Diabetes
   • Infrastructure needs to support self-management.
Programs for self-management will not prosper if they rely on the heroic efforts of a few staff members. Rather, organizational factors and system features need to facilitate consistent and high-quality provision of self-management services. The Diabetes Centre for Excellence and Hub will serve to advance the organizational structure.

- To accomplish self-management, individuals need resources and support for self-management:
  - Continuity of quality clinical care
  - Individualized assessment
  - Collaborative goal-setting
  - Key skills both for disease management and healthy behaviours such as healthy eating, physical activity, and healthy coping
  - On-going follow-up and support to help people adjust their plans as problems arise, stay motivated, and see their providers when they need to
  - Community resources, e.g., for purchasing healthy foods or getting physical activity in safe, attractive environments

3. The Diabetes Foot

- Establish contacts with administrative, governmental and healthcare bodies
- Raise funds (salaries, materials and equipment)
- Establish a diabetes foot clinics, stepwise approach beginning with Diabetes Centre for Excellence
- Planned and multidisciplinary educational approach to enable high compliance of ulcer prevention care needed in diabetic patients at risk for complications
- Establish attainable goals
- Recruit, train and retain team members
- Motivate healthcare professionals to educate people with diabetes

**Resources and support**

It is time for action and the Africa Region requires the equivalent of the Marshall Plan; to address the obstacles to organized diabetes care and look to the future. There is need to have high-efficiency models of care, reduce artificial barriers to care, and to instil a sense of self-reliance in the diabetes population of Africa. Resources and support for self-management encourage healthy eating, physical activity, and healthy coping, which are critical to diabetes management. That is why they need to be central to diabetes care, not just an add-on if time and resources permit. A systematic funding is urgently required for the Region to address this situation. It is hoped that the model of the Africa Diabetes Care Initiative (ADCI) 2010-2012 will be taken up by small as well as large communities and will serve as the beginning of a consensus for harmonized organized diabetes care for Africa, hitherto lacking in the region.
The ADCI welcomes philanthropic and other agency support. Each contribution advances our mission to improve care, advance research, and provide education and outreach to the African communities.

To streamline funding, appropriate application forms drawn up by the donor should accompany intention to support the initiative. Individual communities will access these forms from the IDF Africa Region Office and will require endorsement by the secretariat at the IDF Africa Region Office prior submission to the donor.

Performance indicators

Performance indicators to assess overall progress of the Africa Diabetes Care Initiative 2010-2012 in improving diabetes outcomes will be set up in the Implementation Document.

Commissioning priorities

To move the agenda of the Africa Diabetes Care Initiative 2010-2012 forward, three Task Forces have been created:- a Task Force on Diabetes Education and Standards of Care, a Task Force on Prevention of Diabetes and Diabetes Complications and a Task Force on children with diabetes, Insulin and other essential medicines.

A Task Force on Diabetes Education and Standards of Care already has a Trainers Manual and working with PADEG there should be an organised way of having minimum standards of diabetes education in all countries in the Africa Region.

A Task Force on Prevention of Diabetes and Diabetes Complications. This Task Force is charged with producing a manual for the “prevention of diabetes” and diabetes complications with special emphasis on the diabetic foot. The Task Force is charged with formulating ways of starting sustainable diabetes foot clinics in the regions, within the context of the Initiative.

Task Force on children with diabetes, Insulin and other essential medicines is charged primarily with the care of the child with diabetes but will in due course be responsible for (i) producing / adapting the IDF type 1 guidelines (ii) essential medicine box that should contain as the minimum: Insulin (soluble and NPH), a sulphonylurea, metformin, a calcium channel blocker, an ACE inhibitor, a Statin and Aspirin and (iii) making these accessible to the patient.

Education will address both primary and secondary prevention with relation to NCDS in general, by addressing life style changes. The formation of diabetes foot clinics will strengthen health systems. The essential medicine box will address the NCDs as well.

Dr. Silver K Bahendeka
IDF Chair Africa Region
Figure 1: The Africa Diabetes Care Initiative

IDF Global
The Africa diabetes initiative
Funding co-ordination and support

IDF Africa Region
IDF Regional Chair
IDF Regional Manager
(Education/Program Manager)
Overseeing the implementation of the initiative as one package

Task force on education and standards of care
Task force on prevention of diabetes and diabetes complications
Task force on children with diabetes, insulin and other essential medicines

Governments
Ministries of health

Diabetes Centre of Excellence and Hub

Implementation
Hospitals, NGOS, Clinics, Community Outreaches

References