Diabetes Leadership Forum 2010:
This time for Africa

It was an historic event for diabetes and other non-communicable diseases in sub-Saharan Africa (SSA) when the Diabetes Leadership Forum was held for the first time on African soil, in Johannesburg from 30 September to 1 October 2010. The forum was jointly hosted by the South African Department of Health and the World Diabetes Foundation (WDF), supported by the International Diabetes Federation (IDF), and sponsored and co-organised by Novo Nordisk.

The aim of the forum was to raise awareness of and facilitate appropriate responses to diabetes and other non-communicable diseases in sub-Saharan Africa. It provided a unique opportunity for decision makers and stakeholders to assess the current situation and to begin to develop a shared sub-Saharan approach, and was appropriately timed, given that the United Nations (UN) Heads of State Summit on Non-Communicable Diseases is scheduled for September 2011.

The forum hosted participants from over 30 countries across sub-Saharan Africa, and participants included representatives of governments, donors, international organisations, patients’ organisations, non-governmental organisations (NGOs), the private sector, academic institutions, medical practitioners, and the media. This type of multi-stakeholder representation and engagement is vital for the development of combined advocacy required to challenge the diabetes (and non-communicable disease) epidemic that is sweeping the continent.

A recurrent theme over the two days was the need to integrate measures to combat and control non-communicable diseases into current initiatives to fight communicable diseases. The proceedings also highlighted a widely shared commitment to move beyond simply defining and acknowledging the challenge posed by diabetes and other non-communicable diseases. Discussions included ways of identifying practical and innovative solutions that would enable the health care community to turn the tide and develop appropriate responses to the health care challenges in sub-Saharan Africa.

The first day of the forum examined key topics of particular relevance to decision makers, through discussion on health systems strengthening, innovation in health care, resource mobilisation and preparation for the UN Summit in 2011. The programme included a round table meeting of African health ministers that aimed to commit to a united front in the fight against non-communicable diseases.

The second day focused on specific governmental and non-governmental programmes for managing diabetes and non-communicable diseases. Participants also discussed feasible and sustainable strategies for diabetes self-management in primary care and community settings. There were several presentations, by African recipients of WDF grants, of findings from the implementation of diabetes programmes.

A number of conclusions were made as a result of discussion at the forum: there is a need for health care approaches that fully integrate diabetes and non-communicable diseases into a broader framework, rather than singling out specific diseases; there is a need to identify and adopt the most cost-effective solutions in order to more efficiently utilise limited available health care resources; innovative solutions must have a central role in increasing the effectiveness and cost efficiency of interventions; broader policy should focus on building healthy communities that extend beyond health policy to other aspects that shape lifestyles; individuals must be informed and empowered to make healthy choices to avoid or better manage diabetes and other non-communicable diseases; and resources for diabetes and other non-communicable diseases must be mobilized more effectively, by learning lessons from other successful initiatives.

I was tasked with presenting a talk entitled Facts and figures on diabetes in sub-Saharan Africa. The talk focused on the impact or epidemiology of diabetes in this region, the move towards better care, best practice examples and what needs to change, i.e. the challenges posed by diabetes and other non-communicable diseases and the ways to deal with them. I discussed the prevalence of and risk factors for, both
modifiable and non-modifiable, diabetes, its complications and the double (or triple) disease burden of diabetes and HIV in sub-Saharan Africa. I will highlight a few epidemiological aspects from my presentation.

According to the latest global IDF figures, the greatest growth in the number of people with diabetes is in Africa. There will be a 98% increase in people with diabetes, from 12.1 million in 2010 to 24 million in 2030. For impaired glucose tolerance, there is an expected 76% increase for Africa (vs 37% for the world average). The countries hardest hit by the current diabetes epidemic are those that are least developed and most resource-depleted. Sub-Saharan Africa has the highest proportion (61%) of people with diabetes out of the UN-defined 49 least developed countries. These countries have the lowest per capita incomes in the world, are already resource-depleted, and now face the double or triple burdens of resource depletion and the onslaughts of communicable disease (e.g. HIV/AIDS) and non-communicable diseases (e.g. diabetes).

From studies in sub-Saharan Africa, the diabetes prevalence is variable, but the disease is not as rare an occurrence as was thought before the 1980s. The prevalence ranges from < 3% (low prevalence) in countries like Tanzania, Kenya and Mozambique to < 10% (moderate prevalence) in most sub-Saharan countries, which is similar to that found in the Western world. Inordinately high rates (> 10%) are found in Sudan, the Democratic Republic of Congo, Zimbabwe and Swaziland.

While there are many non-modifiable risk factors for diabetes (age, ethnicity, gender, family history and genetics), there are clearly identifiable modifiable risk factors, including the low prevalence of known diabetes (a reflection of poor access to health care facilities and therefore detection), rapid urbanisation (Africa is currently experiencing the fastest urbanisation in the world), the impact of obesity, low levels of physical activity, dietary factors, and, very importantly, the double disease burden (diabetes plus HIV/AIDS). The increase in diabetes prevalence in sub-Saharan Africa is, to some extent, driven by the change in lifestyle and diet occurring across the region; as populations urbanise, incomes increase, the level of physical activity falls, and diets become unhealthy.

Chronic complications are a major cause of morbidity and the economic cost of diabetes, but patients are often only diagnosed when presenting with complications. The prevalence of microvascular complications is similar to that seen in the West. It is estimated that, in sub-Saharan Africa, 4.5 million people with diabetes have retinopathy (423,500 with blindness), 2.2 million require dialysis because of nephropathy, 970,000 have cardiovascular disease and 169,400 have lost a foot from amputation.

With the increase in non-communicable diseases, including diabetes, Africa faces the double burden of providing adequate care for both infectious diseases and chronic diseases. When both occur in the same individual, household or country, the management of the non-communicable disease can be seen as less important as the priority is given to infectious disease, and it can mean a choice between buying medication for one member of the family versus doing so for another member, or buying medication versus buying food. The interaction between diabetes, tuberculosis and HIV/AIDS and treatments conspire to increase the negative impact of all three conditions in Africa more than on any other continent.

It is, therefore, not surprising that there is a call for a more integrated approach, and that services to screen and treat people for infectious diseases be expanded to include diabetes and other chronic diseases. Such an approach will make best use of health care resources in overstretched health care systems, and will capitalise on the important, but little understood, relationship between communicable (tuberculosis, HIV) and non-communicable (diabetes, hypertension) diseases.

The rest of the talk was about the move towards better care, and focused on health and economic development and the barriers to better care, cost-effectiveness of better treatment, the availability of lower priced insulin, and existing examples of good practice in sub-Saharan Africa.

In summary, the talk highlighted that diabetes, contrary to popular belief, is not rare on this continent, that there is evidence that the prevalence of both diabetes and its complications is increasing, but that there are clearly identifiable and modifiable risk factors for the prevention and progression of both diabetes and its complications. Moreover, establishing sustainable health care systems versus short term measures is the answer, and the time to intervene is now.

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**Reference:**