

**International Diabetes Federation (IDF)  
Middle East and North Africa (MENA) Regional Meeting**

**Supporting the Implementation of the United Nations Resolution (UNR)  
on Diabetes (61/225) in Middle East and North Africa**

**18 April 2009**

**Alexandria, Egypt**



**International Diabetes Federation  
Middle East and North Africa Region**

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**Background**

On 18 April 2009 representatives from the IDF Middle East & North Africa (MENA) member associations gathered in Alexandria, Egypt to discuss the implementation of United Nations Resolution on Diabetes 61/225. The aim of the meeting, chaired by Professor Morsi Arab, was to establish key actions to facilitate the development of National Diabetes Programmes (NDPs) for the prevention, treatment and care of diabetes across the region and build upon the discussion paper presented by Professor Arab on a structured approach to optimal diabetes management.

**Diabetes in the MENA Region**

There are around 24.5 million people with diabetes in MENA and the region includes several countries with some of the highest diabetes prevalence rates in the world. In the region as a whole, the International Diabetes Federation (IDF) estimates that the number of patients with diabetes is expected to nearly double by 2025.<sup>1</sup> This diabetes epidemic is partly fuelled by a high incidence of serious risk factors for diabetes in MENA, including smoking, hypertension, obesity, dyslipidaemia and physical inactivity. It also reflects a global trend in the prevalence of diabetes and its related health and socio-economic consequences. Recent estimates suggest that worldwide one person will die from diabetes complications every ten seconds by 2025.

In 2000, the World Health Assembly endorsed the development of a global strategy for non-communicable diseases, a move that signalled an important re-orientation from the traditional focus on infectious diseases.<sup>2</sup> The World Health Organisation (WHO) has additionally recognised that non-communicable diseases will become the main cause of mortality in the MENA region in the 21<sup>st</sup> century and that conditions such as diabetes represent a key strategic concern in a new era of healthcare.

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<sup>1</sup> Diabetes Atlas, Third Edition. International Diabetes Federation, 2006 [www.eatlas.idf.org](http://www.eatlas.idf.org)

<sup>2</sup> 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases. World Health Organisation 2008. Accessed at <http://www.who.int/nmh/Actionplan-PC-NCD-2008.pdf> in August 2009

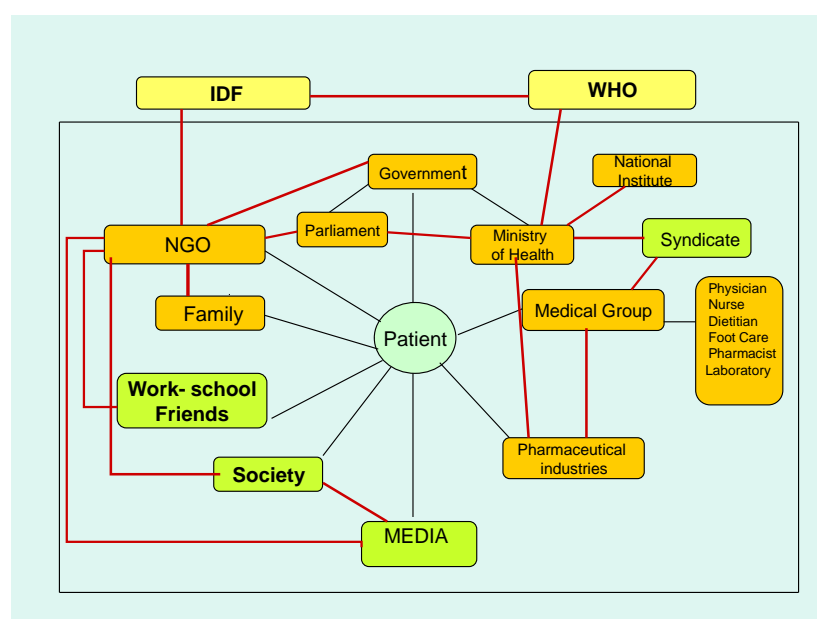
The most significant step to tackle diabetes globally was taken in December 2006 when the United Nations passed the United Nations Resolution 61/225 on diabetes. The Resolution acknowledges for the first time that a non-infectious disease poses a serious threat to global health. It highlights two key challenges – preventing diabetes and preventing complications in people with existing diabetes. The Resolution urges all countries to develop a National Diabetes Programme (NDP) with an overall aim of improving the prevention, treatment and care of diabetes.

### Key challenges in creating a National Diabetes Programme

Any National Diabetes Programme (NDP) should share minimum requirements for objectives and goals with programmes in neighbouring countries to ensure a consistent and robust approach to disease management across the region.

Prevention, treatment and care of diabetes should form the core structure in any approach to ensure that the goals of the United Nations Resolution are met, with priorities for each element dependent on local environmental, political and healthcare factors.

The NDP must, by definition, be specific to its country to ensure that it speaks to and encompasses each individual who is a stakeholder in the diabetes community. People with diabetes; their families, colleagues and friends; healthcare professionals; governmental and administrative decision-makers; non-governmental organisations (NGOs); pharmaceutical and medical device companies; insurers and payors; international health organisations – all should have a direct or indirect role in the creation and implementation of an NDP.



Any NDP will need to overcome a number of socio-economic and demographic barriers. Despite significant economic disparities in the MENA region, certain common challenges exist. Many countries contain extensive geographical areas with poor communications and infrastructure, whilst high population densities make access to medication and healthcare difficult. Illiteracy remains a problem in some areas, which in turn contributes to misconceptions about healthcare, whilst traditional practices may also increase the risk of developing diseases such as diabetes. Regardless of a country's relative wealth, micro and macro financial challenges to improving diabetes management will need to be met.

## **MENA Regional Action Plan**

Developed by IDF MENA, the following action plan represents the regional response to the United Nations Resolution on Diabetes, with a focus on practical and achievable outcomes to improve the prevention, treatment and care of diabetes. The plan provides a template from which IDF member associations can develop their own local National Diabetes Programme (NDP).

The key topics covered by the regional plan provide a checklist of minimum requirements which should be addressed in a NDP:

1. Establish and maintain country-specific data on the prevalence, burden and economic cost of diabetes
2. Prioritise diabetes within national healthcare framework
3. Drive greater collaboration between all parties involved with diabetes
4. Achieve improved disease awareness and education for people with/at risk of diabetes, healthcare professionals and the wider community
5. Strengthen the role of primary care in diabetes management through multidisciplinary team approach with minimum standard of care
6. Deliver tailored care for specific populations
7. Undertake monitoring and evaluation of NDPs

## **1. Establish and maintain country-specific data on the prevalence, burden and economic cost of diabetes**

An important first step to developing a comprehensive and credible National Diabetes Programme (NDP) is ensuring that accurate and representative national data is captured on the extent, magnitude and projected growth of diabetes, and health economic data is produced on the current and future financial impact of the disease. This will ensure that recommendations are evidence-based, capacity building is appropriate and resources are allocated where they can be of maximum benefit. Importantly, governments should be aware of the long-term burden of inadequate treatment that leads to complications such as cardiovascular disease, blindness and amputations, rather than focusing solely on short-term cost savings.

### ***a. Creating a National Diabetes Register***

The creation of a national diabetes register can be of significant value for public health authorities and policy planners at national and local levels by providing a standard data set that can be used to compare data within and between regions. In addition, data from the register can be used to plan public services, exchange information through network connections and to convince policy makers, planners and payers of the need to provide adequate resources to diabetes care.

The register should be set up to contain all patient data in a central location in paper or electronic formats, and can be complemented by local and regional registries such as those held at schools, work or health insurance companies. The creation of such registers can be expensive and, if not feasible, then it is imperative to have comprehensive sub-registers for patients with diabetes e.g. data from schools or health insurance policies.

### ***b. Specifying the role and responsibility of a National Diabetes Institute***

The establishment of a National Diabetes Institute provides an ideal site for the location of a National Diabetes Registry. One of the main objectives of the institute would be to coordinate any national diabetes research including epidemiological and socioeconomic studies. A National Diabetes Institute also has the additional potential to provide standardised protocols for diabetes care and management of complications, become a model training centre for healthcare professionals, engage in education activities through the mass media and general public, and provide a reference library for all educational material.

## **2. Prioritise diabetes within a national healthcare framework**

A strong political commitment is required to invest in the necessary infrastructure and systems of care needed for the successful implementation of a National Diabetes Programme (NDP). Once the diabetes political landscape has been established, governments must be lobbied with consistent messages by a unified group of stakeholders to make diabetes a priority within the national healthcare framework and ensure that appropriate funds are allocated to address the growing disease burden. It is essential that the government should also be evaluated and held to account by stakeholders to maintain momentum and achieve objectives.

### ***a. Demand a commitment to financial investment in diabetes***

Undertake lobbying of government / ministry of health to increase investment in healthcare, particularly for non-communicable diseases and ensure that there is budget available to improve the care of patients with diabetes. The focus of lobbying activity should be securing provision of resources for healthcare services at diabetes clinics and specialised centres on a nationwide basis (urban and rural areas), supporting health education of people with/at risk of diabetes and to ensure healthcare teams are fully trained. Furthermore, legislation from parliament is required to ensure the approval of healthcare-related funds and to support the involvement of non-governmental organisations (NGOs).

### ***b. Ensure access to treatment***

A key issue in diabetes is access to sufficiently effective, safe, affordable and easy-to-use medications. A central component of all NDPs should be to ensure availability of insulin and access to other effective medications/interventions for all people with diabetes. Where appropriate, governments and/or parliament should be lobbied to provide tax exemption for essential medications via health insurance laws.

### ***c. Defend rights of people with diabetes***

Governments / ministries of health and parliament must be encouraged to promote and provide at least a minimum standard of care for patients with diabetes in clinics and hospitals, while maintaining and protecting their basic healthcare rights and protecting against discrimination through legislation.

### **3. Drive greater collaboration between all parties involved with diabetes**

Collaboration between government, advocacy groups, healthcare professionals / medical syndicates and industry is essential to successfully create and deliver an effective and relevant national diabetes programme. This may take the form of cross-sector alliances that audit the diabetes landscape, discuss national priorities for diabetes care and jointly deliver a National Diabetes Programme (NDP).

#### ***a. Unified involvement of active non governmental organisations (NGOs)***

Non governmental organisations (NGOs) include a variety of professional associations, patient groups, health charities and foundations and play a key role in collaborating, coordinating and integrating with government to provide successful NDPs. Their main objective is to create advocacy and educational programmes for patients and their families, healthcare teams and the community as a whole. Ways of achieving this include organising seminars and meetings, and publishing books, pamphlets and other materials. If sufficient funding is available, NGOs can also provide financial support for medical and pharmaceutical products.

It is important that NGOs adhere to a strict code of conduct, including legal recognition within their own country and non-profit status, with all finances being accountable and transparent.

Every effort should be made to identify opportunities to work together and to collaborate on joint-projects under the global umbrella of organisations such as the IDF and in conjunction with government/national programmes. In this way, maximum impact of any lobbying, education, clinical programmes can be achieved. An over-crowded, disparate NGO environment is not in the best interests of the person with diabetes or the healthcare professional and therefore self-regulation, national monitoring and effective collaboration is required to avoid unnecessary duplication.

#### ***b. Engage with industry***

The involvement of industry should be encouraged to gain sponsorships, expertise and joint support of common goals including diabetes prevention, education and care programmes. Collaboration with industry should be open and ethical, and any conflict of interest must be avoided.

***c. Draw on support of international organisations***

International organisations – such as the Global IDF and the WHO – are not directly involved with the implementation of a NDP, but can be approached for support. The IDF is a useful source of information and educational materials, and it advocates the use of IDF task force activities and programmes. The IDF also provides models for monitoring and evaluating the effectiveness of NDPs via regular auditing, and encourages countries to raise diabetes awareness by participating in World Diabetes Day (WDD) events.

The WHO collaborates with both governments and NGOs to promote and improve diabetes care through training and education programmes. The WHO can provide guidance, training, policies, strategies, monitoring and planning for all aspects of diabetes. They also support the development of a regional alliance for diabetes to coordinate research, training and intervention to reduce costs and avoid duplication of efforts.

#### **4. Achieve improved disease awareness and education for people with/at risk of diabetes, healthcare professionals and wider community**

Enhanced disease education is a key component of a National Diabetes Programme (NDP) and is a requirement for all members of the diabetes community, including people with diabetes, their families/carers, healthcare professionals and the general public. A key theme should be re-education and evaluation, to ensure that awareness and knowledge of diabetes is not only raised in the short-term, but maintained in the long-term.

##### ***a. Patients and their families***

The importance of education for patients and their families cannot be overestimated. Education empowers patients to understand how to manage their disease, illustrates the consequences of failure to control their disease, and provides the tools to live with diabetes in the long-term.

A range of standardised and consistent education elements should be developed for use on a national and local basis including leaflets, publications, courses or meetings. These should address a broad scope of themes and topics, from initial diagnosis to long-term complications.

Similarly materials must be made available in as many locations as possible, including clinics, schools and social meetings, in order to reach the maximum number of people within the diabetes community including more remote geographical regions including rural areas.

##### ***b. Healthcare professionals***

In addition to standard ongoing training via professional education, all healthcare professionals (physicians, nurses, pharmacists, dieticians, podiatrists) should receive peer to peer education to allow them to educate their patients. They should also receive media training and presentation skills training to enable them to become effective educators/communicators.

Undergraduate and postgraduate training courses should include non-communicable diseases such as diabetes on their curriculum so that the next generation of healthcare professionals are aware of the diabetes challenge.

***c. General public***

Newspapers, radio and television play a key role in disseminating information and news on diabetes to the general public. It is therefore essential that the media receive clear and accurate messages that educate, foster understanding and help remove the stigma associated with diabetes. Consideration should be given by member associations to engaging and educating relevant journalists on national and local consumer publications. The aim should be to facilitate accurate, well-informed, balanced pieces of journalism that reflect current, evidence-based medicine and serve to appropriately educate the population on diabetes prevention and management of diabetes.

In addition, education should begin as early as possible with children being taught the risk factors for diabetes and the actions they can take to prevent the development of diabetes and obesity as part of school-based education programmes on healthy dieting and active exercising.

## **5. Strengthen the role of primary care in diabetes management through multidisciplinary team approach with minimum standard of care**

The responsibility for diabetes management should lie with an enhanced primary care function that delivers effective management of diabetes in the community, providing a documented minimum standard of care.

The central role of any primary care centre is to provide facilities to allow early detection and diagnosis of diabetes and to provide continuing care of all patients with diabetes. This must include additional services for detecting and managing complications and the development of diabetes screening programmes. Importantly, there is a critical need to provide universal access to primary care centres, even for those in remote areas.

### ***a. Screening programmes***

Screening programmes for the early detection of diabetes should include assessment of high-risk groups such as those with a family history of diabetes, obesity or hypertension, and those with a history of clinically significant laboratory findings or gestational diabetes. It is crucial that these patients receive appropriate treatment early to delay or prevent progression to diabetes. When using screening programmes to detect diabetes the criteria for a diagnosis of diabetes must be consistent.

In patients with existing diabetes, screening programmes for the early detection of complications such as retinopathy, nephropathy, coronary heart disease and foot problems are needed to reduce resulting morbidity and mortality.

### ***b. Multidisciplinary healthcare teams***

Diabetes healthcare teams should be multidisciplinary comprising physicians, nurses, pharmacists, and other diabetes specialists such as dieticians and podiatrists. Each member of the team should have a clearly defined role, but all should work together to provide the best possible patient care. It is essential that a plan is established for the treatment of each patient and that all members of the healthcare team are aware of it.

- Physicians should coordinate the healthcare team and will usually make any final treatment and education decisions

- Nurses play a key role in documenting a patient's treatment history and educating patients on their condition and treatments and/or interventions
- Pharmacists are responsible for making treatment recommendations to the team to prevent adverse drug interactions and keep treatment costs down where feasible; pharmacists are also involved in training patients on how to administer and store their medications appropriately - essentially the pharmacist must ensure the availability of insulin and that it is properly stored and transported. Additionally, the pharmacist is well-positioned to provide supporting advice to people with diabetes in the community, working in partnership alongside the physician
- Dieticians and podiatrists are critical for providing advice and patient education on lifestyle and dietary/nutritional requirements and assessing foot complications. There is an urgent requirement to train more diabetes specialists, particularly dieticians and podiatrists as there is an overall deficit in most countries in the MENA region.

## **6. Deliver tailored care for specific populations**

There are a number of specific populations that require special consideration. To reduce the prevalence of diabetes in these populations, targeted prevention, screening and management programmes are needed.

### ***a. Children and adolescents***

A national register for all children and adolescents with diabetes should be created. If this is not possible, then all schools should have records of the pupils who have diabetes and should be encouraged to include health checkups, food monitoring, sports and psychological support for all children. Schools should also have basic equipment to deal with a diabetic emergency and staff should receive training on diabetes management. Care must be taken to ensure that there is no discrimination against children and adolescents with diabetes.

### ***b. Pregnant women***

All pregnant women should be screened for gestational diabetes and standard protocols should be developed for management. Appropriate and comprehensive care must be provided during pregnancy to ensure the health of the woman and the foetus. After delivery, regular follow-up is essential for both mother and baby.

### ***c. The elderly***

Elderly people are particularly vulnerable and it is important that their families and caregivers are educated to deal with their needs. Steps should be taken to ensure that care and housing is available when family circumstances are not appropriate for optimal disease management.

## **7. Undertake monitoring and evaluation of National Diabetes Programmes**

Once the National Diabetes Programme (NDP) is developed and implemented it should be evaluated regularly using a validated monitoring system to ensure that it is having an impact on the prevention, treatment and care of diabetes. To achieve this, countries must define specific measurable targets that can be used to assess not only the impact but also the cost-effectiveness of the programme. In addition, clear criteria for collecting data need to be established so that comparisons can be made.

By conducting audits and producing regular reports, policy makers will be able to assess whether the current measures are working effectively, and identify policy gaps and key areas that would benefit from further national and regional action.

The creation of a Diabetes Forum is recommended to allow the exchange of good practice for prevention, screening and control of diabetes between different countries. The forum would provide a platform to allow participating countries to learn from the successes and failures of their respective NDPs with the aim of raising standards, reducing inequalities and optimising healthcare resources.

## International Diabetes Federation MENA Regional Meeting

### Participants List

The meeting and consensus was chaired by Professor Morsi Arab, Regional Chair of International Diabetes Federation and attended by:

- Farid Homayoun – Afghanistan
- Maryam El Hajeri – Bahrain
- Abdel Razzak El Medani – Emirates
- Amir Kamran Nikhouskhan – Iran
- Najla Ayoub – Iraq
- Mohamed El Zaheri – Jordan
- Mounira El Arouji – Kuwait
- Abdullah Ben Nakhi – Kuwait
- M. Sandid – Lebanon
- Suliman Abu Srewil – Lybia
- Mohamed Lamki – Oman
- Samad Shera – Pakistan
- Abdullah El Hamaq – Qatar
- Nizar El Bache – Syria
- Zayed Atef – Yemen
- Ibtehal Fadhil – WHO-EMRO
- Morsi Arab – Egypt (IDF-MENA region)
- Aly Sherif – Egypt (IDF-MENA region)
- Adel Abdel Aziz – Egyptian Diabetes Association
- Mesbah Kamel - Egyptian Diabetes Association
- Ibrahim El Ebrasgi – MPH of Egypt National Diabetes Institute, IMH
- Laila El Seoufi – Non-governmental organization, Egypt
- Ibrahim Labouta – Professor of Pharmacy, University of Alexandria, Egypt
- Hassan Fathi – Egypt (Al Ahram newspaper)
- Amani Abdullah – Egypt (El Akhbar newspaper)

This consensus was led by the International Diabetes Federation MENA Region and supported by Merck & Co., Inc

## **Appendix – Supporting Contributions / Case Studies**

### **Prof. Morsi Arab, Chair MENA Region**

A discussion paper and subsequent Egyptian NDP for diabetes management (A Proposed National Diabetes Program for Egypt, AL Mizan 2009 in press) has been developed by Professor Morsi Arab, which provides an example of a structured approach to optimal care and treatment of diabetes. It contains the minimal requirements of the NDP, potential local challenges, identification of target constituents in the community (both individuals and organisations), with the objective to identify shortages in capacity and resource and overcome these hurdles.

### **Dr. Ibtihal Fadhil , WHO-EMRO Regional Advisor**

The World Health Organisation discussed a regional strategic goal of 2% annual reduction in chronic disease death rates, over and above projected trends to 2015. This goal, if achieved, will result in the prevention of 2.3 million deaths in the Eastern Mediterranean countries. The Eastern Mediterranean Approach Network (EMAN) for the prevention and control of non-communicable disease (NCDs) has been established to promote collaborative linking and capacity building in relation to NCD prevention and control. EMAN will aim to link Eastern Mediterranean countries through community based programmes, raise community awareness and facilitate capacity building for standardized NCD risk factor surveillance.

Dr Fadhil acknowledged the lack of national policies for NCD prevention and control, shortfall in necessary funding and the need to re-orientate the health system from acute to chronic diseases. It was also noted that effectively managing NCDs is beyond the capacity of the health sector alone and integrated, coordinated intervention is required from other sectors, stakeholders and government departments.

### **Prof. Ibrahim El Ibrashi (Ministry of Health and National Diabetes Institute, Egypt)**

The development and implementation of a NDP is underway in Egypt, driven by the Ministry of Health and supported by external funding including the World Diabetes Foundation. The first step was to determine the burden of diabetes and the socioeconomic costs through the use of surveys. The Health Insurance System which has been initiated will be available throughout the country by 2017. A key aim is to register all patients who have diabetes on a central registry, although currently this only includes patients who receive free treatment. A protocol was designed in consultation with 35 specialists to develop diabetes management guidelines. Further steps are being taken with regards to the early detection of diabetes in high-risk groups by 14 centers throughout the country for screening purposes.

### **Dr. Abdel Razzak El Medani, United Arab Emirates**

An Arab Gulf Summit held in 2007 led to the development of a NDP, which all member states were encouraged to implement. As part of the NDP a number of diabetes guidelines and protocols for screening were issued. The United Arab Emirates, which has the second highest prevalence rate of diabetes in the world (25% in 2008), has started to implement the NDP and designated 2009 as the 'Year of Diabetes'. The primary objective of this campaign is to raise awareness among professionals and the public. Other objectives include the development of strategies to promote the prevention of diabetes and enable the provision of optimal healthcare and education. One such initiative is the formation of a national continuing medical education (CME) course entitled 'Diabetes Update 2009'. In Dubai, a Juvenile Diabetes Education Centre was opened in November 2008 for children and adolescents with diabetes aged 8–18 years and their families. The centre also trains school teaching staff and school nurses on diabetes management for children.

**Dr Mariam El Hajeri, Bahrain**

Prevention and management of diabetes in children and adolescents is a key priority in Bahrain. A system is in place to inform the school/teaching staff once a child is diagnosed with diabetes. The school also receives a CD-ROM containing *Nutritional guidelines for children with diabetes*, *Guidelines for managing behavioral problems in children with diabetes*, and *Management of diabetes at school*, to raise awareness and understanding of the issues involved. School Health Workshops have also been implemented to help educate and train staff with responsibility for children with diabetes.