Q&A: Key points for IDF Diabetes Atlas 2017

Meet Professor Nam Han Cho, President-Elect of the International Diabetes Federation (IDF) and the Chair of the IDF Diabetes Atlas Committee for the 8th edition, who welcomed the opportunity to answer questions about the new IDF Diabetes Atlas, and the methodology used to generate estimates.

1. If there was to be just one key message from the 2017 IDF Diabetes Atlas to communicate to the world, what would it be?

Rise in numbers related to an aging population with diabetes: 30% of people with diabetes are over the age of 65 (123 million people out of 425 million people) and the number will increase to 40% by 2045 (253 million people out of 629 million people). This is due to the improvements in the healthcare systems and increase in the healthcare expenditure when people are able to live longer with diabetes. A new section reporting on diabetes among people older than 65 years has been added to the 8th edition of the Atlas.

2. Have there been any notable changes related to regional or country data?

Diabetes affects all regions, but the regions that have vastly increasing number of diabetes cases are the Africa Region and the Middle East and North Africa (MENA) Region. The Africa Region is estimated to have the fastest growing number of people with diabetes, since it is estimated that by 2045, the number will increase 162.5% to 41 million and the number of people with impaired glucose tolerance (IGT) is expected to increase 154.3% to 102 million. Even today, over two-thirds (69.2%) of adults with diabetes are undiagnosed. The second highest increase is expected in the MENA region where by 2045 the number of people with diabetes will increase 72% to 67 million and the number of people with impaired glucose tolerance (IGT) is expected to increase 94% to 64 million.

Country-wise China remains on top at the number one position with the highest number of people with diabetes worldwide; furthermore, their number has grown 5 million more from the previous Atlas edition, which is the highest growth among the top 10 countries. People with diabetes in China are also almost double compared to the second country, India, and more than triple compared to the third country, the United States. The top 10 countries have currently 60% of all people worldwide with diabetes.

Measured in International Dollars, India and Mexico have now made it to the top 10 countries list in diabetes-related healthcare expenditure jumping to fourth and eighth position respectively. The top 10 countries spend 75% of the global healthcare expenditure for diabetes.

3. In 2017, it is estimated that 425 million people (aged 20-79 years) are living with diabetes—what can be done to help the world understand that diabetes can no longer be ignored?

For the first time the IDF Diabetes Atlas also contains recommendations for actions that can be taken to reduce the impact of diabetes locally, regionally and globally. First, high-quality research on diabetes epidemiology has to be promoted, through strengthening surveys and regular surveillance systems. Secondly, diabetes care and control has to be prioritised, healthcare personnel trained appropriately and access to essential medicines ensured. Thirdly, National Plans and Strategies need to
be implemented and governmental services scaled up to reduce diabetes burden. Fourthly, health promotion needs to be extended to reduce diabetes and its complications.

4. What are the greatest barriers in attempts to report data for the 2017 Diabetes Atlas?

In the current Atlas, we already have 221 data sources from 131 countries, which contain more than 91% of the global population. However, there is still room for improvements in the methodology, such as taking into consideration more variables including socio-economic measures, indirect costs of diabetes, fasting plasma glucose (FPG) or type 2 diabetes among children and adolescents. Existing methodology and its sensitivity analysis could also contain more risk factors in the model, such as obesity or age distribution in each country.

We are also missing national data from many low-income countries, especially in Africa, where we don't have data sources for two thirds of the countries. We need new scientific reports from those countries that are lacking their own data, because now we have to extrapolate estimates from the neighbouring countries.

As a conclusion however, scientists around the world think that the approach the IDF Diabetes Atlas uses is the right way to manage insufficient data and believe it is close to the reality.

5. Why did the Atlas Committee decide to dedicate one full chapter to the complications of diabetes?

Acute and chronic diabetes complications have not received attention in the IDF Diabetes Atlas before, despite being the main reasons for early mortality, and very prevalent among people with diabetes. This is one way of telling the audience about the often ignored consequences and revealing the tragic burden of diabetes. Making the connection between complications and diabetes requires training and experience to be included to management care plans. The earlier diabetes complications are diagnosed, the easier it is to stop them from progressing. The complications can also easily be prevented, when people with diabetes are educated about adapting to a healthy lifestyle.

6. What are the IDF key initiatives for 2018-2020 that will address the critical issues above?

As the global voice of people with diabetes, there is much that IDF can do to promote knowledge exchange and understanding of recent scientific advances and to help drive policy change to ensure that new solutions relating to the detection and treatment of diabetes are available, accessible and affordable to all. In 2018 and 2019, the core initiatives and programs build on five focus areas, which are (1) Humanitarian programs, (2) Diabetes Care, Access and Prevention; (3) Education; (4) Epidemiology; and (5) Advocacy and outreach.

Examples of these are:

1. The IDF Life for A Child Programme supplies essential diabetes care to 18,000 children living with diabetes in 42 countries.

2. The IDF Eye Health strategy will ensure that the impact of vision loss due to diabetic retinopathy (DR) and related complications are reduced.

3. The IDF School of Diabetes brings healthcare professionals a one-stop portal giving access to the best in-class diabetes education.

4. Taking Diabetes to Heart, which is a global CVD survey, focuses on CVD awareness and knowledge among people living with type 2 diabetes.

5. The Young Leaders in Diabetes (YLD) or the Blue Circle Voices (BCV), represent the interests of people living with, or affected by, Type 1 or Type 2 diabetes as strong advocacy groups.

Professor Nam Han Cho is President-Elect of the International Diabetes Federation for 2016-2017. He is also the chair of the IDF Diabetes Atlas Committee.