

# **The Global Epidemic of Diabetes**

**By Denine Rogers RD,LD**

Everyone knows that HIV/AIDS is taking a toll in Africa but not everyone knows that Diabetes is of similar magnitude silently claiming as many deaths (3.8 million) per year. I was invited to go to the International Diabetes Conference in 2006 at Cape Town, South Africa, with the African-American Specialty Practice Group of American Association of Diabetes Educators (<http://www.diabeteseducator.org>) . I learned so much about the epidemic of diabetes not only in Africa but worldwide. I always wanted to go to Africa and see what the motherland is truly like. This was a once in a lifetime opportunity so I knew that it was the right time to go.

The International Diabetes Federation (IDF) is a worldwide alliance of 200 diabetes association's comprised of 158 countries. For over 50 years IDF has been at the vanguard of global diabetes advocacy. Its mission is to promote diabetes care, prevention and a cure worldwide. The IDF is committed to raising global awareness of diabetes by promoting appropriate diabetes care and prevention and encouraging activities towards finding a cure for the different types of diabetes. Each year another seven million people develop diabetes and 246 million adults worldwide have diabetes in 2007.

It is predicted in 2025 - 380 million people worldwide will be diagnosed with diabetes. It is interesting to note that the highest rate of diabetes is found in India at 40.9 million followed by China with 39.8 million and not in the United States with 21 million. (You need to check this number per capita since there are so many more people in China and in India – I think we lead per capita.) Sadly, the global spending for diabetes care is less than 15%. The global diabetes epidemic treatment and prevention will cost at least 232 billion USD. By 2025, the cost is likely to exceed 302.5 billion USD.(1) Website: [www.idf.org](http://www.idf.org)

As you can see diabetes is a global epidemic and each continental region has their own approach to the assessment, treatment and prevention of diabetes.

## **Southeast Asia and Western Pacific**

The Southeast Asia region carries the highest burden of type 2 diabetes mellitus in the world. Presently, 40 million people are affected and it is projected to increase to approximately 80 million by 2025.(2) Currently, in order to combat this spread Asian healthcare is using the diabetes educational teaching and training provided to healthcare professionals who work in rural communities. Chinese medical treatment of diabetes are being widely used which does includes herbal prescriptions, acupuncture and dietary recommendations.

## **The Americas and the Caribbean**

It is predicted by the World Health Organization ([www.who.org](http://www.who.org)) in the hemisphere region that by 2030, the prevalence of diabetes will be 67 million. In the Caribbean there is the Lay Diabetes Education Program to assist in the treatment and care of diabetes. In this program a lead member of the community or community health worker is selected to assist those with diabetes. This is a community program where the diabetes education and treatment is used to combat the spread of diabetes. In the South America region, the Educator Program is used where a responsible multidisciplinary group of healthcare providers as well as people with diabetes interact to learn from each other in order to have a good understanding of diabetes and better metabolic control. In both regions, the Declaration of the Americas on Diabetes (DOTA), which is under the Pan-American Health Organization, has a diabetes education task group which collects information on the diabetes education programs that are being done in the Latin American and the Caribbean regions. The intention of having this task force is to profile every educational programs effort so that steps can be taken to complete and improve the deficient educational programs and make them become a more structured and successful program.

## **The European Union**

Diabetes is a leading cause of death in Europe affecting over 33.3 million people. In 2030, it is predicted that 48 million people in the European Union will have diabetes.(2) Currently, International Diabetes Federation (IDF) of Europe has initiated a GlucoForum Pre-Diabetes Association, which brings together doctors, nurses and IDF Europe members representing people with diabetes. The GlucoForum website [www.glucoforum.org](http://www.glucoforum.org) has both professional and lay sections, which gives user-friendly information on prediabetes and its prevention. It also looks at who is most at risk and what can be done to help improve their health. The National Diabetes Programs is where there are 11 out of 25 member states of the European Union that have a national framework or plan for diabetes. Member state's national diabetes plans vary significantly in their quality and value in reducing the disease burden and its costly complications. National Plans often lack specific targets and/or a monitoring system to assess implementation and effectiveness. There is one country that stands out as having a model National Plan for diabetes prevention and treatment. Finland's National Diabetes Programme runs the Development Programme for the Prevention and Care (DEHKO) of diabetes. For information of the DEHKO program go on to the website: [http://www.diabetes.fi/sivu.php?artikkeli\\_id=831](http://www.diabetes.fi/sivu.php?artikkeli_id=831)

## **Africa and Middle East**

In 2000, the prevalence of diabetes based on statistics of the World Health Organization is 22 million and it is predicted that by 2030, the prevalence of diabetes will be combined total of 60 million in this region. There is a high incidence of obesity which attributes to the high incidence of type 2 diabetes.

The care and treatment of diabetes in the Middle East regions promotes a holistic approach to diabetes care and prevention. They provide medical treatment, nutritional counseling, prevention and foot care. To combat the high incidences of Mature Onset Diabetes in Youth (MODY) there are wellness days in the school systems on diabetes prevention. In the Africa region there are programs that offer low cost or free diabetes medications. The trained healthcare diabetes clinic staffs are promoting dialogue with the traditional healers to have an understanding clarity of each other's roles with modern medical care and traditional care. The health care diabetes clinic workers are implementing diabetes care programs to all villages and rural communities. Also there are diabetes educational workshops to healthcare workers and patients.

### **Highlight – South Africa**

Since the IDF conference was held in South Africa, the African-American Specialty Practice Group and I went to the G.F. Jooste Hospital (3) in one of the townships nearby downtown Cape Town. There we witness and heard about the problems of diabetes care and treatment going on in this particular hospital. There are 1.2 million people who live in the township and have access to G.F Jooste Hospital. This medical hospital has only 90 beds and currently serves between 70 to 80 thousand patients monthly. At the moment there is no chronic or diabetes care unit available due to the widespread epidemic of HIV and TB. Since there is no diabetes care unit at the hospital the people with diabetes that develop Diabetic Ketoacidosis (DKA) may not receive the appropriate treatment they need. There is an Intensive Care Unit in the hospital where treatment of DKA patients is administered but there are only eight beds available for all chronic disease and trauma patients. In one day, the hospital does 38 leg amputations and this is due to lack of diabetes education, information and general ignorance of diabetes treatment and care. The average stay for patients is two days and there have been incidents where many people have been sent home before they are suppose to be discharged. Dealing with people with diabetes at G.F. Jooste Hospital is usually a full time job since the patients are using the hospital as a clinic. This hospital is the only place available to the patient's disposal since it is open 24 hours day and 7 days per week.

### **Global Partnerships Fighting Diabetes**

So what can we do to stop this global epidemic of diabetes? There are organizations that are bringing awareness, education, prevention and treatment worldwide. There is the International Diabetes Federation that I have mentioned that is leading in a campaign with the United Nations. The campaign is "Unite for Diabetes" which is to raise awareness of diabetes and its complication, to improve diabetes care worldwide and to advocate for action to tackle the diabetes epidemic. Website:

[www.unitefordiabetes.org/campaign](http://www.unitefordiabetes.org/campaign)

The World Health Organization Diabetes Unit has a diabetes program called Diabetes Action Now. This program goal is to raise awareness about diabetes and its

complications, particularly in low- and middle-income countries, and to stimulate effective measures for the surveillance, prevention and control of diabetes. Website: <http://www.who.int/diabetes/actionnow/en/index.html>

The joint collaborated efforts of the International Diabetes Federation and the World Health Organization organized the primary global awareness campaign of the diabetes world called World Diabetes Day. It was first introduced in 1991 in response to concern over the escalating incidence of diabetes around the world. It is celebrated every year on November 14<sup>th</sup> and this year 2009-2013 theme is Diabetes Prevention and Education. Website: [www.worlddiabetesday.org](http://www.worlddiabetesday.org)

The ravages of diabetes will never go away unless everyone makes an effort. Early diagnosis and early education are crucial to preventing complications and saving lives. All of the healthcare communities, educators and patients around the world must join forces to stop this epidemic from spreading, prevent the condition in those at risk, and avoid unnecessary death and disability. If we do not do this then the future generations will unfortunately have to deal with the dire consequences of this major global epidemic.

#### References:

- (1) International Diabetes Federation - Diabetes Atlas – <http://www.eatlas.idf.org/media/>
- (2) World Health Organization – <http://www.who.int/diabetes/facts/en/>
- (3) Information was taken from the Residents Doctors of G.F. Jooste Hospital – Western Cape – Cape Town, South Africa.