Diabetes Where Continents Meet: Turkey

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Diabetes is ever growing health issue of the world's both developing and developed countries. As a none-contagious disease, its estimated prevalence is at alarming rates that is announced by many of the health authorities. Today, striking numbers belong to Indian population in Arizona, USA and a country placed in the gulf area at Basra, named Eritrea. While people are becoming familiar with the disease despite incredible efforts by the governments, diabetes societies and social associations, increasing rates are extremely getting high especially in Africa owing to presumably awareness programs such as economic support for early recognitions and sliding the kitchen profile to western style feeding in that area.

One another region is the middle-east where prevalance of diabetes is reaching among the highest in the world (1). Turkey, a country where continants of Asia and Europe meet has an important economic burden of diabetes management cost which was estimated to be 5,144 billion Euro announced in World Diabetes Congress held by International Diabetes Federation in Dubai (December, 2011).

TURDEP1 Study was a population based study of diabetes which also revealed the risk characteristics and results of the Turkish diabetes epidemiology (TURDEP) in Turkey (2).

24,788 subjects who were over 20 years of age were included in the study. Crude prevalance of diabetes was 7.2% and of IGT was 6.7%. The first population based study in Turkey was recorded in 1990 named TEKHARF which was Turkish Adult Risk Factor Study (3). The overall obesity was 18.6% (3), while it rose up to 22.3% in TURDEP Study (2) and reached even to 43.4% in Adana (4), the city located at eastern part of mediterranean area of Turkey. Accordingly, respecting to the higher obesity rate, Adana province had a higher rate of diabetes (11.6 %) (4). Obesity and eating habits seem to have major contribution to higher glycaemic levels in that region of the country. Southeastern Anatolia Diabetes Project (GAPDIAB) was provided in collaboration with Turkish Diabetes Foundation and Living Well with Diabetes Societies in order to help increase the awareness of diabetes and its complications in patients with diabetes, the public and the health care providers such as nurses, chemists, and supply insulin, needles and insulin pen devices to those whom can not afford at the age of less than 18. Gaziantep was the largest city of diabetes where the start of the project was given (5). Other activities of the GAPDIAB Project was organizing the diabetes summer camps in order to improve diabetes self education of adolescents who were type 1 diabetes whose HbA1c levels showed a result of 9.6% (6,7).

Recently published data reveals very high scores of diabetes prevalance (TURDEP II Study) (8,9). It demonstrates that diabetes prevalance rose from 7.2% to 13.7% and IGT from 6.7% to 8%. Other striking features of this epidemiologic metabolic disaster is that the high level of general obesity and central obesity which was 35.9% and 52.6%, respectively (TURDEP II) while scores were 31.2% and 46.3%, repectively in the previous study (TURDEP I). Hypertension also is climbing from 25.6% to 31.3%, accordingly. In conclusion, between the 12 years period of these two largest epidemiologic data, frequency of diabetes increased 90% and of obesity 44%. Diabetes seems to start 5 years earlier comparing with the previous estimation. Only the benefit gained was the decrease in people who smoke (42% of cessation).

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Today, it is clearly proven that diabetes is increasing tremendously despite great emotional and financial efforts. Well designed education programs for women of child bearing age so as to let them learn how to raise a child in a healthy environment both while he is yet developing as a fetus in the abdomen and after born, and for children starting from the very early ages like preschooling, also for adults by building up diabetes prevention adult centers where exercise and stress relief programs are taught in an exciting way, accordingly for everyone stimulating them walk for everyday may help -at least- reduce the speed of this health issue.

REFERENCES

1. *http://www.worlddiabetesfoundation.org/composite-166.htm accessed in 11.01.2011.*
2. *Satman I, Yilmaz T, Sengul A, Salman S, Salman F, Uygur S, et al. Population-based study of diabetes and risk characteristics in Turkey. Results of the Turkish Diabetes Epidemiology Study (TURDEP). Diabetes Care 2002; 25:1551-6.*
3. *Sansoy V. Obesity, abdominal obesity and their relation with other relation with other risk factors in Turkish adults: In: Onat A (ed.) TEKHARF. MAS:İstanbul, 2003, pp. 64-9*
4. *Gokcel A, Ozsahin AK, Sezgin N, et al. High prevalance of diabetes in Adana, a southern province of Turkey. Diabetes Care 2003; 26: 3031-2034.*
5. *Bilgin I, Ipbuker A, Hatemi H, et al. Diabetes and obesity screening in Gaziantep. Endocrinology forum: epidemiology of diabetes and Obesity in Turkey 2004; 1(Suppl 1): 33-8.*
6. *Olgun N, Ozcan S, Pek H, Yilmaz T, Erdogan S, Oktay S. Preliminary report of the Southeastern anatolia Diabetes Project: activities of the Diabetes Nursing Association. Eur Diabetes Nursing 2005; 282): 71-8.*
7. *Ozcan S, Buyukbese MA. Southeastern Anatolia Diabetes Project (GAPDIAB Project). 9th Annual Conference Federation of European Nurses in Diabetes Munich, Germany (FEND Conference). September 3-4, 2004 (oral presentation).*
8. *http://www.turkendokrin.org/files/file/TURDEP_II_2011.pdf accessed in11.01.2011.*
9. *http://www.itf.istanbul.edu.tr/attachments/021_turdep.2.sonuclarinin.aciklamasi.pdf accessed in 11.01.2011.*