Letter to the Editor

Cite this article as: Libyan J Med, AOP: 061016 (published 17 October 2006)

Do we have a diabetes epidemic in Libya?

Omran Bakoush 1 and Targ Elgzyri 2

1Department of Clinical Sciences/Nephrology, Lund University. 2Department of Clinical Sciences/Diabetes & Endocrinology, Lund University.

Received 04 June 2006. Accepted in revised form 16 October 2006

It is estimated by the World Health Organization (WHO) that 3% of the world’s population (194 million) have diabetes and the prevalence is expected to double by the year 2025 to 6.3% [1].

According to WHO, it is estimated that there were 88,000 diabetics in Libya the year 2000. This prevalence is estimated to reach 245,000 diabetics by the year 2030, (see figure below). In Libya, according to local epidemiological studies, the prevalence for known diabetic patients aged over 20 years was 3.8% [2]. As 50% of type 2 diabetic patients are unaware of their diabetes “undiagnosed”, the actual prevalence is probably higher.

In the town of Tajoura, the west part of Libya; 7.9% of all adult members of 1094 randomly selected families (2996 persons aged between 20 and 75 years) had diabetes [3].

In Benghazi, in the eastern part of Libya, screening of a randomly selected group of 868 subjects revealed that about 23% above age of 20 years were glucose intolerant, two-thirds had diabetes and the rest had impaired glucose tolerance [4].

From these two Libyan cohorts, we estimate the adult diabetic population in Libya to be at least 300,000 at present.
Figure showing the estimated prevalence of diabetes mellitus of adults in 2030 as compared with data from the year 2000. Reprinted with permission from The American Diabetes Association. Reference: Diabetes Care, Vol. 27, 2004; 1047-1053.

In addition, these studies showed that only 18% of Libyans practice any form of physical exercise and more than 69% have a BMI of more than 25 kg/m² [3]. The sedentary life style and obesity are clearly the major contributing factors for the diabetes epidemic.

**The cost of health care:** The average annual health care cost for a patient with type 2 diabetes in Sweden is ~ 2700 Euros [5]. 42% of this cost was for in hospitalisation cost and 31% for ambulatory care visits. Only 2% of the cost was for anti-diabetic drugs. In Spain the direct cost per diabetic per capita per year estimated to be 50% of Swedish cost (~ 1300 Euros) [6]. In comparison to Spain, we estimate at least 400 million Euros will be needed annually to deliver an optimal diabetes care for the 300,000 Libyan diabetic population [4, 7, 8].

In summary: This huge diabetic load seriously threatens the country’s health service. However, due to differences in standards of living, our cost estimates may not be appropriate for Libya, and carefully planned epidemiological and economic studies should be seriously considered. Public education to increase the physical activity and to normalize the carbohydrate load are important actions to be taken to limit the diabetes epidemic [9].

**REFERENCES**

1. Wild S, Roglic G, Green A, Sicree R, King H. Global prevalence of diabe-