Diabetes & Endocrinology Market Analysis

Jie Shen,
Professor, Nanjing Medical University, China,

Abstract

In 2012 there were 1.5 million deaths worldwide directly caused by diabetes. It was the eighth leading cause of death among both sexes and the fifth leading cause of death in women in 2012. Blood glucose levels that are higher than optimal, even if below the diagnostic threshold for diabetes, are a major source of mortality and morbidity. The diagnostic criterion for diabetes is fasting plasma glucose ≥ 7.0 mmol/L – a diagnostic point selected on the basis of micro-vascular complications such as diabetic retinopathy. The risk of macro-vascular disease, such as heart attack or stroke, however, starts increasing well before this diagnostic point. To better understand the full impact of blood glucose levels on mortality therefore requires a look at mortality related to blood glucose as a risk factor. The total burden of deaths from high blood glucose in 2012 has been estimated to amount to 3.7 million. This number includes 1.5 million diabetes deaths, and an additional 2.2 million deaths from cardiovascular diseases, chronic kidney disease, and tuberculosis related to higher-than-optimal blood glucose. Its magnitude highlights that high blood glucose causes a large burden of mortality beyond those deaths directly caused by diabetes. The largest number of deaths resulting from high blood glucose occur in upper-middle income countries (1.5 million) and the lowest number in low-income countries (0.3 million). After the age of 50, middle-income countries have the highest proportion of deaths attributed to high blood glucose, for both men and women.

Except in high-income countries, the proportion of deaths attributable to high blood glucose for both men and women is highest in the age group 60–69 years. Forty-three per cent of all deaths attributable to high blood glucose occur prematurely, before the age of 70 years – an estimated 1.6 million deaths worldwide. Globally, high blood glucose causes about 7% of deaths among men aged 20–69 and 8% among women aged 20–69. The incidence and prevalence of diabetes has been increasing in countries throughout the world. This situation is clearly reflected in the recently published data from the NCD-RisC (Non-Communicable Diseases Risk Factors Collaboration) study, showing that the number of individuals with diabetes quadrupled between 1980 and 2014, particularly in developing countries. Spain has not escaped this upward trend. The Diabetes study reported an age- and sex-adjusted total prevalence of 13.8%, and almost half the affected individuals (6%) were unaware of their condition. Furthermore, the expectations for the future are not reassuring: The International Diabetes Federation has estimated that this disease will affect 642 million adults aged 18 to 79 years in 2040 (this same organization established the value at 415 million in 2015), and approximately 90% of them will have diabetes type. Since 7% to 14% of their current budget is allocated to the treatment of this disease. Recent studies in Europe have shown that patients with diabetes consume twice the amount of health care resources as the non-diabetic population, and the cost increases as patients develop chronic complications. There are several reasons for the rise in the incidence and prevalence of this condition, such as increases in the dual epidemic of excess weight and obesity and in sedentary lifestyles, as well as population aging. One key factor related to the higher prevalence is the improvement in survival prompted by various therapies that enable better glycaemic control, and especially, control of cholesterol levels and hypertension. Diabetes is associated with considerable morbidity and mortality, mainly of cardiovascular origin. More than 75% of hospitalizations and more than 50% of deaths in this population are due to cardiovascular causes, as has been extensively reported. The Steno-2 study showed that intensive, multifactorial management of hyperglycaemia, hypercholesterolemia, and hypertension, together with antiplatelet therapy, result in effective reductions in vascular complications and mortality in the type 2 diabetes population, with decreases of 57% in cardiovascular deaths and 46% in overall mortality. In a recent update of that study, intensive treatment during the first 7 or 8 years was associated with a mean increase in life expectancy of 7.9 years after a follow-up period of 21 years.

Market value on Diabetic Research:

This measurement shows the main ten pharmaceutical organizations in view of worldwide hostile to diabetic income in 2014 and a projection for 2020, in million U.S. dollars. In 2014, Merck and Co created around six billion U.S. dollars in against diabetic income and is required to create more than eight billion U.S. dollars by 2020. Hostile to diabetic prescription is regularly ingested orally, except for insulin, exenatide, liraglutide, and pramlintide. Drugs used to treat diabetes mellitus are frequently called oral hypoglycaemic specialists or oral anti hyperglycaemic operators.