



Diabetes Mellitus

While little can be done yet about the genetic factors, diabetes mellitus' risks can be reduced (primary prevention) through healthy diet and regular physical exercise. People with diabetes can reduce complications (secondary prevention) through carefully managed therapy. Once complications have set in, their prompt treatment (tertiary prevention) is essential to preserve life quality and reduce disability and handicap.

The Defeat-NCD Partnership is focusing on diabetes because of its huge public health significance.

Diabetes mellitus is an acutely life-threatening as well as a chronic condition in which high blood sugar over a long period of time causes many complications such as heart disease, stroke, kidney failure, eye damage leading to blindness, and difficult-to-treat ulcers that can require limb amputation.

Diabetes is due to specialised cells in the pancreas not producing enough insulin (Type I) or body cells not responding properly to them (Type 2). Type I (10% of all people with diabetes) is not preventable with current knowledge and requires insulin injections without which death within a few days is inevitable. Type 2 (90%) is treated with oral medication but may also need insulin. Diabetes is partly inherited genetically but lifestyle factors such as obesity, high sugar consumption, and low exercise levels are contributory.

Gestational diabetes can occur during pregnancy where there is hyperglycaemia, i.e. blood glucose values above normal but below that diagnostic of

diabetes. Women with gestational diabetes are at increased risk of complications during pregnancy and at delivery. They and their children are also at greater future risk of Type 2 diabetes. Gestational diabetes is diagnosed through prenatal screening and insulin may be required to manage it, if dietary measures don't work.

Worldwide, diabetes is the 8th overall leading cause of death (5th in women) with 3.7 million deaths related to blood glucose levels, in 2012. It is projected to become the 7th biggest cause of death by 2030. In 2014, 422 million people had diabetes equating to an adult prevalence of 8.5%. This is expected to increase to 10% by 2035.

Diabetes is highly correlated with obesity, the global prevalence of which has nearly doubled since 1980. In 2014, 11% of men and 15% of women age 18 and older were obese, while more than 42 million children under five years were also overweight in 2013. Meanwhile, many children with Type I diabetes already struggle in school and their learning gaps are difficult to remedy.

Diabetes registers are useful tools for ensuring universal coverage and for tracking quality of care. Specific intermediary process and outcome Indicators should be in line with WHO standards, e.g. monitoring HbA1c, retinopathy checks and blindness rates, renal function, amputation rates, and body mass index. Optimal diabetes management also requires the control of cholesterol and blood pressure with appropriate medication provided at the same time.