DIABETES

Diabetes is a chronic metabolic disease, characterised by high levels of glucose in the blood. It occurs either because the pancreas stops producing the hormone insulin (type 1 diabetes, insulin-dependent diabetes, genetic predisposition), which regulates blood sugar, or through a reduced ability to produce insulin (type 2 diabetes, non-insulin dependent, lifestyle related), or through reduced ability to respond to insulin (i.e. insulin resistance). People with diabetes are at a greater risk of developing cardiovascular diseases such as heart attack and stroke. They also have elevated risks for vision loss, foot and leg amputation due to damage to nerves and blood vessels, and renal failure requiring dialysis or transplantation.

Diabetes is one of the most common non-communicable diseases globally, affecting 422 million people in 2014, a prevalence of 9% and 7.9% among the male and female adult population (18 years or older) respectively (NCD Risk Factor Collaboration, 2016). In Asia-Pacific, about 227 million people live with type 2 diabetes and about half of them are undiagnosed and unaware of developing long-term complications. In 2012, diabetes caused 1.5 million deaths worldwide and an additional 2.2 million deaths were related to higher-than-optimal blood glucose (WHO, 2016a).

Type 2 diabetes comprises 90% of people with diabetes around the world, and until recently, this type of diabetes was seen only in adults, but it is now also occurring in children. For many people, the onset of type 2 diabetes can be prevented or delayed through regular physical exercise and maintaining a healthy weight (see indicators “Child malnutrition (including undernutrition and overweight” and “Overweight or obese adults” in Chapter 4) and a healthy diet. The cause of type 1 diabetes is not fully understood yet – but we know there is a genetic predisposition and environmental factors play a role as well.

Among the 27 Asia-Pacific countries and territories in this report, the prevalence of diabetes for women ranged from 5% in Australia to 18.9% in Fiji of the adult population (Figure 3.32, right panel), while the prevalence for males ranged from 5.5% in Viet Nam to 15.9% in Fiji (Figure 3.32, left panel). In all countries and territories in study (except Singapore), the prevalence of diabetes among males increased from 2000-14, whereas the prevalence of diabetes among women increased in all countries but Japan, Brunei Darussalam, Hong Kong, China and Singapore (Figure 3.32).

Among lower-middle and low income Asia-Pacific countries, deaths attributable to high blood glucose increased by 50% between 2000 and 2015 (Figure 3.33). More than 190 deaths per 100 000 population were caused by high blood glucose in adults in Fiji in 2015. This mortality rate doubled in the Bangladesh and Myanmar between 2000 and 2015, and increased by more than 80% in India and Sri Lanka.

**Definition and comparability**

Country data used in Figure 3.32 were downloaded from the NCD Risk Factor Collaboration website at: [http://ncdrisc.org/](http://ncdrisc.org/).
3.32. Diabetes prevalence among adults, 2010 and 2014

H represents 95% uncertainty intervals.
Source: NCD Risk Factor Collaboration.

[Graph showing diabetes prevalence among adults, 2010 and 2014 for various countries in the Asia-Pacific region.]

http://dx.doi.org/10.1787/88893867550

3.33. Age standardised mortality rates attributable to high blood glucose for adults, 2000 and 2015


[Graph showing age standardised mortality rates attributable to high blood glucose for adults, 2000 and 2015 for various countries in the Asia-Pacific region.]

http://dx.doi.org/10.1787/88893867569