



## **Activity 1 – The epidemiology and classification of diabetes mellitus**

*Who gets Type 2 diabetes mellitus?*

As a clinician, it is important to know whom you are treating. The following report might be helpful in this aspect:

<http://www.diabetes.org.uk/Documents/Reports/Diabetes-in-the-UK-2012.pdf>

Statistics point to the influence of sex and ethnicity on the prevalence of Type 2 diabetes mellitus (T2DM) in communities around the UK. While T2DM has been traditionally diagnosed in middle-aged people, the report above says that T2DM is increasingly being diagnosed among younger people. In addition, T2DM has a strong genetic component, i.e. one's risk of T2DM is significantly higher if one has an immediate family member with T2DM.

The incidence of T2DM is furthermore associated with certain medical conditions:

- obesity,
- high blood pressure (hypertension),
- coronary heart disease,
- stroke,
- polycystic ovary syndrome (<http://www.nhs.uk/conditions/polycystic-ovarian-syndrome/pages/introduction.aspx>),
- congenital conditions such as Down Syndrome

*Diabetes mellitus – beyond Type 1 and Type 2*

T1DM and T2DM may be the major forms of diabetes mellitus, with T2DM afflicting 90% of adult diabetics in the UK. However, there are other types of diabetes mellitus that clinicians may encounter in practice! These rarer forms of diabetes mellitus are also characterised by problems with insulin production or action. These include:

- diabetes beginning in late pregnancy, or 'gestational diabetes'
- diabetes beginning in infancy, or 'neonatal diabetes'
- genetic defects of the pancreatic islets, e.g. maturity-onset diabetes of the young (MODY)
- diseases which damage the pancreas as a whole, and therefore also the islet cells, e.g. pancreatitis (short-term or long-term inflammation of the pancreas) and cystic fibrosis (where pancreatic ducts are blocked)
- a number of other conditions that impair responses to insulin. These are covered in Activity 3.

From this list, it might be worth understanding gestational diabetes from the following link, as it is a condition well managed in the clinic nowadays:

<http://www.nhs.uk/Video/Pages/gestational-diabetes.aspx>