EURADIA
Alliance for European Diabetes Research

Position Paper
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Diabetes and demographic change – a dangerous link

Diabetes is one of the greatest threats to the health of people in the European Union. Around 30 million people currently suffer from diabetes, expected to rise to almost 50 million by 2025.[1]

Treatment for diabetes *and its complications* – heart disease, blindness, kidney failure, amputation - is expensive – but the combined trends of falling birth rates and an ageing population mean that Europe will have more people needing treatment but fewer people working to support this expense.

More funds for diabetes research are needed now, to develop more effective treatments, along with better and earlier screening methods, to keep more people healthy for longer to contribute to society.

EURADIA strongly encourages European decision makers to actively support research in diabetes and to provide enough funds for research into both Type 1 and Type 2 diabetes.

Demographic change in Europe and its consequences

Birth rates have fallen below the population replacement level of 2.1 per woman, meaning there are not enough children born to sustain population levels.[2] In addition, improved healthcare and living standards mean that average life expectancy has risen significantly. This positive trend has led to an unforeseen consequence when combined with declining birth rates: the 'age pyramid' is inverting.

- Spending on healthcare is estimated to increase from 6.4% of GDP in 2004 to 8% in 2050. Fewer people will contribute and more will have to work for longer, as more people will depend on healthcare.

- Chronic diseases such as diabetes present a further drain on the system. It is predicted "*unless effective prevention measures are introduced, expenditure devoted to diabetes and its complications will dominate the health economies of many countries by the end of the first quarter of this century*".[3]

- The core contributors to the European economy – young people – are the most affected by the dramatic rise in both Type 1 and Type 2 diabetes. The impact of younger onset Type 2 diabetes on future heart disease is not yet known.

- Long-term complications of diabetes affect older people making it difficult for them to work to a later retirement age.

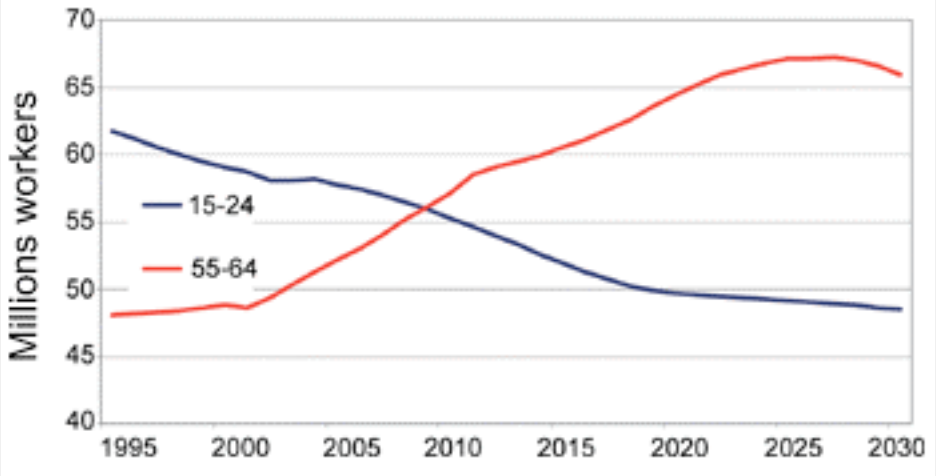
- Europe is an aging continent: it has the highest percentage of people aged 65 or older (15%); this will increase to 34% in 2050. As a result the total EU-25 population will fall slightly but overall will become much older.

- The dependency ratio (number of people aged 65 years and above relative to those aged 15 to 64) is set to double and reach 51% by 2050. Only two people of working age - instead of four - will contribute to the system for each citizen aged 65 and above.

- A crisis in health and social care is being created by these changes; also barriers are developing preventing achievement of the political goals of the Lisbon Strategy.

[1] http://www.eatlas.idf.org/Prevalence/
[2] Communication from the Commission. The Demographic Future of Europe – from challenge to opportunity. COM/2006/0571, 12.10.06
[3] http://www.eatlas.idf.org/Costs_of_diabetes/Calculated_cost_estimates/

Size of the youngest (15-24) and oldest (55-64) working age groups (EU 25 – 1995-2030)



"Around 2009 the size of the youngest cohort of the working age population will dive below the size of the oldest cohort. In 2050 there are expected to be 66 million persons of 55-64 and only 48 million of 15-24. This means that the working age population will start declining soon after 2010 and that the labour market will increasingly have to rely on older workers."[4]
© Source: European Commission

In '*The Demographic Future of Europe – from challenge to opportunity*'[5] the European Commission acknowledges that these challenges must be tackled and the negative trend reversed as fast as possible to maintain competitiveness. The causes are straightforward – the solutions are less evident.

What does this have to do with diabetes research in Europe?

- Around $75 million was allocated by EU sources for diabetes research in 2004 (including national funding, European Commission contributions, and non-profit organisation funds [of which approximately 25 million is from the Juvenile Diabetes Research Foundation a United States-based organisation]),[6] for approximately 30 million people with diabetes.
- The United States spent around $1 billion on diabetes research during 2004,[6] for approximately 16 million people with diabetes.
- Productivity of diabetes research in Europe is comparable with the United States;[6] however, the higher level of research funding in the US compared to Europe is leading to a brain drain – at the time when Europe needs its researchers the most.
- The EU 7th Research Framework Programme and the Innovative Medicines Initiative (IMI) acknowledge the importance of diabetes research in Europe.
- In June 2006, the Council of the European Union adopted a set of Health Council conclusions on the promotion of healthy lifestyles and prevention of type 2 diabetes.[7]
- Europe needs to make a greater investment in diabetes research *now* – the future health of many people can be improved and heavy demand on national health budgets may be avoided.

[4]Communication from the Commission. Green Paper. Confronting demographic change: a new solidarity between the generations. COM/2005/094, 16.03.2005
[5]Communication from the Commission. The Demographic Future of Europe – from challenge to opportunity. COM/2006/0571, 12.10.06
[6]Halban PA et al. (2006) Diabetes research investment in the European Union. *Nature Medicine* 12: 70-72
[7]Council of the European Union. Council Conclusions on promotion of healthy lifestyles and prevention of type 2 diabetes. *Official Journal of the European Union* (2006/C 147/01)