



# Prediabetes: the challenge to society

## A report from a Satellite Symposium held at the 1st International Congress on 'Prediabetes' and the Metabolic Syndrome, Berlin, Germany, 13–16 April 2005

The 'Prediabetes: the Challenge to Society' satellite meeting, held on 13 April 2005 by Merck KGaA at the 1st International Congress on 'Prediabetes' and the Metabolic Syndrome in Berlin, highlighted many of the issues in prediabetes management. Chaired by

Professor Pierre Lefèbvre, President of the IDF, the meeting took a strategic view at how prediabetes should be tackled from all angles, and brought together eminent speakers from disciplines throughout Europe to discuss their pioneering research.

It is widely recognised that the prevention of diabetes presents an enormous challenge to society; indeed it is estimated that up to 333 million people worldwide will have diabetes by 2025. Of these, 90% of people will have type 2 diabetes, many of whose condition could be avoided with early identification and effective management. Identifying people at risk of getting diabetes during the prediabetes stage is therefore becoming established as a major component in the fight against type 2 diabetes.

Already over 60 million people in Europe are estimated to have prediabetes, and the situation is predicted to escalate at an alarming rate. Despite this, the condition is poorly understood and poorly identified in clinical practice, a situation which has significant and far-reaching effects on society. There is therefore an urgent need for a societal approach to identifying and addressing the challenges and issues that are currently preventing millions from living a healthy lifestyle that is free from the threat of diabetes.

### Motivating patients to undertake lifestyle interventions

Patient compliance and motivation to change to a healthier lifestyle have long been recognised as a difficult area to manage in clinical practice. In a joint presentation, Mrs Anne-Marie Felton (*Chair of the*

*Federation of European Nurses in Diabetes, UK*) and Professor Philippe Lehert (*Consulting Statistician, Belgium*) discussed the challenge of motivating patients to undertake lifestyle interventions. Mrs Felton looked at the extent of future management policy, proposing that the approach to the prediabetes syndrome should move towards chronic disease management rather than the current acute model, and noted that the approach must be multi-professional, political and societal. Mrs Felton commented that a cross-sectoral and cross-agency approach will be required and that nurses working in this area will need to have specific training, particularly with regard to the psychosocial and economic implications for individuals identified at risk.

Professor Lehert discussed the HERAPI (Health Education and Risk Assessment survey in Pre-diabetic Individuals: understanding patients' health-related behaviour when at risk of developing type 2 diabetes mellitus) study, a predictive model of compliance with lifestyle intervention. The study was designed to improve understanding of the importance of different influences on the behaviour of patients at risk of developing type 2 diabetes and followed patients over a two-year period. The results showed that there is a very low compliance with lifestyle modification with only 12% of people complying fully with

lifestyle modification at the end of the two-year survey period. The study results also showed that doctors currently have little influence over lifestyle modification, evidently showing a need for improved management to support these patients.

### Improving the identification of people with prediabetes

The call for improving the identification of people with prediabetes was reinforced by Professor Paul Valensi (*Diabetologist and Endocrinologist at the Paris-Nord University, France*). Using data from the 'STEP by STEP' study, Professor Valensi demonstrated the high prevalence of previously unknown diabetes and moderate fasting hyperglycaemia in a targeted population. Using specific screening criteria, the cross-sectional survey of over 19 000 primary care patients in France showed that 10.75% of patients in the group were found to have previously unknown diabetes and the overall prevalence of moderate hyperglycaemia was estimated to be 23.4%. These people and many others like them are clearly at serious risk of deteriorating health if their condition isn't identified early enough.

### Cost-effectiveness

From an economic point of view, the identification and treatment of people at high risk of prediabetes are imperative. Using data on the



cost-effectiveness of the Diabetes Prevention Programme, Dr Giampiero Mazzaglia (*Chief Epidemiologist, Florence, Italy*) explained that type 2 diabetes is an extremely costly disease; however, the evidence shows that prevention of diabetes in prediabetic subjects with intensive lifestyle changes or metformin are both highly cost-effective, with incremental costs/life-year gained of approximately €11 000 for both interventions.

### Action required

#### An innovative approach

Dr Peter Schwarz (*Medical Doctor in the Department of Endocrinopathies and Metabolic Diseases, Dresden Technical University, Germany*) highlighted five alarming facts which underpin the call for immediate action:

- Type 2 diabetes is becoming more prevalent throughout the world.
- Conditions that precede type 2 diabetes have also increased substantially.
- The disease is increasingly appearing in young people.
- The longer diabetes exists the more likely are its complications.
- The treatment of diabetes and its complications is very costly.

Dr Schwarz explained an innovative approach to the identification and management of persons at risk of

diabetes which has been adopted as the German National Health Policy for diabetes prevention. He explained the Tumaini Diabetes Prevention Programme strategy, a ground-breaking programme which focuses on behaviour and group intervention. The programme encourages lifestyle interventions with pharmaco-prevention as necessary and consists of three steps:

- 1 Contact and screening for the identification of persons with a higher diabetes risk.
- 2 Training programme for diabetes prevention (a general intervention and motivation step).
- 3 Continuous follow up to maintain motivation, evaluation and quality control.

Incorporating a central and localised management structure, the programme uses different delivery channels to communicate information and motivate the general population in making appropriate lifestyle changes.

#### European platform for action

On a wider political level, Wilfried Kamphausen (*Principal Administrator in the European Commission, Luxembourg*) acknowledged that diabetes and prediabetes are of major concern and outlined the three fields in which the European Union

can play a major leadership role: research, monitoring and collecting data, and prevention. To address these, the EU has created a new forum for the prevention of prediabetes and other chronic conditions: 'Diet, Physical Activity and Health – a European Platform for Action'. The Platform brings together all the relevant stakeholders active at a European level who are willing to commit to initiatives that could help to halt and reverse current obesity trends, thus contributing to diabetes prevention. Members of the Platform – which include the key EU-level representatives of the food, retail, catering and advertising industries, consumer organisations and health NGOs – have pledged to work together and share their expertise.

**The early recognition of prediabetes is essential to prevent the time bomb of ill health that is ticking ominously for millions of people. The responsibility for identifying and managing this must be shared by all sections of society, calling for a collaborative approach and innovative ways of working together to ensure that those people at risk avoid the devastating consequences of prediabetes and type 2 diabetes.**

*Report by Anne-Marie Felton,  
FEND Chairman*

## Conference Notice

### Mastery in Diabetes Nursing

A collaboration between the UK Diabetes Nurse Consultant Group and the UK Association of Diabetes Nurse Specialists. In association with *Practical Diabetes International*

#### Date and venue to be confirmed

Put together by an expert panel this one evening and one full day meeting aims to bring diabetes nurse specialists together to discuss aspects of the changing landscape of diabetes nursing as well as to provide time for peer support. The meeting will focus on education, service design, research and clinical care. Speakers, the final programme and a delegate price will be confirmed in the next issue of *Practical Diabetes International*.

For further information and to register please contact **Lucie Lancashire**, *Practical Diabetes International* Conference Secretariat, John Wiley & Sons, Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, UK.  
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