A meeting report from the Federation of European Nurses in Diabetes (FEND)

13th Annual Conference, Hotel Cavalieri Rome, Italy, 5–6 September 2008

A truly global gathering of 740 diabetes nurses from 39 countries attended the FEND two-day conference in the historic and inspirational setting of Rome. Some delegates had come from as far as Australia, Canada, the USA and Japan. Opening remarks by FEND Chairperson, Deirdre Kyne-Grzebalski, FEND President, Anne-Marie Felton and Professor Massimo Porta from the EASD, welcomed the largest delegate attendance ever and reflected upon this as a show of solidarity in recognition of the worldwide diabetes pandemic.

The theme for the conference – "Wishes for Diabetes at the Trevi Fountain" – was referred to in terms of what has been achieved since the St Vincent Declaration of 1989, the EU Parliamentary Declaration and the UN Resolution 61/225 in December 2006, and what still needs to be achieved. The President reminded the audience of a quote from Senator Edward Kennedy – "The work goes on, the cause endures, the hope still lives and the dream shall never die". The aspirations of FEND members are to realise acceptable standards of care for people with diabetes throughout Europe and to develop the professional role of diabetes nurses through influencing health policy, education and training. Such wishes as these, and also the desire to collaborate with like-minded international organisations, were reoccurring themes throughout the conference.

Friday 5 September 2008

The diabetes nursing landscape in Italy (Daniela Cristofanelli)
The conference opening presentation from the host country highlighted the very different way diabetes care is organised in Italy in comparison with other European countries, with specialist nurses confined to bigger hospitals. Diabetes care in the primary care setting is almost exclusively provided by physicians. The National Association of Italian Diabetes Nurses formed in 1989 has worked tirelessly to improve this situation especially organising education and master classes in diabetes nursing in a variety of settings.

Dangerous liaisons #1: Diabetes and cardiac complications – Is hyperglycaemia "still" a cardiovascular risk factor?" (Professor Antonio Ceriello)
Current results from the Action to Control Cardiovascular Risk in Diabetes (ACCORD) and Action in Diabetes and Vascular Disease (ADVANCE) trials have contested the role of hyperglycaemia as a risk factor for cardiovascular disease in diabetes. However, other trials which clearly show hyperglycaemia as a risk factor for both micro and macrovascular disease cannot be ignored and we should continue to aim for HbA_{1c} levels of <6.5%. Reasons why type 2 diabetes mellitus (T2DM) especially has been seen to be less of a cardiovascular risk is possibly because those people have been already treated very aggressively for cardiovascular risk. More long-term results are needed before any relaxation on blood glucose levels are exercised. Therefore reports, especially in the media which argue that HbA_{1c} of 7.5% may be acceptable, must continue to be viewed as unproven and dangerous. The message from this presenter was to stay within normal glycaemic range for as long as possible and to avoid variability in blood glucose levels. He also emphasised that achievement of HbA_{1c} <6.5% can reduce the risk of long-term complications when it is done early and safely.

Pregnancy in type 2/ gestational diabetes: The Irish experience (Dr Brendan Kingsley)
One of the goals of the St Vincent Declaration was to achieve pregnancy outcomes for women with diabetes which were comparable to healthy women without the condition within a specified time frame. This presentation reminded the audience that such goals have not been realised. In Ireland, as in most other countries, there are still increased rates of macrosomia, and increased morbidity and mortality in pre-gestational diabetes. T2DM fared worse in terms of these complications than T1DM. To improve these results in Ireland the endocrine department had appointed dedicated staff to work towards the same glycaemic goals for their patients irrespective of diabetes type. The aim is for blood glucose results to be <5 mmols/l pre-prandial and <7 mmols/l post-prandial. To achieve this, women were asked to measure their blood glucose 7 times a day, and HbA_{1c} was measured every 4 weeks with the aim of maintaining a range

between (3.9–6%). Some women with T2DM who became pregnant stopped taking their oral hypoglycaemic medication fearing that their unborn child could be harmed. There were also issues of obesity in these women which exacerbated the problem of glycaemic control. Research seems to indicate that hyperglycaemia in the very early stages of pregnancy is implicated in poor outcomes for women and their babies. Therefore pre-pregnancy planning is an essential aspect of diabetes management and strict glycaemic control is the primary goal, through education and training of both patients and healthcare professionals.

New therapies in diabetes management: incretins, Byetta, DPP-IV (Professor Peter Flatt)

Current oral therapies for T2DM treatment rely on oral hypoglycaemics but more novel agents are needed to better preserve beta-cell function and mass. A gut peptide, Glucagon-like peptide-1 (GLP-1) has also been identified as have insulin-releasing and glucose lowering properties but degrades rapidly due to dipeptidyl peptidase IV (DPP-IV). This presentation demonstrated two methods which have sought to overcome this problem. GLP-1 mimetics have been developed which are resistant to DPP-IV action and there are also DPP-IV inhibitors which provide two possible mechanisms for new treatments for T2DM. Exenatide is the first GLP-1 mimetic but needs to be injected twice daily, although other drugs using once-daily administration are also being trialled (e.g. liraglutide). A large number of DPP-IV inhibitors are also being developed (gliptins), which serve to enhance the action time of GLP-1, and promote the length of response of insulin to meal ingestion.

The challenge of chronic disease: A WHO perspective (Dr Gojka Roglic)

Dr Gojka Roglic reviewed successful WHO campaigns against diseases such as smallpox eradication and management of leprosy. A background into the political and managerial systems of WHO were also given and the advantages of the organisation in terms of impartiality, neutrality, universality of membership and strong convening power were also presented. However, the message from this presentation was that chronic diseases, such as diabetes are still not given the same priority as communicable diseases such as HIV. This situation was made clear with the allocation of funding to the two disease areas. For every $20 spent on communicable diseases, only 50 cents is spent on chronic diseases. The 2008 WHO Action Plan for the Global Strategy adopted CVD, cancer, respiratory disease and diabetes as the main areas for concern because these diseases are associated with the highest mortality rates. WHO is working in a number of ways to address the inequality of financial investment for chronic diseases and has set up a global strategy for diet and health to influence all countries on their national agenda. So far, only 26 out of 192 countries have implemented this strategy. Delegates were urged to access the WHO website and download these strategies (http://www.who.int/chp/en). WHO also publish reports on surveillance of chronic disease risk factors including diabetes and this can be downloaded at http://www.who.int/ncd_surveillance/infobase/en/

The policy puzzle: Is Europe making progress? (Anne-Marie Felton and Dr Michael Hall)

The initiative behind this European Audit was the renewed hope that continual provision of information on the diabetes epidemic will hasten acceptance of the condition as a priority by the EU. The audit, a collaboration between FEND and the IDF provided a map of diabetes service provision in Europe to date. The documentation of national guidelines in each member state was also indicated in the audit, demonstrating those countries who perceive diabetes to be a health priority and those who still need to work towards these goals. It was also anticipated that once all national guidelines were in place for the EU25, a benchmarking activity could then be undertaken which would identify best practice and standards of care. Although the audit does not claim to be totally accurate the undeniable facts emerging from the data collection are that Europe has already exceeded diabetes prevalence rates estimated for 2025; that there is great variability on healthcare expenditure for diabetes (e.g. only 13 member states have national plans and those states without national guidelines have the worst diabetes prevalence rates). The report can now be accessed from the IDF. Inequalities in diabetes care provision still persist within the EU member states and an EU strategy is urgently needed.

Dangerous liaison #2: Renal disease and diabetes (Dr Ludwig Merker and Maria Scholz)

Continuing the theme of dangerous complications in diabetes, Dr Merker presented the high burden both in terms of psychological suffering and economic encumbrances for those people with T2DM who develop end-stage renal failure. The risk of developing this complication was argued as needing a multifactorial approach which must take into consideration race, gender, ethnicity, blood pressure control, nutritional status and blood glucose control. Early referral was also deemed an essential aspect of renal management. Educational programmes for those at risk and others already on dialysis were reported as a vital

aspect of management and in Germany this was part of the role of specialist nurses. Nurses undertake the monitoring and treatment of blood pressure, they consider insulin regimens, monitoring of sodium and fluid intake and smoking cessation. Team work was vital to improve the quality of life for people having treatment for this dangerous complication.

Diabetes education: An integral component of diabetes management (Amparo Gonzales)

The American Association of Diabetes Educators (AADE) evolved from a concept first conceived by Dr Joslin after the discovery of insulin therapy. He was instrumental in training "wandering nurses" who could go to people's homes and support those who needed to inject insulin in what was then conceived as a very serious life-threatening condition. Since those very early days, diabetes education has developed to embrace a more chronic model approach whereby the patient is at the centre of every educational process. Such a process was described in a framework known at the AADE 7, which embraces the critical aspects of living with diabetes and self-care behaviours such as healthy eating, being active, monitoring blood glucose, taking medication, problem solving, healthy coping and reducing risk. Through these tools, this presentation demonstrated that diabetes educators have transformed the healthcare provision for diabetes and subsequently improved outcomes for those with the condition. In response to audience questions, the presenter was able to confirm that this diabetes education provision was not only for those patients who had health insurance but was also provided freely to those on limited incomes by various charitable donations.

Saturday 6 September 2008

Therapeutic patient education: The importance of personal expression of fears, beliefs and hopes… (Professor Jean-Philippe Assal)

The second day of the conference began with a truly inspirational key note lecture by the former chief of the Division of Therapeutic Education for Chronic Disease at the University Hospital, Geneva. What could we learn from the experience of Frida Kahlo? Professor Assal described, through the work of Frida Kahlo, the need to express suffering in chronic illness, although the pressures of daily living promote silence because family and friends do not want to see their loved ones expressing their suffering. However if we are to promote adequate coping skills in those who are ill, we must allow them to express their suffering. Psychologists in particular can be helpful to people who need to express their suffering and this may be extended to friends and family who need to develop the skills to allow this expression. Frida Kahlo expressed such suffering through the medium of art, not in order to be an artist but as a method to help her express the suffering she endured through accident and illness during her life time. Immersion in art allowed her to escape the tragic life events she endured and express her sorrow for them. As healthcare professionals (HCPs), we may also underestimate the need of our patients to express suffering, and if we are to truly understand our patients over the course of life, we must strive to have a greater understanding of the suffering process many go through as their disease progresses. The professor received a standing ovation for the portrayal of suffering through the art of Frida Kahlo.

Standardisation of HbA_{1c} (Professor Sally Marshall)

This presentation reaffirmed the importance of measuring HbA_{1c} levels as an important tool in managing blood glucose levels in diabetes. However, until the present day, there has been no absolute standard assay which means laboratories can vary in the percentage of glycosylated haemoglobin expressed. A new standard (IFCC) has been developed which now gives results in mmols/mol rather than percentages and this will make comparisons between different laboratories much easier. The new numbers are very different and it will take time for HCPs to become accustomed to them. For a 2-year period, laboratories will be recording HbA_{1c} in both new and old figures, and education programmes will also be developed to facilitate greater understanding throughout the UK.

Stem cells – Implication for people with diabetes (Professor Chantal Mathieu)

Islet cell research was demonstrated to be a straightforward science in diabetes but the real stumbling block for people receiving stem cell implants was the need for immunosuppressive therapy. Another obstacle to transplantation was the limited availability of donors and for these reasons only 5–6 islet cell transplantations were happening on an annual basis in the presenter's therapeutic area. The major criteria which defined a "stem cell" were discussed. The cell must be able to proliferate and it must have the capacity to differentiate into different cell types. Scientific investigations to develop new beta-cells from stem cells may overcome the obstacles just discussed, especially if the cells are developed from the recipient's own body – therefore overcoming immunosuppressive problems. It has been possible to develop beta-cells which secrete insulin in the laboratory but the side-effects, such as tumourous

growths in mice, meant that there is still more work to be done. A number of scientists continue to contribute to renewed investigations into stem cells and beta-cell function and the future of this area of research remains optimistic.

IDF – A global response to diabetes education (Helen McGuire)

The message from this keynote speaker was that the IDF seeks to improve patient outcomes and standardised care through educational initiatives involving partnerships. In this manner, the IDF was identified as having similar aims and understanding as the FEND organisation. To support these aims within the IDF there are two strategies for education: the Recognition Programme and the Diabetes Centres of Education. For organisations that have an established programme of diabetes education, the IDF now have an online application process for recognition of excellence in diabetes training provision. The Diabetes Centre of Education, on the other hand, is an even greater commitment to education and involves applications from organisations committed to the advancement of educational ideals in diabetes over a 4-year term. Such strategies were presented as creating a global approach to education and ensuring that high standards of diabetes care are met at both local and international levels.

Update on SEND (Lundberg et al)

SEND stands for the Study on European Nurses in Diabetes and therefore forms an integral part of FEND's mission statement. Confusion exists around the world on the role of the diabetes specialist nurse (DSN) and subsequently there is also uncertainty on the educational level of DSNs and other professional requirements for the role. The study involves 8 European countries and is led by Professor Bert Vrijhoef in the Netherlands. The objective of SEND is to study to the nature, volume, work setting, case-mix and workload of diabetes nursing care in Europe. In doing so, SEND aims to provide scientific knowledge on the quantity and quality of the workforce of diabetes specialist nurses across the 8 participating countries. The main objective of SEND is to answer the following question: "What is the function of diabetes specialist nurses in Europe from a cross-national perspective?" At present, the study has gone through a systematic review of the literature and clarified a functional description of the DSN role. The next phase of work will take place in autumn 2008 and will be a postal survey to all DSNs in the 8 participating countries aiming to explore their role and the results will be reported at the next FEND meeting in 2009. The author urged delegates to respond to this very important survey and to also encourage their DSN colleagues to take part.

Oral presentations and master classes

A feature of the FEND conference is to encourage nurses from all over Europe to conduct good quality research to inform on best practice or change current procedures and management. It was encouraging to see the excellent quality of work undertaken by nurses in poster presentations (35) with 8 of these posters also being presented orally. Two posters below were announced winners at the conference and received a free registration and accommodation to next year's FEND conference in Vienna. The winning abstracts were on severe hypoglycaemia (Glindorf M *et al*) and barriers to integrating evidence-based practices into diabetes nurse education (Graue, M *et al*). Master classes which involved the conflict between ACCORD and ADVANCE results (Professor Bruno Verges), Insulin Pump Therapy (Rosebbom-Gilissen and van der Heyde) and Nurse Prescribing in Ireland (Maureen Flynn) were very well attended (especially on a Saturday in Rome!!) and each of them provoked lively discussion among the delegates. There was useful information (with exchange of e-mail addresses) that had the potential to encourage people to review and change their practice. This is an essential part of the FEND conference and is always popular and well evaluated.

Closing remarks

Comments by the Chairperson of FEND once again reflected the themes for this conference which were adequately addressed through key note speakers, master classes and abstract presentation. There were "wishes for diabetes" which will be continually strived for, and despite the many hills still to climb there was also inspiration demonstrated throughout the event and a readiness for renewed action. FEND tirelessly promotes acceptable standards of care for people with diabetes at a very local level through exploration of best diabetes education, and also at an international level – which will hopefully feed into EU policy. The conference provides a platform for debate at all stages of professional development – from the continually evolving role of the diabetes nurse, to the collaboration with like-minded organisations and other international stake holders. The commitment of FEND demonstrated throughout this 2-day programme, the international reputation of its keynote speakers and the encouragement of single nurse researchers in the advancement of knowledge means that this conference is now a truly established event for all diabetes nurses who are committed in their professional role. If you are a nurse working within diabetes and are reading this report you cannot afford to miss the next conference in Vienna. We hope to see you there.

Gillian A Hood and Sofia V Llahana