

Newsweet

Autumn
2010



New Zealand Society
NZSSD
for the Study of Diabetes



Editorial

Welcome to the autumn copy of Newsweet.

This edition largely contains summary information from NZSSD meeting in Hamilton, which seems to have gone extremely well. Unfortunately, I missed it because of the volcano, so I found the feed-back particularly useful.

Tim Cundy did a fantastic job rallying the troops to pay attention and submit synopses. There was so much material, I've only been able to include a small sample. Many thanks to all those who fed back to me and a very big thank you to Ali Cope-man, Susie Ryan and Paul Drury for organising such a fantastic event. The conference synopsis highlights some of the great work which is being done in the field of Diabetes here in NZ.

Hopefully, NZSSD this year will spur many of us on to plan and execute new ideas and projects for presentation next year!

Catherine McNamara



Feed-back from poster event, NZSSD Hamilton

The poster section was very popular with many enjoying the opportunity to ask questions in a more relaxed and intimate atmosphere. The posters all reflected a lot of work from a lot of people and perhaps it was just a reflection of this year's meeting in Hamilton but almost all of the papers came from the northern part of the North Island.

Margaret Dempster from Auckland reminded us of the importance of a direct telephone line manned by a Diabetes Nurse Specialist to answer questions and particularly to prioritise referrals. **Natasha Cunningham** from Waitemata noted that at least half of the referrals coming through the Diabetes Clinic actually came from pharmacists who are a real treasure in the inpatients' setting for both case finding (appropriately) and also for audit research.

Rachel Calverley, from a PHO on the North Shore, presented data demonstrating that a model that used a multidisciplinary team with nurse dietitian, podiatrist, exercise consultant, combined with a behavioural component on goal setting delivered by a health psychologist worked very well in terms of improvements in glucose control and diabetes knowledge. Exactly which component is most important is unclear though it was considered the health psychologist played an important role.

Ross Lawrenson from Waikato delivered an excellent poster on where people get their education for Type 2 diabetes in the Waikato area. It appears that most of it does come from primary care with the GP and practice nurse sharing duties on a mainly one to one basis. Only 7% receive no education. For some reason Maori patients, despite receiving the same amount of education, had lower perceived knowledge scores.

Michelle Garrett presented on behalf of the newly developed **podiatry special interest group**, which is affiliated to the NZFSD. Preliminary data was presented on regional differences in both the availability of experienced podiatrists with particular expertise in handling acute foot ulcers and amputation rates. It would appear that coordination in foot services, not surprisingly in the community is increasingly important. Criteria for referral to secondary and tertiary care and further advice on how to set up podiatry services around the country will be of interest.

Veronique Gibbons presented a poster on the barriers to insulin initiation. There were no great surprises in this general practice study in Hamilton emphasising the need to talk about insulin early. Effective marketing of insulin is key.



Shekhar Sehgel from Counties Manukau gave evidence that south Asians living in South Auckland are less likely to be prescribed insulin and more likely to receive no glycaemic medication for their Type 2 diabetes. The reasons for this will be important to ascertain.

Posters were presented on real-time continuous glucose monitoring both at Starship and as part of the porcine islet transplant programme at Middlemore. This showed that a number of hypos are asymptomatic and that hypounawareness is alive and well particularly in adults. It appears also to be useful in youngsters initiating insulin pumps with further results awaited.

There were several posters presented on diabetes in pregnancy. Of particular interest, was a paper reviewing Type 1 diabetes in pregnancy, there were two women who despite having criteria for Type 1 diabetes had long-term remission after the pregnancy, lasting three years. The proportion of cases of newly recognised diabetes in pregnancy that had Type 1 diabetes rather than Type 2 appears to be increasing gradually and it up to 8%.

Peter Mwamure presented interesting data on ethnic specific birth centiles revealing useful data on mean birth weights with Europeans slightly heavier than Maori babies but with Pacific Islanders winning the weight competition. Bigger mothers produced bigger babies? There was no significant deviation from birth weights of offspring of non diabetic mothers.

The follow up of women with gestational diabetes was covered in a poster by **Jessie Roy George** from Waikato, with some useful, practical points on the transfer of GDM patients to GP care.

Dr Rick Cutfield, Clinical Director, Diabetes Services, Waitemata DHB

Feed-back from Oral Presentations NZSSD Hamilton April 2010

The **Waikato Regional Diabetes Service** showed how linking together smaller local databases has given them a better picture of their area. Interventions and progress can be closely followed, and other regions can feel uncomfortable in the knowledge they don't have such a system. Also in line with the Waikato gift for number keeping, there were interesting data on non-traumatic amputations. Diabetes was present in a hefty 2/3 of such patients, but the good news is that the number of amputations has not risen over the last nine years. An area of further concern was the prevalence rates presented on diabetes in various Pacific Island groups. Pacific women are 3.3 times likely as their European counterparts to have diabetes. Tongan women and Niuean of both genders had the highest prevalence.

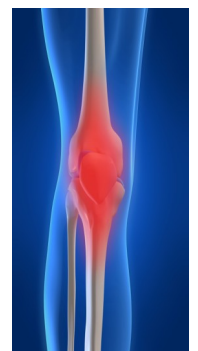
The **Christchurch Lipid and Diabetes Research Group** backed up their case for an environmental cause for Type 1 Diabetes by showing a tripling of the incidence over a 10 year period, clustering in some communities around the city and a reduction in the proportion of patients carrying susceptibility alleles.

Waitemata Diabetes Service presented DAFNE and gave a practical overview of how the course can be delivered. **Gemma Stott** was pleased to win best oral presentation for her DAFNE talk.

Colin Thompson, Diabetes Physician Counties Manukau DHB

Professor Tim Davis from Freemantle in Perth presented 'Non-conventional chronic complications of type 2 diabetes mellitus which focused on reduced pulmonary function and osteoporosis. Tim found in his own Fremantle cohort reduced FVC1, FVE1, VC and PERF with a progressive decline over 7 years corrected for age. Decline in lung function starts 2-3 years pre diagnosis and pulmonary function is a predictor of all-cause mortality. The mechanism of both obstructive and restrictive changes is most likely due to glycation of chest wall and bronchial proteins, autonomic or phrenic neuropathy and possible increased risk of infection.

Osteoporosis is already an established complication in type 1 diabetes with a 7 times increased risk of fractures. Also type 2 diabetes goes with an increased fracture risk despite a protective effect of obesity on BMD. Possible causes are decreased bone quality and strength and increased frequency of falls in patients on insulin. Glitazones have a negative effect on BMD via both osteoblast and osteoclast pathways. It is unclear if the anabolic effect of insulin and the osteogenic effect on osteoblasts of Metformin can protect against these negative effects.



Lynn Randall and Rachael Calverley presented 'Starting insulin in Primary Care' in which they promoted an educational DVD starring Rick Cutfield. It is hoped that dissemination of the DVD will provide GPs and practice nurses with the information they need to facilitate 'insulin - starts' in Primary Care setting.

Justina Wu presented the results of bariatric surgery in Waikato. She investigated factors associated with a negative outcome and showed that patients under 50 years of age seem to do best. In addition QoL and emotional scoring results can influence outcome. She highlighted the very high complication rate of surgery which is over 85%, thus emphasising the need for careful patient selection.

David Voss presented 'Renal disease in diabetes ' Micro albuminuria in type 1 diabetes typically appears after 15 years of diagnosis, only occurs in 20-30% of the patients and 4-17% will progress to ESRF in 20 years. It is often reversible either spontaneously or with strict BP, lipid and diabetes control. Combination therapy of ACE and ARB is beneficial to reduce proteinuria.

Proteinuria is unlikely to be due to diabetes when the onset takes place before 5 years of diabetes, when there's a rapid decline in eGFR decline, when urine sample contains casts or red blood cells or when patients have a systemic disease. In that case patient should be referred to a renal physician.

Renate Koops, Diabetes Research Fellow, CCRep.



Vision for the future of Diabetes Nurse Specialist Nursing

Diabetes Nurse Specialists (DNSs) already practice with a high degree of autonomy, delivering a large proportion of diabetes care across New Zealand. For the future we see a continued and increasing autonomy within an expanded scope of practice allowing for diagnosing and prescribing of treatments. Diabetes Nurse Specialists (DNS) who have completed, or are undertaking, advanced clinical education through a Masters Degree programme are well placed to provide specialised expert clinical management to patients with diabetes.

Under the proposed NZSSD Diabetes Nurse Specialist Prescribing pilot, designed to use a collaborative prescribing model and limited formulary, DNSs will be able to prescribe. This will assist in reducing barriers to health care, making best use of expert staff and optimise health outcomes for patients with diabetes across the lifespan. The nurses undertaking the pilot will need to be supported by a specialist diabetes team who will provide the DNS opportunities to consult and check prescribing with senior members of the team, such as the Diabetes consultant or Nurse Practitioner. It is envisaged that there will be both cost and time savings for patients when the DNS is able to provide the prescriptions during the consultation, avoiding extra visits and fees incurred with their General Practitioner (G.P) when collecting prescriptions. In particular this will assist populations at high risk, such as Maori, Pacific and Asian peoples and lower socio-economic groups, ensuring timely and appropriate access to specialist diabetes nursing care.

Increasing the autonomy and responsibility of the DNS role will also add to its attractiveness in terms of career options in a time of shortage of expert practitioners.

23rd March, 2010

Mary Meendering

Chairperson DNSS of NZNO

Clinical Nurse Specialist – Diabetes

Pauline Giles

Vice-chair DNSS of NZNO

**Clinical Nurse Specialist-Diabetes,
Nurse Practitioner Candidate**

NEWSWEET is the newsletter of the New Zealand Society for the Study of Diabetes (NZSSD). Contributions are welcome, please e-mail me at: catherine.mcnamara@waitematadhb.govt.nz

Recent Educational Awards

Report on the 4th Advanced Diabetes Epidemiology Workshop in Netherlands

by **Grace Joshy** (Recipient of the NZSSD Professional Development Award in 2008)

This three day workshop was organised by the European Diabetes Epidemiology Group. I was fortunate to be one of the 24 people selected to participate from around the world. Participants came from diverse backgrounds including university researchers and people involved with diabetes care in the public health sector. Workshop featured lectures on current diabetes epidemiology topics like nested case control studies, meta analysis, residual confounding, effect modification in cohort studies, diagnosis and prediction, cluster randomised trials and practical using STATA. Leading epidemiologists like Eric Brunner (University College London), Simon Griffin & Nick Wareham (Medical Research Council, UK), Ronald Stolk (UMC Groningen, Netherlands) were part of the faculty. An important part of the workshop was short presentations by all the participants, which allowed discussions about the most troublesome aspects of one's research project. The faculty debate on "If preventing diabetes is the problem, doctors are not the solution" was one of the highlights.

Information regarding upcoming events can be found on the EDEG (<http://www.edeg.org/>) or MRC (<http://www.mrc-epid.cam.ac.uk/Events/>) websites.

NZSSD Professional Development Awards

Applications are invited for awards to members of NZSSD in the general area of "Further Professional Development". The total available funding will be determined by the Executive. The general criteria for assessing applications will include the following, though it is not expected that all will be met – the committee will consider any reasonable complete application.

Health Professionals of any discipline working in diabetes in New Zealand or the Pacific

Membership of, and contributions to, NZSSD or its meetings and activities

A career intention or established career in the field of diabetes

Current, recent or planned study for further relevant professional/academic qualifications

Current, recent or planned research in diabetes care of closely related fields

Current or recent involvement in the teaching of other health professionals

Usually, a financial commitment from the home unit towards support of the candidate

Lack of previous opportunities for such study or relevant experience

Criteria will be interpreted in the light of the applicant's seniority, experience, place of work, and the proposed purpose

Examples of potential award purposes – these are meant to be illustrative, not limiting:

Study expenses (e.g. course fees, attendance costs) for higher degrees or courses of direct relevance to the individual's career/training

Visits to other specialist centres with a defined purpose relevant to the individual's career and special interests.

Attendance at international meetings – this alone will be a low priority

These awards are not intended to fund research projects. Applications close 1 July 2010 www.nzssd.org.nz/awards.html

Further information: info@nzsd.org.nz

! ASIA PACIFIC CONFERENCE ON METABOLIC SYNDROME (APCMS 2010) !

To be held from November 5-7, 2010 at the Grand Copthorne Waterfront Hotel, Singapore. The second APCMS is a 2.5-day event targeting an audience of 400 delegates from the Asia Pacific region. With its theme of "*Asian Perspectives on a World Health Challenge*", the APCMS 2010 is organised with a vision to establish a community of Asia Pacific clinicians to guide and improve understanding, prevention, treatment and outcomes of the metabolic syndrome in the region.

Visit: www.apcms.net A special rate is available to NZSSD members

NEWSWEET is the newsletter of the New Zealand Society for the Study of Diabetes (NZSSD). Contributions are welcome, please e-mail me at: catherine.mcnamara@waitematadhb.govt.nz