

Diabetes nursing research: 6th Nordic conference

Highlights from the 6th Nordic Diabetes Nursing Research PhD and Post-doc Annual Conference, 23–24 April 2013, Bergen, Norway.

The annual Nordic Diabetes Nursing Research PhD and Post-doc Conference is organised by the DiABEST Research Group (Diabetes research for BEST practice), in association with the Centre for Evidence-Based Practice, Bergen University College, Norway. The 2013 conference was held at Solstrand Bad and Conference Centre, a few miles outside Bergen.

This annual conference is a Nordic arena for discussion and dissemination of perspectives on key challenges in diabetes research on prevention, treatment and education in nursing for PhD students and Post-docs, supervisors and senior researchers. The mission of the conference is to strengthen the network of PhD students and Post-docs in the field of diabetes nursing research and to enhance collaboration between researchers in Iceland, Denmark, Sweden and Norway. Moreover, the overarching objectives of the conference are to stimulate a reflective dialogue in the field of nursing studies between researchers from the Nordic countries facilitating exchange of ideas, and to promote high-quality nursing research studies. The programme showed a wide variety of studies and methodological approaches. The projects presented were diverse in their planning, data collection or data analysis phases.

Paediatric diabetes research

Associate Professor Bjørg Karlsen, (Department of Health Studies, University of Stavanger, Norway) was chair of the first session on paediatric diabetes research. The projects were related to diabetes and younger

people and to a great extent connected to interpersonal challenges in daily diabetes management. Key research challenges were highlighted, including the need for further studies exploring shared responsibility in relation to diabetes management tasks among parents and the child or adolescent with diabetes.

Bolus insulin dosing, variable timing and the effects of missed doses on glycaemia were the topic of the presentation by Anna Lindholm Olinder (Sachs' Children and Youths Hospital, Sweden). Lost focus is the main reason for missed doses. By using qualitative interviews and grounded theory, her findings on why adolescents miss doses indicate that a clear distribution of responsibility may lead to better self-management and fewer missed doses.

Insulin delivery was the topic for the next presentation. PhD candidate Anna Lena Brorsson (Astrid Lindgren's Children's Hospital and Karolinska University Hospital, Sweden) presented her report on relationships between health-related quality of life and metabolic control in type 1 diabetes adolescents on continuous subcutaneous insulin infusion.

Finally, Senior Lecturer, Anne Solveig Iversen (Bergen University College), gave a presentation on the design of a qualitative study exploring lived experiences of parents with a child with type 1 diabetes.

Emotional and behavioural factors

It is important to recognise the crucial role of emotional factors in diabetes care in families with a child or adolescent with diabetes as well as in adulthood in order to improve diabetes-related outcomes. Research examining the relationships between diabetes-specific emotional distress, self-monitoring of blood glucose and

HbA_{1c} was presented by PhD candidate Ragnhild Bjarkøy (Bergen University College and University of Bergen). Furthermore, behavioural factors, such as dietary advice and the beneficial effects of eating more carefully, were highlighted by Anna Lena Wennberg, PhD candidate (Umeå University, Sweden). She presented her study on midwives' experiences of dietary advice when counselling women in early pregnancy.

Diabetes education, treatment and complications

On the second day of the conference there was a shift in perspective, with projects related to diabetes education, treatment and complications. Furthermore, innovative tools for patient treatment were presented as a glimpse into the technological future.

Professor Árun K Sigurdardóttir (School of Health Sciences, University of Akureyri, Iceland) chaired the sessions. The first speaker was Jannike Mohn, PhD candidate (Haukeland University Hospital, Bergen University College and University of Bergen, Norway). Preliminary results were presented from this randomised controlled trial (RCT) using guided self-determination as a method to promote improved self-management in adults with type 1 diabetes. Mohn addressed the hypothesis that there is a relationship between a better perceived health care climate, higher perceived competence in diabetes and less diabetes-related emotional distress in people with type 1 diabetes.

An evaluation of a nurse-led, patient-centred intervention directed to patients with type 2 diabetes was presented by Lena Jutterström, PhD candidate (Department of Nursing, Umeå University, Sweden). The study asks for more knowledge on factors

promoting improved teamwork between professionals and patients. In addition, more knowledge on diabetes specialist nurses' (DSNs') perspectives on their professional role as well as on the interaction between patients and providers is needed.

DSNs' experiences of practising patient-centred care in type 2 were the topic of a qualitative study reported by Eva Boström, PhD candidate (Department of Nursing, Umeå University, Sweden). The study indicates that educational issues and different approaches to diabetes self-management support are important research areas to prioritise in future studies.

Telemedicine

Telemedicine care is an upcoming research area and three Norwegian presentations provided results on this topic. Astrid Torbjørnsen, PhD candidate (Oslo and Akershus University College of Applied Sciences, and University of Oslo) presented her work in the EU project 'Renewing Health', which is an ongoing randomised controlled telemedicine intervention with three arms using a mobile-phone-based electronic diabetes diary with/without health counselling by telephone from a DSN. Key elements in this trial are to investigate whether or not health counselling is important for endured use of the electronic diary, and for the patient's health competence and acceptability. In addition, Astrid Torbjørnsen presented the ongoing process of the translation of Service User Technology Acceptability Questionnaire to Norwegian.

At the end of this session, Marjolein M Iversen, Post-doc (Bergen University College and Stavanger University Hospital) presented the feasibility of the intervention in a telemedicine follow up of patients with diabetes-related foot ulcers. This clustered RCT will investigate whether telemedicine follow-up care for people with diabetes-related

foot ulcers in primary health care is an equivalent alternative to traditional outpatient clinical follow up in specialist health care in relation to healing time. The project will contribute to increasing the focus on research related to integrated care.

Translation into practice

In order to decide on what instruments to use in different studies and achieve the aim of doing comparative analyses and designing future collaborative projects, the importance of adequate translations of relevant international questionnaires into Scandinavian languages was highlighted. Patient-reported outcome measures are essential components in research, serving to improve patient care and outcomes by giving voice to patients and their perspectives on living with the disease. Experiences with and the translation of the Diabetes Empowerment Scale-Short Form instrument in the Norwegian study in 'Renewing Health' were presented by Heidi Holmen, PhD candidate (Oslo and Akershus University College of Applied Sciences, and University of Oslo).

Associate Professor Marit Graue and Chair of the DiaBEST Research Group (Bergen University College) reflected on researching complex self-management interventions. According to the literature, what makes an intervention complex is connected with the amount of components acting together, the number of groups or organisational levels targeted by the intervention, and the amount and variability of outcomes. These aspects are carefully discussed in the Medical Research Council framework developed to help researchers and research funders to identify and adopt appropriate methods in clinical trials. According to this guidance, the necessity to pay greater attention to early phase piloting and development work, and in particular the need to adapt interventions to local settings

and situations rather than being completely standardised, were highlighted (www.mrc.ac.uk/complexinterventionsguidance).

While all of the presenters have Scandinavian as their mother tongue, they were encouraged to take advantage of the unique opportunity to present their work in English. Constructive comments raised in the discussions were mainly linked to methodology/methods, the research rationale, the structure of the research process, and how to phrase research questions more accurately and in accordance with the intended concepts of the different studies. Moreover, the speakers received feedback on their presentations, such as keeping to the time limit set, and their verbal and non-verbal performance.

Finally...

This group of Nordic researchers consists of a range of people from four Nordic countries. Some are young researchers at the outset of their career, others have started a research career at a mature age, some are senior researchers supervising their younger fellows, whereas the most prominent researchers from Norway and Sweden are pioneers of diabetes nursing research, with Professor Emeritus Berit Lundman (Department of Nursing, Umeå University, Sweden) as one of the few grandes dames in the field. This is a group with history, with a vivid present, and with a hopeful future.

Associate Professor Marit Graue, Centre for Evidence-Based Practice, Bergen University College, Norway
Associate Professor Åsa Hörnsten, Department of Nursing, Umeå University, Sweden
Associate Professor Bjørg Karlsen, Department of Health Studies, University of Stavanger, Norway
Professor Árun K Sigurdardóttir, School of Health Sciences, University of Akureyri, Iceland