On Target

Dec' 2021

Aoteara College of Diabetes Nurses Committee			
Chair	Bobbie Milne	Counties Manukau	bobbie.milne@middlemore.co.nz
Secretary	Vicki McKay	Manawatu	acdn.secretary@gmail.com
Treasurer	Nana Tweneboah-Mensah	Auckland	acdn.treasurer@gmail.com
Accreditation Coordinator	Amanda De Hoop	Manawatu	amanda.dehoop@midcentraldhb.govt.nz
Membership	Sue Talbot	Timaru	acdn.membership@gmail.com
Website	Belinda Gordge	Christchurch	
Committee member	Anne Waterman		
Newsletter Coordinator	Vacant	**This could be you?**	

Inside this issue

Newsletter Coordinator –

Only requires input 4 times per year to collate the articles.
NZNO administrator available for editing.

Medications update Webinar 3/11/21

by R Milne

Nurse Prescribing

Dr Helen Snell presented a nice summary about nurse prescribing, where it started and progress so far. In 2005 NZ nurse practitioners were able to prescribe and today there are 500 NP. A demonstration project for nurses working in diabetes health started in 2011 with 11 nurses and a second pilot in 2014 allowed 16 more to prescribe under medical. In 2016 the diabetes specific was revoked and a generic registration for prescribing was created for nurses working in primary care and speciality teams. A post grad diploma was required for this. Today there are 500 prescribers and 80 nurses prescribing in diabetes care.

The legislation that allows nurses to prescribe are Medicines Amendment Act 2013 and Medicine (Designated Prescriber – registered nurses) Regulation 2016. Speciality nurses can prescribe under supervision. This must be a medical supervisor and cannot be NP for Diabetes designated prescribers. They are able to prescribe from a limited formulary or medicines and devices, and can only prescribe for those who already have a medical diagnosis; are able to prescribe for diabetes and glycaemic control, reduction of cardiovascular risk, hypertension, dyslipidaemia, renal disease and obesity. The list of medications able to be prescribed is on nursing council website and includes sulfonylureas, metformin, insulin's, antihypertensive agents – ACEi/ARBS, CCB, thiazide diuretics, aspirin, statin, glucagon, NRT, testing strips for glucose and ketones and meters.

There is a nice slide in the presentation summarising the differences between the various prescribers. A point was made that Nursing Council says repeat prescriptions can only be made for those you see face to face after an assessment, although Nursing Council is working on having this updated in this time of Covid and Telehealth.

Applications to be able to prescribe are on the Nursing Council website. The list of medications that can be prescribed are specified by the Director of Health under the Medicines Act 1981 and published by gazette notice.- - 'Medicines List for registered nurse prescribing in primary health and specialty teams (April 2018)'. So when looking at the Nursing Council website – RN prescribing in diabetes health are able to prescribe under sections 5 and 7.

Where is the Nursing Council and Ministry of Health up to with regard to updating the list of medications that RN prescribers can prescribe?

Not a lot of progress to date. It is taking time. They had submissions and consultations and are working on the guidance document that enables RN prescribers to prescribe from the limited formulary. Pharmac has included the following for those designated – They are allowed to prescribe the medications under special authority such as the GLP1RA and SGLT2i. It is just a waiting game until it happens. A good resource that explains RN prescribing is *Key, J., & Hoare, K., (2020) Nurse prescribing in NZ. NZJM, 133 (1524).*

Dulaglutaide

Dr Ryan Paul presented on Dulaglutide for patients with type 2 diabetes and gave an update on how the medication works and how to reduce adverse effects which was very useful with its side effects. He followed on from this by talking about the Type 2 management guidance and where this medication fitted.

In New Zealand only GLP1RA or SGLT2i medications are funded by Pharmac under special authority and are the best medications following lifestyle and metformin in patients with type 2 diabetes and HbA1c >64. Just because both are not funded, the suggestion is that it should be discussed with your patients that if they can afford it, they can be on both. Funding the GLP1RA on special authority and the self-funding the SGLT2i as this is slightly cheaper, advising shopping around for the lowest price. Remembering to reinforce stopping Vildaglipten when starting GLP1RA. Resources are on NZSSD website, He Ako Hiringa, Health Navigator and Health Pathways.

Dr Paul Drury presented on ACE inhibitors and lipid lowering agents in NZ for 2022. A good summary on the various ACEi agents, ARBS and statins – how long they last, what the doses were for starting and maintenance. **His tip- know one agent of each class well with a backup agent if you cannot prescribe one for any reason.** Like most things, be aware of clinical inertia and consider the frail elderly who may be at risk from hypotension overnight. Longer acting agents are generally better and could be given at night if

appropriate. Statin effectiveness correlates to adherence and for every 1 mmol/L reduction in LDL this reduces major vascular events by 25%.

Snippets from Nov' Physicians weekend by R Milne

Targeted insulin pumps for high risk Maori and Pacifica Youth by Dr Fran Mouat (Starship)

This project aimed to improve control of diabetes for Maori and Pacific youth, to reduce hospital admissions with acute complications and address some of the ethnic and social disparities by looking at a new model of care as many of the youth did not meet Pharmac criteria for pump applications. A grant enabled them to employ a DNS 0.6 fte and obtain augmented pumps and sensors. They invited Maori and Pacific children and youth to participate. They sent information home to the family and followed them up. All were invited to a half day teaching session in a small group 5 at a time. Talked about reducing portions of carbs. Another half day was on pump teaching for the patient and the family.

DNS helped with site changes and continued education, started with 10 patients, 4 Maori and 6 Pacifica, Mean HbA1c 109. This group had 28 admissions to hospital, mean 2.8. In 3 months the mean HbA1c reduce to 96 and at 6 months to 89 and they had 2 admissions with DKA. At 12 months 9 of the 10 participants had a mean HbA1c of 81.6 (range 56 – 126). One had stopped using the pump. 2 cases were doing really well and qualified for Pharmac funded pump. It did not work for all so need to find out more about the patients and the families. The successes were: 8 are on pumps, admissions reduced, they improved self-management and improved diabetes control.

Difficulties were: poor access to devices, poor internet access, parental work commitments, parenting skills and health literacy was low and had to deal with some challenging behaviours' such as disconnecting the pump and sensor. Next steps are a phased approach with some community wrap around services involving sensor augmented pumps – this project supported increased equity of access to pumps improved care with reduce admission rates. There needs to individualise care. Had 6 months of a funded sensor after which some went onto self-fund, some used Libre and some went to finger pricking.

Martin De Bock presented some cases of patients on pumps

One case used it during surgery, had a closed loop system and taught the anaesthetist how to adjust the pump if needed whilst the patient adjusted the pump prior to surgery and the day after – the patient did not have any hypos. Some did well on pumps that talked to sensors with some help from DIY system. There is the CREATE study which will be reported on later. There has also been a letter written to Pharmac to review pump criteria special authority, a version of this is included in the newsletter as it does not promote health equity for Maori and Pacifica.

Carl Peters presented a case study on a patient admitted to hospital with diabetes who was hypoxic, febrile with thrombotic condition. As had high D Dimer was put on anticoagulant. Developed pleuritic chest pain and put on dexamethasone with large doses of insulin initially at 0.5 units per kg of body weight which increase dot 1 unit per kg of body weight - he also started dulaglutide – respiratory illness improved and he was sent home on the insulin, dulaglutide. Talked about antivirals treating Covid – it tends to be a slow burn, pts. progressively unwell so a late admission and antivirals need to be given earlier.

Tijana Vlajkovic presented about new onset diabetes in COVID 19

Covid 19 infections effect the beta cell – can cause acute pancreatitis, immune mediated destruction, beta cell damage and destruction. New onset hyperglycaemia, worsening control in people who already have diabetes. Severity of hyperglycaemia proportional to the severity of the infection. Can get new type 1 or 2 due to lifestyle changes during lockdown – reduced activity, increased nutritional intake and may also need treatment with steroids so increasing insulin resistance. In summary Covid 19 infections may increase both insulin deficiency and insulin resistance. We currently don't know enough. Diabetes is a risk factor for poor prognosis of COVID 19 and need to screen patients with Covid and after discharge for diabetes.

Report back from NZSSD Conference *(May 21)*

Kia Ora koutou katoa,

Firstly, I would like to take this opportunity to thank The Aotearoa College of Diabetes Nurses Group for providing funding which allowed me to attend this year's NZSSD in Wellington. And I must say how lucky we are in NZ to be able to continue to get together in such numbers in the pandemic environment for on-going professional development and utilise this knowledge in our daily Mahi.

Over the two days of May 14th and 15th, 2021, the NZSSD organisers brought together HCP's from both primary, secondary care experts and industry representatives for critical education and networking across New Zealand. The Hui combined expert short presentations by specialists, with structured discussion sessions as well as poster presentations which had a wide variety of interesting topics of interest.

Presentation from Health Hawkes Bay PHO presenters presented on libre sensor study of eight adult Maori participants with T1DM aged 24-29 with HBA1C ranging from 54-133 who were infrequent finger prick testers were provided with libre sensors and the overall data showed that participants felt better and were able to do more with their lives such as gain employment and be a better parent. This tool changed the patient's behaviours as the flash glucose monitoring system (FGMS) improved their diabetes management, health, quality of life and increased their confidence and well-being.

Presentation from Hauraki PHO on freestyle libre as an opportunity to improve equity and hauora offered FGMS to poorly controlled people with type 2 diabetes with HBA1C >100 with complex social circumstances and co-morbidities. The study found that average HBA1C dropped by 14.5mmol/mol with patients and whanau describing light bulb moments and their frustration turning into hope. The FGMS data enabled GP's to safely and confidently make adjustments to medications. This also enhanced education and lifestyle changes for patients.

The Cook Island perspective presented by Dr Aumea Herman discussed non-communicable diseases such as CVD, DM, cancer and chronic respiratory disease. She reported obesity is on the rise in the Cook Islands, government costs and human costs have risen exponentially over the recent years. Working class people are retiring early due to having diabetes and the biggest number by age for people diagnosed with diabetes is between 45-64 years. In 2017, 31% of children were reported to be either overweight or obese which rose to 46% in 2019. Things the health sector and health care professionals have learnt are to provide an equity lens, a fair social justice system, harness social capital responsibility, strong political, social, traditional, religious and clinical leadership. Also required are resilient health systems, clinical guidance, affordable medications and emphasis on primary prevention. Effective legislations are essential and several plans that are in place need to be implemented for better outcomes.

Topic on insulin pump by Dr Martin De-Bock (keynote speaker) presented about technology in young adults, highlighted that behaviour change is difficult and HCP's should compensate for these behaviours. To work with young adults, we should start the journey on day one and make no assumptions. Foundations of success are based on upskilling HCP's, learn from patient with diabetes and from industry partners, from trials and set appropriate expectations. He also highlighted the importance of all HCP's to keep up to date with current technology.

The projects carried out/ posters brought in by several colleagues highlighted the passion that we all share in the field of diabetes and the work done behind the scenes apart from seeing patients in both inpatient/ outpatient settings as well as providing education to other HCP's. These were effective learning tools.

The industry representatives had a large variety of information, tools, technology updates and resources and shared the latest information available in terms of patient and healthcare resources. Keeping abreast with the latest technology is vital for all HCP's to be able to continue to provide care to the population we serve for better outcomes.

By Roshni Prakash CNS Diabetes CMH/ Middlemore Hospital

Webinar Professor Jencia Wong Young Adult Type 2.

This is an extremely good webinar by Professor Wong explaining the devastating outcomes for young people with Type 2 diabetes especially compared to similar aged young people with Type 1 diabetes.

There has been a dramatic increase in the incidence of Young Adult Type 2 Diabetes since 2002. Unfortunately, mostly in Indigenous Australian's and people of Pacifica ethnicity.

The age of onset is very important as most young people will have developed hypertension after 2 years from diagnosis. The trajectory to complications is far more aggressive then Type 1 diabetes. The impact on mortality is much higher in this population once again in comparison to Type 1. The devastating impact continues with the physiology of Type 2 looking very different with the susceptibility to complications, particularly retinopathy.

Glycaemic control is usually worse, and treatment fails earlier. Despite changes to lifestyle and an increase in activity glycaemic control will deteriorate faster. Professor Wong stipulates the importance of avoiding clinic inertia as aggressive management with medication is needed for these young people.

In regard to screening, **ethnicity is the most predominate risk factor followed by BMI.** Children with a higher BMI should be screened from the age of 10 years. The Hba1c must be maintained at 6.5% or lower avoiding hypoglycaemia. Assessment must be frequent and with particular importance made to screening mental health. These young people require a lot of encouragement, as despite their best- efforts glycaemic control will deteriorate faster, and intensification of treatment maintained. Despite this all sounding very bleak excellent results have been achieved in management with the use of some of the newer medications available today.

I really encourage you to watch this webinar on the link below with kind permission of Grant Brown from Sanofi.

https://players.brightcove.net/3845398857001/Byt7bybgg_default/index.html?videoId=6247104977001

By Belinda Gordge

Special Interest Group (SIG) study days now Webinars

The SIG study days have been replaced by virtual webinars on the first Wednesday of the month. The first two have been held and proved popular. The slides are available on the NZSSD website under your log-in.

The first speaker at the first webinar was Helen Snell. Happily, she reported that the former Health Mentor online has been revamped as Health Learning Online and is now available on the NZSSD website. There are 14 hours' worth of continuing education.

Ryan Paul gave a comprehensive overview of the new T2DM guidelines. Amongst many points he explained why we should start metformin at diagnosis – partly due to clinical inertia and there is no guarantee when you will see the patient again. It also helps people not feel that T2DM is their own fault as just being told to change their lifestyle might.

Accreditation News

We currently have 55 accredited nurses - 45 Specialist RNs, 5 Specialist NPs, and 5 Proficient RNs. The August round has finished, with all 16 applicants being successful.

Congratulations to the following accredited at specialist level: Cathy Fraser-Reading, Gabriel Molina, Gina Berghan, Kerrie Skeggs, Roshni Prakash, Claire Lever, Iris Blowers, Jo Duncan, Princiy Thomas, Indra Dutt, Simran Haer, Emma Ball, Sally Morgan, and Elham Hajje. Congratulations to Navjot Kaur accredited at proficient level.

The next accreditation round opens on 24 January 2022 and closes at midday on 4 March. All required documents are available on the ACDN website and should be used over previously saved old application forms: ACDN Accreditation

Assessors

Many of our assessors are based across Tamaki Makaurau and Waikato, and I am hugely grateful that despite being in lockdown, they have all continued to provide support to the accreditation process by assessing the large number of portfolios received during the August round. Thanks to Emma Ball from Midcentral District Health Board for joining the pool of assessors.

Funding Support

ACDN has a grants fund that may be used to help cover some of the costs of accreditation or for assessor training. Details of the fund and how to apply are on the ACDN website.

By Amanda de Hoop
Coordinator - ACDN (NZNO) Accreditation Programme

Email: amanda.dehoop@midcentraldhb.govt.nz

NZSSD Foot Assessment Webinar Aug'

This was an excellent informative webinar, even at the end of a busy day!

Clare O'Shea gave an overview of the practical aspects of foot assessment and reminded us all to access the resources on the NZSSD website. She suggested that any general clinic assessment for someone with diabetes should start with the toes and work up to the head.

Vanessa Brown (Pharmacist) then discussed pharmacological management of peripheral neuropathy. Signs and symptoms were discussed, and the impact peripheral neuropathy has on quality of life including increasing risk of falls. Decreased vitamin B12 can lead to peripheral neuropathy, and especially those people with type 2 diabetes and on metformin should have an annual vitamin B12 blood test. If the level is low, vitamin B12 supplementation is recommended.

She also discussed medical management of neuropathic pain, suggesting a 50% reduction in pain is the best we can hope for. Tricyclic anti-depressants have been shown to help with nortriptyline the preferred choice over amitriptyline due to less side effects. Zostrix HP cream is also useful for those people complaining of burning feet at night. She stressed there is no place for opiods in the management of painful peripheral neuropathy.

Bobbie Milne (NP Diabetes) gave an excellent presentation of a case study highlighting the need for treatment that involves pain relief, glycaemic control and CVD risk prevention.

This webinar was information and thought provoking and I would recommend anyone to put aside time to view future NZSSD webinars

By Sue Talbot

Obituary – Professor Trish Dunning

Many of us will remember Trish Dunning as an international speaker at the NZSSD conference in Napier in 2019.

I was lucky enough to take part in one of her workshops in Melbourne while I was working in Victoria and she was developing the McKellar guidelines. She was inclusive, thoughtful and reflective, along with being a champion for people with diabetes everywhere. Diagnosed with cancer in May 2019, Professor Dunning retired in February 2021. She died in early October 2021.

Her friends and colleagues at Australian Nursing and Midwifery Federation wrote these words about her.

The former Barwon Health partnership director for the Centre for Quality and Patient Safety Research (QPS) at Deakin University's School of Nursing and Midwifery, Professor Dunning was a renowned nurse, diabetes clinician, researcher and educator.

Professor Dunning's career, which spanned more than 50 years, was the result of a childhood passion for nursing that began with her caring for some fence posts, which she liked to joke were more accepting of her ministrations than the family dog. Noting the young Trisha's passion, her father soon told her about Florence Nightingale.

Nightingale's belief that nursing is an art made a big impact on Professor Dunning's approach to her work, and as she began her studies she found herself equally inspired by Lucy Osburn, the first Nightingale trained nurse in Australia – who died from complications of diabetes.

Dedicating herself to understanding the disease and its impacts on patients, Professor Dunning became an internationally admired expert on diabetes management and care, especially for older people and those receiving palliative or end-of-life care. She developed guidelines for such care in consultation with patients and their family members, in line with her belief that the art Nightingale referred to is 'to hear' a patient's story and to 'work with them to decide their care'.

'I have always believed that nursing care is a blend of art and science,' she said, 'and both are equally important, especially helping people live with chronic conditions, like diabetes.'

Professor Dunning was a board member of Diabetes Victoria and a vice president of the International Diabetes Federation. In 2004, she became a Member of the Order of Australia for her contributions to diabetes and nursing, and in 2014 she joined the Victorian Honour Roll of Women in

recognition of her work improving the lives of people living with diabetes.

Such was Professor Dunning's impact on the field that in 2020 Diabetes Victoria established the Trisha Dunning Research Scholarship, which offers up to $60,000 annually to a person with professional nursing qualifications and experience to support them to undertake a higher degree focused on a diabetes-related topic at a Victorian university.

By Anne Waterman

Dates for your Calendar

ACDN AGM Thursday 12th May 2022

NZSSD and SIG study days 12 – 14 May 2022

The NZSSD and Study days are planned to go ahead face to face next year in Wellington at Shed 6. The study days will be a half day and there will be a Nurses day, Dietitian, podiatrists, registrars and primary health care all offering different programs. See our program below. Registrations have opened along with application for travel grants for members of NZSSD for 6 months. **Early bird registrations close 12 April**, **abstract submissions are open and close February 28th.** See website for further details. The webinars which have run this year will continue next year and the program has been circulated. Please remember to register for them so if needs be you can see them at a later time. Access is available on the NZSSD website. Look forward to seeing you there.

ACDN Draft study day	Aotearoa College of Diabetes Nurses NZNO
Thursday 12 May 2022	

PROGRAMME 2022

TIME	SESSION	SPEAKER
12:30	Introduction and welcome	ACDN committee
12:40	OSA and diabetes Snoring, HUARS, OSA, OHS and Diabetes Or Why your partner hates you!	Dr Andy Veale
13:40	Diabetes and Cardiovascular disease – Current Practice Trends	Dean Kinloch, NP cardiology
14:30	**Afternoon tea for all SIGS – Please do not change this time**	
15:00	Diabetes and Covid	Speaker to be confirmed
16:00	AGM	ACDN committee
16:30		
17:00	**End of day … head to SHED6 for NZSSD registration and industry welcome reception**	

Meri Kirihimete, Ngā mihi o te tau Hou
ACDN Committee.

thanks to our sponsors: