

On Target

July/Aug' 2022



Aotearoa College of Diabetes Nurses Committee			
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Committee members	Solita Rose Jo Duncan		
Newsletter Coordinator	Vacant		Is this for you?

Newsletter Coordinator wanted –

Only requires 1 hr input 4 times per year

NZNO administrator available for editing.



Inside this issue

- ❖ Introducing New Committee member Jo Duncan
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- ❖ National ACDN study day 12th May 2022
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 - ❖ Diabetes and Cardiovascular Disease – a presentation by Dean Kinloch, NP Cardiology by Sue Talbot
 - ❖ Dr Andy Veale's Obstructive Sleep Apnoea & Diabetes presentation synopsis by Vicki McKay
- ❖ Your Wellness

❖ NZSSD Webinars

7th Sept' - Diabetes Dietitians special interest group hosting the Management of **gastroparesis**.

Oct' 5th - **Technology** update is postponed until 2023

Nov' 2nd - Primary care special interest group and Aotearoa College of diabetes nursing hosting **Medications update**.

Let us know if there are Topics you would like covered. Email acd.secretary@gmail.com

Kia Ora everyone,

My name is Jo Duncan and I'm very honoured to be the newest committee member.



Prior to becoming a nurse, I worked for 8 years as a sales person for my family printing business in Christchurch and I also did a small stint in Auckland as a production coordinator for a NZ fashion designer.

After graduating from nursing school in 2014 I gained a position in a cardiothoracic and vascular surgical ward at Christchurch hospital where I stayed for five years. In November 2019, I took an opportunity to move to Palmerston North to start my first clinical nurse specialist role at the Diabetes and Endocrinology service at MidCentral DHB.

Three months in to starting the role New Zealand was formally introduced to the COVID-19 pandemic. While a buying and renovating a home, and completing couple of masters papers served as excellent distraction over the two pivotal years I was in Palmerston North, I soon realised that I was feeling isolated from my family and friends back in Christchurch. December last year, I moved back home to Christchurch year where I now work as CNS at the Diabetes Centre at Christchurch Outpatients.

❖ Accreditation News

We currently have 53 accredited nurses - 42 Specialist RNs, 7 Specialist NPs, and 4 Proficient RNs.

Seven applications were received for the May 2022 round and all were awarded. Congratulations to Rachael Sampson, Misty Ngatai, Joyce Roberts, Hazel Phillips, Anne Waterman, Bobbie Milne (NP), and Harpreet

Kaur for being accredited specialist diabetes nurses.

The next accreditation round is open, and closes at midday on 5 August 2022. Those of you due to submit a maintenance application should have received an email reminding you of this. All required documents are available on the ACDN website and should be used over previously saved old application forms: [ACDN Accreditation](#)

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.

Assessors

A huge thank you to our assessors and our moderator for their ongoing dedication to the accreditation process despite the challenging times we work within.

Expressions of Interest for Assessors

The College is seeking to grow the pool of approved assessors to assist with assessing accreditation portfolios.

The College would like to hear from anyone with the following skills:

- ❖ accredited as either a Proficient or Specialist Diabetes Nurse
- ❖ an approved PDRP assessor, or
- ❖ have completed the NZQA assessment module 4098 or other approved assessment programme, or willing to undertake relevant training (funding support available), and
- ❖ interested and willing to be an assessor.

Assessment of portfolios occurs twice a year. The time it takes to complete an assessment varies but in general you should allow two hours. Assessors are paid an honorarium of \$50 for each portfolio assessed.

This is an ideal opportunity to develop new skills that contribute to your own professional development, to network nationally with other members of the College, and to contribute to the professional development of your colleagues.

Expressions of interest can be directed at any time to Amanda de Hoop, Coordinator for the Accreditation Programme, by email – amanda.dehoop@midcentralthb.govt.nz

Amanda de Hoop
Coordinator - ACDN (NZNO) Accreditation Programme

Email: amanda.dehoop@midcentralthb.govt.nz

❖ **Diabetes and COVID-19 talk by Dr Marvin McCauley synopsis by Bobbie Milne**

Dr McCauley gave a very good talk on his experience with Covid in the UK.

Covid can be mild or it can be serious. – worse if person also has diabetes, cancer, stroke etc. Mortality and poor outcomes are associated with diabetes and higher still if diabetes poorly controlled. There is a higher chance of needing ventilation and higher mortality for those with HbA1c 64 – 75 versus those whose HbA1c < 64. Outcomes are much worse for the older or obese population. Whereas those younger than 65 or with normal BMI – more likely to be discharged from hospital. Those admitted with pre diabetes likely to develop hyperglycaemia when treated with dexamethasone. New onset of diabetes depends on insulin resistance, health of the beta cells, the use of dexamethasone and their recovery from the stress response. In the UK the mortality varied – in the first wave it was very high, in the 2nd wave low case numbers and in the 3rd wave high numbers of cases but mortality was less due to the vaccinations and this despite the lifting of restrictions. **Generally speaking the poorer the control of diabetes the worse the outcomes** – mortality in the UK was similar to the rest of Europe. Patients that died did so on

day 4 so needed to target interventions before this. In a trial using dexamethasone – survived longer but brought more complications.

In the first wave diabetes service were deployed but in later covid surges they were required as they were dealing with more complex patients and of course they had high levels of sickness which increased the workload. They had 3 covid wards, 70 patients had steroid induced hyperglycaemia – reviewed to see if they had had blood glucose monitoring – on 12% had. Their protocol was if they had a blood glucose > 12 twice in 24 hours they were meant to be monitored and start treatment – screen for previous hyperglycaemia, family history of diabetes, GDM, certain ethnicities – check blood glucose and do HbA1c. Then check blood glucose qid. Start insulin if > 12 based on their weight, refer to DNS, give short acting insulin 4 hourly, background insulin based on 0.3/kg/body weight – 2/3 in the am 1/3 pm – when completed dexamethasone reduce by 50% on day one, further 50% day 2 and stop insulin day 3 but observe blood glucoses. – if less than 10 follow up with GP for an annual check. If > 10 the seen by the diabetes service. Type 2 not on insulin – stop metformin & SGLT2i – start insulin as above and check for ketones. Follow up for 6 weeks with GP to restart Metformin and SGLT2i. Those already on insulin daily increase by 40% monitor and use short acting insulin. If on basal/bolus regime – maintain basal and increase short acting by 40%- if on sulphonylurea – monitor for hypos. On GLP1RA consider volume contraction and monitor. They have revised JBDS inpatient care guidance. Hydrate, address hypokalaemia and hyperglycaemia – if blood glucose < 14 reduce insulin from 0.1 kg to 0.05 kg. Treatment of osmolarity is hydrate first before starting insulin infusion unless they have significant Ketonaemia > 3 – start insulin infusion when glucose has stopped falling as if start insulin infusion too soon, will cause larger osmotic shift leading to neurological complications and even circulatory collapse. Insulin infusion is weight based 0.05 kg/kg/hr if mixed picture – hypovolaemia. Hyperosmolarity

pH < 7.3, and ketones > 3 treat as DKA and treat with fluids and insulin.

His reflections – involve the MDT early and discuss outcome with family. Long term effects of COVID are not known. Need ongoing surveillance and education.

NB Dexamethasone was used to treat COVID – 19 as it was found to reduce risk of ICU admission and death by 56% although in patient with diabetes it was associated with the need for extra medications to maintain blood glucose levels and in a minority, some developed complications, some developed steroid induced diabetes, some it worsened their control and increased mortality (Audit of Clinical Outcomes with dexamethasone in patients hospitalised with COVID-19 - RECOVERY trial).

Dexamethasone dose 6 – 12mg, half-life 36 – 72 hours. Prednisolone dose 40 – 80 mg, half-life 12 – 36 hours, hydrocortisone dose 160 – 320 mg, half-life 6 – 12 hours. All cause hyperglycaemia both in those with pre-existing diabetes and those at risk of diabetes. COVID-19 also induces hyperglycaemia, so if have covid and treated with corticosteroids – will have hyperglycaemia in many patients and may require high doses of insulin during the illness. When the corticosteroids are stopped blood glucose may return to normal – for some this can take a couple of weeks. **It is therefore recommended that HbA1c is taken on admission to define treatment and discharge strategy. So UK developed as Covid-19 diabetes de-escalation strategy.**

❖ **Diabetes and Cardiovascular Disease – a presentation by Dean Kinloch, NP Cardiology by Sue Talbot**

We were very fortunate to have Dean share his experience and knowledge relating to diabetes and cardiovascular disease and heart failure. Dean has worked in cardiology at Midcentral DHB for the last 16 years and, in recent years,

he has qualified as a Nurse Practitioner. His responsibilities include outpatient clinics in both specialist cardiology services in secondary care and in two General Practices in Palmerston North. He supports clinicians working in Primary Care teams to expand their knowledge and skills in diabetes and cardiology. He works to address health inequity for Maori including providing FSA clinics at a local Iwi Health Provider in the Manawatu.

Dean gave an excellent presentation on type 2 diabetes and heart failure, exploring epidemiology and pathophysiology.

Research has shown two thirds of people living with type 2 diabetes will develop heart failure, with Maori and Pacific people being affected most.

He likens a diagnosis of diabetes and heart failure, similar in death rate to a diagnosis of cancer, citing 50% death rate in 5 years.

He also discussed the well-known New York Heart Association (NYHA) universal definition and classification of heart failure and functional classification. He emphasized the fact that heart failure with improved ejection fraction should not be viewed as stable, but rather persistent. Medication should not be reduced. **Dean's talk reinforced the importance of holistic care when providing clinical care and support to people living with Diabetes.**

❖ **Dr Andy Veale's Obstructive Sleep Apnoea & Diabetes presentation synopsis by Vickie McKay**

Many thanks to Dr Andy Veale, Respiratory Medicine specialist, who delivered an informative and practice-relevant presentation. Key points for this attendee include:

* **It's not normal to snore – is a marker of obstruction.**

* **It's never normal to nod off in a meeting**

Always ask patients about sleep!

3 key questions:

1. How do you sleep?
2. Are you sleepy in the daytime?
3. Do you snore?

The answers to these questions will indicate if further questioning/investigation is warranted (eg Epworth Sleepiness Scale)

* **OSA is an anatomical disease** – facial shape & airways shape that predisposes people. We inherit shape of face/size of tongue from one or other parent (if your face shape is similar to a snoring parent, you'll eventually snore too)

* **OSA prevalence 12-20% in Maori & Pasifika** (size of tongue is 1/3 larger than Europeans)

* There is a continuous range of severity - symptoms develop slowly – we're good at rationalising things (tiredness due to age/we're stressed/busy) or we adapt (eg drive less)

* Strong bi-directional association between OSA and diabetes - OSA is independently related to the development of insulin resistance, increased oxidative stress and inflammation; Sympathetic outpouring - about to die - adrenaline & cortisol release, maybe dawn phenomenon may be related to OSA

* Nocturia is common in those with OSA, due to increased intra-abdominal pressure, higher secretion of atrial natriuretic peptide and arousals

* OSA is also a risk factor for hypertension - intermittent hypoxia inducing increased sympathetic tone and impaired baroreflex gain. Altered arterial vasoconstriction and vasodilation owing to stimulation of the renin angiotensin aldosterone system are also significant contributors

* Snoring/OSA vibration causes damage to endothelium of carotid & other arteries – accelerates atheroma

* When to suspect OSA: Habitual snorers; BMI >35; sleepy people; large neck size; undershot jaw – when corrected OSA resolves; Large tonsils

Treatment works ...but it has to be used!

Treatments include: weight loss; Dental splints bring tongue forward, as effective as nasal CPAP in mild-moderate disease; tongue retainer/stabiliser - holds tongue out; CPAP; sometimes 2 treatments are required (eg dental splint and CPAP)

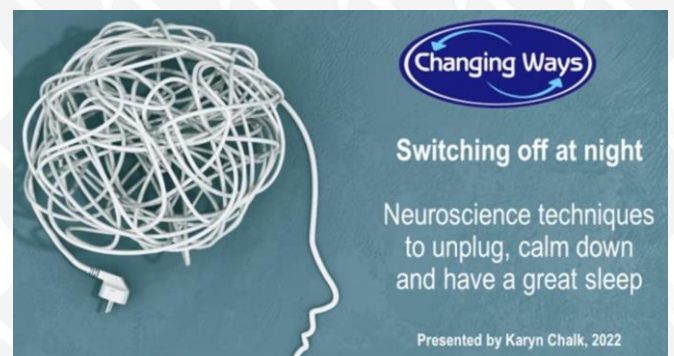
* Consider other sleep disorders – eg narcolepsy

* Referrals: Probable OSA – refer to Respiratory Department for sleep studies/polysomnography; Anatomical nasal or tonsillar obstruction – refer to ENT.

❖ Your Wellness - Are you thinking about work when trying to go to sleep at night?

Here is an invaluable resource for nurses to assist with their Wellness at this time of chronic stress due to staff shortages. Karyn Chalk ([Changing Ways](#)) offers this free online seminar on 'Switching Off at Night'.


"When it comes to having a great night's sleep all roads lead to the brain. Learn a range of research based brain care strategies to help you switch off at night. Implementing these into your life will help calm you down, soothe your brain and build resilience."




[Click here to register for a Seminar](#)

Wed 10th Aug' 6.00 - 7.00pm
Sun 11th Sept' 4.00 - 5.00pm
Wed 5th Oct' 7.00 - 8.00pm
Sat 5th Nov' 4.00 - 5.00pm

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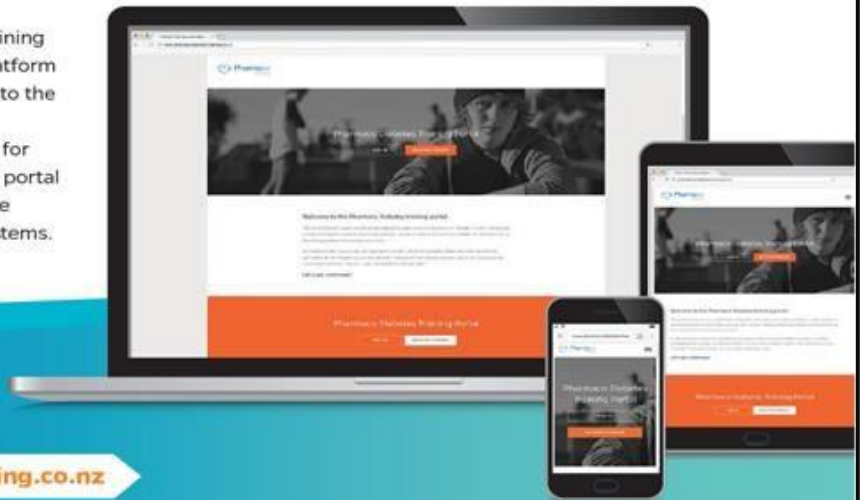

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1. Unger, J. Postgrad Med (2020); <https://doi.org/10.1080/00325481.2020.1744393>.
2. The LibreView website is only compatible with certain operating systems and browsers. Please check www.LibreView.com for additional information.
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