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EMERGENCY NURSE NEW ZEALAND

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Cover shot taken by Natalie Anderson

In this issue

Features

Regulars

A Word from the Editor

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Editor | Emergency Nurse NZ
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Letters to the Editor are welcome. Letters should be no more than 500 words, with no more than 5 references and no tables or figures.

I trust the summer holiday period has been spent successfully re-energizing. The respite is well deserved, especially by those of us who stepped up to two events of national significance - the measles outbreak in Samoa and the eruption of Whakaari, White Island.

Both events impacted significantly on the resources of the emergency departments involved in the immediate response. We can be proud of our colleagues who stepped up to help others in a time of crisis. It's what we do. But it takes a toll, particularly in small EDs like Whakatane and in Samoa, where colleagues were often treating critically unwell, family and community members known to them. In addition, the anniversaries of two recent, historically significant events fall in the summer period – these being the Canterbury and Kaikoura earthquakes and the mass shooting in the Al Noor mosque in Christchurch.

It feels like sentinel events are occurring at an accelerated rate. At the time of writing, COVID 19 looms as a significant, unprecedented challenge to the resources of our primary care services and hospitals, both in New Zealand and throughout the Pacific. At the time of writing there remains a good deal of uncertainty about our collective preparedness for a community-wide spread of this novel coronavirus. It is concerning that that emergency services, in particular our EDs, will be placed under stress going into what looks like being another difficult winter. However, there can be no doubt that nurses and their ED colleagues will again, step-up and deliver the best care in the most challenging circumstances.

Regardless, whether it's a pandemic, or an unexpected natural event - it is always a good time to check our preparedness. Do we each have the resources at hand in our workplace or at home to deal with a crisis? Perhaps it's time to revisit the plan, check the expiry dates on the supplies, have a safe place for kids to go to if we aren't home, swap out the old torch and radio batteries and ensure everything is in place and usable at a moment's notice. I have been heartened by my colleague's response to the potential of social isolation by drawing up a roster to help those of us who live nearby and may need help or support if they are unable to work. Together we are so much stronger.

Kia kaha

Matt

Editorial Info

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Submission of articles for publication in Emergency Nurse New Zealand.

All articles submitted for publication should be presented electronically in Microsoft Word, and e-mailed to mcomeskey@adhb.govt.nz. Guidelines for the submission of articles to Emergency Nurse New Zealand were published in the March 2007 issue of the journal, or are available from the Journal Editor Matt Comeskey at: mcomeskey@adhb.govt.nz Articles are peer reviewed, and we aim to advise authors of the outcome of the peer review process within six weeks of our receipt of the article. **CENNZ NZNO Membership:** Membership is $25.00 and due annually in April. For membership enquiries please contact: *Kathryn Wadsworth Email:* cennzmembership@gmail.com

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Chairperson's Report 2019 Annual General Meeting NZNO (CENNZ)

The emergency nursing profession continues to be well served by the members of the CENNZ committee – a very busy meeting was held in Wellington at the end of February, with the opportunity to share news and experiences from the various regions, and to continue to progress the work of the College.

We welcome two new representatives to the committee, Tanya Meldrum for Southern region and Louise Holland representing the Top of the South.

Key points that arose include:

- There was considerable discussion around coronavirus COVID 19 and the planning and preparation in place to address this
- The importance of ensuring safety of all staff, through adequate education, provision of resources and practice of PPE in line with recommendations
- Acknowledgment that as we prepare to address the emerging threat, EDs are also concerned about limited surge capacity with Winter approaching and in the context of already-busy workloads
- Staff turnover and - in particular - loss of senior and experienced emergency nurses is a challenge for EDs across the country, even as we try to nurture and support new graduates and those consolidating their emergency nursing skills and knowledge
- CENNZ continues to stress the importance of staff wellbeing and protection from violence and aggression; an oral submission as well as a written submission will be made to the justice sub-committee
- The importance of remembering and acknowledging the work done by nurses and the on-going impact of natural disasters and mass casualty incidents across NZ was identified, as we mark the anniversaries of the Christchurch earthquake (February 22nd) and the Mass Shooting of March 15th.

The importance of emergency nurses having a voice in the health care sector, and in the wider political and social sphere cannot be under-estimated, and as we move forward into 2020 and the challenges that this brings it is appropriate to consider what role we all play, and how we can share an understanding of this. We need to be advocates, not only for our patients, for marginalised and disadvantaged groups, but also for the emergency health sector and for the profession of emergency nursing. Your voice matters. Be heard - contribute to our journal, share your experiences and share your passion.

Dr Sandra Richardson

Chairperson

College of Emergency Nurses New Zealand

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CENNZ National Committee 2020

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Management of paediatric sickle cell disease pain in Emergency Departments in N.Z.

Abstract:
This article highlights some of the issues facing Emergency Department nursing staff when caring for children presenting with pain related to paediatric sickle cell disease. Challenges of pain assessment and scoring in children, the effects of culture, triage and analgesic administration are discussed.

Keywords: Sickle Cell, Vasoocclusive events, Pain, Emergency Departments, Nursing,

Sickle cell disease (SCD) results from inherited traits characterized by the presence of atypical haemoglobin (HbS) in red blood cells which can distort into a sickle shape upon polymerisation.

This genetic mutation is more commonly found in people of African and Arabian Peninsula descent. Stress, hypoxia, extreme temperatures, acidosis and dehydration can cause theaffected haemoglobin to polymerise and deform into a sickle shape. The haemoglobin becomes sticky and rigid impeding their passage through blood vessels. This results in vascular occlusion, tissue ischaemia, chronic haemolytic anaemia, chronic organ damage and subsequent increased risk of infections. The sickled red blood cells are fragile and destroyed by the spleen and consequently, the patient becomes anaemic and is susceptible to infections and ischaemic vasoocclusive episodes.

Episodic, non-predictable pain from tissue ischaemia and vasoocclusive episodes (VOE) is a hallmark of the disease and vasoocclusive pain can be acute and severe and last days to

weeks. A retrospective descriptive study carried out by Yusuf, Atrash, Grosse, Parker and Grant in 2010 indicated that 70% of visits to Emergency departments (EDs) by patients with sickle cell disease are as a result of these painful VOEs. These patients have the highest pain scores of all ED diagnoses (Marco, Kanitz & Jolly, 2013) and those with the highest number of pain events a year have a corresponding higher risk of early death (Ellison & Shaw, 2007). Consequently, in an attempt to improve the quality of care for sickle cell patients, guidelines to improve pain assessments and analgesic administration have been developed in many EDs worldwide. Like adults, children with SCD frequently present to EDs for pain management due to VOEs (Zempsky, Corsi & McKay, 2011). Notably, these children may not show typical features of acute pain such as tachycardia and diaphoresis as their responses may have become attenuated with chronic pain over time (Krauss, Calligaris, Green & Barbi, 2016).

In America, SCD is more commonly found amongst the African-American population and as discussed by Haywood, Tanabe, Nail, Beach and Lanzkron (2013), there are many studies that consider the perceived racial and ethnic disparities in pain management in ED within adults with SCD. In New Zealand currently, the prevalence of SCD is low, found primarily in the refugee population. As worldwide international migration increases, the prevalence of SCD will increase.

Management of paediatric sickle cell disease pain in Emergency Departments in N.Z. cont.

The same racial and ethnic disparities may not occur as in America but lack of knowledge and understanding may delay care.

Pathophysiology and disease progression in childhood

Initially a child born with sickle cell disease is protected by the presence of foetal haemoglobin (HbF). HbF prevents the polymerisation of HbS and so during the first year of life, as HbF decreases, clinical presentations of SCD occur. The first VOE is often characterised by pain and swelling in the hands and feet and occurs usually around 6 months of age. Manifestations of sickle cell disease vary as childhood progresses. Bacteraemia is more common in the first four years of life alongside splenic sequestration and stroke. As the children age, the effects of end-organ damage are more commonly found, such as renal damage and pulmonary hypertension (Teoh, 2013). By the age of 5, less than 10% of children with SCD will have splenic function and are more susceptible to infection.

Pain Assessment/scoring and triage

Patients with VOE pain are assessed initially by a triage nurse. Correct assessment, assignment of an appropriate triage code and identification of potentially high-risk complications can be key to improving care (Reddin, Cerrentano & Tanabe, 2011). Recognition and accurate assessment of pain in younger children can be complex and challenging as they are not able to verbally express the extent of their pain. Often in preverbal children, a mixture of physiological responses, excessive crying, facial grimacing and behavioural changes are considered good indicators of pain augmented by input from the child's parents. However, a visit to a busy, noisy and crowded ED can also elicit fear and anxiety and this can result in observed behavioural changes.

When assessing pain in children that present with SCD two further factors must also be considered. Firstly, these children and their parents live with chronic pain and the memory of past painful experiences and this may affect their physiological responses resulting in the clinical picture affected by fear and anxiety. Due to the acute on chronic nature of their pain, they may not exhibit expected behaviours, such as writhing in pain or crying and this can result in scepticism of the genuineness of the pain presentation.

Secondly, there is a cultural aspect of pain. Some cultures believe showing pain is a weakness and stoicism is valued. Children are taught not to show signs of pain and some cultures believe that pain is from God and so should not be treated (Walters, Kynes, Sobey, Chimhundu-Sithole, & Mc Queen, 2018).

There is no current gold standard for pain assessment in preverbal children and often the triage nurse relies on their own experience and knowledge alongside parental reports of pain and pictorial based pain scales such as modified versions of Wong-Baker FACES, (Wong & Baker, 1988).

Over the age of 7, children can usually comply with the same tools used in adults such as verbal numerical scales. Nurses may also have an unconscious bias due to their own experiences with pain and knowledge related to specific conditions.

Red flags at triage

Many of the presentations related to SCD will result in a triage 2 category of the Australasian triage scale. These guidelines define category 2 patients as those who have an imminently life-threatening condition, require an important time-critical treatment or have very severe pain (ACEM, 2001). Also supporting a triage 2 classification for many of these patients is that SCD can be considered to carry a high-risk factor for potential serious illness. Pain in SCD can affect both the macrovasculature and microvasculature in all parts of the body.

Acute pain caused by VOE, however, often involves bone with active marrow and so can present with pain most commonly in the lower back, hip, femur and knees. There can be ischaemic tissue damage, especially in the extremities, fingers, toes and priapism in boys. As well as providing adequate analgesia, it is important to consider other associated life-threatening complications.

Over the age of 2 years old, children can present with symptoms related to acute cardiac or pulmonary issues, such as chest pain, respiratory distress, fever, reduced oxygen saturation and infiltrate shown on chest X-Ray. These issues can result from fat emboli secondary to bone marrow necrosis, acute bacterial or viral infections, or sickled cells affecting the pulmonary microvasculature. Treatment focuses on increased hydration, antibiotics, treatment of pain and application of supplemental oxygen if the child is hypoxic.

Acute stroke is another potentially life-threatening complication of SCD which becomes more prevalent as the child ages. Vaso-occlusion in the cranial circulation affects perfusion and thus stroke should be considered with any new neurological changes and complaints of head pain. The treatment of choice for these patients is a blood transfusion with the goal of reducing the concentration of the HbS in the circulation.

Management of paediatric sickle cell disease pain in Emergency Departments in N.Z. cont.

Abdominal pain can indicate gall bladder disease and liver complications, but in patients with SCD is more likely to be an indication of splenic sequestration. One of the primary functions of the spleen is to sequester and destroy mutated red blood cells. Sickled red blood cells become trapped and are destroyed in the spleen, resulting in a rapid fall in haemoglobin levels, with subsequent pallor, hypovolaemia and weakness. The spleen becomes enlarged and painful.

This splenic sequestration can quickly lead to circulatory collapse. Treatment may result in splenectomy. Due to the role of the spleen in the production of lymphocytes and antibodies, children with reduced splenic function are immunocompromised and therefore highly susceptible to infection.

Sepsis should be considered in all febrile SCD patients and treated aggressively with intravenous (IV) antibiotics and fluids. Bacteraemia carries a high mortality rate. Due to their immunocompromise, the immunisation state of these children should be fully investigated and catch up immunisations considered if required.

Analgesics in ED

Reducing the time from pain assessment to analgesic administration is considered a key performance indicator in most Emergency departments. Overcrowding in EDs can have a negative effect, delaying analgesia administration (Shenoi, Ma, Syblik & Yusuf, 2011).

Minimizing time to treatment in sickle cell children is especially important as it may limit tissue damage and thus result in a better outcome for the child.

Mild to moderate pain events are generally well treated with paracetamol and ibuprofen. Opioids are used when the pain is described as moderate to severe. Opioids may be given alone or in conjunction with NSAIDs. Due to the recurrent nature of pain events in these children, health care providers must be prepared to listen to parents requesting specific analgesics and put aside their concerns relating to opiate dependency. Many children with SCD may also have a degree of opioid tolerance, and so require higher or repeated doses. Studies in America indicate there is no greater incidence of opiate addiction amongst patients with SCD than the general population (Geller & O'Connor, 2008).

Intranasal (IN) Fentanyl is often the opiate of choice for these patients as it can be given quickly and easily without the delay needed for establishing IV access. It has a rapid onset and a short duration, minimising the risk of respiratory depression due to opiate overdose. Kavanagh et al in 2015 proposed the creation of a standardized algorithm for those presenting with moderate to severe pain due to VOE. This includes two doses IN fentanyl five to ten minutes apart followed by further IV doses once IV access has been established. IN Fentanyl compared to IV morphine in a paediatric ED is found to have equivalent efficacy coupled with reduced time to analgesia alongside reduced distress in the child (Borland, Clark & Esson, 2008)

There is also evidence to support nurse initiated analgesia pathways for paediatric patients in pain (Kelly, Brumby & Barnes, 2005). These pathways appear to shorten the time from presentation to first safely administered analgesic even within the context of a crowded Emergency department (Taylor, Taylor, Jao, Goh & Ward, 2013).

Non-pharmacological interventions

Non-pharmacological approaches should also be utilised alongside pharmacological management. In children with acute pain, there can often be accompanying anxiety and distress. Physical comfort methods such as breastfeeding and cuddling may benefit children of all ages though is commonly most helpful in preschool-age children when their lack of cognitive development does not allow verbal reasoning. Infants and preschool children can be distracted with bubbles, sounds, music and books.

Heat and massage can also be helpful as this results in localised vasodilation and muscle relaxation which can increase comfort and reduce tissue damage.

Parents can be recruited to be helpful assistants dependent on their own level of anxiety. Preparation and coaching by the health professional can help parents to use more helpful language and distract the child during interventions (Cohen, 2008).

Treatment and investigations

All children presenting with pain from a VOE should be given analgesics prior to any investigations. Following this, children should have their complete blood count measured to rule out

Management of paediatric sickle cell disease pain in Emergency Departments in N.Z. cont.

an accompanying inflammatory process. Chest X-Ray can be considered if there are respiratory symptoms, chest pain or hypoxia. If the child is febrile, then urine and blood cultures should be drawn and appropriate antibiotics administered. Oxygen should only be given if the child is hypoxic as there is no documented evidence that oxygen administration has anybeneficial effects in non-hypoxic sickle cell patients. Urgent blood transfusions are not normally needed for children that present with VOEs.

Transfusions can be considered when there are severe anaemic episodes such as might be associated with splenic sequestration and when the presentation indicates ACS or an acute stroke.

IV access can be established if there may be a need for IV hydration or planned administration of further IV analgesics. Oral hydration is preferable, however, to prevent the risk of worsening pulmonary complications (Ellison & Shaw, 2007). Adequate hydration decreases sickling by causing hypotonic swelling of the erythrocytes thereby decreasing the concentration of sickled cells.

Computerized brain tomography scans should be considered when there are concerning neurological symptoms. When the child presents with acute abdominal pain FAST bedside ultrasound scan may also be useful.

Disposition.

If there are no other complications of SCD present and pain from VOE is relieved with oral therapy then the patient can be safely discharged home. Most patients, however, will need to be admitted having required repeated dose of opioids in ED. If discharged home follow up should be arranged with the clinician managing the patient's SCD.

Summary

Children with SCD often only present to EDs with acute pain when all other avenues are exhausted. As EDs become more overcrowded timely administration of analgesics must be prioritised. The consequence of deliberation over the accuracy of pain assessment tools utilised at triage and reflection of the nurses on their own attitudes towards pain can only result in more effective pain assessment for all. Acknowledgement that chronic pain and culture may affect pain behaviours leads to more accurate assessments. Implementation of nurse initiated analgesic pathways and standing orders reduces the assessment to administration time of analgesics. Non-pharmacological approaches to pain management are also useful. The consequence of all of these measures is greater patient and parental comfort and satisfaction.

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NZMAT: SAMOA 2020

Samoa bore the brunt of a Pacific-wide measles outbreak at the end of 2019. Samoa's health system was overwhelmed. The NZ Government responded to this crisis by deploying the NZ Medical Assistance Team (NZMAT) to assist delivering Samoa's mass vaccination campaign, which has vaccinated 132,935 people since November 2019.

35 doctors, nurses and support staff have deployed as part of the New Zealand Medical Assistance Team (NZMAT). The three NZMAT rotations have been worked alongside Samoan health personnel, providing support and treatment in a district hospital on Upolu and the main hospital in Apia.

Two deployments of Samoan-speaking medical professionals provide support for the measles response and across the health sector, including psychological support for Samoan health staff and affected communities.

Additionally, seven New Zealand Red Cross nurses, are working with the Samoa Red Cross on the vaccination programme and measles response.

Helen Butler is a Registered Nurse in the Auckland City Hospital Adult Emergency Department. In December last year she was deployed on her first (NZMAT) mission to Samoa to support Samoan colleagues.

This is her experience...

NZMAT: SAMOA 2020 Cont.

What was your involvement with NZMAT to date, training and preparation for this latest mission? Who made up the team?

I had initially applied for the New Zealand Medical Assistance Team (NZMAT) in 2015, and was fortunate enough to participate in the training course in December 2018. Little did I know that one year later I would be asked to join NZMAT in Samoa for the Measles outbreak, and was on the plane heading to Samoa wondering what I had gotten myself into!

I was part of Team Bravo, the second team of three that NZMAT deployed to Samoa. Team Bravo consisted of 14, made up of 3 Doctors, 7 Registered Nurses, 2 Nurse Practitioners and 2 Logisticians, and we were sent to support the local Samoan staff on the ground.

Originally my deployment was for two weeks, but this was extended for another week to work with transitioning Team Charlie, so my time in Samoa ended up being three weeks. We were on the main island of Upolu, based in the Leulumoega District Hospital roughly 30km west of Apia, that was dedicated purely to treat patients with the measles. I shared my time working between Leulumoega District Hospital and a clinic in Faleolo where we saw the non-measles cases and could see up to 60 patients a day.

What was your first impression on arrival to where you were working?

In my nursing career, I'd never seen a case of the measles. The first day of induction is an experience that I shall never forget. Within the first 10 minutes of our orientation, I was overwhelmed by seeing the effects of measles. On the first day, we lost a 17-month-old baby. We hit the ground running and were immediately seeing multiple presentations. I just remember thinking this is very sobering and that I hadn't comprehended the scale of it.

The hospital had eight beds, but we were dealing with at times up to 30-40 inpatients day, mostly young children, acute patients needing either a period of observation or admission for antibiotics and rehydration. Severe cases once stabilised, were sent to Apia via ambulance, others we were able to send home. We were discharging patients every day, which was a highlight for the local staff and us too.

Initially, the presentations were acute measles symptoms. Still, towards the end of our rotation, we saw the complications that go with measles such as serious respiratory infections – it was interesting to observe the change of presentations over the three weeks I was there, from the acute to secondary complications. Then presentations were tailing off once the vaccinations had kicked in. I'd never seen such sick children. Lifeless, flat, dry kids with fevers, with sore mouths and throats that couldn't feed, lying in the heat. We would make up ice-blocks from ORS to encourage them to drink. We relied on the families to help with feeding and giving oral fluids. There was no Radiology, CT or labs, so all the work you were doing was based on clinical judgement and skills. Air-conditioning was a treat and was present only in the ward, nurse's office and Resus. Once we got the air-conditioning working in the wards, it was a lifesaver. We did have to overflow the inpatients into the corridor where there was no air conditioning so we tried to save the ward beds for the children, but sometimes we were just not able to. If you were in Triage, you'd be sitting under a tent in the humidity, so you can imagine what it was like seeing kids with temps of 40 or more, struggling to drink and dealing with the heat.

What was the outcome? What impact did the mission have?

We got to know the kids and their families. Seeing them initially with fevers, conjunctivitis, coughing and crying, just miserable and then every day the small improvements, drinking, sitting up in bed and playing with toys. I found it satisfying to see the kids turn the corner and bounce back and then get discharged. In a few cases, you'd see mum or dad return within the week with another child that had now got measles, and that was hard on the locals and staff. Some of the challenges for me

NZMAT: SAMOA 2020 Cont.

personally being an RN in an Adult Emergency Department is that I'd not nursed kiddies for eight years. I had to refresh on normal parameters for kids' vital signs! I also realised how lucky in NZ we are to have the everyday resources at our fingertips, like equipment and diagnostic testing to help speed the diagnosis process. Oh, and of course, air-conditioning.

What did you learn from your Samoan nursing colleagues?

The local Samoan staff proved their resilience, they were working their hardest; 7 days a week, 12 or more hours a day and they had been doing this for weeks prior to our arrival. They had young families of their own but worked continuously, tirelessly and always with a smile on their face. They were our source of local information, were our interpreters and our phlebotomists when we couldn't get IV lines in the flat kiddies. They embraced us, shared their culture with us, fed us, laughed and cried with us and were invaluable and we couldn't have worked so effectively if we didn't have them.

https://www.health.govt.nz/our-work/emergency-management/new-zealand-medical-assistance-team/volunteering-nzmat

Toddler's Fracture

A toddler's fracture is an undisplaced spiral or oblique fracture of the distal shaft of the tibia with an intact fibula. The periosteum remains intact and the bone is stable. These fractures occur as a result of a twisting injury. They usually occur between 9 months and 3 years of age.

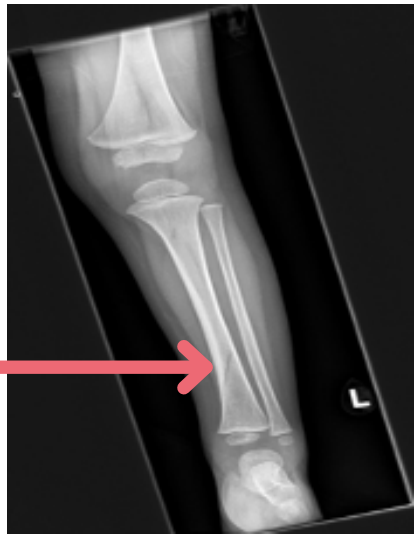
What do they look like - clinically?

Children typically present with vague symptoms. Usually they refuse to weight bear and are irritable. Occasionally there may be overlying soft tissue swelling and bruising. Bony tenderness may be elicited whilst distracting them with bubbles.

Imaging

Anteroposterior (AP) and lateral x-rays of the tibia and fibula to include knee and ankle joints should be ordered. It's also a good idea to order an internal oblique film as sometimes this is the only view which shows the fracture. Still can't see a fracture...radiographic evidence may only become apparent 7-10 days after the initial injury!

There is a minimally displaced spiral fracture of the L) mid-to-distal Tibial shaft (toddler's fracture). Alignment is anatomical.



Management

- Local practices may differ. At SSH we usually manage these in an AKPOP.
- Fracture clinic follow up in 1-2 weeks with x-rays on arrival
- Usual cast time is around 4-6 weeks.

Kathryn Johnson NP
Starship Children's Emergency Department

Regional Reports

Northland/Te Taitokerau | Auckland
Midland | Hawkes Bay/Tarawhiti
Mid Central | Wellington | Top of the South
Canterbury/Westland | Southern

Vacancy

The **Hawkes Bay/ Tarawhiti** delegate position is currently vacant. Please contact CENNZ for further information or to apply

Northland/Te Taitokerau Region

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It's not common to see northlanders doing a happy dance because of a shower of rain. ...but that was the case early last week. Unfortunately, the shower did not hang around. While many of our colleagues in other regions have been swimming in it, our drought conditions have become a significant stressor for our community.

Our expected summer population surge combined with high numbers of multi-trauma presentations challenged our resources over the holiday period. Additional staffing over public holidays helped with workload management

There is good news on the staffing situation with new SMOs and RNs joining the team. Our CNM demonstrated her less recognised talents taking part in a recruitment video to encourage applications for nursing vacancies. We have almost reached our FTE allocation. An extra RN on night shift has improved nurse / patient ratio and safety.

Training to support staff working with aggressive people or experiencing incidents of violence continues. There is a project team working in this area. Over the holiday period there was a trial of security personnel stationed in ED. Feedback included improvement in general atmosphere as well as swift response to incidents.

We are grateful to have a negative pressure cubicle available now with the arrival of COVID19 to New Zealand. The flow chart to guide initial management was updated today, expanding and stratifying the countries of concern. There is also the option to utilise a further cubicle in ICU if the presenting person has high acuity care needs or if ED cubicle already occupied. The patient remains under the care of the ED medical and nursing staff until admission is finalised.

Use of the Emergency Q app has commenced through an agreement with Whitecross. The availability of urgent care is daytime to 8pm. In the introductory phase there were a small number of vouchers allocated. The average number of vouchers is still small and dependent on the nature of ED presentations. This is not redirection but offers choice to access urgent care following triage assessment. Some people prefer to remain in the ED queue. There is ongoing review of this initiative.

Sue

Auckland Region

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Starship Children's Health

Auckland City Hospital

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Starship Children's ED

Children's ED has had a pretty busy run into Christmas, as I am sure other departments did. We did see a slight ease in presentations as children and family left Auckland for summer holidays. This really helped us try and give annual leave, as our staff were pretty tired - 2019 for CED was a busy year with higher presentations, poorer flow compliance and the many additional nursing care hours associated with this poor flow. 2020 has started with us getting prepared for COVID-19- lots of planning and then education sessions on PPE donning and doffing have occurred. A timely reminder for all our presentations required droplet precautions, not just for COVID-19. We have welcomed new staff into the department- Fellows, Nurses and a permanent Social worker (something CED has not had for many years). The CED tennis tournament is making a comeback- first held 12 years ago but now has been a few years between sets! There is a lot of focus being placed on staff wellbeing and some exciting projects to start, soon.

Anna Marie Grace

Auckland Adult ED

The past few months have been particularly dynamic for Auckland Emergency Department, with a new Nurse Unit Manager and Charge Nurse Manager. Nurses across Level 2 have been highlighting risks and advocating for safe staffing, with some success. ADHB have allocated funds for a further 20 FTE staff, to be employed over first six months of 2020. The majority of new staff will be registered nurses, supported by 3 enrolled nurses and a housekeeper to cover restocking, allowing HCAs to spend more time assisting with patient care. A new Pod system of care has been implemented, with some favourable early outcome data. We hope that the increase in staffing will lead to improvements in patient care and safer staffing. It is critical that we demonstrate that an increase in nurses is associated with a better quality of care (and not just faster turnover). We know that insufficient staffing is associated with higher mortality and missed fundamental nursing care. The work of emergency nurses needs to be more visible, and clearly associated with positive outcomes.

ADHB held its annual Health Excellence Awards in December, and Emergency Department had a bumper year, reflecting multidisciplinary involvement in important quality improvement projects, as well as individual excellence. The Healthcare Security Officers Creating a Safer ED project won both the Chief Executive Award and Excellence in the Workplace Award. Our inspirational ED staff nurse Greta Pihema won the Living our Values Award.

Staff are receiving extra training during the COVID-19 outbreak, whilst we continue to see some measles and mumps cases. It is helpful that we have some existing infrastructure and processes, which were established in response to previous outbreaks. These are now being refined to manage this emergency threat.

Natalie Anderson

Auckland Region cont.

Middlemore ED, CMDHB

Over the last few months our emergency department has seen a lot of changes: we have welcomed a new General Manager, a new Clinical Head, a new Clinical Nurse Director and a new Service Manager. Many would say with new management comes change and that is something our department is looking forward to, and is ready for. 2019 brought some really tough times to Middlemore ED; in particular, experiencing a measles outbreak with a large portion of our population being unimmunised. Along with the rest of Aotearoa, we experienced a natural disaster when Whakaari erupted in December. The courage, professionalism, unwavering dedication, empathy, solidarity and respect demonstrated by every member of our ED family was humbling and heartening. As Middlemore is the national burns centre, this disaster has had a significant impact across our services. Having EAP readily available in the department 24/7 was essential for staff wellbeing and for lessening the risk of burnout. We, as a departmental family, came together to provide uniformly excellent care throughout this tragedy.

2020 is already bringing its own challenges including our ED being the closest to Auckland's international airport. With the current health warning regarding COVDI-19, we are aware of the likely increase in presentations.

Within the department we are currently doing Plan-Do-Study-Act (PDSA) trials every Monday; this proof of concept (POC) aims to have senior led triaging at the front door of the ED. An ED SMO at triage supports our nurses while being able to make rapid assessments of patients, refer, order x-rays and chart analgesia and antibiotics. In the early days, we have found that we have reduced the number of patients in the corridor by 20%, and 94% of patients were cared for in an appropriate space.

We are also in the process of developing a nursing strategy where the focus will be on retention of nursing staff due to currently having a predominantly junior nursing workforce, as do a lot of Aotearoa EDs. Nursing wellbeing and staff burnout is something we are also addressing within the department: we have set up the pastoral care team, the Hi-five board, EAP in the department weekly and whanau huddles daily where we can check in on each other as team. As a team, we have also implemented ED Maori health promotion - Kupu hou mo to wiki. While writing this, the week's word is Neehi (nurse). At the beginning of February, we welcomed 14 NetP nurses to our emergency department. This intake, we are trialling a new orientation package in order to support these nurses and their learning better - so watch this space as we review our process. As a department, we have also seen many colleagues take maternity leave in what feels like record numbers of nurse pregnancies and with this comes our ED whanau growing that little bit more. We have also seen colleagues retire and others depart on a new journey in their career- we miss you all.

Lucy Scott

Midland Region

Kaidee Hesford
Nurse Manager

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Greetings from the midland region. It has been a glorious summer in our region bringing with it a lot of tourism and big events. Presentations in our region have been ever slowing increasing, however 6 hour LOS target in ED is becoming less and less achievable, contributed by the ever-increasing acuity of patients coming through.

As a result of our effective ED CNS model in Rotorua ED, we trailed a CNS intern program over the holiday period with 3 senior ED RN's added to the established CNS's. The feedback from both those on the trial and those in the peripheries were superb, we saw an increase in patient satisfaction and efficient see and treat times, we are now in the throws of presenting a business case to increase our permanent CNS team.

Waikato

Have welcomed two new paediatric CNS roles into the ED which is a first for Waikato ED, on top of this they are supporting a second NP who will go to council towards the end of this year. This is a very exciting time for advanced nursing roles in ED at Waikato.

Like the rest of New Zealand, Waikato continue to see large volumes present to ED, and have reached over 300 presentations in a 24 hour period (exceeding 2019 winter numbers). Waikato continue to look at winter planning and escalation planning especially as they move closer to the winter months.

Thames

Numbers of presentations over the Christmas and new year period swelled as was expected, and they again utilised CNS's cohort to stream minors. Thames CNS's are currently studying in-depth anatomy with Waikato CNS's being offered by one of their doctors. They say it's a lot of work but they are learning a lot and really enjoying it.

Thames ED are endeavoring to get more of their nurses triage trained as they have had a couple of more senior staff move on and our current staffing is quite junior. This will mean new CENNZ memberships, which is great.

Whakatane

Have had approval for 3.4 FTE of AM and PM coordinators (finally!) and another 2.6 FTE for RNs so they are in the middle of a bringing on four new staff.

Kaidee

Mid Central Region

Katie Smith
Nurse Practitioner, ED
(Knowledge & Skills Framework
& Website/Social Media)

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Midcentral DHB

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MidCentral DHB ED

Welcome to 2020! We hope you all enjoyed a safe and sunny festive period.

The summer so far has seen consistently high numbers of presentations to ED, with the regular acutely unwell medical and surgical patients, as well as trauma patients. The VRM traffic light seems to go rapidly between green and red, which is not isolated to this DHB only. Pressures with limited district nursing capacity have also seen some constraints to community referrals.

Contingency planning hospital wide see us all preparing for any COVID-19 presentations, on the back of measles screening and management. Planning and flow from the waiting room has seen appropriate management of any potential patients presenting to the ED.

However, with the on-going high presentation numbers, the staff has been consistently working busy shifts, covering leave and sick leave, and working as the amazing team they are. Staff numbers remain stable, but we have seen some staff leave for various reasons. Some of our senior nursing colleagues have left the ED to take on other clinical roles around the DHB, and we wish them all the best with their new adventures. We farewell some staff to maternity leave, and welcome others back from their leave.

Sadly, we had to say goodbye to our Co-Clinical Director, who has left to venture to the sunny South Island to seek out new adventures. We will miss you Helen, and we wish you well on your next story. Advancing Nursing practice is an exciting on-going development in the department, and sees a new NP Candidate and temporary CNS role, this year. We have had a turnover of temporary and full time ACNs and welcome all the new ACNs to the senior nursing team.

As the summer comes to a close, and we see the first days of Autumn arrive, this might be a timely reminder to look after yourselves and the team.

Katie Smith

Taranaki DHB ED

Just a quick update from us – we've had quite a nice month but have steady numbers, definitely busier in the afternoons and evenings at the moment. We are preparing for a potential pandemic, and also have planned simulations around COVID-19.

We are trialling a clinical initiatives nurse in the morning shift to support Triage and the Waiting room, but don't have this FTE officially approved yet.

Successes: We have our first NP and two ED RNS's starting their CNS training and another CNS starting the NP training which is exciting!

We now have a key Maori support person based in ED on a Friday and Saturday afternoon to provide support Maori patients by providing information, advocacy to Maori patients and their whanau whilst waiting and receiving treatment in ED. We also have an extension of our Assessment and Rehab team based in ED – this new service aims to reduce unnecessary hospital admissions and provide short term intervention following d/c from ED, looking also at doing some home visits from ED rather than keeping the patient in overnight, with the possibility of coming back to ED if the home visit fails.

Therese Manning

Wellington Region

Kathryn Wadsworth
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Another steady start to the year in the Wellington regional Emergency Departments. High acuity and steady numbers of presentations continue all be it not quite as pressured as we have had previously. For Wellington March is their busiest month of the year so they are gearing up for that.

Recruitment is the main focus for all of us with staff turnover fairly significant. It is great to see our ED nurses tackling challenges both here and overseas, the experience they take with them can be attributed to dedicated hard work and determination in an environment that insists on rapid prioritising and flexibility and a fair amount of humour. There is also the staff group that leave to find opportunities that negate the need for shift work and again take with them skills difficult to obtain anywhere else. New faces brings orientation challenges and with that the need to address professional development requirements specific to our Emergency Departments. Triage and TNCC are a strong focus and are being constantly managed to ensure a good skill mix across every shift. This may be one of the biggest challenges to achieve in departments that are constantly changing.

COVID19 is at the forefront with a huge amount of information coming into our departments. Good involvement with our infection control teams has been imperative in developing appropriate guidelines and pathways for the anticipated impact nationally. We do have the time to prepare but when it is unclear exactly what for this creates some uncertainty and nervousness amongst the team.

Hutt ED are introducing a new x-ray system this year that may impact on the already pressured department. Violence and aggression remain at the forefront of all of our minds but particularly Hutt ED following the event of last year. The challenges in and around this are on-going and constantly being worked on to reduce the risk.

The Wairarapa ED have implemented the nurse initiated x-ray requests and have been focused on appropriate staff achieving the prerequisites required to do this. The project is well underway around nurse initiated femoral nerve blocks in the ED. The crisis point the Wairarapa has reached with limited Orthopaedic cover now has two days of the week with all acute orthopaedic admissions requiring transfer to Wellington for management. The impact to the ED, the DHB and the patient is huge and it is hoped that this situation will not continue for long. Acknowledgement to our Wellington colleagues as this undoubtedly adds pressure to their stretched system also.

The year is well underway and the pace and diversity of our Emergency Department settings does not disappoint. The challenges we take on with positivity and determination to ensure our patients are managed with empathy, dignity and advancing skill.

Kathryn

Top of the South Region

Jo King
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Greetings from the Top of the South. We have survived the summer surge which has seen increasing presentations, acuity and significant numbers of multi-trauma.

This month I step down from my 4 year term on the CENNZ national committee as the 'Top of the South 'representative. It has been a rewarding experience and a privilege to network nationally. I continue to be inspired by the amazing work of emergency nurses in all corners of New Zealand.

On behalf of the Top of the South, I would like to acknowledge our colleagues in Whakatane emergency department and the care provided during the recent White Island / Whakaari tragedy. We recognise the amazing challenges you faced and the finest of emergency care you provided.

It is a pleasure to introduce my successor as CENNZ representative – Louise Holland. Louise is a staff nurse in the Nelson Emergency Department with significant experience in acute medical and emergency nursing. Louise has recently finished her Masters of Nursing and has a passion for excellence in clinical practice and will be a fabulous addition to the CENNZ team.

We have seen a considerable number of experienced emergency nurses leave our area in recent months to take up new opportunities. The loss, in years of ED nursing experience is considerable. This has led to the recruitment of a cohort of new nurses who are at the beginning of their emergency nursing careers and we welcome them to the team. The large shift in skill mix does present a challenge. However we are using it as driver to look at new ways we can accelerate the learning and development of novice emergency nurses.

The 3 Nurse Practitioner Interns across Nelson and Wairau emergency departments have recently gained NP registration. A cause for celebration, especially as I am one of them! This is a new model in our departments and hopefully we can continue to grow more advanced nursing roles in the future.

Jo

Incoming 'Top of the South' Representative

My name is Louise and I have recently been appointed as the 'top of the south' representative. I have been working within Nelson Hospitals Emergency Department for the last five years and gained my Masters in Nursing Science in 2019. We have had a challenging time over the last months with high staff turnover and increasing presentations. The opening of the Medical Admissions Planning Unit (MAPU), however, has helped with patient flow and has been a welcome addition. On another note, nurses within Wairau and Nelson have commenced Stroke Thrombolysis which has helped improve outcomes, particularly within Wairau. I look forward to working within the CENNZ committee over the coming months.

Louise

Canterbury/Westland Region

Dr Sandra Richardson
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Christchurch ED

A brief report this quarter as we all continue to deal with the on-going stresses of high patient numbers, high acuity and increasingly challenging patient interactions. While staff are able to meet their obligations with professionalism and good will, the incidents of violence and aggressive behaviour remain troubling, with a number of police complaints being laid, and requests for police assistance to remove patients who refuse to leave after being discharged from the ED. The anticipated move to our new building remains on hold in the interim, but planning for the models of care expected to encompass the combined areas and new layout are well underway. In line with all other regional areas, planning for the effective management of coronavirus covid-19 is underway, with staff education and updates and introduction of additional PPE practices and a new Healthline module.

On a positive note, we have an upcoming CENNZ triage course being hosted in Christchurch in March, the ENPC in April and the CAPEN being run in May 4th and 5th (some places still available on this course), and EMSB in August. The interprofessional trauma team training includes multi patient scenarios, and 6-7 interdepartmental simulations with input from anaesthetics, ambulance and various other specialties. Fifty nurses have now undertaken the ED Team Leader program, first introduced last year, which has been very well received.

Sandy

If you would like to submit an advertisement or article for the next issue of the journal please contact the editor matt comeskey for more information!

email Matt at: mcomeskey@adhb.govt.nz

Southern Region

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Dunedin ED

Like the rest of New Zealand, our planning for COVID19 is underway and with the constant flow of information, plans are ever-changing to meet the new up to date information. Dunedin Emergency department has the combined issue that the building we are in is struggling to meet the needs for purpose, especially around isolation requirements. The rebuild will be great when it gets here but in the mean time we have to work with what we have. The Emergency department has the benefit that, our CNM, is on the Clinical Leadership Group for the rebuild. Therefore we have an emergency nursing voice.

Recruitment continues to be an on-going focus, as we continue to experience a high turnover of staff. Staff changes have been for a variety of reasons – progression into senior nursing roles, family moving out of the area, staff taking contract work in Australia and the demand of working in the emergency environment. The skill mix of our department has been affected as a number of more-senior nurses move into further opportunities within the organisation and this has left the knowledge base a lot tighter. The senior nursing team have put significant planning into how we support new staff and progress staff through the department.

We have been fortunate that we will be able to offer all new graduates from 2019 permanent positions in 2020 with a further two new graduates starting this year.

There has been a significant change over of senior nursing staff, including a new nurse educator who has been very busy orientating new staff.

At the end of January, Anna passed her NP panel to become the second Nurse Practitioner in our department. The hospital has experienced significant capacity versus demand issues with staff at times coming on to patients waiting on inpatient beds and sleeping in inappropriate bed spaces. This has an impact on morale of staff and an impact on our ability to provide patient-centred care.

The ambulatory care area, while it has budget approval and building and property have resource consent back from the Dunedin City Council. We are waiting the GETS process to be completed. There is a significant risk to the department heading into the winter as the tentative completion date is June 2020.

The SDHB continues to have issues around Neurosurgical cover and this is affecting ED, as we are now at times having to transfer patient to Christchurch for care.

Tanya

College Activities

Triage Courses 2020

Please continue to check the CENNZ web page for ongoing updates / details:

https://www.nzno.org.nz/groups/colleges_sections/colleges/college_of_emergency_nurses/courses

Region	Dates	Venue	Closing date for booking	Closing date for payment	Registration
Christchurch	25/26 September 2020	Manawa Building [Registration 3rd Floor] Health Education & Research Facility 276 Antigua Street, Christchurch	31st July 2020	14th August 2020	BOOK NOW **15 places left as at 05/03/2020**
Lower Hutt	16/17 October 2020	The Learning Centre, 2nd Floor, Clock Tower Block, Hutt Hospital, High Street, Lower Hutt	21st August 2020	4th September 2020	BOOK NOW
Waikato	14/15 November 2020	Clinical Skills Centre (under the library) Waikato Hospital Campus, Corner Selwyn and Pembroke Street, Hamilton West	19th September 2020	3rd October 2020	BOOK NOW

Leadership in Emergency Nursing Course: Melbourne

Leadership in Emergency Nursing Course: Melbourne

CENNZ acknowledges the role that nurse leaders play in supporting the College's mission of promoting excellence in emergency nursing. With this in mind, CENNZ funds two grants for costs associated with attending the Emergency Nurse Leadership Program. This two-day course is held at The Alfred Centre in Melbourne, Australia, in collaboration with Monash University.

The inaugural grants were awarded last year to Sally Yarwood and Lynda Logan. The next course is 23-24 July 2020. Applications can be made on the web links that follow their report.

The Emergency Nurse Leadership Programme was a two-day programme jammed with thought-provoking, educational and interesting presentations and workshops, as well as the most wonderful catering. The key speakers where leaders and specialists within Alfred Care Emergency Departments with several years' experience including Professor de Villiers Smit Director of Emergency Services, Rebecca Atkins, Director of Emergency Nursing and other Deputy and Nurse unit managers. The facilitators where Emma Saddington, the Nurse Unit Manager at Sandringham Hospital and Charlotte Stevens, the Deputy Nurse Manager of Emergency Nursing who were vibrant and knowledgeable in the field, they kept the participants stimulated, striving for everyone to get the most out of the course.

The course started with a meet and greet. Following this was a presentation on fundamental leadership principals. Next was an exploration of leadership styles. Hippocrates concluded that many people share characteristics and personality traits that affect leadership. To understand ourselves better, we all undertook a colour leadership style test which gave us an insight into our leadership styles and how we could utilise this to better communicate with our team members. It helped me put in perspective how my own leadership style affects how I interact with others. In conclusion, we examined the Myers-Briggs personality test and how it can also inform our communication and leadership.

Professor de Villiers Smit presented an intriguing and thought-provoking presentation on 'Understanding Yourself'. The discussion focused on different mindsets and the ability to develop and grow. Creative thinking starting with the 'why', moving to 'how' and 'what'. He finished with an in-depth discussion on spiritual intelligence and how it is made up: this being emotional, experience, physical, technical, motivational and learning. Delving further into the difference between IQ versus emotional intelligence (EQ) and the difference in a leader's ability with greater emotional intelligence versus intellectual. A quote from this presentation that resonates was,

"IQ gets you hired; EQ gets you promoted."

It gave me food for thought, and I have gone onto further reading and research into EQ, and the impact controlling emotion can have on leadership.

The afternoon included a workshop on mindfulness and resilience. There was an interesting exploration of mindfulness and change management. This involves taking time for oneself and tools to assist in this quest. An overview of several different models of change management was provided. The most significant and most important concept of change management is finding out and communicating the 'Why'.

Leadership in Emergency Nursing Course: Melbourne

There many different models and frameworks you can utilise for process and organisational change management. We looked at Fisher's model of personal change. It reminded me of a rollercoaster of emotions or emojis in relation to employees dealing with change. It was beneficial to learn about the many change management models and how you may find one that is perfect for the change process that is to be implemented in ED. This presentation provoked me to read more around this area to find out about different models that interest me.

The PDSA cycle (plan, do, study, act) assisted in advancing our understanding on undergoing a quality improvement. A round table exercise demonstrated how this cycle works. The issues that were used for this group exercise have been taken back to the relevant areas with the hope of improving and initiating change of practice.

After another culinary feast for lunch the afternoon was kicked off with a feedback workshop.....the thing all of us dread having to do, the difficult conversation. Although there is no easy way of having a difficult conversation, a few helpful hints and role-playing simulations gave us some extra tools and ideas for future situations. The programme participants then interrogated an expert panel of leaders from Alfred Health. We picked their brains for information on leadership, how they achieved what they have achieved and insight into what drives and makes a great leader.

Overall the course was a valuable and exciting programme, the staff where fantastic and the learning was invaluable. We have both taken several things away and given us food for thought. To top of an excellent programme Alfred Care and the city of Melbourne was a fabulous host with an array of great food, sites and shopping.

A great big thank you to CENNZ for giving us this valuable opportunity.

Get full details of the Emergency Nurse Leadership Program

Get details and application forms on the NZNO Scholarships and Grants page.

AENN Training Days 2020

27 May, Wednesday	Counties Manukau DHB	Time and venue to be advised
14 August, Friday	Waitemata DHB	Time and venue to be advised
15 or 16 October, Friday or Saturday in conjunction with a paediatric symposium	Auckland DHB hosting, in collaboration	Time and venue to be confirmed

Contributions for Publication

We are always open to receiving submissions for publication. Submissions in the form of case studies, research posters and practice guidelines are welcome.

There is a modest contribution for featured articles.

You can find guidelines for publication here: https://www.nzno.org.nz/groups/colleges_sections/colleges/college_of_emergency_nurses/journal

Alternatively, email and enquire: mcomeskey@adhb.govt.nz

Helping Emergency Department Registered Nurses Manage and Minimise Burnout

By Lucy Scott Registered Nurse Middlemore Hospital Emergency Department

"Some guy threw a computer at one of the nurses in the waiting room the other day. I went in to the room after the guy did it and told the nurse do not worry about it, this is normal. It is not right, but this is what happens here." *(RN participant)*

Aim

To identify coping and preventive mechanisms that Associate Charge Nurse Managers (ACNMs) and Registered Nurses (RNs) believe management should implement to manage and minimise burnout rates.

Method

Data were collected in 2018 from RNs and ACNMs working in a city ED via a survey, the Professional Quality of Life Scale v.5 (n=83) and focus groups (n=11).

Preventive and Coping Mechanisms

Mechanisms identified to prevent and manage nursing burnout: peer support, appreciation from colleagues and patients, opportunities for professional development, rejuvenation activities, counselling services, self-rostering, resilience training, psychological empowerment, mindfulness training and mentoring programmes.

Quantitative Results

For RNs 67.4% (n=56) experience an average level of compassion satisfaction, 79.4% (n=54) experience an average level of burnout and 63.2% (n=43) experience an average level of secondary traumatic stress. For ACNMs 80% (n=12) experience an average level of compassion satisfaction, 73.3% (n=11) experience an average level of burnout and 73.3% (n=11) experience an average level of secondary traumatic stress.

Qualitative Results

Four key themes were established from each focus group: understanding the concept of ACNM/RN burnout, the context of the work environment, the stressors of being an ACNM/RN, and the need to minimise and manage ACNM/RN burnout.

"When I had a massive break down at work I had three charge nurses ring me over the next 24 hours to make sure I was alright. From my point of view when I was burnt out but they did really well by me. I was going to leave nursing. I have never been so low, I was really bad; and they were there." *(RN participant)*

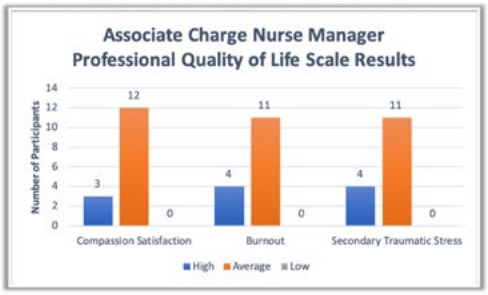
"I think compassion fatigue. I have had a month off work due to burnout because I was in tears on the floor, like I could not cope with anything, I could not cope with the normal patient load, I just could not do it because I just got too burnt out. I just could not cope with the simple things, I just did not care anymore. It just wears you down. I would go in to rooms and roll my eyes and be like why are they here. You get to that point where you are just like 'nah' and I think the environment does not help, it's high stress environment, it is just constant." *(RN participant)*

Breakdown of the Study

Phase A	Phase B
The MMHED Nurse Educator emailed all RNs and the Nurse Manager emailed all ACNMs regarding participating in the research.	Participants who participated in Part A acknowledged they wanted to participate in the focus groups.
The ProQOL5, consent form and PIS were emailed out, along with additional information about where to return the forms to. Information about participating in Part B was also emailed at this time.	A time was arranged with three ACNMs (one of two focus groups) and eight RNs (the other focus group) as to when the focus group could meet.
Participants either returned the survey and consent form to the correct place within the allocated time period or decided not to participate in the research.	Participants in the focus groups were required to sign a confidentiality disclosure prior to the focus group. A questionnaire was utilised in the focus groups to provide structure to the discussion.
Data was collated and analysed.	Data was collated and analysed.
Results, thesis and executive summary written up for MMHED.	

Registered Nurse Professional Quality of Life Scale Results

Associate Charge Nurse Manager Professional Quality of Life Scale Results



"People are not coming to us because there is an expectation that they should cope. I think that is a lot to do with it. You are in the waiting room with thirty plus patients and you should cope, you should be alright." *(ACNM participant)*

Design

A mixed-methods study design.

The Researcher

Is a NZ Registered Nurse working in Australasia's busiest ED, Middlemore Hospital. The motivation for this study comes from her experience as a RN, seeing many nursing colleagues being bullied, stressed, burnt out, overstretched, and physically and emotionally exhausted. This has led to a questioning of what support can be put in place, not only at an organisational level, but also at an individual level for each and every nurse.

Data Analysis

Analysis of Phase A, the ProQOL5, utilised computer assisted data analysis. Two pivot tables were constructed for each of the thirty questions, to allow for significant information to be extracted from the large, detailed data set. Analysis of Phase B, the focus groups, utilised thematic analysis. The focus groups were voice recorded and the recordings were transcribed by a third party. From the ACNM focus group 17 A4 pages were generated with a total of 93 comments made. For the RN focus group 34 A4 pages were generated with a total of 148 statements made.

Limitations

The research limitations were: time constraints, response rate, conflict of interest and drop outs. The study had a timeframe of 18 month with data collection restricted to three months. The researcher works at MMHED which could be viewed as a conflict interest, and there were originally five ACNM participants, but on the day of the focus group two ACNMs dropped out.

Ethical Approval

The University of Auckland Human Participants Ethics Committee on 26 February 2018, Reference Number 020682 and Counties Manukau Health on 29 March 2018, application number 595.

Conclusion

There is a need to enhance knowledge and education about nurse burnout in ED, as burnout has multiple negative implications for RNs, ACNMs and health organisations. There is a pressing need to implement change in EDs to prevent and manage nurse burnout for the welfare of nurses, patients and for the organisations as a whole. There are significant levels of nurse burnout in MMHED. The RNs in this study identified a range of preventive and coping mechanisms that RNs and ACNMs within ED employ, while also discussing the potential of this research to be a catalyst to change the culture of the nursing workforce and how the organisation and ED management deal with nurse burnout.

Snippets Autumn 2020

Use of prophylactic antibiotic in preventing complications for blunt and penetrating chest trauma requiring chest drain insertion: a systematic review and meta-analysis.

British Medical Journal. Volume 4, Issue 1

Prophylactic antibiotic administration in patients with penetrating and blunt chest injuries requiring the insertion of a chest drain was associated with a reduced risk for post-traumatic empyema and

pneumonia. Further studies should evaluate the optimal type, dose, and duration of antibiotic given to patients with chest trauma requiring chest drain insertion.

https://tsaco.bmj.com/content/4/1/e000246

What is the impact of pre-hospital blood product administration for patients with catastrophic haemorrhage: an integrative review.

Injury, Int. J. Care Injured 50 (2019) 226–234

Catastrophic haemorrhage is recognised as the leading cause of preventable death in trauma and is also prevalent in medical and other surgical aetiology. *Prehospital blood product transfusion is increasingly available for both military and civilian emergency teams.* Hospitals have well-established massive transfusion protocols for the resuscitation of this patient group, however the use and impact in the prehospital field is less understood.

https://www.ncbi.nlm.nih.gov/pubmed/30578085

Interventions to reduce Staphylococcus aureus in the management of eczema.

Cochrane Database Systematic Review. 2019 Oct 29. 2019(10).

Staphylococcus aureus (S. aureus) can cause secondary infection in eczema, and may promote inflammation in eczema that does not look infected. There is no standard intervention to reduce S. aureus burden in eczema. It is unclear whether antimicrobial treatments help eczema or promote bacterial resistance. This is an update of a 2008 Cochrane Review. The authrors conclude there is insufficient evidence on the effects of anti-staphylococcal treatments for treating people with infected or uninfected eczema. Low-quality evidence, due to risk of bias, imprecise effect estimates and heterogeneity, made pooling of results difficult. Topical steroid/antibiotic combinations may be associated with possible small improvements in good or excellent signs/symptoms compared with topical steroid alone. High-quality trials evaluating efficacy, QOL, and antibiotic resistance are required.

https://www.ncbi.nlm.nih.gov/pubmed/18646096

Low Back Pain in the Emergency Department: Prevalence of Serious Spinal Pathologies and Diagnostic Accuracy of Red Flags - A Systematic Review.

American Journal of Medicine. 2019 Jul 3

Very little evidence is available on the prevalence of serious spinal pathologies and the diagnostic accuracy of red flags in patients presenting to the emergency department (ED). This systematic review aims to investigate the prevalence of serious spinal pathologies and the diagnostic accuracy of red flags in patients presenting with low back pain to the ED.

We found a higher prevalence of serious spinal pathologies in the ED compared to the reported prevalence in primary care settings. As the diagnostic accuracy of most red flags was reported only by a single study, further validation in high-quality prospective studies is needed.

https://www.ncbi.nlm.nih.gov pubmed/31278933?dopt=Abstract

Lascarrou JB, Merdji H, Le Gouge A, et al. Targeted Temperature Management for Cardiac Arrest with Non-shockable Rhythm.

New England Journal of Medicine. 2019 Oct 2.

Snippets Autumn 2020 Cont.

Moderate therapeutic hypothermia is currently recommended to improve neurologic outcomes in adults with persistent coma after resuscitated out-of-hospital cardiac arrest. However, the effectiveness of moderate therapeutic hypothermia in patients with nonshockable rhythms (asystole or pulseless electrical activity) is debated.

Among patients with coma who had been resuscitated from cardiac arrest with nonshockable rhythm, moderate therapeutic hypothermia at 33°C for 24 hours led to a higher percentage of patients who survived with a favorable neurologic outcome at day 90 than was observed with targeted normothermia. (Funded by the French Ministry of Health and others; HYPERION ClinicalTrials.gov number, NCT01994772.).

https://www.ncbi.nlm.nih.gov/pubmed/31577396?dopt=Abstract

Diagnosis of urinary tract infection in older persons in the emergency department: To pee or not to pee, that is the question

EMA: Emergency Medicine Australasia. Vol 31:3 2019

There is significant room for improvement of ED assessment of UTI in older persons with an imperative to assess clinical probability of UTI prior to ordering urine microscopy and culture. The current practice of widespread, indiscriminate testing of urines for UTI in older persons risks avoidable morbidity for individuals and may contribute to increasing prevalence of multi-resistant organisms. Furthermore, anchoring onto a diagnosis of UTI in settings where this is not clinically supported, means that the true underlying cause of the persons presentation may go unrecognised and untreated.

https://onlinelibrary.wiley.com/doi/full/10.1111/1742-6723.13376

Methamphetamine presentations to an emergency department: Management and complications

EMA: Emergency Medicine Australasia. Vol 31:4 2019

The main toxicity seen with methamphetamines is acute behavioural disturbance, which is managed well with sedation. Complications, apart from rhabdomyolysis and acute kidney injury, are rare. Most patients are managed within the ED and discharged home.

https://onlinelibrary.wiley.com/doi/10.1111/1742-6723.13219

Inhaled Methoxyflurane Provides Greater Analgesia and Faster Onset of Action Versus Standard Analgesia in Patients With Trauma Pain: InMEDIATE: A Randomized Controlled Trial in Emergency Departments.

Annals of Emergency Medicine October 2019

This was a randomized, controlled study that enrolled adult patients with acute moderate to severe (score ≥4 on the 11-point Numeric Rating Scale) trauma-associated pain in 14 Spanish emergency departments. Patients were randomized 1:1 to methoxyflurane (up to 2×3 mL) or standard analgesic treatment.

The results support consideration of methoxyflurane as a nonnarcotic, easy-to-administer, rapid-acting, first-line alternative to currently available analgesic treatments for trauma pain.

https://www.sciencedirect.com/science/article/pii/S0196064419306146

Snippets Autumn 2020 Cont.

Ketamine for emergency sedation of agitated patients: A systematic review and meta-analysis.

American Journal of Emergency Medicine. November 2019.

Prior studies suggest that ketamine is effective for acute agitation in the emergency department (ED) and prehospital settings. This systematic review and meta-analysis aims to evaluate the rate of sedation and need for airway management in patients given ketamine for management of acute agitation.

https://www.ncbi.nlm.nih.gov/pubmed/31902698

Examining the relationship between triage acuity and frailty to inform the care of older emergency department patients: Findings from a large Canadian multisite cohort study.

Canadian Journal of Emergency Medicine. 2019 Nov 13:1-8.

The 2016 Canadian Triage and Acuity Scale (CTAS) updates introduced frailty screening within triage to more accurately code frail patients who may deteriorate waiting for care. The relationship between triage acuity and frailty is not well understood, but may help inform which supplemental geriatric assessments are beneficial to support care in the emergency department (ED). The study objectives were to investigate the relationship between triage acuity and frailty, and to compare their associations with a series of patient outcomes.

https://www.cambridge.org/core/journals/canadian-journal-of-emergency-medicine/article/examining-the-relationship-between-triage-acuity-and-frailty-to-inform-the-care-of-older-emergency-department-patients-findings-from-a-large-canadian-multisite-cohort-study/B3666EC5CA07DF8760D05C91E5C5C74D

Effectiveness of Acute Care Remote Triage Systems: a Systematic Review.

Journal of General Internal Medicine. 2020 Jan.

Technology-based systems can facilitate remote decision-making to triage patients to the appropriate level of care. Despite technologic advances, the effects of implementation of these systems on patient and utilization outcomes are unclear.

Overall, most studies did not demonstrate a decrease in primary care (PC) or emergency department (ED) utilization, with some studies showing a significant increase. Evidence suggested local, practice-based triage systems have greater case resolution and refer fewer patients to PC or ED services than regional/national systems. No study identified statistically significant differences in safety outcomes.

The review concluded there was limited evidence that remote triage reduces the burden of PC or ED utilization. However, remote triage by telephone can produce a high rate of call resolution and appears to be safe. Further study of other remote triage modalities is needed to realize the promise of remote triage services in optimizing healthcare outcomes.

https://www.ncbi.nlm.nih.gov/pubmed/31898116

What are you looking at?

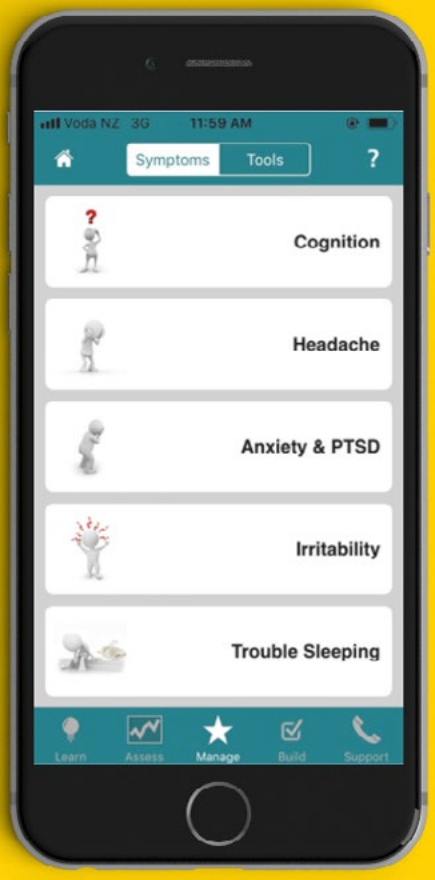
Concussion Coach: app.

Recovery from concussion varies widely between individuals. I find it interesting how often there is a weak relationship between the degree of trauma and the path to recovery. Seemingly innocuous trauma can cause ongoing problems; and yet I've meet patients who have been subjected to significant trauma and who have made a comparatively rapid recovery. For this reason, I find it challenging knowing how to advise patients discharged from ED with apparently minor concussion and what timeframe of recovery they should expect - particularly when we are asking them to self-report symptoms.

This app may be useful. Users can assess and track symptoms using the neuro-behavioural symptom inventory (NSI). You can set reminders to your phone to monitor progress. The app includes a set of suggested tools that address each problematic symptom. For example, a user may list headache on a sliding scale of intensity as a symptom of concern – in which case the app will suggest a 10 minute guided mindfulness exercise for distraction and symptom management. The next time the user logs on, they may choose to rate the headache at a different intensity, in which case a different tool is suggested. Some of the tools can be linked to the users own files of soothing audio and pictures.

There are however, some gaps in the programme's application. For example, the app does not specifically address sports related concussion, nor does it have advice on graduated re-entry to sport. This is likely because it is primarily written for American military veterans. The app was written in 2013, it looks a bit dated. It may also be a bit too wordy for some users on some pages. Additionally, it is somewhat contradictory to be advising users to minimise their screen time (as I routinely do) and then give them a screen-based programme to help them. These reservations aside, - and given how difficult to get patient accepted into ACC funded concussion clinics, this app is helpful for people who want to quantify and manage their symptoms, to track their progress to recovery.

Available, free, in the Apple and Android stores.



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