BACCN

British Association of Critical Care Nurses

BACCN Virtual Conference

Critical Care Nursing: The Next Decade

ABSTRACT BOOK 2020

14th & 15th September 2020
Brought to you online

Contents

S01

Professor Dame Elizabeth Nneka Anionwu DBE FRCN, Emeritus Professor of Nursing at the University of West London (UWL)

BIOGRAPHY

Elizabeth was inspired to become a nurse at the young age of four because, whilst she was in care, a 'wonderful nursing nun' treated her childhood eczema in an expert and sensitive manner. Born in Birmingham in 1947, she identifies herself as of Irish/Nigerian heritage and started work for the NHS as a school nurse assistant in Wolverhampton at the age of 16.

Elizabeth put a substantial amount of her life into her work as a nurse, health visitor and tutor working with black and minority ethnic communities in London. 'People from diverse cultures are not always valued and still sometimes just seen as problems,' she says. In 1979, she helped to establish in Brent the first nurse-led UK Sickle & Thalassaemia Screening and Counselling Centre. In 1988 she was awarded a PhD from the Institute of Education, University College London (UCL). From 1990-1997 she worked at the Institute of Child Health, UCL as a Lecturer then Senior Lecturer in Community Genetic Counselling. She has written extensively and is a co-author with Professor Karl Atkin of the book 'The Politics of Sickle Cell & Thalassaemia' published in 2001 by the Open University Press.

Elizabeth was honoured with a Damehood (DBE) in the 2017 Queen's New Year's Honours List for her services to nursing and the Mary Seacole Statue Appeal. The Queen's Nursing Institute awarded her a Fellowship (FQNI) in October 2017. In 2001 she was awarded a CBE for services to nursing. In 2004 she was presented with the Royal College of Nursing Fellowship (FRCN) for her work in the development of nurse-led sickle cell and thalassaemia counselling services and education and leadership in transcultural nursing. In July 2018, as part of the celebrations for the 70th Anniversary of the National Health Service, Elizabeth was included in the list of the 70 most influential nurses and midwives in the history of the NHS.

S02:

Richard Trimlett, Consultant Cardiac Surgeon & VA ECMO Lead; Royal Brompton Hospital

BIOGRAPHY

Richard spent more than 18 years, working in cardio-thoracic centres specialising in heart and lung transplant, ventricular assist devices, ECMO (both VA & VV) and various other methods of support including Impella and Destination Devices, both in the UK and the USA. He was responsible for the setting up and running of an ECMO service which grew out of the existing VAD Programme. Richard has chaired sessions at international meetings on VA-ECMO and VAD support, published in peer-reviewed journals and written book chapters on this subject. He also has an ongoing research project in the field of additive manufacture as applied to mechanical support pump and technology design with an interest in destination therapy.

Richard has long been an advocate for the development of advanced nursing alongside and within current/future services for patients on mechanical devices and regularly directs training for nurses around ECMO support with a focus on safe rapid cannulation techniques. He also is a visionary of the future utilising 3-dimensional printing and CAD design for the development of new surgical techniques and processes. He has a passion for utilising innovation to save the lives of those in extremis pushing the boundaries of possibility.

S03:

Dr. Mandy Odell, Nurse Consultant, Critical Care at Royal Berkshire NHS Foundation Trust

BIOGRAPHY

Mandy has worked in critical care for nearly 40 years; including both intensive care and critical care outreach. She has been a nurse consultant since 2001.

Her main focus is the improvement of the care of critically ill patients on the general wards through expert role modelling, education, and support; as well as the facilitation and development of Critical Care Outreach, Advanced Nurse Practice and Hospital at Night.

Mandy was the Chair of the BACCN from 1999-2002, secretary of NORF between 2005-2006, the first nurse member of the Intensive Care Society Council from 2008 - 2011 and an inaugural member of the International Society for Rapid Response Systems from 2013.

Her PhD research focussed on ward nurses compliance with rapid response protocols, and following on from that has set up the first system in the UK that allows patients and their families to directly call the Critical Care Outreach team. Her team won a national award for this 'Call 4 Concern'© (C4C) service in 2011.

S04:

Bryn Baxendale; Consultant Anaesthetist & Trent Simulation & Clinical Skills Centre at Nottingham

BIOGRAPHY

Bryn is a Consultant Anaesthetist at Nottingham University Hospitals NHS Trust (NUH). His clinical work is primarily covering emergency, major trauma and vascular surgical services. He helped design the Trent Simulation & Clinical Skills Centre at NUH and has been Director of this regional facility since it opened in 2004. In 2009 he was appointed as an Honorary Professor of Clinical Simulation at the School of Psychology, University of Nottingham. He became the inaugural President of the Association of Simulated Practice in Healthcare (www.aspih.org.uk) from 2009-14, which is now the leading UK organisation addressing the use of simulation to enhance professional training and patient safety in healthcare. He currently co-chairs the ASPiH Special Interest Group (SIG) in Human Factors & Ergonomics and is the clinical lead for the MSc in Quality and Patient Safety Improvement at the University of Nottingham.

In July 2019 he was elected onto the Board of the Global Network for Simulation in Healthcare (www.gnsh.org) which is a collaborative organisation bringing together international healthcare and patient safety organisations, national simulation societies, and industry leaders seeking to design and apply simulation-based interventions to address major global healthcare issues. He has current national roles with Health Education England and the Royal College of Anaesthetists related to the strategic implementation, quality assurance and evaluation of simulation-based and immersive learning technologies within healthcare. He has advisory roles on patient safety and Human Factors with the Royal College of Surgeons of Edinburgh and the Royal College of Physicians Joint Advisory Group on Gastrointestinal Endoscopy.

He is interested particularly in the development of individual, team-based and organisational resilience and exploring how systems design (Human Factors) can influence performance and well-being at a local and system-wide level.

S05:

Megan Brunson: President of the American Association of Critical Care Nurses

BIOGRAPHY

Since 2007, Megan has been the night shift supervisor in the cardiovascular ICU (CVICU) at Medical City Dallas Hospital. From 2000-2007, she was charge nurse/night shift for the CVICU at Emory Saint Joseph's Hospital in Atlanta, after completing two years as the night shift team leader in the telemetry unit at Texas Health Arlington Memorial Hospital. During more than 20 years as a night shift nurse, she has focused on securing professional development resources for nurses in a 24/7 care environment.

Actively involved with AACN for more than 15 years, Megan is a member of the Atlanta Area and Dallas Area chapters, serving as president of the Atlanta Area Chapter in 2007. She has presented many times at AACN's National Teaching Institute & Critical Care Exposition, speaking on leadership development for chapters.

Megan is also a member of the Clinical Nurse Leader Association, American Nurses Association and Texas Nurses Association.

As a nurse researcher, Megan was the investigator for a 2006-2007 study to determine which interventions post-cardiac surgery patients perceived as best to quench their thirst with the least amount of nausea/vomiting, and a study in 2012-2013 on the effect of ambient noise levels on patients' night time sleep patterns.

In 2016, she earned the HCA North Texas Division Excellence in Nursing Professional Mentor Award, and she received the Lois Robillard Nurse of the Year Award from Medical City Dallas in 2009. She earned a Master of Science in Nursing with a concentration on leadership from Saint Xavier University in Chicago and a Bachelor of Science in Nursing from Valparaiso University in Indiana.

Nicki Credland: Chair of the British Association of Critical Care Nurses

BIOGRAPHY

Nicki initially completed her nurse training at the University of Hull, followed by a BSc (Hons) in Critical Care. She then took a MMedSci Advanced Nursing Practice at the University of Sheffield. Following a PG Cert in Education and another in research she is now undertaking a PhD exploring recognition and response to clinical deterioration using implementation science. Her clinical background is in intensive care and latterly critical care outreach. Nicki is now a Senior Lecturer and Head of Department for the Faculty of Health Sciences at the University of Hull. As Chair of BACCN Nicki represents critical care nurses both nationally and internationally.
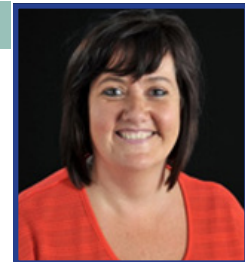
Serena O'Brien: Chair of the Irish Association of Critical Care Nurses

BIOGRAPHY

Serena O'Brien has 20 years' experience in critical care nursing which began at The Alfred Hospital, Melbourne, where she completed her post graduate diploma in advanced nursing. During her 10 years at The Alfred, Serena worked in a surgical ICU and in the latter four years, was employed as a Clinical Nurse Educator with a interest in cardiothoracic nursing.

In 2009, she returned home to Ireland to take up her current role as the ECMO (Extracorporeal Membrane Oxygenation) Co-ordinator at the Mater Misericordiae University Hospital, and working with Dr Edmund Carton, Consultant Intensivist, developed Ireland's national adult ECMO service. She has presented at several meetings both nationally and internationally in relation to ECMO practice.

Serena completed her MSc by research degree in 2015 at University College Dublin where she investigated the long-term health-related quality of life of ECMO survivors in Ireland.

She is the current chair of the IACCN (Irish Association of Critical Care Nurses) and an active committee member of ICUsteps Dublin.

Workshop Abstracts

W01: Continuous, Individualized Ventilation Support with Platform Based Tilt guided by Electric Impedance Tomography

SPONSORED BY: **LINET** Group

Dr. Mikulas Mlcek Ph.D. Charles University Prague

Lateral tilt is widely known as a tool for the prevention of pressure injuries or for assisting in the moving and handling of patients and reducing the risk of musculoskeletal injuries to medical professionals.

However, evidence suggests that lateral tilt and body position has a significant effect on mechanical ventilation and its distribution, therefore it can be utilized to individualize the ventilation care. In this session, we will demonstrate and interactively discuss the effect of lateral tilting on mechanical ventilation and explain how it can be used with critically ill and postoperative patients.

W02: Express Education Workshop Refresher Session - What Matters? Initiatives to aid staff wellbeing and retention

SPONSORED BY: **NHS North Bristol NHS Trust**

Morwenna Maddock, North Bristol NHS Trust

Day 1 is a refresher for those that attended this popular workshop last year and an insight to those of you who missed out on why North Bristol NHS Trust felt the need to form their own dedicated wellbeing team to address staff retention and team morale. Here they share some of the initiatives they have implemented over the past 2 years.

W03: Evidence based ICU protocols for prevention of CRBSI and their maintenance during pandemic crisis

SPONSORED BY: **3M**

Dr Philippe Eggimann, M.D

COVID-19 has impacted us all and especially the ICU
As you address new challenges in reducing the infection risk, we can partner with you to help prevent Catheter Related Blood-stream Infection (CRBSI), improve outcomes and increase patient safety.
With an expert in the field, we present clinical best practice on how to develop and maintain ICU protocols for prevention of CRBSI even in the pandemic setting.

Preventing Infections in the ICU
At the end of this 40 minutes course, you will:
1. Learn about key elements of IV catheter insertion and maintenance bundles.
2. Hear best practice on long term sustained reduction of CABSI.
3. Understand how to maintain patient safety and improve clinical outcomes even in pandemic setting.

W04: Getting to know the determinants of VILI: Driving pressure and mechanical power

SPONSORED BY: **Dräger**

Luigi Camporota MD, PhD, FRCP, FFICM – Intensivist Guy's and St Thomas' NHS Foundation Trust

Every-one knows ventilators can induce lung injury but what can we do about it? In this workshop we will review lung protective ventilation strategies, including the importance of setting the right PEEP and the impact of Timing.
How can we use the information from the ventilator, and the selection of tools provided to help us in our management decisions?
In addition, we will discuss how driving pressure helps in the setting of tidal volume but not PEEP, and finally how measuring mechanical power can give us some insight in to total inspiratory energy.

W05: Express Education Workshop - What matters for ICU nurses during high intensity?

SPONSORED BY:

NHS North Bristol NHS Trust

Nick Ambler, Consultant Clinical Psychologist North Bristol NHS Trust

Day 2 builds on the ICU wellbeing project at North Bristol Trust and reports on how this evolved through the events of the

last few months.

W06: Keeping cool post resuscitation": Therapeutic Hypothermia and Targeted Temperature Management

SPONSORED BY:

stryker

Robert Furby, Rampton Hospital

To understand the definition Target Temperature

Management

W08: Critical Care Rehabilitation: A Call to Action

SPONSORED BY:

Hillrom

Kate Tantum, Plymouth Hospitals NHS Trust and rehab team

A synopsis of the recent evidence base related to ICU rehabilitation the impact of MDT working in ICU. Concluding with a case study demonstrating the value of holistic goal setting and Inter-professional team work.

W09: Bottoms Up; Tummy Time" Lessons learned in the midst of a global pandemic

SPONSORED BY:

arjo

Ian Naldrett, Royal Brompton Hospital and University of West London

Symposium 1: Clinical academic careers in critical care

C05: Lessons learned from the pre-doctoral journey

Harriet Noble
Pre-doctoral clinical academic fellow; Critical Care Research Nurse
Kings College Hospital, London

Biography
Harriet trained at Bournemouth University completing her BSc and MSc in Adult nursing by 2011. She worked at East Surrey intensive Care unit for 3 years before moving to King's College Hospital as a critical care research nurse. Whilst at King's she has been awarded the NIHR pre-doctoral clinical academic fellowship. She was also a successful candidate for the Winston Churchill Memorial Trust Travel fellowship this year. Her main interest are the design of a critical care unit and using outside space to enhance the patient experience.

Abstract
In this presentation Harriet Noble will share her experiences of applying for and undertaking the NIHR Pre-Doctoral Clinical Academic Fellowship and will provide tips on how to create a successful application.

C06: Influencing and bringing your manager and teams with you

Dr Louise Bramley
Head of Nursing and Midwifery Research; Associate Professor
Nottingham University Hospitals NHS Trust; University of Nottingham

Biography
Dr Louise Bramley is the Head of Nursing and Midwifery Research at Nottingham University Hospitals NHS Trust (NUH). She is a senior nurse with a wealth of clinical, research and leadership experience in acute care and healthcare of older people and currently combines research and practice within a large NHS Trust. Louise received her PhD from the University of Nottingham in 2016 and holds an honorary Associate Professor appointment at the University of Nottingham. Louise was recently recognised by the NIHR as one of their 70@70 Clinical Academic Nursing Research Leaders. She is passionate about building capacity and capability for front-line nurses and midwives to undertake primary research that improves patient outcomes and care and recently co-founded the East Midlands Clinical Academic Practitioner Network.

Abstract
In this presentation, Dr Louise Bramley will share learning from work conducted locally, regionally and nationally on opportunities for developing clinical academic careers within the NHS. She will provide an overview of 10 years of development at Nottingham University Hospitals NHS Trust, insights from a regional initiative 'the IMPAACT Programme' and the national Clinical Academic Practitioner Apprenticeship standard development.

C07: Lessons learned from the pre-doctoral journey

Dr Joseph Manning
NIHR HEE ICA Clinical Lecturer; Clinical Associate Professor;
Charge Nurse - Paediatric CCOT
Nottingham Children's Hospital, Nottingham University Hospitals NHS Trust
Children and Young People's Health Research, School of Health Sciences,
University of Nottingham

Biography
Joseph is a Clinical-Academic Nurse with a strong and growing national and international profile within the fields of nursing, paediatric critical care, and clinical academic capacity and capability development. A committed paediatric critical care nurse, Joseph continues to have meaningful concurrent engagement in clinical practice and research, holding frontline care and senior leadership roles at Nottingham Children's Hospital and an Associate Professorship at the University of Nottingham.

He leads a clinically focused programme of research that has demonstrable impact on the experiences, outcomes and lives of children, young people and their families that access acute and critical care.

Joseph has more than £2.8 million in competitive grant income, experience of working with international teams, a range of high quality outputs, and evidence of demonstrable impact from his research in clinical practice.

Aligned to his clinical interests, the core of Joseph's programme is critical care survivorship with a focus on understanding and enhancing long term outcomes of children and their families. He is the first registered children's nurse in the UK to be awarded an NIHR HEE ICA Clinical Lectureship and as part of this award is leading the OCEANIC multicentre study that aims to map outcome trajectories of children and families in the first year post-PICU discharge.

In 2020 he was recognised by the Chief Nursing Officer for England with a CNO Gold award for his lifetime leadership and contribution to Clinical Academic Careers and Nursing Research.

Abstract
In this presentation Dr Joseph Manning will share his insights and experience in navigating the landscape of the post-doctoral clinical-academic pathway. He will discuss the 'IDEAs' framework as a way of strategically developing a career beyond the doctorate, providing examples of how he used this in his own development.

Symposium 2: National and International Programmes for Critical Care research in Paediatrics and Adults

C13(1): Childhood critical illness: Developing the evidence base to comprehend and support long term health outcomes

Dr Joseph Manning
NIHR HEE ICA Clinical Lecturer; Clinical Associate Professor;
Charge Nurse - Paediatric CCOT
Nottingham Children's Hospital, Nottingham University Hospitals NHS Trust
Children and Young People's Health Research, School of Health Sciences,
University of Nottingham

Abstract
In this session Dr Joseph Manning will briefly explore the global landscape and contemporary focus for research within the paediatric critical care context. He will then talk about his own developing programme of work that focuses on understanding and supporting the long term health outcomes of children and their families following Childhood Critical Illness/injury including the NIHR funded OCEANIC study.

C13(2): SEISMIC – Study to Evaluate the Introduction of nurse Staffing Models in Intensive Care
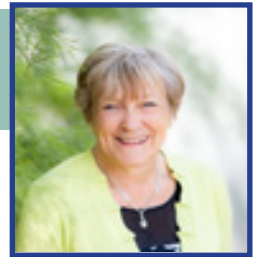
Professor Ruth Endacott
Plymouth University Clinical School/Monash University, Melbourne

BIOGRAPHY
Ruth Endacott is an experienced researcher, her work focuses mainly on organisational aspects of critical care related to patient safety and quality of care. She has experience in multi-centre and multi-country studies and is currently leading a NIHR-funded study to design a trial of nurse staffing models for intensive care.

Abstract
In this session Prof Endacott will discuss the programme of work developed for an NIHR funded study - SEISMIC: a Study to Evaluate the Introduction of a Staffing Model in Intensive Care and also outline changes made to reflect the staffing model introduced during the COVID 19 pandemic.

C01: vCreate – Video Recordings and Photos for family members of ICU patients

Sheila Rodgers, Dr. Corrienne McCulloch, Dr. Helen Jordan, Dr. Jenni Tocher, Lisa MacKinnon, Dr. Elizabeth Wilson, Joanna Tait, Ashley Thomson, University of Edinburgh / NHS Lothian

Introduction: One of the biggest changes to care in UK ICUs during the CoVID-19 pandemic is restrictions on family members visiting with visit allowed only in exceptional circumstances or at the very end of life. We therefore implemented a new secure method of asynchronous video communication called vCreate.

Significance: Whilst regular contact is maintained with family members via telephone however lack of face to face communication added to anxiety and distress for patients, relatives and staff. Family members struggled to comprehend the severity of the illness and therefore found it extremely difficult coping with end of life discussions. The Critical Care Family Needs Inventory (CCFNI) (Molter, 1979) identifies family needs for proximity, assurance and information which are usually met through visiting (Ågård et al., 2019). Additionally, family members use visiting to 'see with their own eyes' what is happening and make sense of the information they have been given (Plakas et al., 2013).

Method: vCreate has been used in UK neonatal ICUs but was an entirely new concept for adult ICU. Regular pre-recorded videos and photos were sent with patient updates and enable family to see the care they were receiving. We added a function for family members to send in videos and photos to be shared with the patient.

Result: We have received outstanding feedback from family and staff and noticed a significant improvement in family members' understanding of the patient's time in critical care and appreciated the severity of COVID-19 disease.

Conclusion: We plan to continue this method of communication once visiting is able to return to normal to supplement our usual communication and to meet the needs of family members who may be unable to visit for a variety of reasons and to build a video diary for the patient. Plans are in progress to evaluate the impact and acceptability of vCreate.

References: Ågård, A.S., Hofhuis, J.G., Koopmans, M., Gerritsen, R.T., Spronk, P.E., Engelberg, R.A., Curtis, J.R., Zijlstra, J.G. and Jensen, H.I., (2019). Identifying improvement opportunities for patient-and family-centered care in the ICU: Using qualitative methods to understand family perspectives. Journal of critical care, 49, pp.33-37

Molter NC. (1979) Needs of relatives of critically ill patients: a descriptive study. Heart Lung.;8:332–339.

Plakas, S., Taket, A., Cant, B., Fouka, G. and Vardaki, Z., (2014). The meaning and importance of vigilant attendance for the relatives of intensive care unit patients. Nursing in critical care, 19(5), pp.243-254.

C02: Family involvement in delirium management

Jasmin Kaur, City Hospital & Dr Veronika van der Wardt, Philipps-Universität Marburg

Background: The PAD guidelines highlight the lack of evidence regarding the role that families play in reducing the stress of critically ill patients and facilitating non-pharmacologic interventions to manage delirium (Devlin et al. 2018).

Aim: The aim of this study was to explore the perspective of former intensive care unit patients and family on delirium management and involvement of family in managing delirium.

Method: Nine semi-structured, qualitative interviews took place following the patient's follow up clinic. These interviews were audio-recorded, transcribed and analysed using thematic analysis. Participants were interviewed after their follow up clinic appointment in the outpatients department of a hospital in the East Midlands, England.

Results: Patients and their family members expressed that family has a valuable role to play in management of delirium in the intensive care unit. However, education and guidance is needed to support the family in how it can be managed by using knowledge about the patient's life and personality.

Implications for practice:
• Former patient and family agree that family do have a role to play in delirium management as they know the patient better than anyone else and can reduce their anxiety, additionally they may be better able to provide delirium management that health care professionals. Therefore, family should be encouraged to use their knowledge of the patient and be involved in delirium management.

• Education and guidance is needed for family's to know how to be involved in delirium management, furthermore support is needed for family members of critically ill patients. Therefore, family meetings should take place in a timely manner to ensure the family understand what is happening with their loved one and this is an opportunity to educate the family on delirium management.

• Family should be supported to cope with the patient's critical illness and manifestations of delirium, through counselling and explanation of what to expect during their illness and delirium

Reference: Devlin, J. W., Skrobik, Y., Gélinas, C., Needham, D. M., Slooter, A. J. C., Pandharipande, P., Watson, P.L., Weinhouse, G.L., Nunnally, M.E., Rochwerg, B., Balas, M.C., van den Boogaard, M., Bosma, K.J., Brummel, N.E., Chanques, G., Denehy, L., Drouot, X., Fraser, G.L., Harris, J.E., Joffe, A.M., Kho M.E., Kress, J.P., Lanphere, J.A., McKinley, S., Neufeld, K.J., Pisani, M.A., Payen, J.F., Pun, B.T., Puntillo, K.A., Riker, R.R., Robinson, B.R.H., Shehabi, Y., Szumita, P.M., Winkelman, C., Centofanti, J.E., Price, C., Nikayin, S., Misak, C.J.. Flood, P.D., Kiedrowski, K., Alhazzani W., 2018 Clinical Practice Guidelines for the Prevention and Management of Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption in Adult Patients in the ICU. Crit. Care. Med. 46, e825-e873.

C03: Nurses' perspectives on spiritual care in ICU: results of a survey

Ann Price, Canterbury Christ Church University

Background: Spirituality has many facets but is focused on the meaning and purpose in a person's life which may include a religious perspective (Westera 2017). Jones (2020) notes that intensive care unit (ICU) nurses need awareness of spirituality and different faiths to support patients and relatives during their stay.

Aim: This presentation explores intensive care nurses' perceptions of spiritual care.

Method: A quantitative online survey was used including:
- Measure staff spiritual care competency using The Spirituality and Spiritual Care Rating Scale (McSherry et al 2002)
- Assess the staff perception of delivery of spiritual care in the ICU
Registered nurses currently working in an intensive care unit within the United Kingdom were invited to participate via social media platforms. Data was collected between March-June 2020 and analysis using SPSS software.
Ethical Approval was gained through Canterbury Christ Church University. The survey was distributed via British Association of Critical Care Nursing.

Results: 37 registered nurses working in a critical care areas completed the survey. 89.2% felt that people could be spiritual but not religious showing a diverse view of spirituality. 62.2% of participants stated that they had not received education on spiritual care related to ICU, commenting that it was mixed in with psychosocial aspects. Despite the lack of training 73% said they thought spiritual care was important and that they assessed spiritual needs. However, 64.8% of respondents did not feel competent to provide spiritual care but some reported good engagement with chaplaincy; two respondents commented that it was not nurses role and an additional burden.
Further analysis will be conducted to explore these issues during the presentation related to demographic data and the rating scale.

Implications for practice: Incorporating spiritual care and utilising local resources seems to be key to providing individual care. Recommendations for spiritual care practice and future work will be considered.

Reference: Jones, C. (2020) 'Where do critical care relatives turn for spiritual support and comfort?' Intensive and Critical Care Nursing. 58. https://doi.org/10.1016/j.iccn.2020.102817
McSherry W., Draper P, Kendrick D (2002) 'Construct Validity of a Rating Scale Designed to Assess Spirituality and Spiritual Care'. International Journal of Nursing Studies 39 (7) 723 – 734
Westera, D.A. (2017) Spirituality in Nursing Practice : The Basics and Beyond. New York: Springer Publishing

C04: The Role of the ODP in the post COVID19 pandemic critical care environment

Giles Farrington, York Teaching Hospital NHS FT

ODP's are educated to degree level on programmes ratified by the Health and Care Professions Council (HCPC) as their registering body with a handful of universities still offering the diploma qualification. The degree qualification requires three years of study, whereas the diploma requires two years of study. The degree is the more common qualification route and that is the route that will be discussed in this abstract. Alongside nursing there is the provision of an apprenticeship that has been developed and is being rolled out as we speak. The access to the BSc in Operating Department Practice varies from university to university, but in general you will need 5 GCSEs at grade 4 or C or equivalent (English and Maths is a must) and A Levels at BBC or equivalent.

The aim of the review was to compare the present role of the Operating Department Practitioner in critical care at York Teaching Hospital NHS Foundation Trust and the role performed by non-critical care staff during the COVID19 pandemic against band 5 critical care nursing staff. And to evaluate if this role could be implemented into a non COVID19 critical care environment.

The BSc in Operating Department Practice is a three year programme of study, the first year is an introduction to perioperative practice. Which includes the anaesthetic, surgical and post operative environments. The student will also learn anatomy and physiology, pharmacology, and an introduction into research and evidence based practice. The second year builds on the first year with the students enhancing their studies in perioperative practice from the first year. In the third year students consolidate their practice and work towards advanced practice modules in which they learn enhance airway and surgical skills such as airway management, cannulation, catheterisation, and surgical assistant skills. Alongside these modules' students learn about leadership, management, and professional development within the perioperative environment. The course is split between 40% theory and 60% practice currently at Hull University, which is where all the ODP students currently study.

References: Huddersfield, U. (2020). Operating Department Practice BSc (Hons). [Online]. 2020. Courses. hud.ac.uk. Available at: https://courses.hud.ac.uk/full-time/undergraduate/operating-department-practice-bsc-hons. [Accessed: 11 July 2020]. Hull, U. (2020). BSc (Hons) Operating Department Practice Course | University of Hull. [Online]. 2020. Hull.ac.uk. Available at: https://www.hull.ac.uk/study/undergraduate/operating-department-practice-bsc-hons. [Accessed: 11 July 2020]. CODP (2020). The Role of the Operating Department Practitioner. [Online]. 2020. College of Operating Department Practitioners. Available at: https://www. aodp.org/what_is_an_odp_parentid_9.html. [Accessed: 12 July 2020].

C10: The Successful Development and Implementation of a Risk Assessment Tool to Prevent Unsafe Redeployment from Critical Care

Sheena Wright, Wrightington, Wigan & Leigh NHS Foundation Trust

Purpose: The purpose of this project in June 2018 was to develop a reflective and accurate risk assessment tool, incorporating environmental and situational risk factors. The intention was for this to support staff members in their decision making when responding to requests for redeployment of critical care staff. As advised by CC3N (2018), the emphasis was to concisely risk assess and monitor staff redeployment whilst further providing a realistic snapshot of activity at any given time.

Significance: As highlighted in 2003 by Ball and McElligot, nurse patient ratios do not account for factors inclusive of skill mix and demographics. Intensive care is a known high risk clinical environment yet historically, if nurse patient ratios are met then this will be deemed safe without any measure of additional high risks. This risk assessment tool has identified and built upon our units added situational and environmental risk factors which capture and score elements of unpredictability. This generates a total score which supports in utilising acuity as a measure safety in contrast to the historical nurse patient ratio.

Method: Risk assessment tool competed at commencement of every shift.
Trialed within ICU for 6 months and modified to reflect our risks.
3rd and final version December 2018.

Result: Acknowledgement that acuity within critical care is a more accurate measure of safety than staff patient ratios. Acuity is discussed before any requests for redeployment are agreed.

Conclusion: Acuity data is now captured and measured, providing evidence to support senior nurses in their decision making when requests are made to redeploy critical care staff.
In addition, this informs non-critical care staff making requests for redeployment of the relevant information. This supports their understanding of the additional risks within the critical care environment.
There is an acknowledgement that acuity within critical care is a much safer measure of safety than staff patient ratios.

Referecences: Ball C, Mc Elligot M. (2003) Realising the Potential of Critical Care Nurses: An exploration of the factors that affect and compromise the nursing contribution to the recovery of critically ill patients. Intensive and Critical Care Nursing: 19:4:226-238
Best Practice Principles to apply When Considering Moving Critical Care Nursing Staff to a Different Clinical Care Area. (2018). Critical Care Networks National Nurse Leads.

C11: Knowing Thy Neighbour -Exploring Interdepartmental interprofessional Collaboration between an Emergency department and an Intensive Care Unit

Cloda Delahunty, St. George's NHS Trust

Background: Interprofessional Collaboration (IPC) refers to the process of different healthcare professionals working together to achieve the common goal of patient care. It is linked to improved patient safety (Jones and Jones 2011; Kohn et al., 1999), job satisfaction and essential for healthcare policy development. Overcrowded hospitals can delay critically ill admissions and are associated with poorer patient outcomes (Chaflin et al., 2007), longer hospital and ICU stays. ED and ICU provide stabilisation, resuscitation and management for the critically unwell. Yet, how these departments collaborate to provide this patient care is largely unexplored in the literature.

Aim: To investigate staff perspectives on Interdepartmental IPC between an ED and ICU and to identify if barriers or facilitators to IPC exist.

Method: A qualitative case study design was chosen. A favourable ethical opinion was given by the University research ethics committee. Sample size of 20 medical and nursing staff participated in the setting of NHS teaching hospital serving a 3.5million population. Data was collected over two months through individual semi-structured interviews, audio-taped and transcribed verbatim. A thematic analysis model was followed. Peer debriefing of anonymised transcripts assisted refining themes.

Results: Increased collegial familiarity between the departments through joint department meetings, policy-making and staff rotation facilitated IPC. Poor communication was a central barrier to collaboration. Miscommunication, lack of, and "too many channels" of communication led to perceived poor IPC. Other barriers to IPC included hospital structure and processes, departmental hierarchy and protectionism.

Implications for Practice: This study generates awareness on the barriers and facilitators of interdepartmental IPC and could contribute to framework development for future interventional studies or to inform interprofessional education or organisational structuring. Dissemination of the research has begun with a local presentation suggesting staff rotation and a handover checklist should be standard practice and increased transparency between departments may further improve IPC.

References: Chaflin, D. B, et al. (2007) 'Impact of delayed transfer of critically ill patients from the emergency department to the intensive care unit', Critical Care Medicine, 35, pp. 1477-1483
Jones, A. and Jones D. (2011) 'Improving teamwork, trust and safety: an ethnographic study of an interprofessional initiative', Journal of Interprofessional care, 25, pp.175-81
Kohn, L. Corrigan, J. and Donaldson, M. (1999) 'To Err is Human: Building a safer Health System', Washington, DC: National Academy Press.

C12: Introducing Clinical Supervision into Critical Care

Daniel Harris, Cambridge University Hospital

Purpose: To present our innovative practice of introducing clinical supervision for critical care nurses across two critical care units in a tertiary centre.

Background/Significance: Clinical Supervision (CS), whilst usually found within mental health nursing, is being implemented for nurses in other clinical contexts (Brunero & Stein-Parbury, 2008). CS are hour-long sessions facilitated by our psychologists. They are a reflective space to think about the emotional and practical aspects of their work with their colleagues. It is based on the Kolb's Theory of Reflection: Cycle of Learning.

Method: Two groups of 8 participants with supervision sessions started in September 2019 on a bi-monthly basis.

An online questionnaire was completed after each session, asking participants closed and open questions on the penultimate session.

A Workplace Resilience Instrument (WRI) was given to participants on the first session. Data will be collected on their last session.

Descriptive statistics were used to analyse closed questions.

Results: 73% of staff agreed that clinical supervision was "quite a bit" or "totally" useful. 79% of staff felt that it gave them an opportunity to reflect on important issues in the workplace. 92% felt that the supervision was focussed. Participants described a mutual benefit undertaking clinical supervision of learning from others but also "everyone feels the same, and sharing it made the difference that we are not alone." Participants also felt supported by the Psychologist and they were learning from each other's experience.

Conclusion: Clinical supervision has been a useful tool to support our new nurses coming to critical care to cope with the workload that working in critical care brings. Further research is planned to assess whether this has an effect on their professional quality of life and expanding to all nurses, not just those who are new to critical care.

References: Brunero, S & Stein-Parbury, J. (2008) The effectiveness of clinical supervision in nursing: an evidenced based literature review. Australian Journal of Advanced Nursing: 25(3);p86-94.

C14: What is the nurse's role in initiating early mobilisation in critical care?

Ana Katrina Evangelista-Lair, Brighton and Sussex University Hospitals NHS Trust

Aim: To identify and explore the different roles nurses undertake in order to initiate early mobilisation for critically ill patients.

Background: Critical illness and critical care unit stay are associated with long standing physical, psychological and cognitive complications. A group of interventions to prevent short and long-term complications has been formulated (ABCDEF care bundle) of which early mobilisation is included. Current best available evidence suggests that mobilisation improve physical and psychological outcomes after critical care unit discharge. Despite the evidence that supports early mobilisation, implementation levels remain low as suggested by current literature and anecdotal evidence in the researcher's local unit.

Method: A full search strategy in three databases (CINAHL, AMED and BNI) was conducted to find research studies that mention the involvement of nurses on early patient mobilisation in critical care. From the selection process, ten studies were identified and critically appraised. A thematic analysis was then conducted.

Findings: Three main themes were identified, which equate to three roles that nurses undertake to initiate early patient mobilisation in critical care: enabler, liaison and participant in practice development. Each theme was further divided into subthemes and discussed.

Nurses take on different roles in order to initiate early patient mobilisation in critical care. The roles identified in this study are enabler, liaison and participant in practice development. Nurses also use various skills they have acquired in their training and experience to recognise barriers and facilitators in implementing early mobilisation. A multidisciplinary team approach as well as robust interdisciplinary training on early mobilisation are also instrumental in mobilising patients safely and effectively.

Implications for Practice: Having an awareness of these roles will help present and future critical care nurses recognise the importance of their role not just in early mobilisation but in the overall rehabilitation of critical care patients.

References: Barber, E.A., T. Everard, A. E. Holland, C. Tipping, S.J. Bradley, and C.L. Hodgson. 2015. Barriers and facilitators to early mobilisation in intensive care: a qualitative study. Australian Critical Care. 28(2015):177-182. [Online]. Available from: https://www.australiancriticalcare.com/article/S1036-7314(14)00170-2/fulltext [Date accessed: 10 July 2019]
Clarissa, C., L. Salisbury, S. Rodgers and S. Kean. 2019. Early mobilisation in mechanically ventilated patients: a systematic integrative review of definition and activities. (2019)7:3 1-19. [Online] Available from: https://jintensivecare.biomedcentral.com/track/pdf/10.1186/s40560-018-0355-z [Date accessed: 30 January 2020]
Marra, A., E. Wesly Ely, P. P. Pandharipande, and M. B. Patel. 2018. The ABCDEF care bundle in critical care. Critical Care Clinics. 33(2):225-243. [Online]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5351776/ [Date accessed: 30 January 2020]

C15: A constructivist grounded theory of staff experiences relating to early mobilisation of mechanically ventilated patients in intensive care

Catherine Clarissa, University of Edinburgh
Lisa Salisbury, Queen Margaret Univerity
Sheila Rodgers, University of Edinburgh
Susanne Kean, University of Edinburgh

Background: Mechanically ventilated patients have been reported to develop muscle weakness within the first hours after intubation. Significantly, this weakness commonly persists after intensive care unit (ICU) discharge and impacts on survivors' lives beyond leaving hospital. Early mobilisation of mechanically ventilated patients (EM-MV) has been suggested to be an effective intervention in mitigating muscle weakness. Despite the evidence supporting its potential benefits, EM-MV is still not a common practice. Understanding the experiences of staff about EM-MV is crucial to gain insights into what might facilitate or hinder its implementation. However, research exploring different perspectives of interdisciplinary staff about EM-MV is lacking.

Aim: To understand and explore interdisciplinary healthcare staff experiences of EM-MV.

Method: Charmaz's constructivist grounded theory approach guided the study conduct. A total of 44 participants from two Scottish ICUs were recruited, including clinical support workers, nurses, physicians and physiotherapists. Data were collected from observations of early mobilisation activities, eleven individual staff interviews and two focus groups with interdisciplinary staff members. Constant comparative analysis and theoretical sampling enabled the development of a middle-range theory. Ethical approval was obtained from NHS Scotland Research Ethics Committee (REC) A and the School of Health in Social Science, University of Edinburgh.

Results: 'Managing Risks' was identified as the core category and theorised using the concept of risk. EM-MV process starts by 'defining patient status', which can move back and forth to 'negotiating patient safety' until a consensual decision is reached and in turn, enables 'performing accountable mobilisation' within the dynamic context of the ICU setting.

Implications for Practice: EM-MV is a complex intervention involving multidisciplinary healthcare professionals and a diverse patient population with varying acuity. The study suggests the necessity of clarifying and articulating the roles and responsibilities of each profession in the EM-MV collaboration.

References: Charmaz, K. (2014) Constructing Grounded Theory. 2nd ed. London: SAGE Publications Ltd.

C17: One size doesn't fit all': Perceptions and experiences of nurses new to critical care regarding their 3-week orientation period in a teaching hospital

Sheela Vinu Kurian, King's College Hospital

Purpose: The study investigates the 3-week orientation experiences of new nurses' preparation to care for critically ill patients.

Background/Significance: The orientation programme contributes to the new nurses' initial experience with critical care and their preference to remain in this domain or commit to the organisation (Price, 2009). Nurses develop their enthusiasm, emotional balance, time management, autonomy and decision-making skills during the orientation period, there are shortcomings in terms of its duration, support, patient exposure, decision making, and this contributes to lack of research in the efficacy of orientation (Parker et al, 2014). Therefore, as recommended by Kozub et al (2015), a good orientation empowers new nurses and patients safely. Many

hospitals offer a 6-14 weeks supernumerary period to the new starters though CC3N (2015) only suggests six weeks that can be adjusted as per their individual needs. Being one of the liver critical care speciality, the patient acuity in this unit is different from other units. Hence, nurses' previous experiences elsewhere in the country or from overseas is not enough to care for such complex cases.

Method: Semi structured interviews were used in this case study to collect data from eight nurses who agreed to participate. Ethical approval was sought from organisation and university research team.

Result: The findings were overwhelming clinical milieu, background experience, organisational familiarity, staff diversity and distinctive learning needs, insufficient time, senior support, inadequate feedback, idealistic objectives and recommendations.

Conclusion: The orientation period is stressful therefore; it should be tailored as per individual distinctiveness and differences with SMART goals. Nurses' ability to adapt will be contingent on their education background, experience and coping strategies. Further, new nurses appreciated clinical support, feedback and reassurance from managers and PDNs. This study highlights that the critical care units have varying complexities of patients therefore more studies which focus on orientation time is required.

References: Parker, V., Giles, M., Lantry, G. and McMillan, M., 2014. New graduate nurses' experiences in their first year of practice. Nurse education today, 34(1), pp.150-156.
Price, S.L., 2009. Becoming a nurse: a meta-study of early professional socialization and career choice in nursing. Journal of advanced nursing, 65(1), pp.11-19
Kozub, E., Hibanada-Laserna, M., Harget, G. and Ecoff, L., 2015. Redesigning orientation in an intensive care unit using 2 theoretical models. AACN advanced critical care, 26(3), pp.204-214

C18: Factors influencing nurses' intentions to leave adult critical care areas: findings from qualitative phase of a mixed method study

Nadeem Khan, Oxford Brookes University and Oxford University Hospitals

Aim: To explore views and experiences of critical care nurses about their working conditions and possible factors that may influence their intentions to leave adult critical care areas.

Background: The shortage of critical care nurses is

a global concern. Critical care areas are especially vulnerable to retention problems due to unique working conditions requiring high number of specialist nurses to care for patients with critical illnesses. High nursing turnover in critical care areas is evident however; research into the factors that influence nurses' intentions to leave adult critical care areas is limited.

Method: Qualitative data was collected via in-depth telephone interviews from a sample of nurses currently working in adult critical care areas in phase 2 of a larger mixed method study. Data was collected from November 2017 to April 2018. Framework method was used to analyse the data which involves the following stages; transcription, familiarisation with interviews, coding, developing analytical framework, applying the analytical framework and charting data into the framework matrix. Additionally, field notes and analytic memos were used to aid the analysis.

Results: Qualitative data was collected from 15 participants. Three main themes were identified which were associated with nurses intentions to leave. These were; feeling appreciated and acknowledged for their specialist skills and knowledge, providing overall support and developing a system of wellbeing following stressful incidents and acknowledging the importance of organisational and operational aspects of management in the delivery of care.

Conclusions: High nurse turnover in critical care areas impacts on staff morale, productivity, patient safety and quality patient outcomes. Nurse Managers need to consider the findings of this study when developing strategies to improve nurse retention in adult critical care areas.

References: Gale N K, Heath G, Cameron E, Rashid S and Redwood S (2013) Using the framework method for the analysis of qualitative data in multi-disciplinary health research. BMC Medical Research Methodology, 13(1), p.117
Moloney W, Gorman D, Parsons M and Cheung G(2018) How to keep registered
nurses working in New Zealand even as economic conditions improve. Human Resources
for Health; 16(1)
Wengraf T (2001). Qualitative research interviewing: Biographic narrative and semi-structured methods. London: Sage

C19: Florence and the Machine...... What place for nurses in the history of UK critical care?
Sharon Whiting, GM Critical Care Skills Institute/ NMGH

Introduction: The year is 2020. It is two hundred years since the birth of Florence Nightingale. The World Health Organisation has titled this The International Year of the Nurse and Midwife. The NHS has passed its 70th anniversary. The ICS is fifty, the BACCN thirty-five. There are American, Canadian, and Australian histories of critical care nursing. Yet no British equivalent.
This is a gap.
How can British critical care nursing move confidently forwards into the next decade without recording, acknowledging and learning lessons from the journey travelled?
The focus of this educational workshop is to provoke interest and curiosity in the history of critical care and nursing placed at its very core.
To consider how, as critical care nurses, we might redress this - present our history, leave a legacy, and use it to inform a twenty-first century future.

Learning Objective:
1. To name three nurses who contributed to the development of critical care as a distinct field of nursing.
2. To list three events that have directly influenced the development and need for critical care nurses.
3. To describe one qualitative research methodology used in the capture of nursing history.

Biography: Currently: Critical Care Practice Educator, North Manchester General Hospital. Part-time Deputy Manager Greater Manchester Critical Care Skills Institute. Part-time doctoral student University of Manchester.

Qualified in 1986.
Critical Care Nurse since 1987.
Full-time educator since 2010.

RN; ENB100; BSc(Hons); MSc; PgCert.

References: Reynolds, L A; Tansey, EM. (Eds). (2011). History of British intensive care, c. 1950-2000. Wellcome Witnesses to Twentieth Century Medicine, vol.42. London: Queen Mary University of London
Nicholls, A. (2011). "Life in the Balance: Critical Illness and British Intensive Care, 1948-1986". PhD diss., University of Manchester
Fairman, J; Lynaugh, J. (1998). Critical Care Nursing. A History. Philadelphia, US: University of Pennsylvania Press.

C20: A Tale at the Nightingale: Gathering Experience
Jessica Moorhouse, The Royal Free NHS Foundation Trust

Introduction:
The coronavirus, SARS-CoV-2 (COVID-19), arrived in York

on January 29th 2020 (Holmes, 2020). The number of COVID-19 patients started to surge in early March (WHO, 2020), and by the end of March the UK was in complete lockdown to prevent the spread of the virus and protect the National Health Service (NHS).

In early April, the ExCeL became an NHS Nightingale Hospital; designed to treat patients that needed critical care due to COVID-19. The British Association of Critical Care Nurses assisted in recruiting staff onto the faculty to start inductions. Patients were admitted a week later. Following this, more NHS Nightingale Hospitals were established to increase resources in other locations (NHS England, 2020).

Patients were cared for in the NHS Nightingale London Hospital during April, and into May. On the 12th May 2020, the Nightingale Faculty organised a reflection and recognition day for staff to feedback their experiences. The hospital was placed in a state of hibernation, ready to reopen if necessary, and the staff were redeployed back to their normal places of work.

Learning Objective:
- To discuss the Nightingale Hospital journey and the qualitative vignette of the presenting ward sister and her colleagues
- To understand how Florence Nightingale's 200th birthday and the admission criteria impacted on the Nightingale hospitals.
- To consider how the future of critical care nursing will develop following the response to the COVID-19 pandemic

Teaching Method: This interactive workshop will start with a PowerPoint presentation discussing the Nightingale Hospitals and the qualitative experiences of the presenter and her colleagues. The presentation will focus on the learning objectives and will lead into a set of planned questions for the attendees to answer. Groups will be set up after the presentation and the members of each group can draw on their own experiences to respond to the questions. They may use the qualitative nature of the presentation to facilitate their imagination. The dynamic learning environment will help them to draw their own conclusions, and will empower them to feedback ideas, forming an individualised and collective experience. Notable points from the group work will be summarised at the end by the presenter.

Biography: Jess Moorhouse spent the last few months working at the NHS Nightingale London Hospital, as a member of the faculty, a clinical educator, a ward sister and an ITU Nurse. When the Nightingale went on standby in May 2020 she resumed her duties at the Royal Free London NHS Foundation Trust ITU.

Jessica graduated from King's College, London, 13 years ago, and has since worked in Critical Care at the John Radcliffe Hospital, Oxford, St Bartholomew's Hospital and the London Chest, Guys and St Thomas' NHS Foundation Trust, the Wellington Hospitals, and now the Free. As well as working in critical care, Jessica has some experience in Hepatology Research and Trauma Nursing. She is a member of the BACCN and ICS.

References: Holmes, F., 2020. COVID-19 Timeline. [online] British Foreign Policy Group. Available at: <https://bfpg.co.uk/2020/04/covid-19-timeline/> [Accessed 22 May 2020].
NHS England, 2020. NHS To Build More Nightingale Hospitals, As London Set For Opening. [online] England. nhs.uk. Available at: <https://www.england.nhs. uk/2020/04/nhs-to-build-more-nightingale-hospitals-as-london-set-for-opening/> [Accessed 22 May 2020].
World Health Organisation International [WHO]. 2020. Coronavirus. [online] Available at: <https://www.who. int/emergencies/diseases/novel-coronavirus-2019> [Accessed 22 May 2020].

C21: Recognising, Rallying, and Reconciling: The Lived Experiences of Nurses Navigating Through Medical Emergencies in the ICU.

Yongxing Patrick Lin, Tan Tock Seng Hospital, Singapore

Background: Medical emergencies in the ICUs can cause much distress to nurses (Sjöberg et al., 2015), and can lead to workforce absenteeism or attrition. Despite its high occurrence, little is known about the lived experience of ICU nurses attending to medical emergencies.

Aim: This study aims to examine the lived experience of nurses attending to medical emergencies in the ICUs.

Method: Underpinned by Husserl's philosophy (Husserl, 1931), a descriptive phenomenological study was conducted in a Singapore tertiary hospital. 10 registered nurses who have prior experience in attending to medical emergencies in the ICUs were recruited via purposive sampling from April 2019 to August 2019. Guided by data saturation, individual semi-structured interviews were conducted, transcribed verbatim and analysed using Colaizzi's seven step analysis (Colaizzi, 1978). Ethical approval was sought before study commencement.

Results: Three salient themes emerged from the data. Firstly, "Recognising and responding to medical emergencies" acknowledges that nurses are typically the first responders to medical emergencies and may exhibit emotional dissonance towards such events. Secondly, "Rallying the nursing team" highlights the nursing

team's attempt to lead both senior and junior nurses during medical emergencies despite their differences and limitations. Thirdly, "Reconciling shortfalls in patient care" illustrates how nurses responded to failures in patient care during medical emergencies and their suggestions to improve teamwork within the interprofessional team.

Implications for Practice: Results from this study have led to a quarterly interprofessional resuscitation training. Future research on the lived experience of the interprofessional team in managing medical emergencies is currently underway. Overall, the findings encapsulated the lived experience of ICU nurses navigating through the intricacies of medical emergencies. Findings elucidated that even experienced ICU nurses require support in areas such as nursing leadership during emergencies. Issues highlighted coalesced into a call for further nursing empowerment so as to advance critical care nursing into the next decade of excellence.

References: COLAIZZI, P. F. 1978. Psychological research as the phenomenologist views it. In: VALLE, R. S. & KING, M. (eds.) Existential-Phenomenological Alternatives for Psychology. Oxford University Press.
HUSSERL, E. 1931. Ideas: general introduction to pure phenomenology, London; New York, Routledge.
SJÖBERG, F., SCHÖNNING, E. & SALZMANN-ERIKSON, M. 2015. Nurses' experiences of performing cardiopulmonary resuscitation in intensive care units: a qualitative study. J Clin Nurs, 24, 2522-8.

C22: Patient and family involvement in recognising and escalating deterioration: A qualitative systematic review

Aidín McKinney, Professor Donna Fitzsimons, Professor Bronagh Blackwood & Dr Jennifer McGaughey, Queen's University Belfast

Aims: To explore (a) patients' and relatives' experiences of acute deterioration and (b) patients', relatives' and healthcare professionals' perceptions of the barriers or facilitators to patient and family-initiated escalation of care in acute adult hospital wards.

Background: Clinical deterioration is not always detected early enough, despite Early Warning Scores and Rapid Response Systems (Donaldson et al, 2014). Patient and family-initiated escalation of care schemes have shown some benefit in assisting recognition (Brady et al, 2015). However, there is a need to investigate the assumptions that underpin these schemes and the factors that promote or hinder engagement with them, particularly in acute adult settings (Gill et al, 2016).

Method: We conducted a qualitative review using Cochrane methodology. MEDLINE, CINAHL, EMBASE, PsychINFO databases and grey literature were searched from 2005 to August 2019. Two reviewers independently screened studies, extracted data and appraised the quality using a qualitative critical appraisal tool. Findings were analysed using a thematic synthesis approach and confidence in findings was assessed using GRADE-CERQual.

Findings: Five studies representing 120 participants were included and the certainty of evidence was assessed as moderate using GRADE-CERQual. Findings indicated that a number of patients/relatives have the ability to detect acute deterioration, however various factors act as both barriers and facilitators to being heard. These include personal factors, perceptions of role, quality of relationships with healthcare staff and organisational factors. Theoretical understanding suggests that patient and relative involvement in escalation is dependent on both inherent capabilities and the factors that influence empowerment.

Implications of Practice: Various enabling/constraining factors impact on patient/relative ability to escalate care. The key implication for healthcare organisations is the need to address these factors to promote more active partnerships when considering interventions to address patient and family involvement in calling for help. These findings will help to inform the design and implementation of future patient and family-initiated schemes.

References: Brady PW, Zix J, Brilli R, Wheeler, D.S., Griffith, K., Giaccone, M.J., Dressman, K., Kotagal, U., Muething, S., Tegtmeyer, K. (2015) Developing and evaluating the success of a family activated medical emergency team: a quality improvement report. BMJ Quality and Safety 24:203-11.
Donaldson LJ, Panesar SS, Darzi A. (2014) Patient-safety-related hospital deaths in England: thematic analysis of incidents reported to a national database, 2010–2012. PLoS Med 11(6):e1001667. doi:10.1371/journal.pmed.1001667 9 [published Online First: 24 June 2014].
Gill FJ, Leslie GD, Marshall AP. (2016) Family initiated escalation of care for the deteriorating patient in hospital: family centred care or just "box ticking". Australian Critical Care 29:195–200.

C23: Developing an Evidence Based Consensus Paper for Oral Care Within Critical Care

Collins T, Plowright C, Stayt L, Clarke S, Caisley J, Harcourt-Watkins C, Hodges E, Leaver G, Leyland S, McCready P, Millin S, Platten J, Rowley-Conwy G, Scallon M & Tipene P, Gibson V.

Aim: To provide an evidence-based, British Association of Critical Care Nurses (BACCN) consensus paper. The paper aims to provide direction for critical care practitioners on how to perform comprehensive oral care which can be used as part of a Ventilator Acquired Pneumonia (VAP) and/or Hospital Acquired Pneumonia (HAP) reduction strategy in conjunction with the ventilator care bundle approach.

Design: A consensus committee of 15 critical care nurses and experts from around the countries of the United Kingdom (UK) evaluated the literature. The committee consisted of a variety of disciplines within critical care nursing consisting of front-line nurses, managers, educators, consultant nurses and academics. The committee participants were selected following an advertisement asking for expressions of interest to take part in the consensus document through the BACCN communication networks. All individuals who expressed an interest were selected to the committee. The round table discussion was chaired by an elected national board member for the BACCN who has experience in generating national guidelines and consensus documents.

Method: The committee focused upon 5 oral care practices relating to the level 1, 2 (HDU) & 3 (ICU) critically ill patient. The evidence was evaluated for each practice within the context of reducing VAP or HAP in the non-ventilated patient: frequency for oral care; tools for oral care; oral care technique; solutions used and oral care in the non-ventilated patient who is critically ill and is at risk of aspiration. The group searched the best available evidence and evaluated this using the ,Grading of Recommendations Assessment, Development, and Evaluation (GRADE) system to assess the quality of evidence from high to very low, and to formulate recommendations as strong, moderate, weak, or best practice consensus statement when applicable (Guyatt G, Oxman A, Vist G, et al. 2008).

Results: The consensus group generated 5 recommendations, delineating an approach to best practice for oral care in critically ill patients. Recommendations will be shared in full during the presentation. Whilst literature may be limited in its hierarchy, there is a clear association that effective oral care reduces the incidence of VAP and promotes patient comfort and care. Controversy exists regarding the use of chlorhexidine and therefore routine use is not recommended (Price et al 2014).

Conclusions: Oral care is an important part of the care of critically ill patients, both ventilated and non-ventilated. An effective oral care programme reduces the incidence of VAP/HAP and promotes patient comfort.

References: Guyatt G, Oxman A, Vist G, et al. (2008). GRADE Working Group: GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. British Medical Journal. 336: 924–926.
Price, R, Maclennan, G, Glen, J (2014) Selective digestive or oropharyngeal decontamination and topical oropharyngeal chlorhexidine for prevention of death in general intensive care: Systematic review and network meta-analysis. BMJ. 348: g2197.

C24: Efficacy and competence in contributing to endpoint resuscitation: the UK critical care nursing perspective.

Aurora Medonica, Louise Stayt & Deborah Slade, Oxford Brookes University

Background: European Resuscitation Council guidelines to the ethics of resuscitation and end of life, stated how decisions to withhold or pursue resuscitation are usually taken by a senior physician in collaboration with members of the multi-professional team. However, there was no clear understanding of how and to what extent, critical care nurses were included in the decisional process of ending resuscitation.

Aim:The main aim of this study is to understand critical care nurses' and advanced critical care practitioners' (ACCP) in the United Kingdom, self-efficacy and self-perceived competence associated with making or contributing to the decision to instigate, withhold, continue or terminate, resuscitation.

Method: A quantitative, descriptive survey design was adopted. Critical care nurses and ACCPs were asked to complete the General Self Efficacy and Self-Perceived Competence questionnaire (Schwarzer & Born 1997, Bartlett et al. 1998). Data were then analysed using descriptive statistics.

Results: Thirty-five participants completed the questionnaire. The results found that 69.44% of critical care nurses and ACCPs perceive that they can cope moderately well when facing end of life

care, resuscitation situations, and complex family conversations. Although, the contribution to the resuscitation decision-making process stills presents some concerns. In particular, the involvement of critical care nurses and ACCPs in multidisciplinary team meeting and the impact of their contribution on patients' safety, dignity and end of life directives.

Implications for Practice: There is a general need for improved shared decision making in the resuscitation field as well as the wish of critical care nurses and ACCPs to be more involved in such a process, given the holistic nature of their profession.

References: Connelly C. and Schreiber M. (2015), Endpoints in resuscitation, Curr Opin Crit Care 21, (6): 512-519.
Bossaert L, Perkins G, Askitopoulou H, Raffay V, Greif R, Haywood K, Mentzelopoulos S, Nolan J, VandeVoorde P, and Xanthos T. (2015), European Resuscitation Council Guidelines for Resuscitation 2015 Section 11. The ethics of resuscitation and end-of-life decisions. Resuscitation 95: 302-211.
Jennings N, Clifford S, Fox A, O'Connell J, and Gardner G (2015), The impact of nurse practitioner services on cost, quality of care, satisfaction and waiting times in the emergency department: A systematic review. International Journal of Nursing Studies, 52: 421-435.

C25: Psychological impact of caring for critically ill patients with Covid-19: ICU nurses are disproportionately affected

Andrew Bates, Marcie Perrow, Dr Julia Ottaway & Dr Rebecca Cusack, University Hospital Southampton and Dr Sophie Rushbrook, Dorset HealthCare University National Health Service Foundation Trust

Purpose: To characterise the psychological wellbeing of staff from a UK Intensive Care Unit. To understand staff preference for supportive strategies.

Significance: Reports of psychological stress among frontline healthcare workers are emerging from the Covid-19 outbreak in China(1). Worryingly, these match findings from previous pandemics, which asserted long-term psychological sequelae(2).

Method: In April 2020, a multi-disciplinary cohort completed an online, validated questionnaire, including Generalised Anxiety Disorder-7(GAD-7), Brief Resilience Scale, PTSD Checklist(PCL-5) and the Job-related Affective Well-being scale(JAWS). Staff also rated the perceived usefulness of supportive interventions.

Results: 59% of invited staff responded. 77% reported normal/high level of resilience. Thirty-two staff (35%) reported a GAD-7 score (>=10/21) at which formal psychological assessment is recommended. Sixteen (14%) staff member's PCL-5 score (>=31) was suggestive of PTSD. Multiple regression analysis revealed a significant relationship between JAWS, GAD-7(p=0.003) and PCL-5 (p=0.005). Nurses were seven-times more likely than doctors to score GAD-7 >=10 (OR=6.8;p=0.01). (See table 1)
Highest-rated supportive interventions were adequate personal protective equipment, rest facilities and regular breaks. Psychological support and relaxation sessions were perceived as least useful. However, in the sub-group of staff with GAD-7 scores >=10, psychological support for staff, patients and family was perceived as significantly more useful, with significant reductions reported for rest facilities and PPE.

Conclusion: We report concerning levels of anxiety and post-traumatic stress symptomology among intensive care staff during the Covid-19 crisis, significantly impacting job-related well-being. Nurses are disproportionately affected. Desired supportive interventions reflect Maslow's hierarchy. Physiological protection is prioritised, however staff with established anxiety desire professional psychological help.
Our single-centre, self-reported questionnaire, limits generalisability, however the results do match reports from SARS 2003 (2) and China 2019 (1).

To mitigate long-term psychological consequences of caring for patients during a pandemic, easily deliverable protective strategies should be instigated, supported by formal psychological support. Particular attention should be paid to ongoing support for nursing staff.

References: Chen, Q., et al., Mental health care for medical staff in China during the COVID-19 outbreak. Lancet Psychiatry, 2020. 7(4): p. e15-e16
Maunder, R., et al., Long-term Psychological and Occupational Effects of Providing Hospital Healthcare during SARS Outbreak. Emerging Infectious Diseases, 2006. 12(12): p. 1924-1932
Maslow, A.H., A theory of human motivation. Psychological Review, 1943. 50(4): p. 370-396

C26: Fatigue in survivors of critical illness: a systematic review

Suzanne Bench, London South Bank University
Dr Lousie Stayt, Oxford Brookes University
Dr Akshay Shah, University of Oxford
Dr Paula Dhiman, University of Oxford
Dr Wladyslawa Czuber-Dochan, King's College, London

Aims: To identify the prevalence, experience, risk factors and management of fatigue in adult ICU survivors.

Background: Fatigue is defined as an overwhelming, sustained sense of exhaustion, unrelieved by sleep, with decreased capacity for physical and mental work at a usual level. Fatigue is a common but under-recognised problem in people recovering from critical illness (1,2). International advisory panels have called for research into its prevalence, severity, underlying mechanisms and management (3)

Method: We performed a mixed methods systematic review. We searched seven databases: CINAHL; Medline; EMBASE; PsycINFO; Emcare; British Nursing Index; Web of Science and included 76 studies investigating fatigue or vitality in adult ICU patients. Extracted data were split into three datasets for analysis and methodological quality assessed using CASP tools. We adopted a segregated approach to mixed-methods synthesis, merging all results into one of four qualitative themes: prevalence and severity; contributing factors; impacts on quality of life; assessment and management.

Findings:
Reported fatigue prevalence ranged from 13.8 to 80.9%; reaching its nadir at approximately one-month post-ICU discharge; improving over time but seldom reaching reference population scores. A range of modifiable and non-modifiable factors related to fatigue were reported. No fatigue assessment tool specific to critical illness was identified, and a paucity of potential interventions were reported despite data supporting that fatigue negatively impacts survivors' quality of life.

Conclusion: The importance of early interventional psychological supportive care, commenced during critical care admission is highly pertinent and feasible (Richards-Belle et al, 2018) but remains poorly identified, assessed and evaluated. NICE (2017) recommends highly stressed patients should be identified and offered psychological support as part of their recovery.

Implications for Practice: Despite being highly prevalent in ICU survivors, an insufficient understanding of the experience of fatigue and its impact on patients' lives is evident. Our review has identified factors, which may increase or mitigate against fatigue, along with potential management strategies, which should be used to inform future research and practice. More studies validating ICU specific fatigue assessment tools and testing interventions based on modifiable factors such as exercise, diet and knowledge are required.

References: Spadaro S, Capuzzo M, Valpiani G, et al. (2016) Fatigue in intensive care survivors one year after discharge. Health Qual Life Outcomes. 14(1):1-9. doi:10.1186/s12955-016-0554-z
Wintermann GB, Rosendahl J, Weidner K, et al. (2018) Self-reported fatigue following intensive care of chronically critically ill patients: A prospective cohort study. J Intensive Care. 6(1):1-12.
1. Latronico N, Herridge M, Hopkins RO, et al. (2017) The ICM research agenda on intensive care unit-acquired weakness. Intensive Care Med. 43(9):1270-1281. doi:10.1007/s00134-017-4757-5

C27: Introducing a restraint mitt guideline in ICU; a service improvement project

Heather Prowse, Royal Berkshire Hospital

Purpose: A need for guidance in relation to the use of restraint mitts was the principle recommendation from 2018 MSc dissertation. Guideline was developed and training programme implemented alongside updates to electronic documentation system and creating an information leaflet. Has there been improvement in nurse understanding and/or documentation?

Background/Significance: The nine principles of Bray et al.'s BACCN (2004) position statement on the use of restraint directed this project alongside guidance from RCN (2017) and ICS/FICM (Browne Jacobson LLP 2017). Now witnessing increased UK published research articles concerning the use of physical restraint. As we continue to learn more about the long-term effects of ICU treatments, e.g. chemical restraint, physical restraint use may increase. Therefore, guidance ensuring that physical restraint is used therapeutically, ethically and lawfully is required.

Method: Initial nurse questionnaire and retrospective review of patient documentation completed 2018. Repeated March 2020 following implementation of training programme. Similar questionnaire returns but almost twice as many patients identified as having worn restraint mitts 01/10/2019 – 31/03/2020. Responses and patient data themed. University and Trust approvals granted.

Results: Questionnaire responses had greater recognition of alternate measures to try before restraint mitts including involving family, distraction therapy and

relieving physical concerns, e.g. pain. There was complementary data from documentation review, e.g. 81% of patient records demonstrated measures tried which had been unsuccessful. Evident that there is still further progress to be made in many areas and that this is a long-term project.

Conclusion: There is increased emphasis on assessment of need for restraint mitts in our ICU. One nurse commented 'I think we have improved our knowledge and documentation after the implementation of this project'. Ongoing education will be required. Have started to look at the introduction of freedom sleeves alongside restraint mitts. Research regarding long-term psychological effects for patients who wear restraint mitts is required.

References: Bray, K., Hill, K., Robson, W., Leaver, G., Walker, N., O'Leary, M., Delaney, T., Walsh, D., Gager, M. and Waterhouse, C. (2004) 'British Association of Critical Care Nurses position statement on the use of restraint in adult critical care units', Nursing in Critical Care, 9 (5), 199-212.
Browne Jacobson LLP. (2017) Intensive Care Society/ Faculty of Intensive Care Medicine Guidance on Mental Capacity Act/Deprivation of Liberty Safeguards. PDF available at: https://www.ficm.ac.uk/news-events-education/news/ficmics-guidance-mca-and-dols Accessed 30/06/2020.
Royal College of Nursing (2017) Three steps to positive practice; A rights-based approach when considering and reviewing the use of restrictive interventions. PDF available at: https://www.rcn.org.uk/professional-development/publications/pub-006075 Accessed 30/06/2020

C28: Standardising eye care in the ICU
Latifat Awotedu, Royal Brompton Hospital

Purpose: The aim was to assess the quality of assessment, treatment, and documentation of eye care in the Adult ICU.

Background/Significance: Critically ill patients are at increased risk of eye injury due to several factors including underlying disease, equipment use, medications and the intensive care unit (ICU) environment (The Royal College of Ophthalmologists and the Intensive care society, 2017). Studies on eye care in the ICU, though limited, have shown inconsistency in following eye care protocols that in the ICU environment may be neglected; as other priorities arise leading to poor visual outcomes (Kousha et.al, 2018).

Method: An audit was undertaken in the AICU at Royal Brompton Hospital using eye condition, closure grade with the frequency of assessment and treatment as audit measure. A sample size of 16 patients

Results: 16 patients were included in this audit. 31.3% of nurses assessed patient eyes every hour, 50% assessed every 4 hours and 6.3% every 6 hours. Of these, eye treatments including ointments and drops were documented to be administered every 4 hours for 37.5% of patients with 18.8% of patients not receiving any eye treatment when required. Ophthalmology referral was indicated in 18.8% of patients while only 6.3% had a referral sent.
This audit demonstrated the need to update nurses' knowledge, eye care assessment, and treatment practice and to provide a guideline to be used by bedside nurses'.

Conclusion: In conclusion, in AICU, nurses need support to understand the holistic needs of patients requiring eye care as they will readily deliver evidenced-based practices in order to optimize recovery and reduce complications. Nursing education was carried out on eye care with the development of an easy to follow guideline which was reflected in electronic documentation options. Understanding the various risk factors is paramount and the importance of prioritizing prophylactic eye care, reduce the risk of ocular surface disease and other ophthalmic complications cannot be underestimated. Future studies are required to further understand the impact of this data including using follow up data after critical care illness.

References: Kousha O., Kousha Z., Paddle J., (2018). Exposure keratopathy: Incidence, risk factors, and impact of protocolized care on exposure keratopathy in critically ill adults, Journal of Critical Care, Volume 44,2018, Pages 413-418, ISSN 0883-9441. Available at https://doi.org/10.1016/j.jcrc.2017.11.031. Accessed 13/1/2020
The Royal College of Ophthalmologists' & The Intensive care Society, (2017). Ophthalmic Services Guidance Eye Care in the Intensive Care Unit (ICU) June 2017. Available at https://www.rcophth.ac.uk/wp-content/uploads/2017/11/Intensive-CareUnit.pdf, Accessed 13/1/2020

C29: Large Scale Simulation: Challenges of Facilitating Simulation in The O2 Arena
Tim Collins, NHS Nightingale London
Louise Houslip, University Hospital Coventry/NHS Nightingale London
Colette Laws-Chapman, Guys & St Thomas NHS Trust/NHS Nightingale

Purpose: This presentation presents the complexities and strategies implemented for the large scale simulation training at The O2 Arena for NHS Nightingale, London.

Significance: NHS Nightingale presented unique challenges, including equipment, team variables and unfamiliar working practices whilst working in a large open environment originally built as an exhibition centre. Simulation is an education modality employed to help prepare learners for a future real events 1. A high-fidelity simulation area was set up in The O2 arena to replicate the perceived clinical reality within NHS Nightingale. Providing mass scale simulation in a conference arena provided complexities, confounded by the emergent situation of rapidly increasing ICU provision due to COVID-19 pandemic.

Method: Following a 5-day brief to implement a simulation curriculum with no pre-available equipment at the Excel, we moved to a 12-bedded simulated ward purpose built in The 02. This large and acoustically challenging arena, with no privacy for training & debriefs, combined with social distancing, was problematic to communicate and facilitate effective debriefs. In addition, there was limited adult critical care educators, creating variability in faculty expertise. Confounding factors include allocation and learner variability, from experienced critical care staff, through to musicians and airline cabin crew. This required faculty to constantly adapt to learning needs.

Results: Faculty adopted a co-facilitation, adaptive approach to support simulation and debriefing. Industry, technicians, adult and paediatric nursing and medical faculty collaborated to provide a supportive, realistic simulation curriculum. Daily pre-briefing and debriefing allowed iterative adaptation of the programme and supported faculty development. Social distancing was maintained by limiting participants per scenario, providing short simulation sessions and distancing during debrief. The plus/delta debrief model was used as this provides a swift debrief whilst also allowing novice and experts to debrief to successful outcomes 2. Scenarios with differentiated learning outcomes were matched to the streamed groups depending on their expertise and where applicable benchmarked to national competencies 3.

Conclusions: A large and skilled faculty, creative and adaptive to varying learner needs using a rapid improvement framework ensured that large scale simulation could be implemented within an Arena with positive evaluations.

References: 1. Gaba D (2004) The future vision of simulation in health care. Qual Saf Health Care 13:i2-10.
2. Schertzer K, Patti L. In Situ Debriefing in Medical Simulation. [Updated 2019 Oct 22]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; [Accessed 06/06/2020]
3. Critical Care Network National Nurse Leads (CC3N) (2015) 'National Competency Framework for Registered Nurses in Adult Critical Care . Step 1 competencies'.

C30: Putting the Boot into the Emergency Induction Boot Camp for the Nightingale Hospital

Colette Laws-Chapman, Guy's & St Thomas' Hospital
Dr Tim Collins, Teleflex Medical
Louise Houslip, Coventry Hospital

Purpose: Development of a simulation-based medical education (SBME) curriculum to support preparation of volunteer healthcare and non-healthcare workforce within Critical Care (CC) teams at NHS Nightingale London.
Due to the anticipated transient nature of the workforce and varying levels of expertise, simulation sessions were designed to be interprofessional, preceded by a series of skills stations to achieve:
• Give context to the skills sessions to effectively problem solve bedside situations
• Preparedness for COVID-19 emergencies
• Develop social and cognitive skills to enhance, problem solving, team working, decision-making and patient safety

Significance: With high learner volumes, limited resource within a time-restricted training programme, and an awareness that non-CC staff were concerned about their knowledge base, SBME needed to be time limited, adaptive whilst relevant. Focussing upon the principle theory of scaffolding knowledge (1) and skills through collaborative learning, and a reflective learning cycle (2) we aimed to create pertinent concrete experiences with team reflection through a facilitated debrief, clarifying technical and non-technical skills (NTS) knowledge acquisition,: And where possible, enhance team resilience through interprofessional simulated scenarios.

Method: Using the PDSA cycle3 we developed technical and NTS outcomes for anticipated common COVID19 scenarios, for all to observe or participate in. Establishing an adaptive faculty approach, responsive to rapid change in policy and adverse incidents, and on-the-day learner needs was essential. We selected the plus/delta model (3) due to its adaptability to the time restricted situation and changing faculty skill mix

Results: Taking a constructivist approach to facilitate learners application of new knowledge from the skills stations we created 10 scenarios, pitched at the varying level of learner to aide learner transition to working in CC. Feedback from participants was extremely positive with non-cc practitioners indicating that we gave them an unexpected level of preparedness for the concept of CC

Conclusion: Due to the urgency of the ever-changing situation, we had to constantly adapt, to meet the needs. This added to the pressure as cascade of changes was hard to disseminate across a large faculty. In addition, faculty were not staff in the hospital making it difficult to construct a contextualized authentic situation.

References: Chambers D et al (2013) Preparing student nurses for contemporary practice: The case for discovery learning. Journal of Nursing Education and Practice Vol. 3 No. 9 p106-113
Poore J, et al (2014) Simulation-Based Interprofessional Education Guided by Kolb's Experiential Learning Theory Clinical Simulation in Nursing, V10:4 P Published: https://doi.org/10.1016/j.ecns.2014.01.00
NHS improvement. 2018. Plan, Do, Study, Act (PDSA) cycles and the model for improvement. [Online]. [Accessed 13th March 2020]. Available from: https://improvement.nhs.uk/

C31: Point-of-Care Ultrasound for COVID-19 Patients in the Intensive Care Unit: A Case Series

Eleanor Corcoran & Professor Louise Rose, King's College London

Purpose: This was part of a national service evaluation project with the Intensive Care Society to identify whether Point-of-care ultrasound (PoCUS) guided change in clinical management of patients suffering from COVID-19 in ICU.

Significance: Use of PoCUS in critically ill patients has been associated with fewer ventilator days, lower risk of prolonged ICU stay (> 7 days) and a more neutral fluid balance. However, the role of PoCUS in management of COVID-19 patients is currently unknown.

Method:
We conducted a prospective observational case series of 18 ICU patients with COVID-19. An echocardiogram and 6-point lung PoCUS were performed by a PoCUS-accredited ICU nurse using the GE Venue (Chicago, US) or Philips Affiniti (Amsterdam, Netherlands) machines. Findings were documented using standardised case report forms and descriptive statistics were used to analyse data. Service evaluation consent was granted from the critical care ultrasound lead and the trust research and development department.

Results: 20 echocardiograms and 6-point lung scans were performed on 18 patients. 2 patients received repeat scans. The mean day of scanning (±SD) was 45.5±42.5 days since symptom onset (range, 3-88). 75% of scans resulted in a change in clinical management including: diuresis in 5 patients (27%), increased/decreased ventilatory support in 4 (22%), altered patient positioning and decreased level of care (tracheostomy decannulation and reduction in sedation/paralysis) in 2 patients (11%) respectively. Abnormal pathology was found in 4 patients (22%) requiring further imaging. All patients recovering from COVID-19 infection showed signs of moderate-severe COVID lungs including thickened pleura and global interstitial oedema.

Conclusion: In this 18-patient case series, PoCUS – assessed by a PoCUS-accredited ICU nurse - identified pathology requiring clinical intervention which was not previously detected using other clinical assessments. Significant lung damage was evident in all patients recovering from COVID-19 infection.

References: Mayo, P., Arntfield, R., Balik, M., Kory, P., Mathis, G., Schmidt, G., Slama, M., Volpicelli, G., Xirouchakix, N., McLean, A. & Vieillard-Baron, A. 2017. The ICM research agenda on critical care ultrasonography. Intensive Care Med, 43, 1257-1269.
Chen, Z., Hong, Y., Dai, J. & Xing, L. 2018. Incorporation of point-of-care ultrasound into morning round is associated with improvement in clinical outcomes in critically ill patients with sepsis. J Clin Anesth, 48, 62-66.
Smith, M. J., Hayward, S. A., Innes, S. M. & Miller, A. S. C. 2020. Point-of-care lung ultrasound in patients with COVID-19 – a narrative review. Anaesthesia, early access (not yet published in vol), pp. 1-9, DOI:10.1111/anae.15082.

Poster Abstracts

P01: Introduction of a visitor's guide app in the Critical Care setting

George Kerrison, Nottingham University Hospital

Aim: Aim of this project was to create an app that will contribute towards improving the way information is provided to the patients and visitors of Critical Care.

Background: Critical Care has historically been effective at providing high quality face to face information but not always at providing ongoing quality supportive information. Gaps in information dissemination within critical care were highlighted by staff, patients and visitors. The plan was to create a different form of information sharing within critical care to fill this gap. A digital health app was decided to try and rectify this quandary.

Method: Surveys were completed both by staff and visitors, to ascertain if an app was a suitable option to pursue, or if another was preferred, and, if so, what should be included on an app or other format. All information was passed through clinical governance, Trust communications teams, and proof read by a reader's panel. All information was then passed onto IT and NUH charity for funding and development, with multiple testing phasing culminating in the app launch. Feedback will be ongoing once the app has been fully launched (will be before conference)

Result: Multiple issues were discovered throughout the designing, production and launching of this app. Once an app had been decided as the best option, the design and content were created. The content has all been decided on from feedback gained during initial and ongoing testing. The app is to be launched in the second quarter of 2020.

Conclusion: Plans are in place for the continuing development of this app and for wider role out as a blueprint for other Trusts to follow. Findings will help to shape the way information is handled in Critical Care in the future and help with the use of technology in healthcare.

P02: Reducing the 'Time to Hold' on Neurosurgical Critical Care

Sarah Wild, Leeds General Infirmary

Purpose: "The implementation of a proforma to overcome the length of time taken for sedation holds and subsequent neurological assessments to be carried out on Neurosurgical Critical Care.
To enhance the communication channels between the MDT around sedation holds and therefore increase staff confidence and knowledge in this area, ultimately resulting in improved patient care and experience."

Background: "Within Critical care it has become the `normal` for sedation holds and subsequent neurological assessments to occur late morning or early afternoon, with the consequence of extended use of sedation and a delayed subsequent assessment or extubation resulting in extended time as a level 3 patient.

The aim of this quality improvement intervention was to implement a more positive culture regarding sedation holds thereby improving patient experience and resource utilisation."

Method: Quality Improvement Methodology was used for this project. Three Plan, Do, Study, Act (PDSA) cycles were completed yielding very positive results.

Conclusion: Initial Timed Observations displayed that sedation holds took on average 3 hours. The time taken to perform a sedation hold has been dramatically reduced and is being adopted by other critical care units.

References: Frontera JA. Delerium and sedation in the ICU. Neurocritical care 2011;14(3) 463-74.

P03: The Value of Critical Care Follow-up from a Patient's Perspective

Ingeborg Iris Knoop, Eastbourne District General Hospital

Purpose: In this patient satisfaction evaluation, we looked at the responses from the 18 patients and their families who attended the ESHT MDT critical care follow up clinic during a 3-month period to find out what they found most helpful, least helpful, and if there is anything that could be done differently.

Background/Significance: Eastbourne District General Hospital's (EDGH) Critical Care Dept is the first in the South East with an integrated psychology service. Both early psychological intervention as well as follow up are seen as important in critical care (Storli & Lind, 2009), as ICU admissions are associated with high levels of anxiety, depression and posttraumatic stress (Rattray & Hull, 2007). Literature defines psychologist's role in ICU

in three fundamental areas: attention to patients at the ICU, attention to family members or caregivers, and work with health personnel (Novoa et al., 2006).

Method: Thematic analysis of 18 questionnaires (95% response rate) collected between 02 Oct – 27 Nov 2019

Result: All attendants experienced the follow-up clinic as helpful and positive, with 78% of respondents finding nothing unhelpful about the appointment. The most common and important themes that we found were: The Expertise, professionalism and compassion of staff (which was mentioned by 50% of respondents), Discussing concerns and asking questions (44%), Sense-making of their stay in ICU (33%), Reassurance regarding symptoms and progress (33%), and Expressing gratitude to staff (33%). A few areas for improvement were mentioned: Parking (11%) and waiting times (11%).

Conclusion: Our findings highlight how and why the service is valued by patients and their families, with much of our findings concurring with existing research that follow-up helps the patient in his quest for meaning about happened in ICU (Storli & Lind, 2009). In addition, early psychological intervention within ICU leads to lower rates of anxiety (8.9% vs. 17.4%) and depression (6.5% vs. 12.8%) (Peris et al., 2011).

References: Novoa, M., Ballesteros de Valderrama, B.C., (2006). The role of the psychologist in an intensive care unit. Univ. Psychol. Bogotá (Colombia) 5 (3): 599-612, octubre-diciembre de 2006 Available from: <http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1657-92672006000300014&lng=en&nrm=iso>. ISSN 1657-9267
Rattray, J. E., & Hull, A. M. (2008). Emotional outcome after intensive care: literature review. Journal of Advanced Nursing, 64(1), 2–13. doi: 10.1111/j.1365-2648.2008.04767.x
Storli, S. L., & Lind, R. (2009). The meaning of follow-up in intensive care: patients' perspective. Scandinavian Journal of Caring Sciences, 23(1), 45–56. doi: 10.1111/j.1471-6712.2007.00589.x

P04: Evaluation of the SWIFT-R approach to ICU discharges

Andrea Turner, Royal Berkshire NHS Foundation Trust

Aim: To report on the evaluation of a "readmission risk" screening tool "SWIFT-R (R-Reading)" that was developed in 2018 by combining the Stability and Workload Index for Transfer Score (SWIFT) (Gajic et al 2008) with locally agreed high-risk factors, with the aim to ultimately designed a graded response that streamlined discharge planning, bringing a tailored approach to post-ICU reviews.

Background:
Unplanned readmission to Intensive Care (ICU) can adversely affect mortality, be resource-intensive and distressing for patients and families (DeSautels et al, 2017). The Critical Care Outreach (CCOR) team is part of the multidisciplinary discharge planning process: how this is achieved can be dependent on the individual CCOR practitioner. Furthermore, discharged patients are reviewed by the CCOR service once, within 24 hours of transferring from ICU, irrespective of the patient's length of stay or dependency on transfer.

Method: Retrospective chart review over 9 months, screening all patients discharged from ICU, excluding those that were not for readmission, for end of life management, discharged to another facility or home

Result: 397 patients were screened. Of those 340 (85%) of patients were seen pre-ICU discharge.
Out of the 340 pre-discharge reviews, we found:
144 (42%) low risk
123 (36%) medium risk
52 (15%) high risk
21 (6%) very high risk
In total 4 patients were re-admitted (1 x low risk and was readmitted 2 weeks later; 2 x medium risk and was readmitted >36 hours; 1 x medium & high risk – readmitted and died on the unit)

Conclusion: NEWS > 5 was the most common factor across the Reading variables
Although readmission rates were low the categories 'High and Very High' risk identified patients with greater dependency on the wards: potentially identifying tailored input needs from CCOR

References: DeSautels T, Das R, Calvert J, et al (2017) Prediction of early unplanned intensive care unit readmission in a UK tertiary care hospital: a cross-sectional machine learning approach
Gajic O el al (2008) The Stability and Workload Index for Transfer Score predicts unplanned intensive care unit patient readmissions: initial development and validation. Critical Care Medicine 36 (3): pp 676-682.

P05: Education during the Pandemic – Evaluating the implementation of an expedited Critical Care education program

Lisa Enoch, Cambridge University Hospitals

Introduction: Critical care nursing is highly specialized and requires years of training to achieve the skills and knowledge needed (Critical Care Network - National Nurse Leads, 2015). In March 2020, NHS trusts were asked to create additional capacity to meet COVID19 demands.

When surge planning for critical care, it became apparent that an education package was required to develop staff without critical care skills. Our critical care, split across two areas, has 32 level three care beds and 11 level two beds. Phase 4 of the surge plan needed 79 level three beds, requiring 98 additional nurses.

A two day 'upskilling course' was rapidly developed. This included lecture-based and inquiry-based sessions. Over a 6-week period, 450 nurses and 50 theatre support workers were trained and then allocated limited supernumerary shifts.

Objective: As part of our sustainability planning and preparation for a second surge, we asked for feedback from redeployed staff. The development had been managed through a crisis period and our objective was to evaluate the implementation of the program.

Method: A mixed methods survey was emailed to the redeployed staff. Consent was implied by answering the questionnaire. A question was included at the end to capture nurses who consented to further follow up. These will be contacted for a Focus Group debrief.

Results: Twenty seven responded (18%). The data will be analyzed using excel and a thematic analysis tool (Nowell et al 2017).
The preliminary results have seen themes already emerging, i.e. support preferences, delivering techniques and psychological safety (attached image).

Conclusion: We aim to understand the efficiency of the course and the role of the education team in the facilitation of training and support of redeployed staff. Whilst the majority of responses have been positive; there have been pertinent points regarding support preferences, poor communication, delivering techniques and psychological safety.
Further exploration through focus groups with substantive Critical Care and redeployed staff can give insight into perceived barriers of delivering education during a pandemic and assisting preparation for further surges.

References: Nurses in Adult Critical Care: Step 1 Competencies. Available at: https://www.cc3n.org.uk/uploads/9/8/4/2/98425184/01_new_step_1_final__1_.pdf (Accessed: 23 February 2020).
Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. International Journal of Qualitative Methods. https://doi.org/10.1177/1609406917733847

P06: Improving oxygen prescribing

Karen Maher, St Georges Hospital

Purpose: Improving oxygen prescribing for adult patients being cared for on hospital wards.

Background/Significance: As a newly formed critical care outreach team in a large teaching hospital, we have noticed a high trend in patients being prescribed the wrong oxygen target resulting in over and under oxygenating patients. This goes against BTS guidelines advises regarding correct oxygen saturation for COPD patients (BTS, 2017)

Method: We surveyed 12 nurses across 4 different units, including both surgical and medical wards, who regularly look after patients with known COPD. All questions were multiple choice, offering 4 potential answers but only one was correct.
We also carried out 6 semi-structured informal interviews with members of the medical team ranging from FY1 to consultant level to ascertain their knowledge and what oxygen target range they aim for with their patients.

Result: This questionnaire highlighted that many nurses believe that if a patient is known COPD their oxygen target range should be set at 88-92% and titrate their oxygen requirements to meet this target. It was also noted that some nurses did not have a good knowledge of different oxygen delivery devices and were unsure when to use air or oxygen when delivering a nebuliser to this cohort of patients
An FY1 was able to acknowledge the need to prescribe an oxygen target of 88-92% and also when to aim for higher saturations, but would only prescribe what his consultant wanted, even if he knew this would result in over or under-oxygenating the patient.
A medical consultant too believed that all COPD patients should have oxygen target range of 88-92%, but was unable to back this up with sound medical evidence.

Conclusion: Further research to see if this is an issue in other hospitals would help investigate this issue further. As a team, our overall aim will be to improve the knowledge behind oxygen prescribing and preventing patients being over or under oxygenated in future.

References: British Thoracic Society (2017) BTS guideline for oxygen use in adults in healthcare and emergency settings. British thoracic society.

P07: Introducing SLED in critical care during the COVID19 pandemic

Lauren Ward, Cambridge University Hospital

Purpose: This poster will explore the challenges faced when introducing Sustained Low Efficiency Dialysis (SLED) into critical care. To evaluate what went well during the introduction of SLED during the COVID19 pandemic and explore the challenges and barriers. Identify what we have learnt from the process and how this will guide future service improvement projects.

Background/Significance: During the peak of the COVID19 pandemic, critical care units across the UK faced shortages of continuous renal replacement therapy consumables (NHS England, 2020). Alternative treatments were sought and SLED was introduced into our unit. Intermittent Haemodialysis (IHD) is not common practice in critical care, Continuous Renal Replacement Therapy (CRRT) is preferred due to reduced risk of cardiovascular instability and the ability to predict the clearance of pharmacological agents (Nash et al., 2017).

Method:
Over a period of 4 weeks during May 2020, nurses were trained to undertake SLED treatments using a simulation machine.

A questionnaire was emailed to SLED trained staff (n=20) asking participants open and closed questions after training completion.

Descriptive statistics were used to analyse closed questions.

Result: More than half of the nurses felt that the training provided did not prepare them to undertake a treatment on a patient. The main challenges to introducing SLED were; lack of environmental space, lack of training opportunities, unfamiliarity with the therapy and training of non-clinical staff.

Conclusion: There have been significant challenges to introducing SLED into critical care. More training resources should be available to staff to increase confidence and competence in providing treatments for patients. Only clinical staff should be trained in order to maximise support to bedside nurses. Environmental constraints must be carefully considered prior to the introduction of a new therapy.

References:
NHS England and NHS Improvements (2020) Clinical guide for renal replacement therapy options in critical care during the coronavirus pandemic. Available at: https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/04/C0298-speciality-guide-clinical-guide-for-renal-replacement-therapy-options-in-critical-care-v1.1.pdf (Accessed: 29 June 2020).
Nash, D. et al. (2017) 'Systematic review and meta-analysis of renal replacement therapy modalities for acute kidney injury in the intensive care unit', Journal of Critical Care, 41, pp. 138-144.

P08: Examining virtual visiting using videocalling during the Covid pandemic

Joanne Charlesworth & Dr Mark Vivian, CUH Addenbrookes Hospital

Purpose: How effective was videocalling in providing support to relatives of patients admitted to intensive care?

Significance: In March Addenbrooke's Hospital made the decision to suspend visiting to Intensive care units to reduce the spread of Covid19. Relatives of patients in intensive care often suffer with long-term mental health repercussions such as anxiety and PTSD (Petrinac 2016) . Good communication, high quality information and support from the clinical teams is vital in mitigating this (ICS 2019) . A strategy utilising videocalling was developed to maintain communication within the restrictions.

Method: Virtual visiting via videocall was facilitated by a collaboration between Doctors, who set up and managed the technology, and a team of Nurses, who developed protocols to support communication between staff and relatives. We developed innovative solutions, whilst working from home, ensuring provision of clear, quality information to relatives and maintaining patient dignity and confidentiality.

Results: This system has been in use for 3 months and review is ongoing. We have facilitated videocalls with over 60 relatives. Early feedback suggests videocalling has been well received. Problems have been encountered with the videocalling platform and ensuring patient confidentiality. We have refined our protocols and are reviewing alternative long-term solutions. Additionally we found some relatives do not have the facility to make videocalls or are not technologically confident and needed substantial phone support. There may be additional implications as the shielding team return to clinical duty.

Conclusion: As a tertiary centre we often have relatives who live far from the hospital. We have found videocalling to be a valuable way to emulate the process of bedside visiting for relatives unable to attend the unit, with implications for wider hospital visiting.

References: Petrinec AB, Daly BJ.(2016) Post-Traumatic Stress Symptoms in Post-ICU Family Members: Review and Methodological Challenges. West Journal of Nursing research [online]38(1),57–78. [viewed 29th June2019]. Avaliable from doi 10.1177/0193945914544176 Intensive care society (ICS), The faculty of intensive care medicine (2019) Guidelines for the provision of intensive care services. Edition2 [online] Intensive care society [Viewed 28th June 2019] avaliable from: https://www.ics.ac.uk/ICS/ICS/GuidelinesAndStandards/GPICS_2nd_Edition.aspx

P09: Should we take a look at nursing notes?

Katy Surman, North West Anglia NHS Foundation Trust

Nicola Duffy, North West Anglia NHS Foundation Trust

Niamh Campbell, West Suffolk NHS Foundation Trust

Sarah Godlee, West Suffolk NHS Foundation Trust

Yungei Yang, Cambridge University Hospitals NHS Foundation Trust

Katherine Ripullone, Cambridge University Hospitals NHS Foundation Trust

Sean McGuire, North West Anglia NHS Foundation Trust

Nadya Pohran, University of Cambridge

Timothy Baker, Cambridge University Hospitals NHS Foundation Trust

Purpose: Our primary aim was to assess the differences between nurses' and doctors' perceptions of whether nursing notes serve as an adequate form of communication.

Background/Significance: ICU care is complex requiring clear communication between all clinicians. Patients are dependent on their nurses as their advocates to ensure care prioritises suit them as a person. (NMC,2015; NICE, 2016)

Method: An online questionnaire was sent to four ICU's in the East of England. Nurses were asked to specify their experience in intensive care, the structure of their notes, how often doctors read their notes, and what they thought doctors were interested in. Doctors were asked to specify their speciality and experience, how often they read nursing notes, if not why and if so, what they found most useful.

Result: 120 nurses and 47 doctors responded to our questionnaire. 37% of nurses use a systems-based approach to write their notes, 27% use an A-E structure, 15% use a pre-formatted template or care plan and 21% use an alternative method. 76% of nurses think that doctors rarely or never read nursing notes, compared to 40% of doctors. Three main themes emerged when nurses were asked what they thought doctors read in their notes: relative communications, skin assessments and notable events. Doctors indicated that the information they were looking for included: relative communication, the patient's gastrointestinal status and nursing concerns. Doctors indicated that it would be most useful to highlight nursing concerns and patient-reported symptoms (where applicable).

Conclusion: Nursing notes appear not to be perceived as serving their function to facilitate effective communication between allied healthcare professionals. Writing notes reduces the time spent on direct clinical tasks, consideration for how to improve this needs to be made. It is worth noting that irrespective of their structure no nurse highlighted the need to document patient preferences or their symptomatic needs.

References:Nursing and Midwifery Council, 2015. The Code. Available at https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf [Accessed 29 June 2020]
"National Institute for Health and Care Excellence, 2016. Nice Guideline 53.Available at https://www.nice.org.uk/guidance/ng53/resources/tailored-resources-4429245855/chapter/2-Ensuring-effective-communication-between-teams-and-with-people-using-services-families-and-carers [Accessed 29 June 2020]

P10: Developing a new service to support ICU families through the COVID-19 Pandemic

Alexandra Wray, Hull University Teaching Hospitals NHS Trust

Purpose: During the pandemic, ICUs were over capacity, visiting stopped and communication extremely difficult. When inadequately informed families and poorly supported, families suffer significant distress and anxiety (Jacobowski, Girard, Mulder and Wesley Ely 2013). The service aimed to improve communication and sharing of information between the healthcare team and families (The Critical Care National Network Nurse Leads Forum 2015).

Background/Significance: To develop a new service to support ICU families who were separated from patients during a pandemic, distressed in the context of critical illness with uncertainty and fear of their loved one's death (Azoulay, Chaize and Kentish-Barnes 2014).

Method:
The service was developed in a week taking into consideration practice in other hospitals and current research for ICU communications with involvement from the ICU senior nursing team, medical staff, psychologists and the hospital Chaplaincy team.

Result: A 7 day telephone service provided daily updates to families, ensuring they were supported and felt connected to their loved one with bereavement support including keepsakes, sympathy cards and follow up phone calls.
14 ICU nurses, unable to work clinically were redeployed to the service and continue to support around 60 families each week.
Feedback so far from families has expressed their gratitude for the service:
"it was incredibly difficult for us not being with him but knowing you were there for us gave us such comfort and support at such a difficult time"
"thank you for the sympathy card, I had to write and thank you for the help and support and daily calls you gave me….knowing he was being looked after by compassionate and caring people made it more bearable"
"the trauma and distress of not being there was eased by your calls and e-mails I could send"

Conclusion: The service continues and will be formally evaluated. Elements of the service will continue post COVID-19 due to overwhelmingly positive feedback from families and staff proving the essential need of this service during the pandemic.

References: Azoulay, E., Chaize, M. & Kentish-Barnes, N. (2014) Involvement of ICU families in decisions: fine-tuning the partnership. Annals of Intensive Care. 4(37), 1-10. Jacobowski, N, L., Girard, T, D., Mulder, J, A. and Wesley Ely, E. (2013) Communication in Critical Care: Family Rounds in the Intensive Care Unit. American Journal of Critical Care. 19(5), 421-430. The Critical Care National Network Nurse Leads Forum (2015) Critical Care Nursing Step Competencies. Available online: https://www.cc3n.org.uk/uploads/9/8/4/2/98425184/01_new_step_1_final__1_.pdf [Accessed 29/06/20].

P11: COVID-19 Demographics and Critical Care Outreach

Natasha Trenchard-Turner, Triona Yearsley, Ciaran Lynch & Dr Deborah Dawson, St George's Hospital University NHS Trust

Purpose: To characterise the demographics of the COVID-19 patients being referred to the Critical Care Outreach Team (CCOT) at St George's University Hospital NHS Trust (SGH). Enabling benchmark against what is known nationally and internationally.

Background/Significance: Nationally there are audits on all COVID+ adult inpatients (Doherty et al, 2020) and on those admitted to ICU (Intensive Care and National Research Centre, 2020) but not the group that is referred to CCOT: deteriorating adult inpatients. COVID-19 is an emergent pathogen and understanding its risk to our patients is the starting point to improving treatment.

Method: A retrospective audit included reviewing the notes of all patients referred to CCOT at SGH with a diagnosis of COVID-19 between the 1st of March and the 31st May, this data was then interrogated using excel. The number of patients referred was not significant enough to run statistical analysis.

Result: The results concurred with the national findings that, of the CCOT referrals; BAME patients were disproportionately highly represented compared to the hospitals' local population. The referrals increased at a rate mirroring the overall hospital admissions of COVID-19 patients, with up to a third of the COVID -19 positive daily admissions being referred at the busiest point. 16% of the referrals had a not for critical care escalation limit set after referral, 65% of the referrals were admitted to ICU. 43% of all referrals survived to discharge. It is difficult to compare this group to national data as it encompasses more than ICU admission but less than all inpatient COVID-19 positive admissions.

Conclusion: This data emphasises the National findings, showing BAME patients were higher risk. A National discussion on how to protect at risk groups is urgently required. A larger CCOT data set could be examined alongside those that received not for ICU Treatment Escalation plans to better interrogate the outcomes.

References:
Docherty, A , Harrison, E, Green, C, et al (2020) Features of 20 133 UK patients in hospital with covid-19 using the ISARIC WHO Clinical Characterisation Protocol: prospective observational cohort study. BMJ 2020;369:m1985.
Intensive Care and National Research Centre (2020) ICNARC report on COVID-19 in critical care 10 July 2020. Intensive Care and National Research Centre.

P12: Reasons for leaving Intensive Care Unit- nurses' perspectives

Chitra Sanjel, Chelsea and Westminster Hospital NHS Foundation Trust/West Middlesex Hospital

Background:
Nurses in Intensive Care Unit (ICU) are highly trained and losing a staff impacts on the cost effectiveness and patient care. Various studies are done on the nurses working in ICU to help with staff retention. However, there seems to be a gap in literature regarding studies

done on nurses who have left ICU in the UK.

Aim: The aim of this study was to explore the reasons that influenced nurses to leave ICU.

Method: Qualitative Interpretative phenomenology approach was used. Ethical approval was obtained from University of West London. Prospective participants were contacted through UWL course leaders and RCN Critical Care and Flight Nursing Forum. Purposive sampling was used and five nurses who had left ICU practice in the last two years were telephone interviewed. Data was synthesised using thematic analysis.

Results: The four themes emerged were: lack of development opportunities; poor management and leadership; lack of recognition ; and negligence on staff well-being. Although inconsistency in leadership of senior nurses, lack of debriefing and support after challenging events and lack of shift coordination opportunities have been listed in other literature; perception of favouritism to some staff by seniors and unfair allocation of annual leave were some of the reasons found in this study which have not been identified before. Various strategies were recommended by the participants on encouraging retention.

Implications for Practice: This study has provided rich explanation on the causes of ICU nurse retention in the UK. It has also recommend the strategies that can be adopted by organisations to retain experienced ICU staff. Further large-scale mixed method research needs to be done on nurses who have left working in ICU to find the reasons from various geographical locations so that it can inform the development of national strategies on nurse retention.

References:Khan, N., Jackson, D., Stayt. and Walthall., H. (2018) ' Factors influencing nurses' intention to leave adult critical care settings', Nursing in Critical Care, 24(1), p. 24-32. doi.org/10.1111/nicc.12348
Sawatzky, J.V., Enns, C.L. and Legare, C. (2015) 'Identifying the key predictors for retention in critical care nurses', Journal of Advanced Nursing, 71(10), pp. 2315-2325. doi: 10.1111/jan.12701.
Tao, H., Ellenbecker, C.H., Wang, Y. and Li, Y. (2015) 'Examining perception of job satisfaction and intention to leave among ICU nurses in China', International Journal of Nursing Sciences, 2(2), pp. 140-148. doi: 10.1016/j.ijnss.2015.04.007.

P13: Education - Supporting redeployed staff during the COVID-19 pandemic
Rebecca Sumnall, University Hospitals of Leicester

Purpose: During the COVID-19 pandemic critical care bed capacity had to increase significantly in order to care for the increasing number of patients requiring ICU care. Therefore non-critical care nurses needed training in order to care for these patients.

Background/Significance: Non critical care nurses ideally should receive condensed critical care training appropriate to their role in preparation to work in the critical care setting. (NHS, 2020)

Method: Training was developed to support the development of staff redeployed to critical care to support the surge response. An online study was sent to all the staff that attended the training to evaluate the training, to try and understand their experiences of the training and learn for the future in case this exercise needs to be repeated. 356 members of staff were trained and 163 surveys were returned.

Result: The survey gave quantitative data about whether staff had volunteered to attend the training, had they done a shift or not and which sessions were the most useful. There was also qualitative information about whether the training had helped reduced the anxiety they felt about being redeployed and anything else that could have been done to support them.

Conclusion:
The integration of redeployed staff into the Critical Care team allowed the additional patients to be cared for as safely. These staff required training to provide them with the information to care for these patients safely.
The training was generally well received and helped most of the staff that attended. This was a difficult time for all concerned and continues to be so.

If critical care were to require redeployed staff again in the future in order to cope with increased ITU bed capacity refresher training may be required. Many of the staff that were trained never actually did a shift on critical care.

References: NHS (2020) Coronavirus: principles for increasing the nursing workforce in response to exceptional increased demand in adult critical care

P14: Promoting psychological wellbeing as part of a Clinical Education process in nurses new to Adult Critical Care
Helen Horton & Catherine Balcombe, Leeds Teaching Hospitals NHS Trust

Purpose: Our aim was to evaluate the introduction of a new format for induction and education to nurses new

to an Adult Critical Care (ACC) department. The change was to use a cohort system (rather than different staff on each study day) and incorporated sessions with a Clinical Psychologist.

Significance: The psychological and emotional impact of working in critical care environments has been well documented, particularly including Burnout Syndrome (eg Vincent at al, 2019). The service had already begun to provide support on one ACC unit, with individual sessions of Clinical Psychology as part of the induction, and recommendations from this included the consideration of a group format (Ormerod et al, 2019).

Method: The sample included nursing staff who began employment within ACC in Autumn 2019. The Clinical Psychologist provided a 1-hour lecture on wellbeing on session one and reflective practice groups (RPGs) on the five subsequent sessions. Data collection was via self-report questionnaires and feedback forms.

Result: Full analysis has yet to be completed but the initial feedback results are positive. Participants mean rating for the question "the RPG was helpful today" across all groups was 8.72/10 (with 0 being not at all and 10 being completely). In the overall evaluation, 83% of participants who completed feedback rated the groups as being useful or very useful in helping them feel supported in their new role. An overarching theme from the question of "what did you find most helpful about the groups" was the opportunity to share experiences with people in a similar position to them.

Conclusion: The findings show that the staff found the opportunity to have RPGs and peer support to be helpful in supporting them in their new role. Future plans are being discussed about how to continue and further evaluate this process given current challenges around social distancing.

References: Vincent, L., Brindley, P.G., Highfield, J., Innes, R., Greig, P. & Suntharalingam, G. (2019). Burnout Syndrome in UK Intensive Care Unit staff: Data from all three Burnout Syndrome domains and across professional groups, genders and ages. Journal of the Intensive Care Society; 20(4): 363-369
Ormerod, J., Pearson, S., Fisher, C. & Hudson, R. (2019). The experience of running a staff support service for critical care nurses. Clinical Psychology Forum No. 321

P15: The Use of Fully Immersive Simulation Training within a Intensive Care Course Curriculum

Nicole Lee, Broomfiled Hospital

Introduction: A prospective introduction of fully immersive simulation day for critical care nurses within a critical care course curriculum.

Background: The benefits and evidence of full immersive simulation training (SIM) is ever growing with increasing evidence in medical education and addition to mandatory curriculum in some healthcare professions (Heath Education England, 2020, ASPiH, 2014, UK foundation programme, 2016).

Following a review of the current nursing Intensive Care Courses providers run across the South East of England it highlighted none of the mandatory curriculum had use of a full immersive Simulation experience as a learning objective.

Introduction of a fully immersive simulation day was added to the curriculum for one provider with scenarios based on module content delivered across five simulation centres at the local hospitals with support of local educators.

Results: Students that completed the simulation day feedback that this style of training reduced disconnect between the theory and practice, aided rich discussions around module learning enabling them to feel more confident within clinical practice. Addition learnings points raised within the students feedback were the non clinical skills highlighted following participation with communication, leadership, SBAR handovers, and staying calm during critical situations highlighted.

Conclusion: The use of fully immersive SIM training was of benefit to students to aids learning and reduces disconnect between theory and practice for critical care nurses undertaking a critical care module. The use of local simulation centres and clinical educators led to rich discussions as part of debrief improving students overall confidence within the clinical environment.

Implications for practice: The use of fully immersive SIM training was of benefit to students to aids learning and reduces disconnect between theory and practice for critical care nurses undertaking a critical care module. The use of local simulation centres and clinical educators led to rich discussions as part of debrief improving students overall confidence within the clinical environment.

References: Health Education England,. 2020. Simulation. Online <https://www.hee.nhs.uk/our-work/simulation> [Accessed] 24th June 2020.
ASPiH. 2014. The National Simulation development project: summary Report [online] <ASPiH.org.uk/we-content/uploads/2017/07/national-scoping-project-summary-report.pdf>. [Accessed] 24th June 2020.
UK Foundation programme. 2016. The Foundation Programme Curriculum. [Online} <https://

foundationprogramme.nhs.uk/wp-content/uploads/
sites/2/2019/11/FP_Cirriculum_2016_V2-1_0.pdf>.
[accessed] 25th June 2020

P16: Has the introduction of C.A.L.M. Improved Basic Airway Awareness?

Sarah Jones, Kay Sybenga, Michelle Hunter, NHS Blood and Transplant

Introduction: The 4th National Audit report in 2011, which examined major complications in airway management, identified 168 recommendations that would improve outcome and also reduce the incidence of these complications. The C.A.L.M programme was developed to address some of these recommendations.

Background: The educational objectives of the 4 hour Critical Airway Learning and Management (C.A.L.M.) training/simulation programme were to address issues relating to Basic Airway management and covers areas of:
1.   Human factors
2.   Capnography
3.   Airway Checklists
4.   ISBAR handover tool
5.   Emergency Front of Neck Access (eFONA)

The aim of the study is to identify if, following this programme
1.   An improvement in knowledge was shown
2.   An improvement in practice was identified

Main Findings / Results / Discussion: A mixed method design study was used and it looked at 3 areas:
1.   Pre/post self-reporting questionnaires to gauge levels of learning
2.   An 8 question Likert type self-efficacy scale post course
3.   A re-evaluation of questions 3 and 6 months post CALM to identify change in practice

The programme consisted of 1 ½ hour classroom based education & 2 ½ hour simulation based scenarios encompassing all the taught topics delivered to both nurses and doctors of varying level of experience.

The educational objectives underpinning the CALM programme demonstrates overall (n 21) an improvement in knowledge   (n 19).
The pre and post questions identified that 90% of candidates gained knowledge.

Conclusion: 3 month results from "impact on practice" imply that areas relating to Capnography, ISBAR, and Airway Awareness have 100% compliance.

There is 80% compliance with the DAS checklist, however, the checklists are a recent addition to the arrest trolley and may account for the 20% who feel they do not always use them.

From this study, it has shown that the introduction of C.A.L.M has improved airway awareness in WGH.

Implications for practice:
3 Difficult Airway Trolleys in ICU, ED and Theatre
Audited monthly for standardisation
eFONA envelopes on all arrest trolleys
DAS guidelines on all Arrest trolleys
Continuation of CALM programme
NMBI and Royal College of Anaesthesiologists accreditation

References: Cook, Tm, Woodall, N (2011) "Major complications of airway management in the UK: a result of the 4th National Audit Project and Difficult Airway Society", The Royal college of Anaesthesia, March 2011. Frerk C., Mitchell V. S., McNarry A. F., et al. Difficult Airway Society 2015 "Guidelines for management of unanticipated difficult intubation in adults", British Journal of Anaesthesia. 2015; 115(6):827"848

P17: Simulation...Sold!

Kimberley Kirkbright, Forth Valley Royal Hospital

Introduction: As an advocate of simulation based education, I developed and led a team to formalise simulation as an education tool in my ICU. This proved a challenge, as an information gathering effort demonstrated nurses aversion towards this form of learning. The aim was to reduce the negative culture and introduce simulated scenarios, following up with courses at the Scottish Centre for Simulation and Clinical Human Factors (SCSCHF). I am keen to promote simulation thus empowering others to implement simulation in their own clinical areas.

Background: My passion for simulation stemmed from my Mother - a Midwife - who involved me in scenarios on various obstetric emergency study days. I then attended many courses at the SCSCHF and with little experience began facilitating simulation for postgraduates at the University of Stirling. On completion of my faculty development training I became part of the faculty for the medical student curriculum. This experience was instrumental in developing a Simulation Team within my ICU. This year I facilitated a simulation course 'Management of Intensive Care Emergencies' (MICE).

Main Findings / Results / Discussion: It has taken two years to fully establish simulation in my department. Success in changing the culture has taken persuasion, patience and perseverance. Staff now trust and

believe in this method of learning. Feedback I received revealed simulated learning should be integral in staff development.

Conclusion: Changing a culture in the workplace is challenging, however, I was undaunted. I was keen to break down the barriers of those averse to change in education methodology. We now have a fully established team who support me in delivering simulation based education.

Implications of Practice: I hope other staff who have a similar ambition will now have the courage to take on this challenge in their own areas. My recommendation is to 'sell' simulation in the right way, making it fun, relevant and relatable.

References: Forrest, K., McKimm, J. and Edgar, S., 2013. Essential Simulation In Clinical Education. Chichester, West Sussex England: Wiley-Blackwell.

P18: Using audio-visual vignettes to explore how nurses make the decision to restrain a delirious patient on the critical care unit

Angela Teece, University of Leeds

Introduction: Delirious patients are at risk of disrupting life-sustaining therapies, for example, dislodging an endotracheal tube or vascular access devices. Chemical or physical restraint are often cited by staff as the main method of preserving patient safety.

This study aims to explore how nurses make the decision to restrain patients, and identify potentially modifiable factors which may lead to reduced restraint use with delirious patients.

Background: An integrative review identified nurses as the primary decision-makers when applying restraint, but showed wide-variations in practice. Subjective descriptors were used to rationalise restraint use, and nurses may be influenced by unit custom and previous adverse experiences. A need for further education was identified together with research to explore the decision-making process.

Main Findings / Results / Discussion: 6 short audio-visual vignettes were developed from reflection on clinical practice and an integrative review of the literature and filmed at the University of Leeds. The vignettes depict a range of patients showing behaviours associated with hyperactive delirium and a range of risk inference. 'Think Aloud' aims to reveal the thought processes involved in making decisions through encouraging the participant to vocalise their thoughts whilst watching

the vignettes. The audio-visual format is intended to mimic the sights, sounds, and time-pressures of a clinical environment.

Conclusion: Audio-visual vignettes are a cost and time-effective way of exploring decision making remotely in challenging environments. This innovative method facilitates the study of decision-making under simulated clinical pressures and captures data about factors impacting on the nursing decision to restrain a delirious patient.

Implications of Practice: Audio-visual vignettes are an innovative and practical data collection tool for researchers and have potential for use in educational settings. They offer the opportunity to explore complex clinical decision making remotely. Clinical accuracy is essential for participant immersion and simulation of the environment and its pressures. Further development could enhance the method through making the vignettes responsive to participant decisions.

References: BRAUER, P. M., HANNING, R. M., AROCHA, J. F., ROYALL, D., GOY, R., GRANT, A., DIETRICH, L., MARTINO, R. & HORROCKS, J. 2009. Creating case scenarios or vignettes using factorial study design methods. Journal of Advanced Nursing, 65, 1937-1945 BENBENBISHTY, J., ADAM, S. & ENDACOTT, R. 2010. Physical restraint use in intensive care units across Europe: The PRICE study. Intensive Crit Care Nurs, 26, 241-245.
FINCH, J. 1987. The vignette technique in survey research. Sociology, 21, 105-114.

P19: Making a difference to critical care patient safety through simulation training

Sheela Vinu Kurian, Kings College Hospital

Purpose: The aim of the project was to provide high fidelity simulation training to critical care nurses based on the clinical incidents hence improving patient safety and outcome.

Background/Significance: The simulation programme provides a non-threatening environment for healthcare professionals to learn skills by exposing them to many situations and learn from each other (Lewis et al, 2012). These include self-awareness, observe behaviour under pressure, learning from each other and developing new skills. Our aim was to educate our team about the common errors happen in the clinical area and prevent it reoccur. Further we learned from experience that simulation training based on clinical incidents improved staff morale and autonomy.

Method: The simulation sessions were conducted by PDN, Matron, managers, ICU consultants and sim centre technical team. The day started with introduction to the high-fidelity sim centre and meeting the mannequin. The participants included band 5, 6, IENs and the faculty members acted as students, patient relatives and doctors. The scenarios included drug errors, self extubation, NGT placement, ETT displacement, anaphylaxis, hypoglycaemia, acute liver failure management due to paracetamol overdose, GI bleeding management, violence and aggression, delirium and patient transfer. Following the 30 mts scenario, debriefing and was done exploring the human factors followed by a 10 mts teaching session on the specific theme, emphasising the policy/ protocol/ management, evidence.

Result: Pre and post sim feedback was collected, and it was extremely positive as nurses agreed they developed their confidence to manage critically ill patients has improved considerably including assertiveness, delegation and escalation skills. They found the training empowered them with more autonomy and camaraderie and escalation skills. This was reflected in our patient relative feedbacks, ward accreditation results and staff feedback on team days.

Conclusion: Our training has decreased clinical incidents related to the above topics considerably and improved patient safety. Further, our staff morale has improved, and good practice been adhered to. We would be hopeful to extend the programme to multi-disciplinary team that would encourage learning from each other.

References: Lewis, R., Strachan, A. and Smith, M.M., 2012. Is high fidelity simulation the most effective method for the development of non-technical skills in nursing? A review of the current evidence. The open nursing journal, 6, p.82.

P20: Is the use of simulation realistic in a low-middle income country?

Chris Carter & Joy Notter, Birmingham City University
Priscar Sakala Mukonka, Lusaka Colleges of Nursing & Midwifery

Purpose: This project is an established partnership project between stakeholders in Zambia and the UK. The overall aim of the project was to raise the level of education from Diploma to Degree and build sustainability through staff education and training. Part of the project resulted in the enhancement of the critical care simulation centres in two Colleges of Nursing. This presentation outlines the findings of a training of trainers simulation workshop and the development and

sustainability of a simulation laboratory.

Background/Significance: Simulation provides a safe environment in which healthcare professionals can objectively practice situations not commonly seen in practice and develop confidence, technical and non-technical skills (Alinier & Platt 2013). However, its use in low-middle income countries (LMIC) is unclear (DiMiceli et al, 2019).

Method: The project involved a mixed-methods approach involving a national e-survey of critical care nurses, a review of simulation equipment available and a training needs analysis. The findings were used to develop and deliver a 2-day train the trainers workshops.

Result: The national e-survey revealed 100% unanimity regarding time spent in practice, and within that group, the majority argued that ideally, it should be 75% (46/62.5%). However, most respondents (55/74.3%) agreed simulation could be used as part of clinical practice to support student development, with 9 (12.2%) reflecting the lack of consensus regarding the role of simulation and a further 10 (13.5%) respondents unsure of its role.

27 nurses attended the 2-day simulation workshops. During which 7 new simulation scenarios were designed, tested and peer-reviewed by participants.

Conclusion: Findings from this study have been used to develop policy and practice to build flexibility into current and future critical care nurse programmes and to use different teaching and assessment strategies to respond to the current and future healthcare needs. Recommendations from this study are of importance for those establishing simulation as an educational approach, particularly in an LMIC setting.

References: Alinier G. Platt A. (2013). International overview of high-level simulation education initiatives in relation to critical care. Nursing in Critical Care. 19. 1. 42-49
DiMiceli M. Banerjee A. Newton M.W. McEvoy MD. (2020) Simulation in Low-Resource Settings: A Review of the Current State and Practical Implementation Strategies. In: Mahoney B. Minehart R. Pian-Smith M. (eds) Comprehensive Healthcare Simulation: Anesthesiology. Comprehensive Healthcare Simulation. Springer.

P21: Identification of barriers and facilitators to information exchange about a deteriorating patient's escalation of care: A Human Factors Analysis

Jody Ede, Oxford University Hospital Foundation NHS Trust

Background: Failure to identify and treat physiological deterioration in hospitalised patients may result from factors such as poor understanding of illness severity, lack of situational awareness and information barriers. This increases Intensive Care Unit admissions, length-of-hospital stay and mortality. Understanding influences to information exchange during events may inform service improvement strategies

Aim: To explore the facilitators and barriers to information exchange for a deteriorating ward patient.

Method: An ethnographic study using non-participant ethnographic observations was performed on acute surgical wards in two UK hospitals. Doctors, nurses and care support workers were observed and data was analysed thematically with broad themes being mapped to the System Engineering Initiative for Patient Safety model. This study was given REC ethical approval 16/SC/0264.

Results:
Person: Face to face or incidental referrals were common and effective when good team relations existed.
Tools and Technology: Outdated technology and communication systems made escalation referrals challenging. Intensive care was seen as a back-up during failed team communications.

Task: Three main types of escalation were captured informative, passive actionable and actionable.

Organisation: Misplaced paper notes caused care delays, team tension and frustration.

Environment: Patient bed spaces are not adapted for computer systems thus interrupting information exchange flows during ward rounds.

Implications for Practice: Using a human factors model with which to several key areas have been highlighted that facilitate or hinder escalation of care. Optimising referral communication systems and ward environments may improve information exchange. Cohorting wards and staff may increase the likelihood of incidental escalations and face to face referrals. Further definitions of escalation of care may be warranted

References: NCEPOD, "Themes and Recommendations Common to all Hospital Specialities," 2018.
K. Nagpal et al., "Failures in communication and information transfer across the surgical care pathway: Interview study," BMJ Qual. Saf., vol. 21, no. 10, pp. 843–849, Oct. 2012.
P. Carayon et al., "Work system design for patient safety: the SEIPS model," Qual Saf Heal. Care, vol. 15, pp. 50–58, 2006.

P22: Evidence Based Psychological Support for Intensive Care Nurses in COVID-19

Rhianna Colyer, Harefield Hospital

Aims: It is already widely known that intensive care is a high stress workplace, and that intensive care nurses are at risk of anxiety, depression and burnout. The added pressure of a global pandemic requiring massive numbers of intensive care beds has increased this stress exponentially, with evidence showing ITU nurses during COVID-19 suffer from twice as much anxiety and depression compared to hospital staff in low risk areas (Lu et al. 2020). As well as being an issue on a personal level for these nurses, poor mental health is also hugely expensive for the NHSand also has a direct impact on the standard of patient care (Health Education England, 2019).

Background/Significance: The choice and standard of interventions seems to be widely varied among different units, with an inconsistent use of evidence. For example, some areas have been promoting not discussing COVID-19 in the coffee room, however the evidence shows that avoiding news or mentions of COVID-19 is an unhelpful strategy, and that being able to discuss the current situation openly with friends is hugely important (Cai et al. 2020). We are also seeing the wellbeing resources being rapidly withdrawn now that we are past the peak, despite the face that there are still hundreds of active cases within intensive care around the country, meaning that these nurses are facing long shifts in 'red zones' without the support we had previously, such as access to food and hospital support phone lines.

Method:
Literature search
CINAHL search
Well-being and 'pandemic or epidemic or outbreak' and 'nursing' 39 results
2010-2020= 23 results
And 'intensive care unit or icu or critical care or critical care unit'
1 result- not relevant

Change
Well-being to support
Change nursing to staff
29 results- not relevant

'pandemic or epidemic or outbreak'
'staff;
Psychological
2010-2020
47 results 0 relevant

Add ,or covid-19 or covid or coronavirus
51 results
Limit to academic journal 17 results- 2 relevant

New search
covid-19 or coronavirus or 2019-ncov or sars-cov-2 or cov-19 AND staff or nurses or healthcare professionals or professionals AND wellbeing or well-being or well being or quality of life or wellness or health or positive affect or mental health
2010-2020
21 results, none relevant
MEDLINE (pubmed)
((covid or covid-19 or coronavirus) AND (wellbeing or support or psychological or mental)) AND (staff or nursing or nurses) 483 results
Within 1 year 241 ; relevant 9
From the 11 found, I went through and read each, chose the 3 largest and most robust pieces of research and used the rest as supporting evidence

Findings: After conducting a literature search, the three most relevant papers I have found detail not only the magnitude of the psychological stress being placed on intensive care nurses presently, but also which interventions may or may not be helpful. Shin et al. (2020) found that 45% of ITU nurses had difficulty sleeping, and 26% self reported frequent crying. Lai et al. (2020) found over 70% of frontline workers were suffering from psychological distress. This is not a small number of our workforce we are talking about, a huge majority of our ITU nurses mental health is massively at risk.

It was found that nurses with sub-threshold and mild psychological distress turned towards self help media and books for support, and were less inclined to want to speak with a psychologist, whereas those with severe distress preferred psychological input. Only 50% of the workforce had managed to access supportive media, and those with severe psychological distress generally did not access any resources, which could suggest that giving access to resources could prevent psychological distress from worsening for some, although this is just a correlation and does not prove causation.

Implications of Practice: Access to psychologists is imperative in these situations, but the entire team need adequate support during such challenging circumstances. One recommendation to practice would be the use of well-being boards in an area that is widely accessible to all staff. Not only will this facilitate self help media being accessible to the team, it also gives a place to offer psychological support and information for those who need it. It is also a good place to foster positive attitudes among staff, with the use of a 'positivity board' for the team to write positive messages.

These boards can also then be used to provide communication from the management team, as not everyone has access to emails from home, and it is very distressing to come to work and feel 'out of the loop'. Despite this being actively withdrawn, I would really urge hospitals to reconsider removing access to food and drink. The evidence supports how much of a positive impact this has on well-being. Although it does cost, health education England has found that for every £1 spent on well-being, there is a £4.20 return on this investment, due to better mental health in staff. We need to do the right things for our nurses before it is too late.

References: Cai, H., Tu, B., Ma, J., Chen, L., Fu, L., Jiang, Y. and Zhuang, Q. (2020) 'Psychological Impact and Coping Strategies of Frontline Medical Staff in Hunan Between January and March 2020 During the Outbreak of Coronavirus Disease 2019 (COVID-19) in Hubei, China', Medical science monitor, 26, pp. e924171. doi: 10.12659/MSM.924171.
Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z. and Hu, S. (2020) 'Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019', JAMA Network Open, 3(3), pp. e203976. doi: 10.1001/jamanetworkopen.2020.3976.
Shen, X., Zou, X., Zhong, X., Yan, J. and Li, L. (2020) 'Psychological stress of ICU nurses in the time of COVID-19', Critical Care, 24(1), pp. 1-200. doi: 10.1186/s13054-020-02926-2.

P23: End-of-Life Care decision-making by Rapid Response System Teams for hospital inpatients: a systematic review

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Aims: To determine the effectiveness of the role of RRS teams in EOLC decision-making for hospital inpatients.

Background/Significance: Rapid Response System (RRS) teams were implemented to provide specialist critical care skills at the bedside for inpatients who deteriorated on acute hospital wards. This role has since evolved to include the decision-making and implementation of End-of-Life Care (EOLC). Despite becoming an expansion of the role there is limited structure or frameworks defining how EOLC decisions are made.

Method: We searched MEDLINE, EMBASE, SCOPUS and Web of Science databases for qualitative, quantitative, and mixed-method studies using free text and MESH terms up to February 2020. All studies were screened for eligibility, data extracted and quality appraised using the Mixed Methods Appraisal Tool (MMAT) (Pluye et al, 2011). Ten percent of data extraction and quality assessment was undertaken by two independent reviewers. Data was analysed narratively.

Result: We included 15 non-randomised studies (14 observational which included 4 survey, 10 cohort studies and 1 mixed methods, 19,628 participants). Findings: Showed that RRS teams have an EOLC interaction with approximately a third of reviewed patients resulting in better symptom management and planned EOLC, leading to a better quality of death. No studies provided a structured framework or decision-making model to understand how EOLC decisions were made. RRS teams may not be the best resource for EOLC planning and suggest that timelier discussion with patients regarding limitations of care and the addition of a palliative care nurse to RRS teams could be effective.

Implications for Practice: EOLC decision-making is currently an integral role of RRS teams. Further research is required to ascertain how the decision-making process is undertaken and what structural framework is used. There is also a need to explore the use of a palliative care team with RRS teams.

References: Pluye, P., Robert, E., Cargo, M., Bartlett, G., O'Cathain, A., Griffiths, F., Boardman, F., Gagnon, M.P. and Rousseau, M.C. (2011) Proposal: A Mixed methods appraisal tool for systematic mixed studies reviews. Retrieved on 12/02/20 from http://mixedmethodappraisaltoolpublic.pbworks.com.

P24: An Exploration of Critical Thinking in non-newly registered Critical Care Nurses

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Background: Critical Care units require high levels of decision making and Critical Thinking (CT). These are also sought-after attributes of critical care nurses, with efforts to enhance these when commencing work in critical care environments (CC3N, 1995).
Understanding determinants of individuals' CT ability can help during periods of reflection. The California Critical Thinking Disposition Inventory (CCTDI) (Insights Assessment, San Jose) is a validated measure (Facione et al, 1994) aimed to elucidate these factors. An overall score of 280 or more indicates a positive disposition towards CT.

Aim: To explore non-newly registered critical care nurses disposition to critical thinking.

Method: Between September 2017 and April 2018, participants across four Critical Care units were recruited via poster advertisements to complete an online version of the CCTDI. Written informed consent was obtained and ethical approval was received from a university ethics committee.

Result: Twenty-one Critical care nurses (18 females) with an average age of 40 years participated. The mean CCTDI score was 295.28. For females, the score was 294.11 and for males 302.33. There was no correlation (p=0.448) between age and CCTDI scores. Degree graduates scored 292.16 compared with 299.44 for those with a Diploma. Band 6 and 5 nurses scored 321 and 290.94, respectively. Staff with >10 years' experience had a score of 304.63 vs 286.83 for those with 5-10 years. No differences were statistically significant (p>0.05).

Implications for Practice: Tentatively, due to the small cohort, results suggest Critical Care Nurses have a positive disposition towards CT. It would appear common socio-demographic influences (age/gender) have little correlation with CT, whilst workplace factors like experience and banding may have an increased association. Objective measures like the CCTDI could help the early identification of individuals that may struggle in critical care environments and facilitate focused clinical supervision to prevent unnecessary staff attrition.

References: Critical Care Networks-National Nurse Leads (CC3N). (1995). A National Framework for Registered Nurses in Adult Critical Care (STEP 1). [online] Available at: https://www.cc3n.org.uk/uploads/9/8/4/2/98425184/01_new_step_1_final__1_.pdf [Accessed 1 June 2020].
Facione N.C., Facione P,A., and Sanchez C.A. (1994). Critical Thinking Disposition as a measure of Competent Clinical Judgement: The Development of the California Critical Thinking Disposition Inventory. Journal of Nursing Education. 33(8) 345-350

P25: Frailty in Unplanned ICU Admissions During Covid-19

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Purpose: The Covid-19 pandemic lead to a surge of ICU admissions. The aim of this audit was to examine the demographics and frailty in unplanned ICU admissions in patients who had deteriorated on a ward. This was compared Covid-19 admission to ICU.

Background/Significance: NICE Guideline NG159 advised that patients with a Clinical Frailty Score of ≥5 may not benefit from an ICU admission. CFS is only validated in patients ≥65 years old. An individualised assessment should be made in those <65.

Method: Patient information was obtained for two periods using local data routinely collected for ICNARC.
Pre Covid data collection Dec 2019-Feb 2020.
Covid-19 data collection Mar 2020-14 Apr 2020,
Outcomes-survival to ICU discharge.
Statistical analysis using GraphPad Prism.

Result: Both groups were predominantly male and similar in terms of age and gender distribution.
The CFS of the pre Covid population was significantly higher and there was a much higher prevalence of frailty. The likelihood of being discharged alive was significantly higher in the non-Covid population, despite the high prevalence of frailty.
Deaths in ICU in both the pre-Covid and Covid-19 groups accounted for 10% of overall hospital deaths.

Conclusion: During the Covid-19 pandemic, CFS was used to assess frailty, despite not being validated in the age group that made up the majority of the Covid-19 admissions population.

The Covid-19 population was a highly selective group of fit patients, with a low prevalence of frailty. However the likelihood of being alive at ICU discharge was significantly lower than the pre-Covid group, demonstrating the severity of this disease.

There was a similar proportion of deaths in both groups that made up overall hospital mortality. This may indicate that the most appropriate patients were admitted to ICU during the Covid data collection period.

Limitations-this audit was limited by its small sample size, the short data collection period for the Covid population, and the use of CFS in patients <65 years old.

The Charlson Comorbidity Index may have been a more appropriate choice.

References: COVID-19 rapid guideline: critical care in adults. NICE guideline [NG159]Published date: 20 March 2020 Last updated: 29 April 2020 {Internet}. Available at https://www.nice.org.uk/guidance/ng159/chapter/2-Admission-to-critical-care
Rockwood K, Song X, MacKnight C, Bergman H, Hogan DB, McDowell I, Mitnitski A. A global clinical measure of fitness and frailty in elderly people. CMAJ. 2005 Aug 30;173(5):489-95

P26: Contagion: Will Nurses Answer the Call

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Background: In 2014, while caring for an Ebola patient, two registered nurses (RNs) became infected. Existing research focuses on perceptions about working during pandemics, but there is little literature available that addresses nurses' willingness to work with Ebola.

Background: The objective of the original research was to examine the perceptions and attitudes of nurses regarding their duty to care and willingness to work following an Ebola admission.

Method: This was a quantitative, descriptive study. Social media was used to recruit participants to a survey. Participants included critical-care nurses who worked during Ebola admissions. Of the 101 participants who met the inclusion criteria, 72 (71.3%) provided analyzable data. The A.T. Still University Institutional Review Board approved this study. This anonymous survey posed minimal risk.

Result: While only 16 (23.2%) respondents reported providing direct care, more than half (n=38; 55.1%) were asked not to work with EIPs. A majority of respondents (n=63; 88.7%) tended to agree HCWs have a duty to tend the sick despite high risks to themselves or their families; however, the same number (n=63; 88.7%) also agreed that their family responsibilities take priority. Respondents were less likely to work if their partners (n=44; 62.0%) or children were ill (n=42; 58.3%) but were more likely to work if their colleagues were infected (n=48; 66.7%) or dying (n=40; 55.6%). Shunning was experienced by 28 RNs (38.9%), while 25 (34.7%) knew of others who were shunned.

Implications of Practice: Results of this pilot survey revealed a prevalent belief in an ethical duty to care despite risks. A myriad of factors affect RNs' willingness to provide care when EIPs are admitted. Administrators should examine these factors when considering work incentives. Emergence of the 2019 corona virus (COVID 19) and the societal disruption associated with it, heralds

the need to examine how emerging diseases may affect a nursing workforce.

References: Kortepeter, M. G. et al. (2015) 'Caring for patients with Ebola: A challenge in any care facility', Annals of Internal Medicine. American College of Physicians, pp. 68–69. doi: 10.7326/M14-2289.
Lum, L. H. and Tambyah, P. A. (2020) 'Outbreak of COVID-19-an urgent need for good science to silence our fears? ONLINE FIRST PUBLICATION', Singapore Medical Journal, pp. 1–6. doi: 10.11622/smedj.2020018.
Damery, S. et al. (2010) 'Healthcare workers' perceptions of the duty to work during an influenza pandemic', Journal of Medical Ethics. Institute of Medical Ethics, 36(1), pp. 12–18. doi: 10.1136/jme.2009.032821.

team and the regional Team Managers.

Conclusion: The module weeks are designed so learning is manageable, allows the time and values reflection and new SNODS will have already demonstrated a commitment to learn.Every opportunity has been taken to ensure the learning environment is based on important aspects such as safety; physical and emotional, relationships; respect, engagement and leadership, teaching and learning; support, professional relationships and the physical environment.

References:
Department of Health (DH) (2008) Organs for Transplants: A Report from the Organ Donation Taskforce; London: Department of Health
National Institute for Health and Clinical Excellence (NICE) (2011) Organ donation for transplantation: improving donor identification and consent rates for deceased organ donation
NHS Blood and Transplant (NHSBT) (2013) Taking Organ donation to 2020: A detailed strategy; London: NHS Blood and Transplant

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