

Day 1 - AM

Abstract Submissions



Approaches to Practice-based
Learning

Use of a Nominal Group Technique to Evaluate a Peer Social Support Intervention in a Perinatal Grief Workshop for Paramedic Students

Matthew Warren-James, Belinda Flanagan

University of the Sunshine Coast, Sunshine Coast, Australia

Matthew Warren-James

Twitter handle

@mwarrenj1

Belinda Flanagan

Twitter handle

@Mbpelf5

Abstract

Introduction

Evidence suggests that paramedic students experience a form of occupational socialisation whilst undertaking Work Integrated Learning (WIL) in the ambulance setting, reporting a negative attitude towards emotional expression and a preference for emotional suppression when working with their clinical mentors. Furthermore, there is a reluctance among some individuals to access psychological help provided by ambulance services for fear over confidentiality and concern over the harm it may cause to their career prospects and reputation. This is concerning given the significant stressors paramedic students face whilst working in the ambulance setting.

Aim

The aim of this study was to evaluate students' experiences of participation in a peer social support group, using the CARES skills framework, when talking about perinatal grief.

Methods

A convenience sample of n=60 participants were recruited from a third-year paramedic program in a single regional university in Australia (Data to be collected in March 2021). A modified Nominal Group Technique (NGT) consensus method was used during the debriefing session to identify problems, generate solutions and make decisions regarding the efficacy of the CARES skills framework (Connect to emotion, Attention training, Reflective listening, Empathy, and Support help seeking) as a method to help participants to talk about perinatal grief. NGT is a structured process which provides quantitative measurements through a qualitative approach, and includes two distinct stages of collaborative "brainstorming" as well as anonymous "judgement".

Relevance to paramedic education

To become a registered paramedic, students are required to undertake a Work Integrated Learning (WIL) in the ambulance setting. However, students face considerable stressors when working in this setting. As such, there is an increased interest from universities in preparing paramedic students for the mental health challenges they may face during WIL. This study highlights findings about the efficacy of peer social support as an alternative medium of support that can be encouraged amongst students. It also presents the CARES skills framework as an evidence-based intervention, built on skills known to improve social support.

Implications for paramedic education

Peer social support may offer an important alternative medium of support for paramedic students when coping with stressful situations, such as the death of the child, in the absence of support of clinical mentors or a willingness to access psychological help.

Presentation

Static Poster

Biography

[Matthew Warren-James](#) is a United Kingdom (UK) registered Health and Care Professions Council (HCPC) paramedic. He has spent 10 years working in the London Ambulance Service NHS Trust, where he responded to emergency calls on both an ambulance and as a solo responder. Matthew also has extensive experience in both paramedic and nursing Higher Education (HE) programs including course development, validation, implementation, evaluation and review. Before moving to Australia, he held the position of program leader for the undergraduate BSc (Hons) Paramedic Science (London) at the University of Greenwich, UK.

Matthew coordinates courses in the areas of clinical leadership, mentorship, ethics and law. He is currently undertaking his PhD in which he is exploring how first year student paramedics experience stress on their first ambulance placement.

[Dr Belinda Flanagan](#) has been involved in various areas of health since 1990 and over this period has gained extensive experience in healthcare, emergency medical services and education sectors. Prior to her appointment with USC, Belinda was an Advanced Care Paramedic with both the NSW and Qld Ambulance Service and a Registered Nurse/Midwife with NSW and Qld Health. Belinda frequently collaborates with the Queensland Ambulance Service in guideline development and education in the area of obstetrics and neonatal resuscitation. Belinda has completed a PhD exploring the paramedic response to obstetric emergencies, this will provide recommendations for the management of emergency obstetric cases.

Student paramedic perceptions of a non-ambulance practice learning experience

Nicki Credland, Antony Rodgers, Matthew Hurwood, John McKenzie

University of Hull, Hull, United Kingdom

Nicki Credland

Twitter handle

@credland_nicki

Antony Rodgers

Twitter handle

@antonyrodgers4

John McKenzie

Twitter handle

@academbulance

Abstract

Background: The role of the paramedic has changed significantly over the last 10 years. In order for paramedic students to gain the necessary skills and knowledge to effectively manage the increasing complexity of patient presentations a wide range of placement opportunities are required to support learning. The provision of non-ambulance placements within a structured programme of education ensures and safeguards students' exposure to a range of clinical care specialties and environments. This aids development of transferable skills whilst increasing functional knowledge of how the contemporary paramedic interacts with various stakeholders and contributes to the continuum of care. Internationally, pedagogical approaches vary to paramedicine work-integrated learning. It does appear consistent however, that interdisciplinary scholarship enhances the overall quality of experiential learning and assists development of a more rounded paramedic.

Objective: To explore first year student paramedic experiences of non-ambulance placements.

Methods: A qualitative study using semi-structured interviews and thematic analysis was used to explore first year student paramedic's experiences of non-ambulance placements. The study took place in one higher education institution in England, UK.

Results: Thirty-three first year BSc (hons) Paramedic Science students agreed to be interviewed. All the students had undertaken at least one non-ambulance placement within a hospital setting. Four key themes that emerged from the transcripts, Expectations, The Patient Journey, Communication and Mentorship.

Conclusion: Whilst the students identified some excellent learning opportunities within the non-ambulance setting they felt unsupported at times with evidence of professional isolation and lack of support. As individuals many of them accepted that they had a responsibility to actively seek out learning opportunities but also felt that their clinical mentors had a lack of insight into the need for non-ambulance placements. In order to prepare students for the future, to deliver quality care and to improve patient outcomes a variety of educational opportunities is crucial. There remains work to be done supporting clinical mentors, tearing down barriers between professional groups and exploring our similarities and strengths.

Presentation

Oral - pre-recorded

Biography



I am a Senior Lecturer and Head of Department for Paramedical, Peri-Operative and Advanced Practice at the University of Hull. I am a critical care nurse by profession and Chair of the British Association of Critical Care Nurses (BACCN). The research team comprised of myself and 3 Lecturers in Paramedic Science. Antony Rodgers has a background as a specialist paramedic, John McKenzie as an air ambulance paramedic and Matthew Hurwood as a hazardous area response team paramedic.

Designing and implementing an educational framework for Advanced Paramedics rotating in Primary Care in North Wales

Georgette Eaton¹, Ian Happs², Robert Tanner³

¹University of Oxford, Oxford, United Kingdom. ²NHS Wales Health Education and Improvement Wales, Wales, United Kingdom. ³Llangollen Health Centre, Llangollen, Wales, Llangollen, United Kingdom

Georgette Eaton

Twitter handle

@georgette_eaton

Abstract

Background: The Pacesetter Project in North Wales examines the viability of an extended rotation approach, where Advanced Paramedic Practitioners (APPs), employed by Welsh Ambulance Services NHS Trust (WAST), rotate into primary care. As part of this project, an educational framework was developed in order to both prepare and support practitioners in the provision of clinical care in primary care settings. This was developed and supported by a group of GP trainers, under the not-for-profit company, NEWMEDED LTD. The overall goal was to evaluate the educational framework from NEWMEDED Ltd in its support for the development of the APPs in the primary care setting. The educational framework is based around a group-based educational model akin to the model of General Practitioner (GP) specialist training, where GP trainees come together once a week for learning and reflection. Alongside this, a work-place based portfolio was developed to enable the APPs to record their progression within the primary care setting. This portfolio used a combination of clinical discussion, self-reflection and multi-source feedback.

Objective: To evaluate the usefulness of such a framework for Advanced Paramedics rotating into Primary Care

Methods: This educational framework was evaluated to determine how it supported the development of the Advanced Paramedic Practitioners in the primary care setting. Semi-structured focus groups were undertaken with Advanced Paramedic Practitioners (n=7) and GP trainers (n=4). A narrative analysis of the information collected highlighted three overarching themes concerning the need for clinical supervision and feedback in primary care, and the usefulness of the education framework in regard to a tailored curriculum and recording progression.

Findings: Data was inductively coded, and a narrative analysis was undertaken, highlighting three overarching themes, consisting of Supervision, Curriculum and Recording Effectiveness. Various sub-themes were also explored, whereby Reflection, Confidence, Support and Time were considered key points for development of APPs in this area.

Recommendations: Despite the upcoming workforce changes, there is currently no standard education framework to support the development of Advanced Paramedic Practitioners in primary care across the UK, particularly in Wales. This evaluation offers insight into the educational needs of Advanced Paramedic Practitioners working in this setting and suggests an education structure that can best support their learning, whilst meeting regulatory requirements for paramedic professional development. Formal research is required to determine any link between provision of education for Advanced Paramedic Practitioners in primary care and patient outcome and safety.

Presentation

Static Poster

Biography

Georgette Eaton is an NIHR Doctoral Research Fellow Nuffield Department of Primary Health Care Sciences, University of Oxford

Ian Happs is a GP and works for NHS Wales Health Education and Improvement Wales

Robert Tanner is a GP at Llangollen Health Centre, Llangollen, Wales

Use of immersive virtual reality for training undergraduate paramedicine students mass casualty triage

Brennen Mills, Alecka Miles, Luke Hopper, Sara Hansen, Luke Brook, Ian Macleod

Edith Cowan University, Joondalup, Australia

Ian Macleod

Abstract

Introduction

Medical management of sudden *mass-casualty* incidents is a low-frequency, high-risk scenario facing paramedics and rescue organisations the world over. Whilst systems and organisations will continue to face these challenges, individual paramedics will rarely be exposed to such situations, emphasising the importance of effective and ongoing training and skills maintenance. As the geopolitical landscape continues to fluctuate, environmental changes threaten urban spread, transportation technology increases in speed and volume, population hotspots rapidly increase in density and high-risk industrial activities continue to expand, we are likely to continue to face a range of natural, technological and terrorism events which produce complex, multiple casualty situations. Survivors rely on highly trained and prepared rescuers for effective sorting, treatment, and transport to best survive their ordeal.

Purpose/Aim

The Simulation and Immersive Digital Technology Group at Edith Cowan University (<https://www.ecu.edu.au/schools/medical-and-health-sciences/our-facilities/ecu-health-simulation-centre/simulation-and-immersive-digital-technology-research/simulation-and-immersive-digital-technology-group>) has developed and trialled a novel virtual simulation designed for mass casualty response triage for paramedicine students, suitable for delivery via fully immersive virtual reality (with use of 360 degree head mounted display) or via traditional screen-based display (i.e. traditional computer screen).

Relevance to Paramedic Education

Traditional mass casualty incident response training involves a combination of class-room activities, desktop simulations, and live field exercises. Both desktop and live exercise require a significant degree of improvisation, planning, and preparation. These complexities, and the associated challenges in resetting and reproducing scenarios mean that field exercises are limited in how many learners can perform key roles. Additionally, the ability to attain and deliver accurate and relevant feedback to learners is hindered

by the span and geographic spread of concurrent activities during live-exercise training. Virtual simulation provides a potential avenue to replicate some facets of mass casualty response training.

Implications for Paramedic Education

There is a need to find low-cost, comparable alternatives to table-top exercises and live simulation that can be used to enhance training for mass-casualty incidents for emergency medical personnel. Virtual simulation resources show promise as a valuable training tool within the paramedic student curriculum. While the physical and emotional demands of virtual reality training may be limited in comparison to live simulations, immersive virtual simulation has demonstrated comparable immersion, decision-making and satisfaction outcomes to live simulation and provides a cost-minimising method of delivering mass casualty incident response triage training. Exposure to mass-casualty simulation using a virtual reality platform may allow students to hone their skills in the assessment and successful triage of casualties, likely better preparing them for live mass casualty incident response. Given the catastrophic nature of real-world mass casualty incidents, and their potential threat to life and long-term injuries, the ability of virtual reality to provide realistic education and training is a significant benefit. Moreover, the highly programmable and structured format training provided via a virtual reality platform could work to standardise training across providers, as well as improve the accessibility and feedback potential for mass casualty incident response training, without overly sacrificing scenario authenticity.



Saving lives through VR disaster triage training



Presentation

Oral - live

Biography

The Simulation and Immersive Digital Technology Group is comprised of a multidisciplinary early and mid-career researcher team who investigate the use of immersive technology, such as virtual reality, for real world simulation and educational needs. Spanning three Edith Cowan University (ECU) schools, this unique collaborative team bring together skills which cover health sciences research, simulation education, serious game theory, game design, animation, and biomechanics.

Through use of the industry standard 21 camera ECU motion capture studio, high fidelity, human focussed virtual simulations can be produced and evaluated which are difficult to replicate in real-world conditions. Scenarios range from mass trauma and disaster triage, violence and aggression de-escalation, procedural management and enforcement of Occupational Health and Safety regulations and drug and alcohol education.

Formative and evaluative research contribute to the evidence base informing best practices for applied immersive simulation and education. Real world engagement and impact is recognised through consultation with industry partners and end-users, and the implementation of the immersive simulation experiences which are developed for bespoke industry needs.

Ian Macleod is a paramedic regional team leader within the South Australian Ambulance Service and a Masters by Research student within the School of Medical and Health Sciences at Edith Cowan University (ECU), working closely with academics, clinicians, and virtual technology leaders from ECU's Simulation and Immersive Digital Technology Group. Ian's background is in on-road clinical practice and delivery of clinical and operational training to volunteer and industrial clinicians through a range of settings, most recently in the resource-sparse South Australian outback in collaboration with industrial and mining entities. Ian has a particular interest in simulation-based training with a focus on creation of highly realistic learning environments to drive competence and clinician resilience.

Undergraduate paramedic student experience with violence and aggression whilst on clinical placement and the role of Operational Safety Training in education

Brad Mitchell

Flinders University, Adelaide, Australia

Brad Mitchell

Twitter handle

@BradMitch85

Abstract

Introduction

Paramedics frequently face violence and aggression directed toward them while performing their duties. This is an international problem with studies worldwide showing that paramedics experience workplace violence (WPV) due to their unique working environment. Currently a paucity of evidence exists regarding the lived experience of paramedic students with WPV and how they perceive their own safety and preparedness for clinical placements.

Aims

The objective of this research was to investigate the prevalence, and lived experience, of undergraduate paramedic students' exposure to WPV whilst on clinical placement and identify their training needs to inform the design of a contextualised Operational Safety Training (OST) program.

Methods

The study incorporated a survey and in-depth interviews of undergraduate paramedic students as part of a mixed methods approach using a convergent parallel design. It examined the lived experience of paramedic students with WPV and evaluated the current training that students receive as part of their education. Analysis through the lens of constructivist grounded theory was utilised to acknowledge and explore the social and cultural nature of this issue.

Results

A total of 85 students completed the survey, and 7 interviews were conducted. The research confirms that paramedic students are exposed to WPV when undertaking clinical placements as part of their university studies, with 35% having experienced verbal abuse, and 9.5% physical abuse. Concerningly, none of these incidents were reported to the University which supports the literature around the underreporting of WPV in this space. The characteristics of each incident also aligns with the literature with the patient being the perpetrator in most cases, and the incidents occurring late in the afternoon or

overnight. Despite these statistics, students generally feel prepared and safe while on clinical placement. This feeling of safety comes from the protective nature of the supervision that the paramedics they are working with provide. Students however believe they need more education around communication and de-escalation to assist them on placement, as well as more time dedicated to disengagement/breakaway techniques, and training to be more frequent.

Recommendations/Implications for education

Findings from this study have a significant impact on the future of undergraduate paramedic education by providing useful background to inform the design of a contextualised OST program for paramedic students. This includes greater content around situational awareness and de-escalation skills, and the promotion of reporting any WPV incident so that more accurate data can be collected. This is to be supported by a repository of information and resources pertinent to OST for students to access and review as they need. This allows for students to be better prepared for WPV as part of their university curriculum providing a more holistic and realistic education.

Presentation

Oral - live

Biography



Brad is a lecturer in the Paramedic Science degree at Flinders University in Adelaide, South Australia and maintains his clinical qualification by working part-time as a paramedic with the South Australian Ambulance Service. He is also a member of the Ambulance Service Young Professionals Group steering committee and is secretary of the Emergency South Australia conference committee.

Brad holds a Bachelor Nursing/Bachelor Clinical Practice (Paramedic) from Charles Sturt University, graduating in 2007. His education also comprises the postgraduate certificate in Intensive Care Paramedic Studies through Charles Sturt University, and the Master of Clinical Education (Research) at Flinders University.

Brad's interests include evidence-based practice and incorporating technology/innovations into teaching and paramedic practice. He is passionate about paramedic education and professional out-of-hospital care and was a director on the National Board of Paramedics Australasia prior to the establishment of the Australasian College of Paramedicine.

Encouraging a culture of Peer led learning and peer review through a team based learning Project

Ady Fell, Ruth Fisher

Yorkshire Ambulance Service, Bradford, United Kingdom

Ady Fell

Twitter handle

@adyfell

Ruth Fisher

Twitter handle

@YAS_RuthF

Abstract

In 2020, Yorkshire Ambulance Service introduced team-based 'Investment Days' as a part of the Workforce Transformation Project, to promote learning, development, and team-working for A&E Operational staff. Beginning with two trial sites in different areas of the Trust (West and South), the planning and instigation of the Investment Days was led by local Clinical Development Managers (CDM) and Clinical Supervisors (CS), enabling the days to be tailored to meet the needs and capabilities of each site.

With additional challenges of encouraging the engagement of teams, inclusivity and value for all clinical grades, the earliest Investment Days lacked structure, consistency and, in some cases, learning opportunities, which was further compounded by variations in experience within the facilitating CS team.

Following a series of personal development reviews (PDRs), discussions with both clinical and non-clinical staff and local clinical investigations, the structured learning package concept was introduced at Bradford (West). Based on the need for consistency between teams and facilitators, beneficence and relevance, the inaugural series of Bradford Investment Days was designed to promote a culture of peer-led learning, peer-review, and working as a team. Taking into consideration the operational demands on the CS team and CDM, particularly the additional pressures brought about by the pandemic, learning packages were designed and prepared in advance so that any member of staff could facilitate the activities at short notice, this also supported those less familiar with the facilitation of learning in a classroom environment.

The packages consisted of a variety of activities, provided a range of learning styles to meet the learning needs of both individual learners, and the team as a whole, and provided a framework on which future topics could be developed, and subsequently rolled out to other areas. Activities that teams would engage with in the course of the day included practical and theory-based clinical breakout rooms based

on patient stories from local clinical investigations, team-directed learning and presentation in the form of educational posters, and peer-reviewed practical scenarios.

Based on the positive feedback provided by staff who attended the initial Investment Days, as well as areas highlighted for development, the subsequent learning package was modified to include an anonymised documentation peer-review and feedback pilot, as well as a period of team-building activity as decided by the team in order to promote and support staff wellbeing.

Feedback provided by the Bradford teams has been invaluable in the development of an Investment Day learning package that meets their needs, whilst addressing issues on a local level. With guidance from local CDM's, and a bespoke tool, the experience can be tailored to the clinical grade and experience of each individual, whilst also creating opportunity for discussions, shared learning, further supported by being able to work with the twinned site at Doncaster (South).

While the current demands on service provision associated with winter pressures and COVID-19 have resulted in their temporary postponement, the CDM and CS team eagerly await the return of the investment days and the introduction of the new learning package.

Presentation

Oral - live

Biography

Ady Fell is a Clinical Development Manager and paramedic with Yorkshire Ambulance Service, based across the West Yorkshire region. In addition to his role as CDM, Ady also works on Yorkshire Air Ambulance and frontline operations. An experienced paramedic, Ady is proactive in facilitating CPD events, in-house learning opportunities and guiding staff on their career journey. He shares his passion for learning and clinical development with his colleagues.

Ruth Fisher is a Clinical Supervisor and paramedic with Yorkshire Ambulance Service based in Bradford. Having developed a passion for facilitating and encouraging learning and development, particularly on a local level, she became involved in the Investment Days in the course of returning to work. She continues to support and encourage colleagues in their development whilst on operational duties, and is about to start a PhD studentship with the College of Paramedics and University of Hertfordshire.

Claire Craft is a Clinical Supervisor and paramedic with the Yorkshire Ambulance Service based in Bradford. She has been involved in the support, organisation, planning and facilitation of the Bradford investment days from the start. She is a keen advocate for supporting locally derived learning opportunities for the teams at Bradford.

Ady, Ruth and Claire recently completed a PGCert in Clinical Education with Leeds Institute of Medical Education and are Fellows of the Higher Education Academy.

'When two become three' - Spicing up the life of the PRU by using the third seat for teaching

Rosie Malkin, Tony Hanks

Emergency Medicine, Cardiff, United Kingdom

Abstract

Education and clinical placements were drastically affected during the COVID-19 Pandemic for both students and Healthcare professionals. SPA and educational time was often stopped and many students had to adapt their learning opportunities. The Gwent Physician Response Unit (PRU), a partnership between the Grange University Emergency Department and the Welsh ambulance service, became a vital service during the pandemic. The previously relatively unused 'third seat' provided an opportunity for students paramedics to gain experience, practice and be educated in the Prehospital setting during a pandemic under close supervision from senior practitioners.

A survey was sent out to paramedic and medical students that had been a third seat observer in the PRU to explore whether the experience provided a comparable alternative teaching environment to their traditional placement in the Emergency Department or Ambulance placement. The questionnaire covered themes of practicing clinical assessment and management, prehospital decision making and the ability to complete clinical based discussions addressing areas of their respective curriculum. The PRU helps support paramedics on shift with direct advice from a senior doctor to either assist with a difficult case or help discharge a patient from the scene.

Over 16 participants responded in the pilot study. Overall the experience was deemed better on all aspects most notable practising clinical skills, group teaching opportunities and management aspects of the curriculum. 93% of participants found the experience positive. This, combined with other potential benefits such as the student being able to assist with donning/doffing, mean utilising the third seat of the PRU is likely to lead to benefits for both the traditional PRU team and student alike.

Presentation

Static Poster

Biography

Dr Rosie Malkin - A&E Registrar at The Grange University Hospital, Newport, Wales. Keen interest in PHEM with a background of teaching including a degree in Medical Education (PgCert Merit).



Dr Tony Hanks - A&E Registrar & PHEM Fellow at The Grange University Hospital, Newport, Wales. Keen interest in PHEM and trauma care.



College of Paramedics' International Education Conference

My name is Laura Finch and I am a Newly Qualified Paramedic working for the South East Coast Ambulance Service based in the Chertsey area. During the second year of my training at the University of Surrey, I organised an international elective placement and spent three weeks in Vancouver working with the British Columbia Emergency Health Service.

Proposed Oral Presentation

'Benefits of International Placements'

Outline of my elective placement

- Practical aspects i.e. organisation and planning
- Structure i.e. shift pattern/observational schedule with different specialities within the service

Personal benefits

- The ability to take ownership of my learning journey and combine my studies with my love of travelling the world
- Practical experience of working in a different country and discovering the similarities and differences between UK and Canadian Practice
- The chance to explore the opportunities available to work internationally as qualified paramedic
- Gaining a greater appreciation and understanding of how all aspects of the ambulance service integrate to form a functioning system

Wider benefits

- Being the first UK student to undertake an elective placement with BCEHS, it helped set precedent for future students and strengthened international relations between and University of Surrey and BCEHS
- Sharing my experiences with others during my placement as well as on my return to university

Conference Themes

- Approaches to Practice-based Learning
- Innovations in Teaching and Learning

