

Day 5

Abstract Submissions



Transition to Professional
Practice

Preparedness for Professional Practice: Final Year Paramedicine Undergraduate Perceptions

Lucinda Mayor, Scott Devenish, Peter Horrocks

QUT, Brisbane, Australia

Abstract

The “preparedness for practice” concept is difficult to quantify into a single construct. Previously it has been poorly defined within paramedic and other healthcare research, with the terms often used synonymously and erroneously. The literature acknowledges the factors that impede clinical learning although the impact on preparedness is not clearly identified. The aim of this grounded theory study is to explore the development of a paramedic undergraduate preparedness for practice theory from an international, industry and academic perspective. In the first phase of this study, intensive face-to-face interviews explored the perceptions of preparedness for practice of final year undergraduate university students (n=6). The categories indicate maturity, self awareness, communication and situational awareness were important. Students also highlighted understanding cultural and workplace practices as well as socialisation are key to preparedness for practice, highlighting similar findings in the extant literature. This qualitative study explored the perceptions of university students about preparedness for practice. The findings from this study form part of a higher degree research project which now turns to investigate the views of clinical preceptors and academics about preparedness for practice from an Australasia perspective.

Presentation

Oral - live

Biography

Lucinda Mayor is an experienced paramedic and academic. Currently undertaking her PhD at QUT. Lucinda is also employed as the Paramedicine Course Coordinator and Lecturer at Australian Catholic University, Brisbane.

Dr Scott Devenish is the Head of Discipline for Paramedicine and Senior Lecturer at QUT.

Dr Peter Horrocks is a Senior Lecturer for Paramedicine at QUT

Career Intentions of Australian Undergraduate Paramedic Students

Scott Devenish¹, Adam Rolley^{1,2}, David Long³

¹QUT, Brisbane, Australia. ²Queensland Ambulance Service, Brisbane, Australia. ³University of Southern Queensland, Ipswich, Australia

Abstract

This presentation explores the career intentions of undergraduate university paramedic students from a large university in Australia. This is the first study about paramedic student career intentions since professional registration commenced with the Australian Health Practitioner Registration Agency in 2018. It is also the first to examine the perceptions about career intentions of students studying a paramedicine degree in Queensland Australia. Second year university undergraduate paramedic students (N=182) were invited to participate. Ethics approval was gained, and consent to participate was implied by the completion of a mixed methods questionnaire developed from the existing literature about paramedic student career intentions. Data were coded and analyzed using STATA 15.1 and NVIVO 12. The response rate was 47.3% (N=86). Findings indicated 82.35% of students surveyed intend to pursue paramedic employment after graduating. Due to the geographical location of the university, Queensland Ambulance Service is the preferred choice of employer (78.05%). However, 67.07% of students intend to apply to multiple state-based services for employment, 62.2% are considering private paramedic employment and 59.76% are contemplating applying for work in the United Kingdom. Intended paramedicine career length revealed 39.5% of participants plan to work for 20 years or more, 29% for 6-10 years and 18.4% for 11-15 years. Qualitative findings highlighted participants are very concerned about employment opportunities due to large student enrolment numbers across Australia. Other findings indicate concerns about being dislocated from support networks and feeling unprepared to work in other paramedic jurisdictions outside of Queensland. Furthermore, the employer's reputation, culture, internship program, career development opportunities and rates of pay impact on employment decisions. The paramedic landscape in Australia appears to be changing due to professional registration and high student enrolment numbers. While the vast number of participants want to work for state-based ambulance services, students are exploring broader and alternative employment opportunities. Understating the career intentions of undergraduate paramedic students is important for universities when preparing students for the transition to a globally evolving profession. It is also important for the employer to have an understanding of student career intentions when designing recruitment or marketing campaigns and when reviewing internship and preceptorship programs.

Presentation

Oral - live

Biography

Dr Scott Devenish is the Head of Discipline for Paramedicine and a Senior Lecturer at Queensland University of Technology in Brisbane, Queensland, Australia

Mr Adam Rolley is an Executive Officer for Queensland Ambulance Service and a Senior Lecturer at Queensland University of Technology in Brisbane, Queensland, Australia

Dr David Long is the Head of Discipline for Paramedicine and a Senior Lecturer at the University of Southern Queensland in Ipswich, Queensland, Australia

Near Peer Teaching in Paramedicine Education

Steve Whitfield

Griffith University, Gold Coast, Australia

Abstract

Abstract

Near-peer teaching (NPT) has been identified as a contemporary and valued pedagogical approach in higher education health programs that has recently gained momentum in paramedicine education. The objective of this study was to investigate the experience of student paramedics involved in a near-peer teaching program over two academic trimesters at an Australian University.

Methods

A cross-sectional study design was utilised in the form of an online questionnaire. The questionnaire contained a variety of questions that related to the experience of student paramedics involved in paramedicine specific near-peer teaching programs.

Results / Findings

Of the sixty-five students enrolled, thirty-four completed the questionnaire (52.3% response rate). A majority of the students surveyed (94.1%) agreed that teaching was an important role for the professional paramedic and all of the students (100%) agreed that they learned more through their interactions with near-peer mentors than they did previously without them. However, a large number of students (64.7%) identified that being taught a clinical skill by an academic instructor increased their sense of responsibility more than when taught by a peer mentor. Similar to previous near-peer teaching studies, students involved in this study provided encouraging feedback on their paramedicine near-peer teaching experiences.

Conclusions

Whilst there is a paucity in the literature pertaining to paramedicine near-peer teaching, the results of this study were comparable to previous studies. Students involved in paramedicine near-peer teaching programs were both receptive and supportive of near-peer teaching programs in paramedicine education continuing. Students overwhelmingly identified near-peer teaching as a positive experience and identified it as assisting them develop through their clinical practice. These results suggest that near-peer teaching is a valuable pedagogical method that should be used widely in paramedicine education and warrants further research and development.

Presentation

Oral - live

Biography

Steve is a paramedic educator with research interests in remote and extreme environment medicine. His experience spans humanitarian operations, high altitude expeditions, flight retrieval, and ambulance development. Steve has published over 30 articles in international journals and media, and in 2019 he was awarded the IAFCCP Tim Hynes Award for exemplary service to EMS. Currently, Steve is a lecturer at Griffith University School of Medicine (paramedicine) and he is a Fellow of the Royal Geographical Society, a Fellow of the Higher Education Academy, and a Fellow of the Wilderness Medical Society. In 2020 he launched the [Medics Beyond Borders](#) initiative to bridge health care gaps in low GDP countries.



The fitting child: a case report illustrating the challenges of recognising and managing paediatric non-epileptic attacks in the prehospital setting

Shannon Bernard Healey^{1,2}, Marina Awadalla^{1,2}, Dr Alasdair Parker^{1,3}, Dr Sri Velandy⁴, Dr Pooja Harijan³

¹East of England Ambulance Service, Cambridge, United Kingdom. ²School of Clinical Medicine, University of Cambridge, Cambridge, United Kingdom. ³Department of Paediatric Neurology, Cambridge University Hospitals NHS Trust, Cambridge, United Kingdom ⁴Department of Liaison Psychiatry, Cambridge University Hospitals NHS Trust, Cambridge, United Kingdom

Abstract

Introduction

Fitting is a common and challenging pre-hospital presentation. Pre-hospital practitioners report uncertainty and a lack of confidence when managing seizures, particularly when they are not in status epilepticus and therefore cannot be managed according to a protocol.

Non-epileptic attacks are episodes that mimic epileptic seizures, but are not associated with characteristic changes in brain activity and do not respond to anti-epileptic medication. They represent a significant diagnostic challenge for pre-hospital and specialist practitioners alike: patients are commonly first diagnosed and treated as epilepsy, and make up a quarter of patients treated for status epilepticus on neurointensive care units, exposing them to significant iatrogenic harm.

Aim

We describe a recent case of a non-epileptic attack in a paediatric patient, and draw out key points in its diagnosis and management for less experienced pre-hospital practitioners.

Case

As Community First Responders, we attended a 12 year old female with difficulty in breathing. On arrival, the patient was lying on her bed convulsing. Primary survey revealed no life threatening ABCDE issues. Her GCS was E3V2M6; she was able to communicate by blinking and was not able to make any other purposeful movement. The patient had repeated cycles of tonic posturing followed by myoclonic jerking, alongside repeated cycles of hyperventilation and apnoea.

She was recently discharged with a diagnosis of Functional Neurological Disorder following a short illness and period of being unable to stand or walk. This made the diagnosis of a dissociative, non-epileptic seizure considerably easier. We did not request Hot1 backup for fitting. We managed her conservatively as for non-epileptic attack, with reassurance, for 70 minutes until we handed her over responsive but still convulsing. She was conveyed to hospital and discharged medically-well after a short admission with psychiatric follow up.

Discussion

This case illustrates a typical presentation of non-epileptic attack, offering rich opportunity for discussion of the difficulties of recognition and management in the pre-hospital setting. The case posed particular challenges for us as healthcare students and junior pre-hospital providers. The diagnostic uncertainty about seizure type and therefore level of backup to request was a focal point during debriefing. Paediatric patients and their parents pose an additional emotional and cognitive burden. This case demonstrates that additional training in the recognition of non-epileptic attacks and a collaborative partnership with the parents together ensure that paediatric seizure patients are managed appropriately and safely.

Presentation

Static Poster

Biography

Shannon is an Emergency Care Assistant and CFR with East of England Ambulance Service and a 5th year medical student at the University of Cambridge. He has clinical and academic interests in critical care, neurosciences, and medical education, and is employed by the university to teach neuroscience to 2nd year undergraduates. Seizures and functional neurological disorders are a recent area of interest after listening to presentations at the British Paediatric Neurology Association's 2021 conference.

Marina is a Community First Responder with East of England Ambulance Service and a 5th year medical student at the University of Cambridge. She is interested in emergency medicine and prehospital care.

Nearpod is like PowerPoint on steroids

Amanda Hlushak

Australian Catholic University, Brisbane, Australia

Amanda Hlushak

Twitter handle

amandahlushak

Abstract

The effects of COVID-19 have created unprecedented change in day to day teaching. Most of these changes have required an increase in technology use. This change has been necessary to accommodate a continued robust learning platform in an online teaching environment.

Traditionally the mainstay platform for delivering lectures and tutorial content is PowerPoint. It is robust, efficient and easy to use when creating single layer one dimensional resources to be used during lecture and tutorial classroom settings. Students can download a PDF version, or notes page to use as a resource and taking notes. However, PowerPoint presentations are usually dull and mundane. Delivered with multiple words, and often print that is too small to read. This was even more accentuated during COVID-19 and online classes. Students were disinterested and uninvolved. Which was confronting given the interactive, hands-on nature Paramedic education usually provides. Something needed to change. This change was the use of Nearpod.

Nearpod is an easy to use online interactive tool that easily and seamlessly transforms your lessons from stale PowerPoint slides into interactive-stimulating lessons. Students enjoy paramedic scenarios that utilise a combination of interaction and problem based learning. It provides students with many different opportunities to interact individually and within a group. Nearpod is simple to use, and even easier to create lessons that are enjoyable both in creation and delivery. Join my virtual demonstration to learn how to easily transform your lacklustre Powerpoint presentations into a virtual reality classroom with interactive assessments, classroom collaboration and increased student participation.

Presentation

Oral - live

Biography

Amanda Hlushak is a CanAussie (Canadian and Australian) qualified paramedic who works predominately as a lecturer at the Australian Catholic University in Queensland. She has Master of Health Science and Master of Paramedic Practitioner with a desire one day to undertake a PhD. When not working she is the ultimate Uber-mum transporting her two beautiful children to sports and dance.

Are we preparing future paramedics to support patients experiencing partner abuse?

Simon Sawyer

Australian Catholic University, Melbourne, Australia

Simon Sawyer

Twitter handle

@simonthesawyer

Abstract

Introduction/background:

Partner abuse is a significant contributor to mortality and morbidity for young women worldwide. Current evidence suggests that the Australian paramedic workforce rarely receives any meaningful education on partner abuse and does not feel prepared to recognise and respond to patients experiencing partner abuse.

Aim/objectives:

To measure the readiness of Australian paramedic students to encounter patients experiencing partner abuse.

Methods

The READIness to encounter partner abuse patients Scale (READI Scale) was delivered to a sample of Australian paramedic students. We calculated mean readiness scores and asked participants to estimate their hours of education.

Results:

Data from 315 Australian paramedic students were included in the analysis. The majority of respondents (71.7%) reported less than three hours of family violence education. The mean readiness of students was 5.11 out of 7 (SD 0.58), indicating low to medium readiness.

Discussion

Australian paramedic students report low to medium readiness to encounter patients experiencing partner abuse, which is unsurprising considering little time is dedicated education on this subject. An individual's confidence and belief in their abilities appears to be the key factors influencing overall readiness. Participants indicated a strong belief that responding to partner abuse was part of their role.

Conclusions:

Results indicate that students are lacking in confidence and belief in their abilities to respond to patients experiencing partner abuse. Students do however show high motivation and belief that responding is part of their professional role. Results indicate that more time dedicated to training students to recognise and respond to partner abuse is needed, with more emphasis on building skills and confidence.

Presentation

Oral - live

Biography

Simon has been a registered Advanced Life Support Paramedic working in Victoria for the past 10 years. Simon is also a lecturer and researcher with Australian Catholic University in the Paramedic discipline and helps train the future Australian paramedic workforce.

Simon completed his PhD on the paramedic response to family violence and is engaging with the paramedic industry worldwide to build the capacity of the workforce to support their patients by responding properly to family violence.

Watson the wellness dog: Impact of a wellness dog on study-related anxiety in undergraduate paramedicine students

Dr Holmes

Edith Cowan University, Perth, Australia

Abstract

University study can be extremely daunting, particularly for students enrolling directly out of high school. Perceived support, as well as academic and social engagement are all clearly defined factors that promote and impact on student retention. Without these protective systems in place, undue stress associated with weekly study commitments, assignments and exams often overwhelm students, who are developing their own personal resilience and support mechanisms. Previous research suggests exposure to wellness dogs at university is a cost-effective and easily accessible method that can reduce stress, improve memory consolidation and even lead to greater satisfaction with units and courses amongst students. The extent to which wellness dogs influence these factors for students across undergraduate degree courses, is not well established. The purpose of this research was to examine whether Watson the wellness dog had an impact on study-related stress and anxiety reduction amongst undergraduate paramedicine students.

Watson attended three different classes every fortnight. Each week a short thirty second survey relating to stress and anxiety was taken at the beginning of each lecture. A second five-minute survey relating to satisfaction with university life, exam anxiety and belongingness was measured once at the end of semester. Participants were then invited to attend a series of online focus groups. This was to elaborate on the five-minute survey responses and enable students to come together as a group to discuss the topic areas.

Early data analysis of the 131 students who participated in this research shows a trend across weeks when Watson the wellness dog was present, there was an overall higher average level of well-being in the class on those weeks. Participant emotional well-being was also found to be higher when Watson was present, compared to when Watson was absent. Focus group data indicates that students felt an increased sense of belonging, wellbeing and engagement with the university, lecturers and fellow students with Watsons attendance both in lectures and around campus.

It is clear that there is a positive impact on students when Watson attends lectures, further research is planned later this year that will encompass a wider student base across first, second and third year, in addition to a variety of teaching environments.

**Note: Watson can attend the presentation too
(live or recorded)**

Presentation

Oral - pre-recorded

Biography

Dr Lisa Holmes is a Lecturer in Paramedical Science within the School of Medical and Health Sciences at ECU. Her focus has always been the education, mental health and well-being of staff and students and led Lisa to undertake her PhD and subsequent research in this area. She has published guidelines for embedding mental health and well-being across accredited undergraduate paramedicine courses, a continuing series of Post Traumatic Growth articles in addition to developing activities for both students and staff to develop strategies to maintain personal and team well-being. More recently she has introduced a wellness dog to reduce the anxiety and stress of students. She is also an accredited Mental Health First Aid Trainer.

The Perpetuating Elements Paradigm: Optimising motivation and self-development potential within the leadership, education and clinical domains

Benjamin Haselwood

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Benjamin Haselwood

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Abstract

Introduction

The author presents a conceptual model and framework for optimising motivation and self-development potential within the leadership, education and clinical domains. The paradigm aims to describe the factors contributing to the self-actualisation and performance improvements for practitioners. This work developed from a set of circumstances for a major NHS Trust. Preliminary investigations and analysis suggest the discoveries can now be evaluated and extrapolated further.

Rationale & Relevance

Motivation is the catalyst that permeates throughout self-development, professional progression and academic attainment. For clinicians, it is critical to patient morbidity and mortality. Education forms the fundamental core of establishing and maintaining standards of professional competency via knowledge, skills, experience, and behaviours.

The demands on contemporary paramedic practice are evolving. Areas of strategic foci are identified as investment in clinical training and innovative development. Motivation and education are *the* pivotal enablers to this clinical quality and profession growth. Through understanding which factors influence this, the optimum catalyst and culture can be created.

Methodology & Findings

A regional team of specialist clinical practice officers was developed and embedded, consisting of six Band 7 leaders with impact and influence at organisational and system-wide levels. A unifying combination of character, behaviours and values was quickly ascertained, all influencing individual intrinsic self-motivation. Exploration of those drivers suggested meaningful purpose and understanding *why*, was the key that encapsulated this state.

A framework was then designed of six extrinsic elements to enhance the drivers, relating to identity, security, autonomy, empowerment, resources and support. Combined, these notions happen to self-perpetuate in a powerful positive feedback mechanism. They appear to correlate to psychological needs, optimise potential, and promote ascent towards self-actualisation – both at individual and team performance levels.

An analogy is that the intrinsic motivation drivers provide the ignition, the extrinsic motivation elements provide the energy, and both must be hosted within the optimal environment to thrive exponentially. Analysis via robust longitudinal empirical research will determine the validity of the concept and scope of wider application, plus determine the direction of any successive evolution and synthesis of the paradigm.

Implications

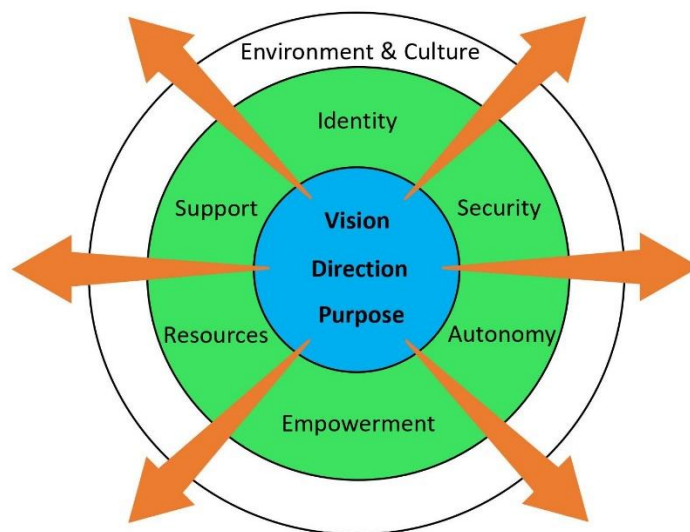
Through application of these principles, we enable our clinicians and leaders with essential knowledge, skills, behaviours, attitudes, vision and values to perform effectively and with agility. The result is an environment and culture that inspires and encourages everyone the opportunity to have a tangible purpose and reach meta-motivation.

This concept permeates through the various phases of training, education and clinical practice. A pivotal juncture in this learner journey is the evolution from competence to proficiency and the theoretical to experiential transition. Innovative structures, processes, and systems have been designed, developed and embedded across this learner and clinician journey to specifically focus on this premise.

Conclusions

Early qualitative and quantitative results from testing the paradigm are positive. Further research is required to focus on understanding the synergy between the intrinsic and extrinsic factors, plus ascertain the correlation and dominance on motivation. Furthermore, understanding the application of this conceptual construct within the real-world environment.

The Perpetuating Elements Paradigm



Vision	=	Values & Drivers	(WHY)
Direction	=	Behaviours & Attitudes	(HOW)
Purpose	=	Actions & Effects	(WHAT)

Intrinsic Motivation Drivers

Extrinsic Motivation Elements

Motivation

Presentation

Static Poster

Biography

Benjamin holds the position of Higher Education and Clinical Practice Lead for the East of England Ambulance Service NHS Trust. As an experienced Paramedic Officer, he has held various operational and regional tactical leadership and commander roles. He is an established clinical educator, instructor and project lead, with his most recent study and focus being on improving education, training and clinical practice across the organisation and wider profession. His particular interests focus on human factors, critical care, leadership development and strategic transformational change.

