

2018

Exploring the preparedness of novice (student) paramedics for the mental health challenges of the paramedic profession: Using the wisdom of the Elders

Lisa Holmes
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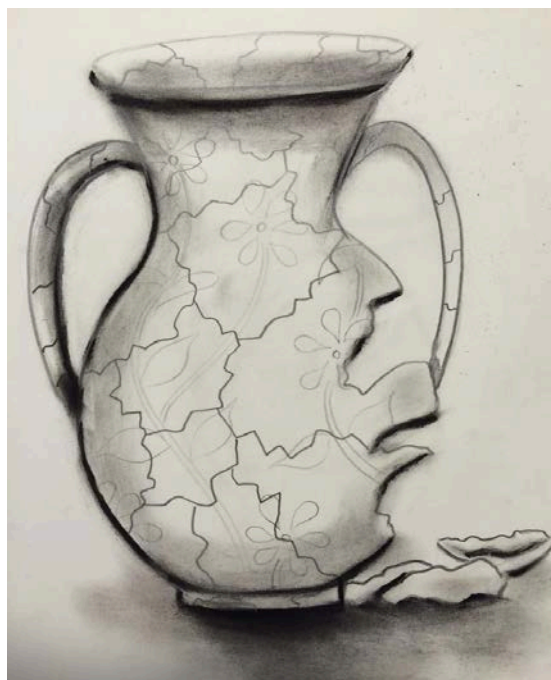
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**Exploring the preparedness of novice (student) paramedics for the mental health
challenges of the paramedic profession**

Using the wisdom of the Elders



Broken by Chris Mawson
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This thesis is presented for the degree of
Doctor of Philosophy

Lisa Holmes

Edith Cowan University

School of Medical and Health Sciences

2018

It was my dream job, full of excitement, pumped with adrenaline and diversity. I was paid to save lives. But in reality, as with any dream, it comes at a price...

Chris Mawson (2015, p. 247).

Abstract

This study investigates the preparedness of novice (student) paramedics for the mental health challenges of the paramedic profession and identifies the coping strategies used by veteran paramedics to successfully meet these challenges. The lived experience of veteran paramedics is utilised to provide this important assistance.

Initially, two surveys were developed and administered to 16 course coordinators and 302 students of the 16 accredited undergraduate degree paramedicine courses across Australia and New Zealand, to identify the perceived need (for preparation) within the curriculum. In addition, the anticipations, confidence and fears of novice (student) paramedics, course coordinators and veteran paramedics were also collected as a means to facilitate the preparedness through self-evaluation, reflection and discussion.

Twenty semi-structured interviews with veteran paramedics, each with a minimum 15 years paramedic experience from across Australia and New Zealand, were conducted to gain an understanding of their experiences, mental health coping strategies and advice for novice (student) paramedics. Results from the interviews were validated by three focus groups comprised of six veteran paramedics each, representative of the geographic spread.

All 16 course coordinators and 302 novice (student) paramedics responded to the surveys. Results suggest there is widespread recognition for the need to include preparation for the mental health challenges of the profession within accredited undergraduate paramedic courses with 100% of course coordinators and 97% of students recognising this need.

The semi-structured interviews with veteran paramedics provided valuable insights into the experiences and strategies used to aid the survival of the veterans throughout their careers. Within the interviews 70% of participants expressed a sincere love for the

paramedic role, and 70% identified black humour as the coping strategy most used by themselves and colleagues.

In addition, extensive advice was given to novice (student) paramedics based on the veterans lived experiences. This advice focused comprised of three themes; support, health and the profession.

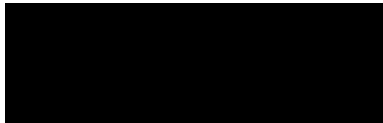
The findings of the study indicate that the preparation of novice (student) paramedics for the mental health challenges of the paramedic profession throughout the undergraduate curriculum could be advantageous. By utilising the relatable data collected on the anticipation, confidence and fears of novices, course coordinators and veterans, the advice offered by the veteran paramedics can be included within undergraduate paramedic curricula and delivered by sharing the lived experiences of the veteran paramedics. These lived experiences are highly credible and an opportunity for veterans to contribute positively to the future of paramedicine. Guidelines for their inclusion to the paramedic curriculum have been prepared to facilitate the knowledge and commence the development of conscious coping strategies by novice (student) paramedics during their learning phase.

Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

- i. incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;
- ii. contain any material previously published or written by another person except where due reference is made in the text of this thesis; or
- iii. contain any defamatory material;

Signed

A solid black rectangular box used to redact the signature of the author.

Lisa Holmes

Date: 04/04/2018

Acknowledgements

I would like to acknowledge and sincerely thank the following individuals and organisations:

My fantastic supervisory team, Professor Lynne Cohen, Associate Professor Richard Brightwell and Associate Professor Natalie Ciccone, which has guided and continuously supported me with endless patience and understanding throughout this undertaking.

Professor Russell Jones for his contribution to chapters one, three and part of four.

Members of The Network of Australasian Paramedic Academics, Sirens of Silence, Paramedics Australasia, The Paramedic Observer and Professor Brian Maguire who advised, facilitated and promoted the surveys, veteran participation and data collection.

All the undergraduate course coordinators and students who promoted and completed surveys as part of this research.

Chris Mawson and Natalie Harris whose bravery and openness have served to inspire and motivate me during the challenging times.

Daniel Sundahl for kindly allowing me to use his incredible art, a picture really can tell a story.

David Ford whose stories from his wealth of experience continue to add context and reality to mental health in a prehospital setting for both our students and myself.

Don Sonsee (The Don) who gave me a deeper understanding of the mental health challenges of paramedics through his experiences as Chaplain for St John Ambulance (WA) and the support he gave to those paramedics who were lucky enough to work with him.

A very special thank you to Richard and Ray whose mentorship, integrity and confidence in me, has been invaluable and will never be forgotten. Also, to my beautiful family, Simon, Ella and Joel without whose endless faith, love and support, I would not have completed this rollercoaster of a journey. An additional thank you has to go to Ella for her brutally honest reviews of my work over the years.

Lastly, my heartfelt and sincere gratitude to the veteran paramedics who so unreservedly volunteered their time to share their experiences with me despite the triggers and difficult emotions at times. I am truly humbled by your trust and willingness to aid future paramedics through your experiences.

This study is to honour all those that have suffered for the role, past, present and future.

Thank you!

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Research Outputs

Publications:

Australasian Journal of Paramedicine

Holmes, L., Jones, R., Brightwell, R., & Cohen, L., (2017). Student paramedic anticipation, confidence and fears: Do undergraduate courses prepare student paramedics for the mental health challenges of the profession? *Australasian Journal of Paramedicine*, 14(4), Australia, Paramedics Australasia.

Paramedics Australasia Response Magazine

Holmes, L., Jones, R., Cohen, L., & Brightwell, R., (2016). Preparing student paramedics for mental health challenges of the profession. *Paramedics Australasian Response Magazine*, 43(3), 14-16, Australia, Paramedics Australasia.

Presentations:

| | |
|------------------------------|---------|
| Survive & Thrive Symposium 3 | 05/2018 |
|------------------------------|---------|

Wellbeing Strategies for Paramedics

| | |
|---|---------|
| Rural Outback and Remote Paramedic Conference | 04/2018 |
|---|---------|

Communication for Wellbeing

| | |
|------------------------------|---------|
| Survive & Thrive Symposium 2 | 06/2017 |
|------------------------------|---------|

Compassion V Attachment with Natalie Harris

| | |
|------------------------------|---------|
| Survive & Thrive Symposium 1 | 04/2016 |
|------------------------------|---------|

Student paramedic anticipation, confidence and fears when commencing their paramedic career.

Abstract Submission:

International Mental Health Conference 08/2018

Poster Presentations:

International Mental Health Conference 08/2016

Sharing the wisdom of the Elders in paramedicine

Australian and New Zealand College of Paramedics 08/2016

Conference

Student paramedic and course coordinator anticipation,
confidence and fears when commencing their paramedic career.

Emergency South Australia Conference 07/2016

Student paramedic anticipation, confidence and fears when
commencing their paramedic career.

Education and Training:

Guidelines incorporated into the (education of novice (student) paramedics) Bachelor of
Science (Paramedicine) undergraduate degree at Edith Cowan University:

PST1107 Perspectives in Professional Paramedic Practice

PST1106 Mental Health Emergency Response

PST3109 Reflective Practice in Paramedicine

First responders see things they should never see-sights, sounds, and smells stay with them long past the high they feel after a call well done. For me, my inability to cope with some very stressful calls wasn't an overnight change, but for some it is. I feel a lot of my work-related depression was cumulative....

Natalie Harris (2017, p. 23).

Save-My-Life-School.

Chapter 1

Introduction



'Fly on the Wall'

Used with kind permission from Daniel Sundahl, Dansun Photo Art.

Aims of this Chapter

This chapter aims to summarise and review the importance of mental health issues and its relevance to novice (student) paramedics in Australia. It selectively focuses on providing an understanding of the rationale behind the research. The purpose and aims of the study are presented. The methodological framework to study this phenomenon is unique in that it combines qualitative and quantitative approaches not previously used in the paramedicine area. The chapter concludes with a description of the researcher's philosophy.

1.1. Overview

From a young age, many individuals in Australia are advised to call triple zero (000) and triple one (111) in New Zealand, when an emergency situation occurs and help is required. This automatic response resulted in 3,537,829 calls to triple zero (000) in Australia during 2016-17. With 4,369,577 requiring an emergency response (Report on Government Services, 2018). In New Zealand, there were 489,780 triple one (111) calls in 2016-17, which resulted in 439,105 emergency responses (Ministry of Health, 2018). Despite the 11,034 emergency calls per day, it is only when there is a high profile disaster featuring the services of first responders that the roles of these brave men and women are considered. Emergency first response work is high risk both physically and emotionally; the men and women who undertake these roles can be the hidden victims of the very incident in which they are assisting (Dyregrove, Kristoffersen, & Gjestad, 1996).

Independent coronial data alarmingly reports that one police officer paramedic or firefighter in Australia is taking his or her own life every six weeks, (National Coronial Information System, 2013). Warnings from experts have been reported as stating emergency workers are not getting the levels of emotional support needed (Knowles, 2015).

In Australia, the 4.4 million responses where an ambulance was sent to a single or multiple casualty incident, required the services of the 26,733 Ambulance Operatives, which comprise of 16,980 full time employees, 6,575 volunteer personnel and 2,3178 ambulance community first responders across Australia (Report on Government Services, 2018). A paramedic is defined by Paramedics Australasia as ‘a health professional who provides rapid response, emergency medical assessment, treatment and care in the out of hospital environment’, (2015). Paramedics Australasia is a professional society for the paramedic profession. There are many titles used for paramedics both nationally and internationally which include ambulance service worker, ambulance officer and first responder. The

objectives for the ambulance services are described as:

Ambulance services aim to promote health and reduce adverse effects of emergency events on the community. Governments' involvement in ambulance services is aimed at providing emergency medical care, prehospital and out-of-hospital care, and transport services that are;

- *accessible and timely.*
- *meet patients' needs through delivery of appropriate health care.*
- *high quality – safe, coordinated and responsive health care.*
- *sustainable.*

Governments aim for ambulance services to meet these objectives in an equitable and efficient manner, (Report on Government Services, 2017).

National patient satisfaction responses regarding ambulance services identify no significant differences across states and have been consistent over the last ten years. About 98 percent of patients are either satisfied or very satisfied with the service received (Report on Government Services, 2017). It is no surprise paramedics have been voted the 'most trusted profession' for a decade (Queensland Health, 2014). However, paramedics suffer occupational injuries eight times more than the national average of all workers in Australia (Maguire, O'Meara, Brightwell, O'Neill, & Fitzgerald, 2014; Maguire, 2014). Paramedics also suffer some of the highest rates of work-related stress, anxiety and suicide (Maguire, O'Meara, Brightwell, O'Neill, & Fitzgerald, 2015). Most calls for help are an infrequent occurrence for the general public. For paramedics, responding to calls for medical help is a part of their profession and daily work pattern. With each call, they enter into unknown circumstances and need to rapidly respond to the scene that unfolds. Additionally, they are

required to manage relatives, friends and bystanders while ensuring the safety of themselves and their crew; this stress can become unmanageable (Mildenhall 2012; Sterud, Ekeberg, & Hem, 2006).

Over time, these work-related stressors can develop into mental health issues.

Devine (2014) cited the following factors as mental health challenges:

- Trauma witnessed by paramedic staff.
- Attacks/abuse of paramedic staff by clients/family/bystanders.
- Pressure related to the cumulative stress from traumatic jobs.
- The number and frequency of jobs on a shift.
- Long hours and shift work.
- The role of ambulance services in managing and debriefing traumatic incidents.
- The role of ambulance services in continued education programs and the change in practice and protocols.

The culture surrounding ambulance services is one of strength. Anecdotal and published narratives from paramedics suggest that they fear the stigma and stereotyping of having a mental illness. Consequently, it is perceived as undesirable to be seen seeking support from mental health professionals even when these services are readily available (Lovegrove, 2017; Harris, 2017; Mawson, 2015). Paramedics tend to rely on each other for support, this can increase the stress of individuals and further discourage the use of outside interventions. As identified by Miller (1995) almost a quarter of a century ago when he stated “*the very toughness that facilitates smooth functioning in their daily duties now becomes an impediment to these helpers seeking help for themselves*”, (p. 592).

The ongoing mental health of paramedics has received much media attention in recent years and includes heightened awareness of the high incidence of suicide paramedics. This indicates work related stressors could be a factor in the high rates of suicide within the

profession. Specific data on attributed mental illness and suicide from related services is currently not readily available. Ambulance organisations are being called upon to review policy and implement procedures to support paramedics within the workplace (Powell, 2014).

In 2015-16 there were 7,500 novice (student) paramedics enrolled in accredited undergraduate paramedicine degree programs in 16 universities across Australia and New Zealand (Council of Ambulance Authorities, 2017). These novice (student) paramedics are a captive audience. They have the opportunity to become aware of the mental health challenges in a learning environment, as opposed to developing ad-hoc coping strategies as events arise within their workplace. As a consequence of this research, the lived experiences and advice from the veteran paramedics may be of benefit to the novices through the sharing of the narratives.

1.2. Purpose and aims of this study

This study seeks to investigate the preparedness of novice paramedics for the mental health challenges of the paramedic profession and to utilise the experience of veteran paramedics as a resource. There is currently no formal requirement for the inclusion of this topic in any undergraduate degree programs accredited by the Council of Ambulance Authorities or Paramedics Australasia. Together, three organisations (Australian College of Paramedics, Paramedics Australasia and Australia and New Zealand College of Paramedicine) are responsible for the Paramedic Education Programs Accreditation Scheme (PEPAS) that accredits undergraduate paramedic degree programs across Australia and New Zealand. However, the Paramedic Professional Competency Standards (Council of Ambulance Authorities, 2013) have specific criteria that relate to the mental health of paramedics. These are outlined below:

1. Acts in accordance with accepted standards of conduct and performance.

1.1 Maintains expected standards of conduct and performance:

- demonstrates accepted standards of personal conduct;
- provides their employer with relevant information that may affect their ability to practice;
- limits their work or stops practising if their performance or judgment is affected by their health or other personal factors.

6. Operates within a safe practice environment.

6.2 Develops and maintains personal health and wellbeing strategies:

- maintains physical health, fitness and nutrition.
- maintains psychological wellbeing;
- actively maintains a safe working environment for self and partner;
- identifies, uses or establishes personal support networks and shares experiences with colleagues related to professional issues.

(Council of Ambulance Authorities, 2013, p. 8, 11).

The research presented in this thesis explores the inclusion of mental health strategies within the educational content delivered in accredited undergraduate paramedicine degree programs focusing on the following aims:

- Facilitate accredited undergraduate degree programs through guidelines for content inclusion to meet the specific mental health related Paramedic Professional Competency Standards, in addition to the following competency standard:
9. Critically evaluates the impact of, or response to, the Paramedic's actions.

9.3 Participates in the mentoring, teaching and development of others:

- shares knowledge with colleagues;
- shares knowledge and experience with colleagues relating to individual/group/unit problems;
- acts as a role model to other members of the health care team;
- participates where possible in coaching and mentoring to assist and develop colleagues.

(Council of Ambulance Authorities, 2013, p. 14).

- Raise awareness of the need to prepare novice paramedics for the mental health challenges.
- Provide veteran paramedics with the opportunity to use their experiences positively.
- Utilise the experiences of veteran paramedics to provide opportunities to engage and reflect on personal health and wellbeing.
- Encourage openness to mental health issues and support through the education of future paramedics, managers and policymakers.
- Promote further study into personal wellbeing to assist the mental health of novice (student) paramedics.

By raising awareness of paramedics' mental health, this study promotes accredited undergraduate degree course coordinators to include this important topic across all years of study. Collected data will form guidelines for the topics to be included when preparing novice (student) paramedics for the mental health challenges of the profession. These guidelines will be made available for the design and creation of educational resources in undergraduate paramedicine degree courses. The purpose of these resources will be to engage and prepare paramedic students to successfully meet the mental health challenges of their chosen profession while maintaining a sense of community within the profession

(Nichol, 2011). This will raise awareness and encourage open discussion on causes of mental health challenges, coping strategies, further research and knowledge of support services available. The format of the guidelines will utilise David Kolb's experimental learning cycle, (Kolb, 1984).

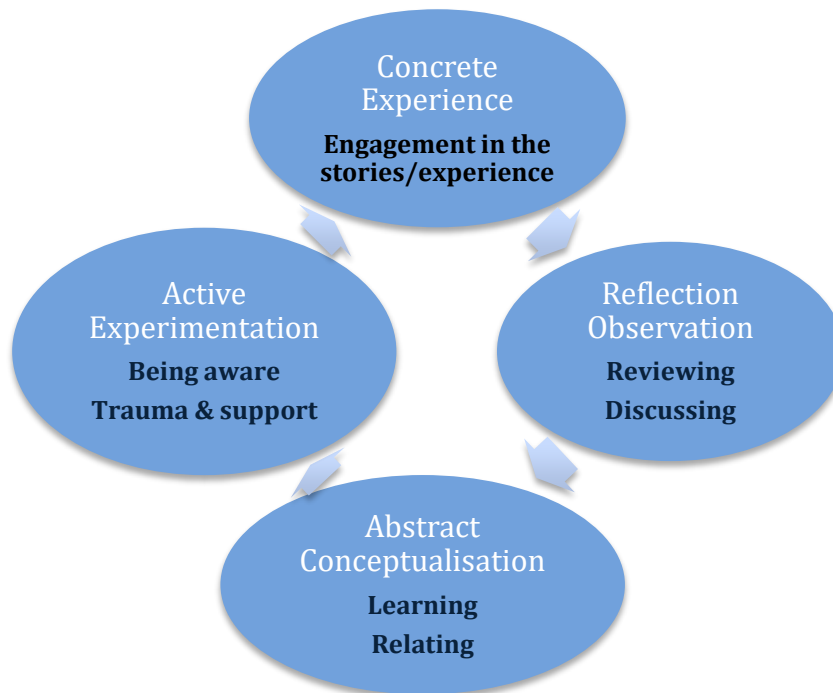


Figure 1. Format of Guidelines, adapted from Kolb's Learning Cycle.

1.3. Conceptual framework

Figure 2 below represents a socio-ecological model (Centres for Disease Control and Prevention, 2013 adapted from Bronfenbrenner, 1977) which has been applied to underpin the research framework for this study. The model outlines the following areas that affect the role of a paramedic:

- The influence of family and peers on beliefs, support and downtime.
- The requirements and demands of the role, access to mental health support and the culture of the organisation.

- Working within the community, awareness of sensitivities, people in emergency situations and available external support.
- The broader aspects of policy that define the role.

All areas impact the paramedic profession and should be considered, however, the focus of this study is on the individual (novice and veteran paramedic). The areas of knowledge, attitude and beliefs will be addressed when preparing novice (student) paramedics for the mental health challenges of their chosen profession. This knowledge will form a foundation for the development of coping strategies for themselves and their colleagues as the role unfolds.



Figure 2. Socio-ecological model that reflects the current study's conceptual framework from Centres for Disease Control and Prevention (2012), adapted from Bronfenbrenner, U. (1977).

1.4. Theoretical framework

Resilience is a difficult concept to define because the application of resilience can imply a variety of meanings. Unger (2014) defined resilience as “*the capacity of individuals to navigate their way to the psychological, social, cultural and physical resources that sustain wellbeing*” (p. 4). However, Masten and Coatsworth's (1998) definition was related

more directly to the duties of a paramedic as they referred to “*manifested competence in the context of significant challenges to adaption or development*” (p. 2). This may be in addition to the definition of Luthar (2005) “*a phenomenon or process reflecting relatively positive adaption despite experiences of adversity or trauma*” (p. 12). In the context of this study and veteran paramedics, resilience is defined as the ability to survive the mental health challenges of the paramedic profession.

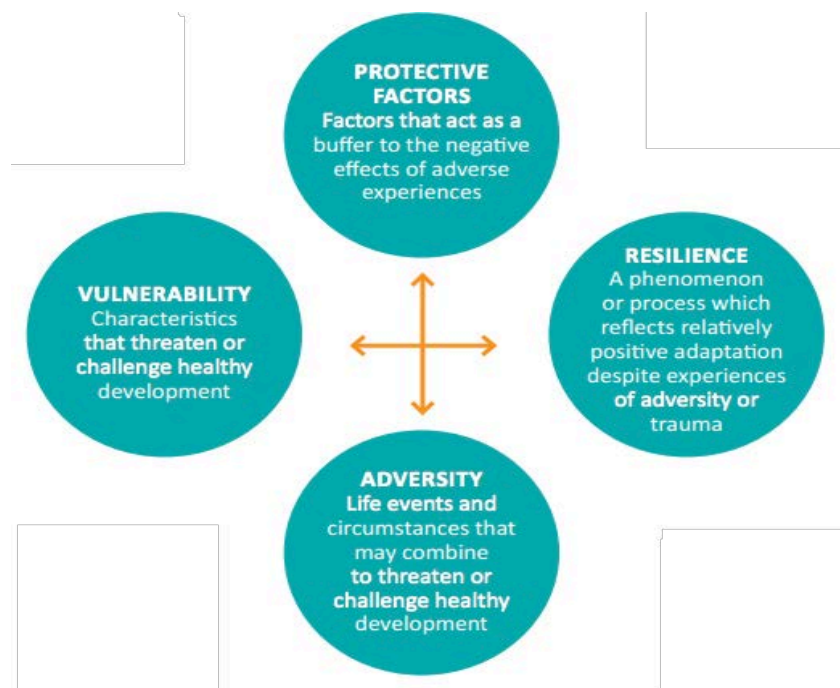


Figure 3. Resilience matrix, from The Resilience Framework by Antcliff, Daniel, Burgess, & Sale (2014).

This resilience matrix identifies both extrinsic and intrinsic factors that influence the resilience of individuals. Extrinsic factors originate outside of the person, for example, the environment, the views of others and group dynamics. In contrast, intrinsic factors originate from within a person, for example, biological responses, age and ability levels. Both intrinsic and extrinsic experiences influence a person’s overall ability to act with resilience (Antcliff, Daniel, Burgess, & Sale, 2014), however, it is acknowledged that there is a link between factors. For example, in the context of paramedicine, past negative experiences may intensify

future reactions and the ability of the paramedic to cope with similar experiences while on a call.

Michael Unger, in his 2014 *Thinker in Resilience* report for the Commissioner for Children and Young People Western Australia, presented nine common factors that predict resilience. While the factors are written for young people most can be applied to any individual at any age.

1. Structure.

This relates to the frameworks that we live by, for example family, groups and communities.

2. Consequences.

These are essentially the rewards and punishments for living within or outside of the frameworks.

3. Parent-child connections.

Role modelling and the ability to problem solve is developed here.

4. Many strong relationships.

This extends the parent-child connections into a broader circle of relationships.

5. A powerful identity.

This is how individuals see themselves through how others value them.

6. Sense of control.

This is the ability to make own decisions and select own direction.

7. Sense of belonging.

Being part of a group, family or wider community.

8. Fair and just treatment.

The understanding of being treated fairly and justly, in addition to treating others in the same way.

9. Physical and psychological safety.

This affects every facet of an individual's life, being able to access all our needs both physically and mentally without fear for personal safety.

(Unger, 2014).

These factors can be condensed into the six domains of resilience as seen in Figure 4 the Resilience Practice Framework published by The Benevolent Society (Masten cited in Antcliff, Daniel, Burgess, & Sale, 2014). The six domains are linked to three key development areas of child, family and community. The domains are:

- Friends.
- Talents and interests.
- Positive values.
- Social competencies.
- Secure base.
- Education.

When applied to a Paramedic, the Resilience Practice Framework includes domains covering aspects of life including family and community. The domains individually and collectively have an impact on the resilience, and in turn, the mental health of the individual. A more complex framework developed by Michael Ungar (2008) was the Multidimensional Model of Resilience which details the many contributing factors related to resilience and the management of stress from a developmental and maintenance perspective. For the purposes of this study, a simpler framework was chosen to enable focus on just one domain while acknowledging that other domains exist. Ungar's model is however very relevant and could be adopted when investigating potential support and training for the ongoing wellbeing of paramedics within ambulance and health services. This is particularly applicable in the context of the trauma and stress relating to the paramedic role, (Ungar, 2013).

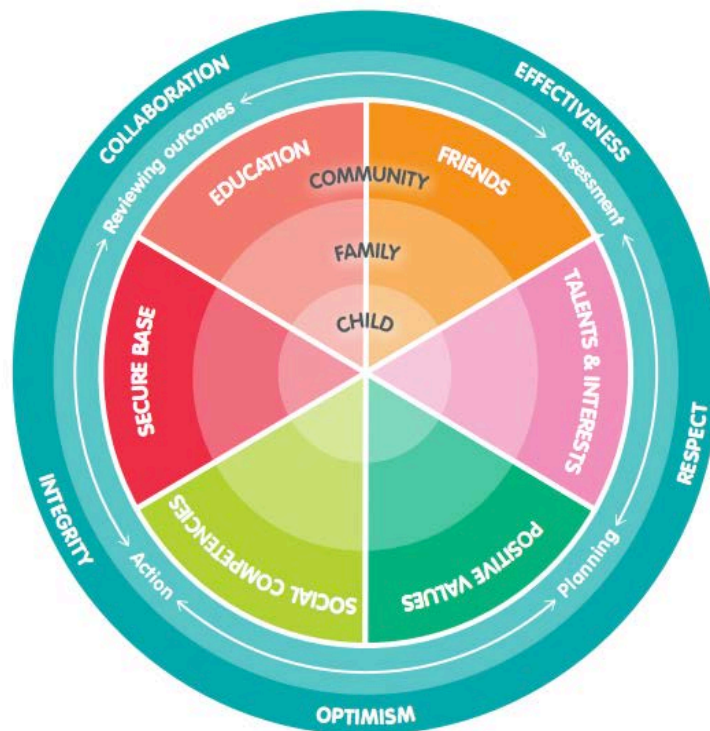


Figure 4. Resilience Practice Framework by Antcliff, G., Daniel, B., Burgess, C., & Sale, A., (2014).

The Resilience Practice Framework can be applied to paramedicine in the following ways:

1. Secure base.

This domain is the foundation of the individual; the underpinning roots within family, culture and beliefs. When these are secure and trusted, there is a strong association with positive self-esteem (Howe cited in Antcliff, Daniel, Burgess, & Sale, 2014).

2. Education.

This is the initial and continuous education and training of the paramedic from novice to veteran. Other domains affect the context within which this learning occurs.

3. Friends.

This domain may be related to collegueship and friendship both within and external to paramedicine. Internal friendship will offer support and empathy from paramedics,

with a view to aiding each other. External friendships offer an outlet and a different context away from the work environment where the paramedic can relax and recharge.

4. Talents and interests.

This domain may be applied within and external to the work environment. Internally it is the recognition of particular skills and perhaps the leadership and mentoring of others. Externally it facilitates the release for any negative thoughts, feelings or experiences. This can build self-confidence, esteem and contributes to community altruism.

5. Positive values.

This domain can be defined as ‘having the capacity to act in a helpful, responsible and caring way towards others’ (Werner and Smith, cited in Antcliff, Daniel, Burgess, & Sale, 2014). Within paramedicine, this would be the empathetic approach to others, communication with patients, and the support of colleagues.

6. Social competence.

This domain is the individual’s ability to think, feel and behave in social situations, in addition to the anticipation and awareness of the consequences of actions and taking appropriate measures to ensure the safety of all. The most vital domain within paramedicine and can be one of the first domains lost when mental health challenges are not being addressed.

Collectively the six domains of the Resilience Practice Framework describe all areas, which may assist to in developing resilience of paramedics throughout their initial training and ongoing careers. The initial education and training leading to ongoing careers is the first part of a continuum and should be addressed as such. As with the conceptual framework only one domain is the focus of this study. Through collecting survey data and the narratives

of veteran paramedics, this study seeks to raise awareness and educate novice paramedics about the challenges they may encounter. The education domain serves to offer awareness, knowledge and coping strategies to prepare novice paramedics for these challenges.

1.5 Researcher's philosophy

The researcher's philosophy underpinning the study is outlined below.

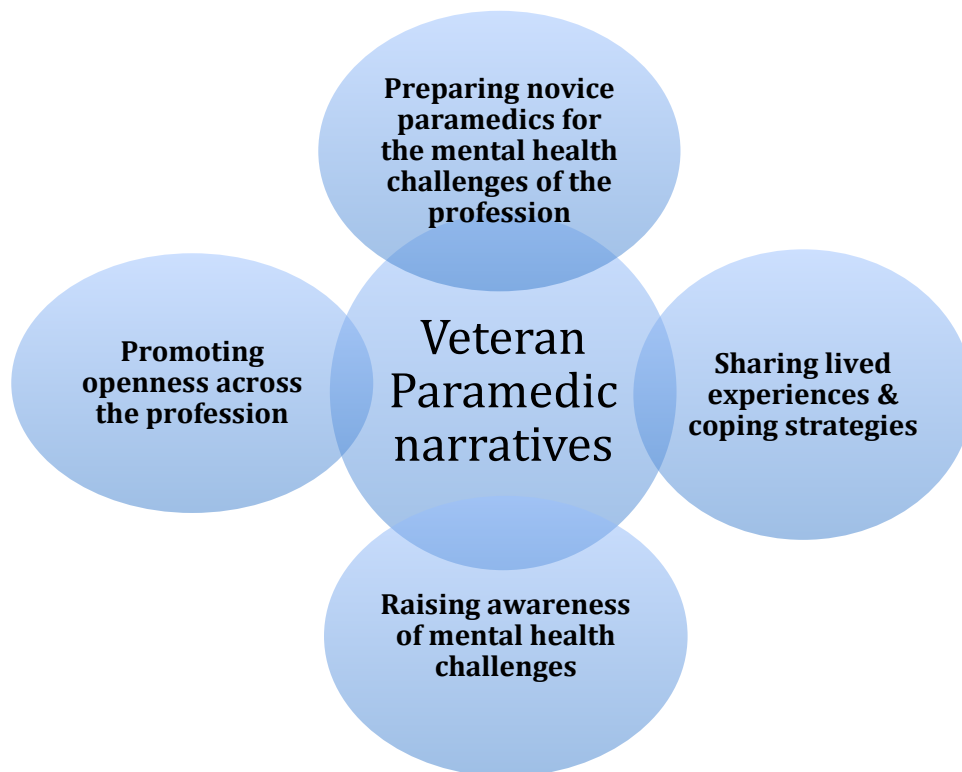


Figure 5. The researcher's philosophy

The philosophy shown above is based on utilising the survival strategies of veteran paramedics to aid the preparation of novice paramedics for the mental health challenges of the profession. This type of preparation could occur by sharing the lived experiences and coping strategies via veteran paramedic narratives much the same as Aboriginal 'Elders' share their stories to guide and educate their young (McConghie, 2003; Walker cited in Child Family Community Australia, 2014).

From an educational perspective, Elders are at the very centre of first nation pedagogy. Elders teach and maintain culture, traditions, ideals, knowledge and life lessons across all members of the community, through informal teachings, storytelling and role modelling. This type of teaching is considered informal in the western paradigm because it has no predetermined standardised curriculum or structure (First Nations Pedagogy, n.d.).

Elders are individuals who hold highly respected leadership positions within communities. They are respected for their cultural knowledge, leadership and for making community-based decisions (McIntyre, 2001). In particular, they assist children to learn and understand all aspects of their culture, family, community and life. Walker (cited in Antcliff, Burgess, & Sale, 2014) described Aboriginal Elders in the following statement;

The role of Elders is difficult for outsiders to understand. We rely strongly on them as key decision makers within families. They are the people we hold the greatest respect for because many of them went through so much, so that now we do not have to suffer the injustices they experienced. Their guidance is often illustrated through everyday life and their teachings are often done subconsciously; we follow, we observe and we go on to teach our own families. It is through our Elders that the spirit of Aboriginal people is kept alive. (p. 53).

This current research suggests formal education can be linked to the informal knowledge, experiences and strategies of veteran paramedics to prepare, teach and assist the novice (student) paramedics within a formal framework. Similar to the 'Elders' informal teachings within their communities. This strategy will help to raise awareness amongst novice paramedics who are more focused on helping others often at a significant cost to themselves. Preparation of novice (student) paramedics for mental health challenges will assist in opening the subject area of mental health and wellbeing and may have a positive effect on the future culture of the profession.

Those paramedics who are currently novices will be future paramedic managers, leaders, policy and decision makers. These individuals will be better placed to support mental health wellbeing from within organisations because of their education and experiences.

The researcher has worked for more than 10 years with first responders including paramedics within an educational context in both Australia and the United Kingdom. This experience has provided the researcher with a significant insight into the mental health challenges, narratives, strategies and culture of paramedic communities. Importantly the researcher is not a paramedic and this adds validity to this study, because there were no distractions or perceived judgments made on the clinical context of the stories. This allowed the total focus of the researcher to be on the veteran paramedics' narratives and their imparted survival strategies.

There is very limited research data and literature available regarding the preparedness and preparation of novice (student) paramedics for the mental health challenges of the profession. This is presented in the next chapter, which highlights the literature available and subsequent need for this research.

Chapter 2

Review of Literature



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Aims of this Chapter

This chapter reviews the literature and research on the preparation of novice (student) paramedics for the mental health challenges of the profession. As there were few research studies published in this area, other areas such as nursing related studies were initially accessed. However, while these were used as background on the subject area, they were excluded from this literature review as the focus of the study is the nature of prehospital emergency and paramedic experiences, which are outside of the clinical nursing setting. This chapter considers the mental health literature more broadly and demonstrates the need for this current research study. Finally, the research questions for the research are presented.

2.1. Review of literature

Despite the plethora of publications on paramedic mental health challenges, there is currently little literature on preparing novice (student) paramedics for the mental health challenges of the profession. A search of the following databases was conducted: Medline, PsycINFO, Scopus, Cinahl and Web of Science. Keywords used were: student, novice, trainee, paramedic, prehospital worker, EMT, prepar*, mental health, intervention and training. Grey literature, paramedicine-related support and social media groups were also investigated to develop a greater understanding of how mental health challenges are addressed.

Nursing related articles and studies were accessed to provide a background into this subject area. However, nursing-related research has been excluded from this literature review as the focus of this study is on the nature of prehospital emergency and paramedic experiences, which are outside of the clinical nursing setting.

The literature search reveals a paucity of specific relevant material. This lack of related investigations and specific literature reveals a need for study into student preparation. There have recently been many studies into paramedic mental health. However it appears that no consideration has been given to preparing students for the challenges.

It is difficult to establish specific rates for stress, mental illness and suicide amongst paramedics from information available in the public domain. However, organisations and government bodies do offer general data for allied health workers which includes the data for paramedics. The data presented makes no division between the branches of the workforce that would give specific information on the mental illness of paramedics. This may reflect the sensitive nature and confidentiality of individual information, or it may reflect that prior to impending paramedic registration, paramedicine has not been recognised as an independent health profession, or the data may not have been captured.

The World Health Organisation (2015) defines mental health as ‘a state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community’. In contrast, a mental health disorder or illness can be defined as ‘a diagnosable illness that affects a person’s thinking, emotional state and behaviour’ (Kitchener, Jorm, & Kelly, 2014, p. 4).

Within paramedicine, the most prevalent mental illnesses reported in articles and anecdotally are described below (Alexander & Klein, 2001; Courtney, Francis, & Paxton, 2012; Avra, Goldblatt, & Yale, 2014; Behind The Seen, 2015; Sirens of Silence, 2015).

- Depression.

A mood disorder, which manifests itself in a sad mood, lack of energy, tiredness, negative thoughts, loss of interest and appetite. This mood disorder lasts for more than two weeks (Kitchener, Jorm, & Kelly, 2014, p.22).

- Anxiety.

Outside of the normal human reaction to perceived danger, anxiety problems result in a variety of severe physical reactions such as pounding heart, chest pain, and shortness of breath. Psychological effects include unrealistic fear and worry, panic attacks and nervousness. Those suffering from prolonged anxiety are more likely to use alcohol or unprescribed drugs to lessen the effects (Kitchener, Jorm, & Kelly, p.40).

- Post-Traumatic Stress Disorder (PTSD).

PTSD can occur after an individual has experienced a traumatic event or events. Symptoms vary but can include re-experiencing the event, flashbacks, intrusive memories and thoughts, avoidance behaviours, emotional distress, aggression and suicidal thoughts (Kitchener, Jorm, & Kelly, 2014, p. 41).

- Suicide.

The act of taking one's own life, this is often caused by a mental illness (American Psychological Association, 2017).

During the literature search it was noted that articles published on mental health issues encountered by practising paramedics in Australia are supported by literature published from the United States of America, Canada, the Netherlands and the United Kingdom. Although the precise descriptions of the paramedic role vary between countries, the causes and mental health issues outlined worldwide are very similar and demonstrate a theme within the paramedic role. The National Volunteer Fire Council (2012) in the United States of America, for example, published a detailed report on the mental health issues faced by Fire and Emergency Services (including paramedics).

The aim of this report was to raise awareness about mental health challenges and to demonstrate the impact of not considering them. This comprehensive information includes contributions from the Firefighter Behavioural Support Alliance and the HOPE Health and Research Institute in an attempt to break the stigma of mental health illness and promote a change in the culture of the service. This collaboration has produced an important starting point from which support systems and re-education are being developed. Paramedicine as a profession has an opportunity to learn from these foundation studies and resulting guidelines.

Paramedics are routinely exposed to a wide variety of traumatic emergency situations. These include road traffic accidents, illness, injury, violent crime, disasters, abuse, threats to their own and their collegial safety. However, less dramatic events can also have a lasting negative impact on a paramedic (Regehr, Goldberg, & Hughes, 2002). Such instances can be as simple as a call to an older person with no family, or the death of a child through terminal illness. Alternatively, witnessing the trauma experienced by others causing vicarious traumatisation can contribute to post-traumatic stress disorder in paramedics (McCann & Pearlman, 1990). It is possible that other factors, external to the workplace, may contribute

to mental health issues. These could be a predisposition to mental illness, problematic family situations and financial concerns (Beyond Blue, 2017). Other mental health challenges in the workplace such as varied shift patterns, traumatic events and lack of emotional support, may cause or exacerbate mental health issues in other areas of a paramedic's life (Van Der Ploeg & Kleber, 2003).

The main coping strategies used by paramedics are often those that disassociate the individual from events. Healthy emotional processing is prevented through the use of denial, humour and distancing. Unsurprisingly many paramedics suffer mental health issues due to routine exposure to emergencies and trauma. When mental health problems or illness occur, they can have detrimental and lasting effects on the career of the paramedic, their physical health, patient care, families and social groups (McFarlane, 2015).

A study into fatigue, sleep and mental illness by Courtney, Francis, and Paxton (2010) found metropolitan paramedics had high rates of fatigue associated with mental health problems. This study was replicated by the same researchers in 2012, with paramedics who work in rural areas and again showed that they had high rates of fatigue and depression. These findings were not affected by age or gender of those studied. The study concluded that rural paramedics are at a higher risk of developing mental health issues due to shift patterns and occupational demands. This may be due to a reduced level of resourcing and large geographical coverage. Ambulance service intervention through the review of working and scheduling practices was recommended (Courtney, Francis, and Paxton, 2012). However, this would be difficult to facilitate given the geographical spread of rural environments. It could be argued rural paramedics need to provide additional support to each other compared to their metropolitan counterparts and should have a greater awareness of the mental health challenges that they and their colleagues are likely to encounter.

A pilot study was undertaken by Shepherd and Wild (2011) to investigate cognitive appraisals, objectivity and coping in ambulance workers. Cognitive appraisals reflect an individual's interpretation of an event. Participants were 45 paramedics from the United Kingdom who were assessed using self-evaluation questionnaires that were completed after difficult call outs. Results indicated positive appraisals and increased objectivity were linked to coping well during the event when compared to negative appraisals and reduced objectivity. The researchers concluded that paramedics would benefit from psychological interventions related to cognitive reappraisal training. These interventions encouraged the changing of negative appraisals to positive, which then enhanced objectivity and coping. As the study was focused on retrospective self-evaluation by paramedics, memory bias presented a limitation. However, these results are consistent with the overall opinion from mental health professionals regarding the existence of mental health issues among paramedics and the need for further study in this area (Paramedics Australasia, 2017).

Clohessy and Ehlers (1999) investigated the symptoms of Post-Traumatic Stress Disorder (PTSD), the response to intrusive memories, and coping in ambulance service workers. Though the number of participants was relatively low at 56 and all were from the same organisation, results of the study were consistent with other studies in differing services undertaken by Thompson and Suzuki (1991), Rentoul and Ravenscroft (1993) and Marmar, Weiss, Metzler, Ronfeldt, and Foreman (1996). These research studies concluded that emergency workers (including paramedics) are at risk of mental health illness, in particular PTSD, regardless of whether or not they have been exposed to disasters. Links were also made to the addition of internal work-related stresses, such as shift patterns and time pressures, which serve to increase overall distress. It was concluded that when participants used coping strategies that distanced themselves from events or memories such as denial and distraction, it served to maintain the PTSD as opposed to allowing the emotional processing

of the event. This suggests that paramedics need help to in processing the memories on an emotional level. By raising awareness and promoting openness to discuss the mental health challenges which paramedics experience, employers would encourage the processing of events through open discussion and the sharing of narrative.

In Australia, there are several external agencies offering mental health assistance that are accessible to all community members. These include Mental Health Australia, Beyond Blue and the Black Dog Institute. There are also smaller organisations and charities that have been set up by individuals or groups of veteran emergency personnel which are specifically targeted at emergency workers. These include Behind The Seen, Time To Change and Sirens of Silence which are predominately internet and social media based. Though primarily offering support and education, Behind the Seen (2015) surveyed the families of first responder emergency workers to investigate the impact of traumatic incidents. Results revealed that 72.73% of the 99 participants agreed these incidents affect their family dynamics. Impacts vary across individuals but can include aggression, absence and withdrawal from family life (Devine, 2014). While the results are the outcome of a small number of emergency worker families, they reinforce the information reported in websites of external agencies and smaller organisations as mentioned above.

Some veteran paramedics across Australia and New Zealand have created their own groups in an attempt to support colleagues. For example, two practising paramedics in Western Australia established Sirens of Silence as a charity in 2015. This was in response to several paramedic suicides over a period of 18 months in Western Australia. The charity *“recognised a broader safety network is required to protect and provide support for all emergency personnel in Australia”* (Sirens of Silence, 2015). Funds are raised to create opportunities for practising and retired emergency personnel to learn about mental health issues and access psychological support. Closed and private Facebook groups also exist

across states and offer an opportunity for paramedics to share their experiences and support each other, outside of the ambulance services. As the number of support groups increase there may be potential for sharing resources and offering centralised support across the professions'. This support could then be embedded within the services enabling independent, trusted and relevant support appropriate to the needs of the emergency workers.

The focus and attention of researchers, organisations and the media appear to be on practising and veteran paramedics. Support for novice paramedics, outside of the generic university counselling services was not found. This contrasts with provision for novice medical doctors within the medical student fraternity via organisations such as Heads Up which offers extensive information about mental health and coping strategies. In addition to online support and links to further support if required. In time, and with the aid of the research described in this thesis, it is feasible future novice paramedics may have access to similar support organisations.

There has been research within universities which has mainly focused on the perceived preparedness of graduating students. O'Brien, Moore, Hartley, and Dawson (2013) investigated final year paramedic student perceptions of their work readiness. While the survey was small ($n = 23$) and limited to one university, the results suggested that students felt they were adequately prepared for the workplace from a theoretical perspective, and had much more to learn 'on the road' as graduate paramedics. These results support the findings in Dawson's (2008) study where students felt unprepared for the practical aspects of the role. A similar study undertaken by Waxman and Williams (2006) showed students felt unprepared for the application and selection process relevant to their employment. It could be argued that while the overall focus of each survey was similar, the construction of specific questions within each survey may have identified different focal points for students therefore yielding a variety of responses.

In most cases, clinical instruction is based within the state or territory ambulance service or the providers of clinical services. However, the accreditation criteria for the non-clinical requirements of courses are broad and open to interpretation. Therefore, this may explain why there are varied responses from students across the three studies mentioned above. It could also be suggested that if students were not taught or introduced to a topic, such as the mental health challenges of the profession, students would not know how to comment on their perceived preparedness. While these studies have informed educators of potential gaps in preparing students for work readiness, there is little mention of mental health wellbeing. There is an opportunity for this current study to urge national standards for graduates entering the profession. These standards would include clinical competencies and mental health awareness.

Developments in mental health awareness and education within the profession as well as within state ambulance services across Australia and New Zealand is evident. Examples of this are:

- Queensland Ambulance Service is reviewing the paramedic wellbeing provision and re-launching their staff support services as the Priority One Program in 2013.
- The publication of the Silver Linings text and activities by Queensland Ambulance Service. This resource recognises the emotional challenges faced by paramedics and subsequent effect on their families. The program provides the opportunity for participants to develop resilience through combining theory and the recorded experiences of paramedics (Bowles cited in Murray, 2013, p5).
- Wellington Free Ambulance has created a peer support program that enables personnel to access peer mentorship as required. In addition, managers are able to recommend support for staff after particularly traumatic calls (Wellington Free Ambulance Service, 2015).

- In Western Australia, there has been a call from within the profession for personal input by the Independent Oversight Panel into workplace culture and wellbeing at St John Ambulance Western Australia Ltd. This is another attempt to review and proactively develop the current provision of mental health and wellbeing of paramedics as part of the organisation's occupational health and safety provisions.
- A collaborative between Paramedics Australasia (PA), Australian and New Zealand College of Paramedicine (ANZCP) and Council of Ambulance Authorities (CAA) to organise an annual event called Survive and Thrive, which is a one day resilience symposium for paramedics.

This type of activity is reflected across many other services and countries. For example, in-house training on stress reduction techniques such as monitoring sleep patterns, breathing exercises, meditation and emotion positivity are becoming popular. These may be in addition to daily debriefing sessions from peer mentors and Chaplains (Drewitz-Chesney, 2012). The overall aim is to reduce distress and prevent long-term impairment.

Paramedic professional bodies including Paramedics Australasia, the Australia and New Zealand College of Paramedicine and the peak employer body, the Council of Ambulance Authorities have formed a collaboration and offer an annual symposium called Survive and Thrive. To date, events have occurred in 2016, 2017 and 2018. This one-day event includes presentations from key personnel from within and outside of the ambulance services, psychologists, academics, researchers and veterans sharing their experiences. The focus is to acknowledge mental health and wellbeing and encourage ambulance personnel to thrive within their roles. This is a direct acknowledgement from the profession that awareness of mental health, illness and wellbeing is vital to all practising paramedics.

Organisational support resources tend to be more commonly accessed after large-scale disasters. This access indicates there is an awareness of the need for the proactive education of paramedics to recognise potential risks in routine situations and to promote the use of available support systems (Regehr, Goldberg, & Hughes, 2002). As the cumulative effects of stress are more common than the stress of a single incident (Robinson, cited in Alexander & Klein, 2001), the development of self-help and protection strategies in the learning phase would serve to re-educate the service and promote a culture of mental health wellbeing.

There is a recommendation by Reed (2014) to build resilience in paramedics through cognitive behaviour modalities. These are produced through the combination of Cognitive Behavioural Therapy (CBT) and mindfulness. CBT is a variant of psychotherapy that aids patients to change thought processes. Mindfulness has been adapted from the Buddhist technique of acceptance of emotions and experiences where the focus is acceptance of responses to trauma and decision-making. Selva (2017) suggested that related therapies have increased the management of stress-based conditions and reduced substance abuse. Although the focus of these recommendations is for use with practising paramedics, rather than in the preparation of novices, the therapies are related to personal experience and may be relevant in the preparation of novices who are likely to encounter emotional challenges during training. Moreover, novice (student) paramedics may benefit from learning how to adapt CBT and mindfulness in preparation for when they graduate.

These developments and government-led reviews of current levels of support for in-service paramedics and their families are encouraging. However, no mention of the initial training process and how future paramedics can be prepared for the mental health challenges of the profession are evident from the body of literature.

Storytelling by paramedics has been suggested as an accepted form of debriefing after a traumatic emergency call out and as a mechanism to develop survival strategies (Tangherlini,

2000). This technique was shown to encourage camaraderie, support and team solidarity and may help to create emotional distance between the patient and the paramedic, thus enabling individual paramedics to cope with events. This research has been criticised for limited participant selection with one ambulance station as a focus and unregulated methods due to the evolving nature of storytelling, Tangherlini's study does offer an insight into the use of storytelling within the profession as a socially accepted way of discussing issues and relieving tension. As with humour, storytelling can have a wide variety of purposes which include the release of tension, discussion of delicate issues, expression of fears, boasting and demonstrating competence. Within the educational context, this human instinct to story tell can be used to inform and prepare novice paramedics in an attempt to inform them of what they may expect after they graduate and are 'on the road'. Mildenhall (2012) suggested there was a need for research into the area of storytelling as a coping strategy within paramedicine, claiming that it is under rated and underutilised. Storytelling may have significant benefits across all aspects of a paramedic's career and further develop resilience and empathy. The use of storytelling and the sharing of strategies form the basis of this research study.

Regardless of the reasons why mental health issues develop, they are prevalent at an alarming rate. As outlined in the discussion above, there is very little existing knowledge specific to the preparedness of novice (student) paramedics for the mental health challenges within the paramedic profession. Further research and resources are needed to raise awareness and openness around this area. More specific information is needed in the following areas of:

- Preparation to cope with mental health challenges included within currently accredited undergraduate degree programs.
- Course coordinator and novice paramedics perception of whether this topic area should be included within accredited undergraduate programs.

- How novice paramedics feel when commencing their career as a paramedic.

The above review has focused attention on previous research and suggests that there is a paucity of research into how novice (student) paramedics are provided with strategies to cope with mental health issues once they have graduated. This chapter asserts that this current research can fill an identifiable gap in the literature and makes a noticeable contribution to previous research. It provides the reader with an understanding of the substantive domain and offers a framework for conducting research in this area.

2.2. Research questions

Based on the identified gap in literature and need for the study, this research addresses the following main questions:

1. Are novice (student) paramedics being prepared for the mental health challenges in accredited paramedicine undergraduate degrees?
2. What do novice (student) paramedics fear most about commencing their career as a paramedic?
3. What do novice (student) paramedics feel least confident about when they commence their career as a paramedic?
4. What do novice (student) paramedics feel most confident about when they commence their career as a paramedic?

5. Do novice (student) paramedics believe awareness of, and techniques for addressing the mental health challenges of the profession should be part of the undergraduate curriculum?
6. Do course coordinators believe awareness of, and techniques for addressing, the mental health challenges of the profession should be part of the undergraduate curriculum?
7. Do veteran paramedics feel the sharing of their mental health survival strategies will benefit the preparation of novice (student) paramedics for mental health challenges?

Chapter 3

Methodology



'Another Routine Day'

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Aims of this Chapter

This chapter provides the reader with a clearer understanding of the methodological underpinning of the study and the rationale guiding the process. The proposed methodology is described in detail. The methodology incorporates triangulation of qualitative and quantitative methods to serve both completeness and confirmation of the research. This includes administration of a survey and semi-structured interviews with veteran paramedics. The overarching framework for the research design is presented as well as the ethical considerations for conducting the research.

3.1. Research methodology

In using a multi methods approach, an important distinction needs to be made between qualitative and quantitative methods. Qualitative research encompasses a holistic approach to a specific phenomenon based on the participant's viewpoint and experiences. The researcher collects data in a natural setting and analysis is through extracting themes and meanings. The results seek to provide a deeper understanding of the topic (Creswell, 1994).

In contrast, quantitative orientated research involves the collection of data, which is quantified numerically and analysed statistically. The mathematical results are then used to confirm or disprove specific claims (Creswell, 2002).

The following table outlines the main characteristics of qualitative and quantitative approaches (Creswell, 2002, 2013; Gray, 2014).

Table 1

Comparison of the main characteristics of the qualitative and quantitative approaches

| Qualitative Research | Quantitative Research |
|---|---|
| The researcher is the main source of data collection | Questionnaires, surveys and interviews are the main source of data collection |
| Research is conducted in a natural setting | Research is conducted in a pre-determined setting |
| A focus on a small number of participants perspectives and experiences | A focus on numerical data from a large volume of participants |
| Multiple forms of data are collected; documents, observations and face to face interviews | Set forms of data collection standardised across the study |
| Open ended questions | Closed questions |
| Data is maintained as words and images | Data is transferred to numerical information |
| Transcripts and images are analysed and emerging themes and meanings are identified | Statistical data is analysed for comparison and trends |
| Has an evolving design | Has a prescribed design from the beginning |

(Creswell, 2002, 2013; Gray 2014)

While the table shows the differences between the two approaches there are similarities. Both qualitative and quantitative approaches go through an initial research

design process which identifies and establishes the appropriate method using a clear and structured process. Creswell (2002) adapted the scientific method of inquiry from Kerlinger (1972) and Leedy and Ormrod (2001) into the following six steps of research design, used for this study:

1. *Identifying a research problem*
2. *Reviewing the literature*
3. *Specifying a purpose for research*
4. *Collecting data*
5. *Analysing and interpreting the data*
6. *Reporting and evaluating the research*

(Kerlinger, 1972; Leedy & Ormrod (2001) cited in Crewsell, 2002, p.7)

The data collection methods and tools may be similar for both approaches; for example the use of surveys and interviews for both approaches. However, quantitative research uses specific closed questioning often with set response categories, which are then transferred into numerical data. Qualitative research uses open-ended and probing questions to gain an in-depth understanding of the perspective of the individual, which is then analysed for meaning and themes (Gray, 2014).

While researchers tend to use either qualitative or quantitative research approaches. The two approaches can be combined to create a mixed method or action research design. This is dependent on the nature of the study and the data to be collected. By combining the data from each approach, a study could quantify and understand a research problem, offering a broader and more holistic picture.

3.1.1. Research approaches

Both qualitative and quantitative approaches were used for data collection and analysis, therefore it can be argued that a mixed methods approach was used in this study.

The main focus of the study was to understand the experiences of veteran paramedics and the coping strategies they used, with a view to using the information to prepare novice (student) paramedics for the mental health challenges of the profession. Due to the lack of literature related to this topic, the current provision of mental health preparation taught in accredited undergraduate degree programs across Australia and New Zealand needed to be identified in order to substantiate the need for this research. In addition, the opportunity to gain an understanding of anticipations, confidence and fears of commencing a career in paramedicine was collected. This was to further understand and provide opportunities to engage and prepare novice (student) paramedics with links to their own feelings towards commencing their careers.

The combination of the two approaches enabled the researcher to better understand this area and outlined the current views and needs of both participants and novice (student) paramedics.

The following section presents each part of the research and outlines the approach and methodology used to collect the information required for the research.

3.1.2. Study 1

Both quantitative and qualitative approaches were used for the initial part of the study which addressed research questions one to six. Two surveys were designed to maximise engagement and completion through online distribution, compact format and a ten minute completion time.

In addition to supporting the need for the research, the surveys also served to gauge the current inclusion of preparation for mental health challenges in accredited undergraduate degree courses across Australia and New Zealand. The views on the inclusion of related content from course coordinators and novice (student) paramedics were collected. The surveys also collected the views on anticipation, confidence and fears experienced when commencing their careers as paramedics, which were analysed for themes. The results of both surveys are published and reported in the results section of this thesis. In addition, the results have been published in a peer reviewed journal article within the *Australasian Journal of Paramedicine* and a copy is provided at the back of this thesis.

3.1.2.1. Target population

Course coordinators from accredited paramedicine undergraduate degree programs were the target population for Survey 1. At the time of the research (2016/7), there were 16 accredited undergraduate paramedicine programs across Australia and New Zealand. Novice (student) paramedics who were enrolled in the 16 accredited paramedicine undergraduate degree courses were targeted for Survey 2.

3.1.2.2. Survey 1

The course coordinator for each of the 16 accredited programs was asked to complete a short online survey.

Survey themes were:

- Information about their university and enrolments.
- Information about the undergraduate paramedicine program and the preparation of novice (student) paramedics for the mental health challenges of the profession.

- Information about course coordinator thoughts of how novice (student) paramedics feel commencing their careers.

Please refer to Appendix B for a copy of the survey.

3.1.2.3. Survey 2

Novice (student) paramedics ($n > 100$) were asked to complete a short survey.

Survey themes were:

- Personal information.
- Information about the undergraduate paramedicine program and the contributions of the program to novice (student) paramedic preparation for the mental health challenges of the profession.
- Information on a novice (student) paramedic's thoughts about how they feel commencing their careers.

Please refer to Appendix C for a copy of the survey.

3.1.3. Study 2

A qualitative narrative approach was used for the second part of the study with stories collected through individual interviews and participation in focus groups. This addressed research question seven. A narrative design was selected to collect and share the stories and advice of those with lived experience. In addition, it was the researcher's intention to find a way to embed this information into the preparation of novice (student) paramedics within accredited undergraduate degree courses. It was not the intention of this research to develop a theory relating to paramedic mental health, although this may be addressed in future research.

3.1.3.1. Narrative approach

Narrative, as a research method, collects data on the lived experiences of participants through the gathering of their detailed stories and or strategies in written, oral or visual formats (Denzin cited in Sandelowski, 1991). The narrative focuses on the meaning of these lived experiences and offers an insight into specific phenomena. An increased understanding is promoted through the telling and retelling of the narratives in collaboration with participants (Creswell, 2013). Gray (2014) stated this method and the subsequent analysis can “*cast a light on the culture, complexities and contradictions in organisations*” (p.166). This is particularly relevant to the context of this study as the lived experiences of the veteran paramedics will offer valuable insight into the coping strategies used.

Narrative research is defined by Gay, Airasian, and Mills (2011) as “*the description of the lives of individuals, the collection of individuals’ stories of their experiences, and a discussion of the meaning of those experiences*” (p. 4). Czarniawska (2004) referred to the spoken or written account of a specific event, or chronologically connected events. Riessman (2008) claimed storytelling is a natural impulse across the globe, although Western teachings have led to the use of the word ‘I’ rather than the broader significance of storytelling that may include culture, land, home, spirits and being. These are demonstrated in other contexts including the Australian Aboriginal culture. Here, the art of storytelling encompasses the creation of country, the land, the histories of people and Australian Aboriginal ancestors (Casey, 2012). Similarly, the culture of paramedicine encompasses the creation of the profession of paramedicine, the history of people helping people when they are ill or injured, and the lineage of paramedics.

Narratives capture a rich source of data using the stories and or strategies of those who have lived the experiences by using their own words. This provides a valuable insight into the given phenomenon from a specific contextual and cultural perspective. Patterson

(2002) believes narrative is not merely a text or a representation but is also an experience that has “*real and far-reaching effects and implications for the self and the world*” (p. 1). It is holistic from the outset and enables a broader and deeper understanding through a storytelling approach. This method utilises the human instinct to tell stories and is demonstrated in many cultures across the world. In this study there is a strong link made to Australian Aboriginal Dreamtime. This is one of the oral traditions of the spiritual belief system called ‘Dreaming’ and is seen as passing down wisdom through the generations (McKay & Dudley, 1998).

The narrative research method allows the researcher to collaborate and build trusting relationships with research participants. In turn, this enables a more comprehensive understanding and representation of the lived experiences of the ‘Elder’ (i.e., the veteran paramedic). The researcher actively promotes involvement of participants in the research to encourage mutual trust and collaboration (Clandinin & Connelly, 2000). This is empowering for participants because they see their experiences are valued and used positively.

Participants and the researcher both learn from this activity, with both parties facilitating the opportunity to make positive change (Pinnegar & Daynes, cited in Clandinin, 2007). Maintaining a positive experience is essential in order to reduce any negative impact on the mental health of the participant who themselves may be vulnerable due to their experiences as a paramedic.

Researchers such as Bruner (1990) claim that people use narrative to make sense of their world in context by observing how others react and survive. Semi-structured interviews were used to collect the narratives because they allowed for a free flow exchange around the topic while maintaining a focus through the semi-structure questions. In addition, semi-structured interviews maintained the comfort and trust of the participants. Themes and patterns were found through the analysis of narratives. These provided valuable data

regarding the strategies of the veteran paramedics and how this can be utilised to further aid the preparation of novice paramedics.

Narratives are valuable in the communication of experience as the stories are related within a context which in this research is the paramedic profession. Narratives and strategies have been collated using the voices of participants in oral and written formats. This increases the credibility of the narratives because they are the real stories and strategies of veteran paramedics who have undertaken and survived the paramedic role. The narratives themselves contain turning points, which outline strategies that aided veteran survival (Denzin cited in Sandelowski, 1991). Christie (2010) states storytelling “*allows the listener to preserve memories, educate a new generation and honour those who have engaged in the storytelling*” (p. 1) which reflects the rationale for conducting this research.

The importance of uncovering the person underneath the story is acknowledged as a vital component of data collection in order to fully understand the narrative and the strategies imparted by the participants (Edel cited in Creswell, 2013). Building a respectful, caring and trusting relationship can aid this. Each participant is unique and needs the researcher to adapt to them accordingly. For all regular communication, assurances and open communication are necessary. Pinnegar and Daynes, (cited in Clandinin, (2007) also highlight several of the challenges of this research method including:

- Who owns the story?
- Who can tell the story?
- Who can change the story?
- What happens when the narrative is complete?

The researcher needed to ensure that there was open communication with the participants to overcome these challenges. This extends from the initial approach to participants to

discussions and coming to agreement on ownership and authorship, both verbally and in writing. It is equally important to review agreements with respect to their participation in the research study. The researcher must develop a partnership with participants and acknowledge that establishing this partnership may take considerable time and multiple meetings.

The narrative approach is in contrast to quantitative methods that explain a particular phenomena by breaking down data into statistical information and often decontextualising responses through this process. Although some authors, such as Gray (2014), argue that quantitative methods are more reliable than qualitative methods because quantitative methods do not allow the researcher to influence the data or its collection; this requires a rigorous investigative design as well as appropriate and precise statistical analyses. Other authors, such as Creswell and Miller (2000), suggest that a qualitative approach incorporating collaboration and negotiation between the participants and researcher validates the data and this validation, in turn, adds reliability.

Quantitative research methodology was initially considered for collecting the stories and advice from veteran paramedics. Following careful consideration and with guidance from supervisors, it was decided a quantitative methodology would not allow for the depth required to explore the strategies and advice given by veteran paramedics. A more flexible lengthy process was required to build the relationship between the participant and the researcher in order to gain the essence of participant experiences.

Quantitative research methodology was used for the surveys conducted in the first part of this study because a this approach was appropriate to analyse this survey data.

3.1.3.2. Target population

Veteran paramedics with a minimum of 15 years' service as a paramedic were the target population for study two. The sample was recruited via a poster (Appendix D) presentation made by the researcher at paramedic conferences and paramedic continuing professional development events. Examples include Western Australia Chapter Paramedics Australasia Conference, Network of Australasian Paramedic Academics meetings, Paramedic Australasia International Conference. Veteran paramedics were fully informed of the research through the presentation and subsequent discussion with the researcher. The geographical spread of the sample was across all states and territories of Australia and New Zealand including paramedics from metropolitan, rural and remote areas.

The extensive experience of these individuals is presently not formally utilised as a resource for current or novice paramedics. Veteran paramedics have survived in the paramedic role and, by sharing their lived experiences, pass down their stories and strategies to educate and maintain culture much the same as the Elders within Australian Aboriginal communities.

Each Aboriginal community has its own protocols and, importantly, Elders are not always defined by age. It is their experience, cultural knowledge and status, in addition to their contribution to the Aboriginal community, that determines their standing as an Elder (NSW Aboriginal Community Care Gathering Committee, 2011). Similar to Aboriginal communities and Elders, it is the experience, cultural knowledge and status of veteran paramedics in addition to their contribution to the paramedic community that is valued. Age, gender or current employment status does not necessarily affect the experiences and stories to be shared.

By using the wisdom of the Elders to educate and empower the young, Elders preserve their own experiences as well as the experiences of those who have gone before through the

power of their stories. In the context of this study, veteran paramedics share their stories and strategies of survival to educate novice paramedics and empower them to help themselves and their colleagues. As with Aboriginal young, novice paramedics are more likely to engage in stories from those that have lived the experiences compared to a third party repeating the stories. Credibility is a vital component for the engagement and reflection of the narrative. Therefore, narratives of veteran paramedics are presented in the words of the veteran participants. Respectful trusting relationships are an integral part of Australian Aboriginal culture. The following advice is given by the Share Our Pride Reconciliation Organisation (2015) regarding the building of these relationships.

1. Take time to get to know the culture.
2. Attend local activities.
3. Engage with Australian Aboriginal organisations.
4. Link to the grapevine.
5. Begin the relationship with trust.

The following principles were applied to build the relationships between the researcher and the veteran paramedic participants.

1. Have an understanding of the culture within paramedicine.
2. Attend networking and continuing professional development events.
3. Engage with professional bodies such as Paramedics Australasia, The Australian and New Zealand College of Paramedicine, the Council of Ambulance Authorities and Student Paramedics Australasia.
4. Link to relevant social networks and websites to stay current with views, opinions and changes within the profession.
5. Start the relationship with a trusting, clear and honest approach.

Similar to Australian Aboriginal culture, getting to know the veteran paramedic participants was an important first step to building a trusting and honest relationship. Once that relationship was developed, working together became an integral part of experience. In the context of the veteran paramedic, this relationship was based on a mutual interest and desire to assist the current mental health crisis faced by many paramedics. Trust was built through honest clear and mutually agreed activity. While the researcher had a keen interest in the study, the safety and mental health and wellbeing of the participants was crucial.

3.1.3.3. Procedure

Veteran paramedics were selected from the target population and interviewed. The number of interviewees was initially set at 15. However, interviews continued beyond this number until saturation (Glaser & Strauss, 1967), whereupon data being collected provided no additional information. This approach resulted in 20 interviews being conducted. Participants were asked to volunteer for the study following a presentation when the nature of the study and all information had been presented to potential participants. This information included ethical considerations, such as participants could refuse to take part in the research at anytime without penalty. They could also decline to answer any questions and withdraw from the research at anytime. It is acknowledged that using volunteers may bias the data, however, approaching veteran paramedics directly could have applied undue pressure to participate in the research. In turn, this may have caused unnecessary anguish and, in addition, had the potential to cause bias.

Recorded semi-structured interviews were conducted to elicit the stories of survival from the mental health challenges that have been experienced by veteran paramedics and to describe the survival strategies adopted. The use of open-ended interview questions (see Appendix E) allowed for the collection of a large volume of information, while the semi-

structured format allowed for free flow of narrative while maintaining focus. Questions included were:

What did you look forward to the most as you commenced your career as a paramedic?

What did you feel the most confident about as you commenced your career as a paramedic?

What did you feel least confident about as you commenced your career as a paramedic?

What did you fear the most as you commenced your career as a paramedic?

Tell me about your experiences as a Paramedic?

Tell me how you survived the mental health challenges of the profession?

What strategies did you use?

Is there any advice you would give a novice (student) paramedic?

A framework for the semi-structured interview was provided to the participant prior to the meeting. This was to encourage trust and collaboration and enable the participant to mentally prepare for the interview. In addition, responses were more accurate, less prompted and in the participants own words (Mertens, 2005). This allowed the researcher to gain insight into their personalised narrative and context.

Secondary sources including newspaper articles, reports, photographs and diary entries were sought to contextualise the stories and advice. This was also an opportunity to build the relationship between the participant and the researcher. The length of the semi-structured interviews were determined by the participant based upon their comfort and willingness to continue. Each interview was a maximum of an hour and was recorded verbatim. Creswell (2013) advises this is the optimum time span for this type of activity.

3.1.3.4. Focus groups

Using the data from individual interviews, three focus groups were formed from veterans who had volunteered to participate in study 2, however they were not able to participate in an individual interview. This was to confirm the findings from the semi-structured interviews were applicable to the wider paramedicine community. Focus groups are defined as a collection of data via recording group interactions on a topic specified by the researcher (Morgan, 1997). This research technique may be considered a group interview where the researcher supplies the topics and records the responses and interactions within the group. This provides valuable data and insight into the views of both individuals and the group as a whole.

The advantage of using the focus group method is the researcher can collect the thoughts, opinions and interactions on the specific topic from a number of participants simultaneously (Morgan, 1997). However, because the group and topic are created and facilitated by the researcher it could be argued that focus groups are less realistic and potentially biased. The accuracy of responses is also a consideration because the group is made up of individuals from the same profession and, potentially, from the same working region. Therefore, the following positive and negative aspects of organising a focus group are acknowledged:

Table 2

Acknowledged advantages and disadvantages of focus groups

| Advantages | Disadvantages | How this will be overcome |
|---|--|--|
| Opportunity to present the data to groups from the target population. | Researcher can influence data collection through the selection of participants and topics. | Every care was taken to ensure consistency across all groups. |
| Simultaneous data collection from a group of individuals. | Participants can influence data collection through polarisation, where more extreme views can be expressed in the group setting than those expressed in private. | Specific topic areas were given where the researcher maintained focus with related discussions/comments. |
| Recording of interactions, thoughts and opinions. | Peer pressure, as with polarisation, views expressed may not be what are truly believed by individuals, but the need to go along with the group may be stronger (Sussman, Burton, Dent, Stacy & Flay, 1991). | The purpose of this research was to explore this topic therefore it was likely participants would be keen to overcome this and express their views, as they volunteered for participation. |
| Clarification of any ambiguous areas. | Assumed knowledge and professional language because participants are from the same profession. | The researcher ensured clarity through confirmation and validation of meanings. |
| Validation of data. | As with any profession there may be invisible boundaries, which may be addressed within the data presented. | Ground rules were negotiated prior to commencement of the activity, along with the researcher presenting specific and targeted discussion areas. A funnelled approach was used to elicit specific data and maintain control throughout the activity. |

In application, the strengths of this activity aided the clarity and validation of the data collected in the individual interviews by utilising the thoughts and opinions of similar professionals collected within the focus groups.

The number of participants in each focus group was a minimum of six and a maximum of ten. Morgan (1993) stated this number is the optimum manageable number for

focus groups. In order to maximise attendance, the activities coincided with a paramedic related conference and professional meeting where many of this community attended. Three focus group activities were held in Melbourne. Veteran paramedics present had collectively worked in all states and territories.

3.1.3.4.1. Participants

Veteran paramedics who volunteered to participate in the study, and who were not interviewed due to location or interview saturation, were asked to attend the focus group sessions. Participation criteria remained the same. A maximum of 10 participants were invited to attend sessions, which coincided with conferences or professional meetings. The focus group participants were provided with the interview questions to consider prior to the session so that they could prepare for the activity and optimise the time spent in discussion with other participants and the researcher (see Appendix F).

The following table identifies the number of participants present at each of the focus groups.

Table 3

Information on focus group participation

| Focus Group | Number of Participants |
|-------------|---------------------------|
| 1 | 6 |
| 2 | 6 |
| 3 | 6 |

The use of strangers in focus groups is recommended by Agar and MacDonald (1995) because assumptions and boundaries are greatly reduced, when compared to participants who

know or work with each other. However, Morgan and Krueger (cited in Morgan, 1993) claim it is preferable to use acquaintances because discussions tend to occur more readily. The use of acquaintances can also aid self-disclosure because there can be a feeling of unity and mutual understanding (Jarrett cited in Morgan, 1993). Due to the nature of this study and its participants, some acquaintance was unavoidable because of networking and events within the professional community. Additionally, due to time constraints and the need for openness, using participants who were potentially acquainted with one another benefited the activity and provided a comfortable, open discussion forum.

During focus group sessions, a funnel-based interview approach was used, as with the semi-structured interviews. This provided a balance between unstructured and highly structured approaches (Morgan, 1997). The funnel-based interview approach enabled a less structured, free discussion to be promoted around the topic of the mental health challenges of the profession at the beginning of the session. This allowed participants to be heard and to express their own views prior to the specific researcher led questions, which were the same as the semi-structured interview questions. The data collected at this stage could have potentially revealed areas that had not yet been recorded or considered. Specific structured questions and opinions were integrated allowing the researcher to seek opinion and validation of the data already collected. It is acknowledged that great care needed to be taken in the transition of the questioning. However, having the interview questions prior to the activity aided this and helped to retain focus.

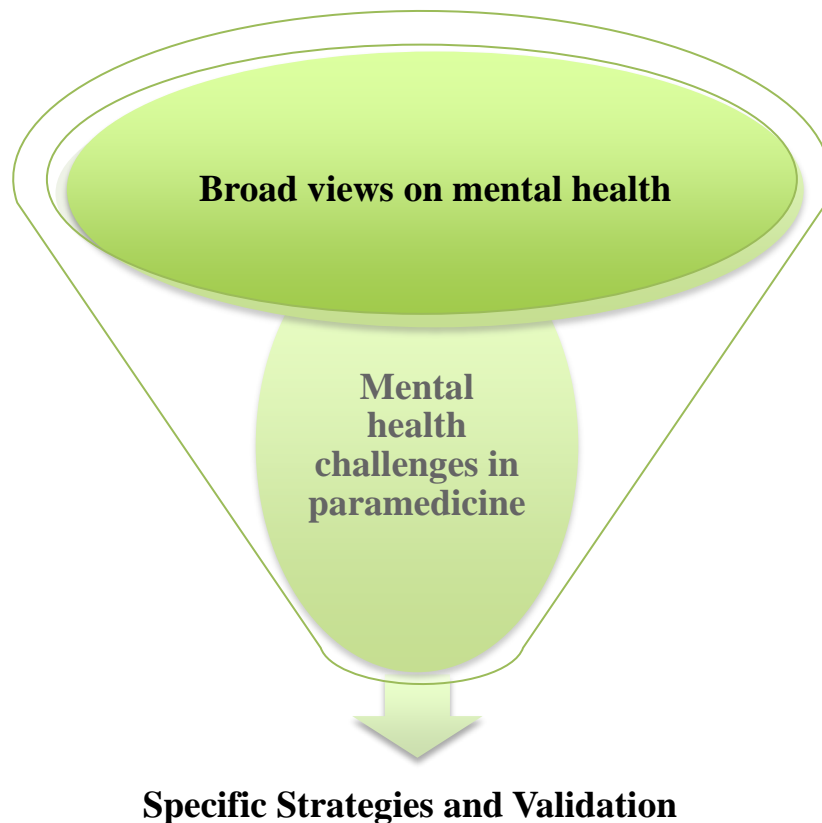


Figure 6. Funnel-based interview approach adapted from Morgan, (1997).

Each focus group was standardised and used the same materials, timings and content. This was the same as the interview process to ensure a consistent approach. Merton, Fiske, and Kendall (1990) claim four criteria should be planned and met during focus group activity:

1. Range.

All topics were related and led to mental health in paramedicine.

2. Specificity.

Questions mirrored those asked in the interviews and surveys.

3. Depth.

Discussions explored the feelings and thoughts on the mental health challenges of the profession.

4. Personal context.

The broader context was similar for all because it related to the profession.

However, the personal context was how participants coped, where others perhaps did not or used other coping strategies.

3.2. Research rigour

Ensuring appropriate rigour in any research is vital for the credibility of the data collected, analysis, findings and subsequent recommendations. In addition, rigour is necessary to ensure the integrity of the information shared by participants. Table 4 outlines the quantitative and qualitative research criteria adapted by Lincoln and Guba; Tashakkori and Teddlie and Chism et al., cited by Reis, Amorim, and Melao, (2017). This formed the basis of consideration throughout this study.

Table 4

Quantitative and qualitative research criteria

| Quantitative research criteria | Qualitative research criteria | How this was addressed in the study |
|--|---|--|
| Validity Project and instruments measure what they are intended to measure | Credibility Establishing that the results are credible or believable | This was approved in the proposal process by the supervisory team and two independent examiners. A pilot study was used to review the questionnaire and interview questions (please refer to section 3.5.). The researcher and supervisory team continuously monitored the instruments and credibility of their use throughout the data collection and analysis. Participants were sought from accredited university programs and members of both professional paramedic bodies. |
| Generalisability Results are applicable to other settings, achieved through representative sampling | Transferability Applicability of research findings to other settings, achieved through thick description | All participants in both the interviews and focus groups were veteran paramedics with 15+ years experience. Focus groups were used to confirm findings accurately represented the wider population of veteran paramedics Survey participants had clear criteria for completion. |
| Reliability Findings are replicable or repeatable | Dependability Researchers account for the ever-changing context within which the research occurs | The three focus groups confirmed the findings from the data collected from the semi-structured interviews. Clear links to the context of paramedicine and the developments within this area were noted. |
| Objectivity Researcher limits bias and interactions with participants | Reflexivity Researchers examine their own bias and make them known | Bias was acknowledged and noted throughout the planning, design and data collection process. Information was provided to all participants prior to the interview/focus group sessions, this clarified questions to be asked and expectations. The semi-structured interviews were standardised to ensure the focus of interactions with participants and topic coverage during the meetings. |

Table adapted by Lincoln and Cuba; Tashakkori and Teddlie; and Chism et al., cited by Reis, Amorim & Melao, (2017).

3.2.1. Further challenges

In addition to the safeguards for research rigour described throughout the chapter sections above, the following activities were conducted.

The questionnaires for the course coordinators and novice (student) paramedics were developed in conjunction with the supervisory team. The semi-structured interview questions for the veteran paramedics were reviewed by the supervisory team for layout, readability, clarity and feasibility. A separate check for clear alignment to the research questions was also undertaken; this was to ensure that relevant, stable data could be collected across the target populations. This was also carried out by the supervisory team and in the pilot study where the questions were reviewed and tested. Amendments were applied and direct alignment with the research questions was confirmed.

Reliability and bias are challenging to achieve in interview settings. Despite the use of standardised questions, the researcher could potentially unintentionally affect the interview situation through tone of voice used, assumptions made and time given to each participant to respond (Gray, 2014). Therefore, semi-structured interview questions were created which the researcher practiced in an interview setting with colleagues and the pilot group several times to ensure the process and subsequent outcomes were as similar as possible.

Although lived experiences and narratives cannot be measured (Van Kaam, cited in Creswell 2013), the depth, detail and words of participants can be measured. This adds validity and credibility to the data collected (Patton, 1980). During analysis, themes were created and reviewed by the supervisory team to ensure that the process maintained a reliable, valid and unbiased approach.

It is acknowledged that experiences and narratives are living memories and are therefore continuously developing based on the perceptions and further experiences of each individual (Moen, 2006). However, it is the meaning behind each story that is significant.

These are the survival strategies of veteran paramedics to be shared. While the researcher undertook very limited editing, when this occurred all editing was agreed between the researcher and the participant and, in every case, the narratives and strategies remained in the words of veteran paramedic participant.

3.3. Study ethics approval

Edith Cowan University Human Research Ethics Committee reviewed and approved the ethics application for this study.

A risk assessment was carried out as part of the approval process and revealed the level of potential risk associated with this research project to be:

Table 5

Risk assessment results

| Rating | Score | Category |
|--------------------|-------|--|
| Likelihood rating | 3/5 | Possible risk might occur at sometime |
| Consequence rating | 2/5 | Minor counselling treatment may be required. |
| Overall rating | | Moderate Risk |

Ethics approval for the study was granted based on the requirements of the National Statement on Ethical Conduct in Human Research (National Health and Research Council, 2015). The approval period was from 28th July 2015 to 14th May 2018.

3.4. Analysis of the data

Surveys

Descriptive statistics were generated in analysing the responses and thematic analysis, the methods of quantitative research were used to analyse the open-ended questions.

Interviews

Interviews and focus groups were recorded using a digital voice recorder, which allowed the researcher to engage with the participant without distraction and ensured all data was collected. Recordings were catalogued and reconstructed using ‘restorying’. This is the process of reconstructing the story from participants using key themes and timelines to reorganise the content (Ollerenshaw & Creswell, 2002). Where relevant, the researcher would collaborate with participants to finalise the narrative and ensure that it was representative of the participant’s contribution (Gay, Airasian, & Mills, 2011). This process also added validity to the data by ensuring the essence of the data collected and was conveyed as the interviewee intended. Husserl cited in Gay, Airasian, & Mills (2011), stated this is ‘explicating experiences in the language of the experience itself’ (p.28).

Interviews and focus groups were analysed using thematic analysis where the content was the main focus, i.e., what was said (Riessman, 2008). Although this type of analysis can be conducted on a wide range of narratives, it is particularly suited to narratives revealed in interviews and focus group situations where the experiences and events are recorded (Mishler, cited in Riessman, 2003). Where relevant, the researcher analysed each interview and chronologically ordered events based on career stage as follows:

1. Novice (student) paramedic; an undergraduate student studying paramedicine.
2. Paramedic; a practising paramedic with five to 10 years post paramedic qualification experience.

3. Veteran paramedic; a practising or retired paramedic with 15 or more years post paramedic qualification experience.

Further analyses for themes and patterns across all narratives were undertaken. The narrative that was created post analysis focused on the veteran's experiences and strategies and not on the conversation and questions that were conducted to elicit the data. This produced clear, efficient, focused narratives with no distractions (Mishler, cited in Riessman, 2003).

According to Dohrenwend, Turner, Turse, Adams, Koenen, and Marshall (2006) validity of the narrative needs to be investigated because events and experiences can be distorted over time and exaggerated when retelling. However, Bruner (2003) argued verification of narratives has limited applicability and deflects from the intentions of the research.

The focus of this study was to raise awareness of the mental health challenges of the profession. Thus, investigation into the validity of the narratives would deflect from the purpose of this shared wisdom and serve to alienate the participants. Whereas it was accepted that stories and experiences change over time, the importance is that the narrative is shared (Riessman, 2008). If further information was required from participants, a return visit was negotiated following the same procedure as for the first interview.

Analysis of focus group data was conducted in the same way as the semi-structured interview data by using thematic analysis. Themes were compared and used to validate the original findings. This enabled broader generalisability across the veteran paramedic community.

Within the process of analysis the role of the researcher was to:

- Empower the participant to tell their story of lived experience.
- Where possible construct the story into narrative in collaboration with participants using their words.

- Validate narrative accuracy with participants.
- Ensure the final narrative was a true reflection of the participants' lived experiences (Patterson, 2002).

3.4.1. Ethical considerations

It was important to have realistic expectations of the data collection and analysis processes therefore the study included the following considerations as outlined in Table 6:

Table 6
Ethical considerations

| Concerns | Issues | How this was overcome |
|------------------|------------------------------------|---|
| Ethical | Sharing of data in group situation | Interviewees could choose to be anonymous. Focus group ground rules regarding contributions and privacy. |
| | Data protection | All data was coded and documentation did not include participant's personal details. |
| | Security of data | Documentary data was secured in a lockable cabinet, with computer data being password protected. Access was limited to the researcher. |
| Budget | Location | Activity was timed to coincide with paramedic conferences and continuing professional development events. This maximised contributions because many from the veteran paramedic community across Australasia attend these functions. |
| | Space | Appropriate spaces were arranged at the event venues and were costed accordingly. |
| | Refreshments | Refreshments were provided and budgeted accordingly. |
| Time constraints | Recruitment | This was conducted at paramedic events. This was the most efficient use of time and location. |
| | Transcription of data | The researcher undertook this activity which maintained the trust and confidentiality of contributions. |
| | Time available | This impeded the opportunities for return visits by the researcher to participants. |

No payment was offered to participants for engaging in the research. Many veteran paramedics were keen to share their experiences in order to aid the preparation of novice paramedics in an attempt to raise awareness of the mental health challenges of the profession.

3.5. Pilot study

Both the interview and focus group questions were piloted with a small group of six veteran paramedics from Perth, Western Australia. Recruitment was from a presentation and request for participation at the Paramedics Australasia WA Chapter Conference. The paramedics who participated in the pilot study did not form part of the study population. Based on the results of the pilot study, only grammatical modifications were made prior to commencement of veteran paramedic interviews and focus groups discussions.

3.6. Summary of the research design

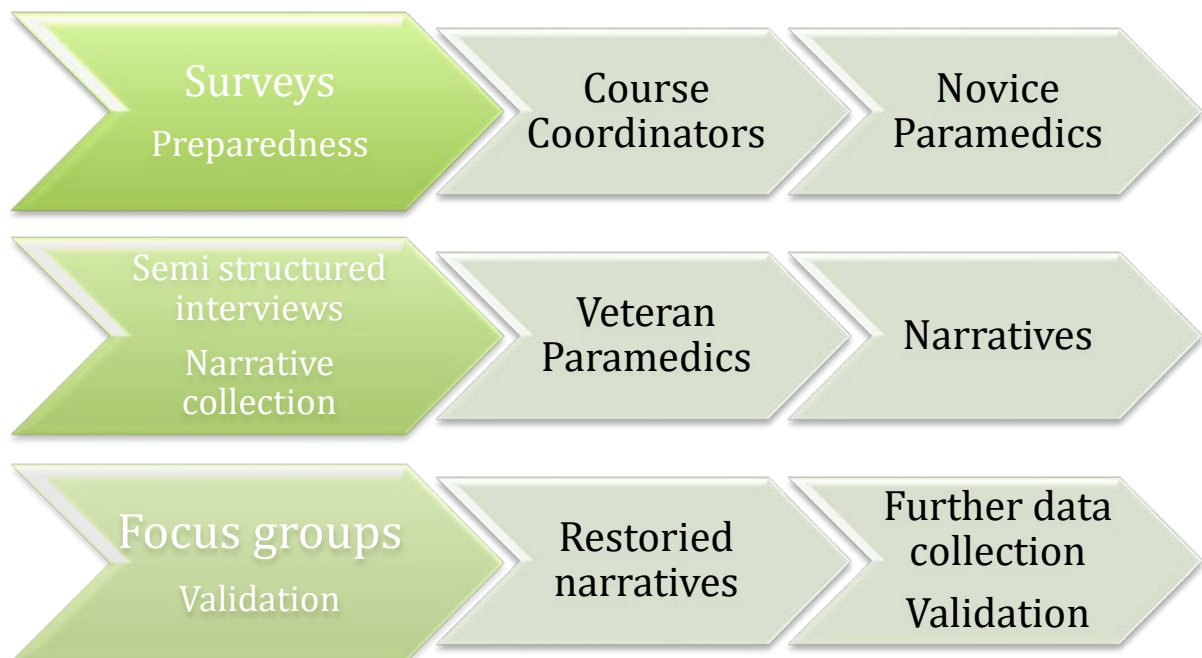


Figure 7. A Summary of the research design

3.7. Recruitment of participants for study 1 and 2

Table 7 provides a summary of participants included in Study 1 and 2 and information on the recruitment of the participants for each study is described below the following sections.

Table 7

Summary of all participants in the study

| Data collection | From | Requirements |
|--|--|--|
| Course coordinator survey Study 1 | Accredited undergraduate degree courses across Australia and New Zealand | Course coordinator |
| Novice (student) paramedic survey Study 1 | Accredited undergraduate degree courses across Australia and New Zealand | Enrolled student 18+ years of age |
| Semi-structured interviews Study 2 | Across Australia and New Zealand | Current or ex paramedic 15 + years experience |
| Focus group participants Study 2 | Across Australia and New Zealand | Current or ex paramedic 15 + years experience |

3.7.1. Course coordinator survey - participants

Participants were course coordinators recruited from Paramedics Australasia Conferences and the Network of Australasian Paramedics Academics (NAPA) meetings. NAPA is a Special Interest Group within Paramedics Australasia. Members have a focus on paramedic education and research. At the time of recruitment, there were 16 accredited undergraduate degree courses across Australia and New Zealand (Council of Ambulance Authority, 2014).

3.7.1.1. Procedure

NAPA supported the researcher to pursue this study and maintained a keen interest in developments in this topic area. The researcher presented the study at a NAPA meeting and asked for participation from the course coordinators for both the course coordinator and distribution of the novice (student) paramedic survey.

3.7.2. Novice (student) paramedic's survey – participants

Voluntary participation was advertised via course coordinators to the novice (student) paramedics enrolled in their undergraduate courses. This was through promotion and a link to the study information and survey on their course Moodle and Blackboard sites.

3.7.2.1. Procedure

Paramedics Australasia and The Paramedic Observer who both have a high level of presence in paramedicine forums also promoted participation via social media. The researcher also attended paramedic conferences and events to present the concept of the study and to ask for voluntary participation. The same information was used for all participation promotion (refer to Appendices C and G).

3.7.3. Veteran paramedics for interview and focus group participation

The researcher attended paramedic conferences, events and professional meetings to present the study and ask for voluntary participation from veteran paramedics. A poster (Appendix D) was also displayed at four conference events and in five ambulance stations in New South Wales, North Territory, Western Australia, Tasmania and New Zealand. In addition, the research was promoted on social media by The Paramedic Observer and Paramedics Australasia.

Bias is acknowledged because participants volunteered to participate in the study. Other means of participant recruitment such as a direct approach were considered to be equally biased as well as unethical due to the perceived stigma of mental illness within the profession and the potential of triggers for those suffering from mental illness. Therefore, asking for voluntary participation enabled veteran paramedics to gain further information and make an informed decision to participate or not.

3.7.4. Participation and consent procedure

Information regarding the purpose and outcomes of the study were explained and provided to all participants through presentations, meetings and the sharing of study information documents. Opportunity to ask further questions was also provided. Formal consent was sought from all participants with emphasis on their right to withdraw from the research study at any time without penalty. This was advised both orally and in writing (Appendices G, H, I.).

For the interview and focus groups, the emotional wellbeing of participants who were sharing and reviewing narratives, strategies and experiences was considered at length. A positive and sensitive approach was adopted by the researcher, who explained the benefits of veterans sharing their stories, strategies and experiences with novice paramedics prior to commencing their career.

All contributions were highly valued and treated with the utmost respect. Participants were provided with support information and organisational brochures that contained details of agencies that they might contact should they experience any issues after the interviews (Appendix J).

3.8. Researcher mental health wellbeing

The researcher undertook relevant professional development to ensure interviews were conducted in a sensitive and supportive manner. This maximised researcher sensitivity and helped to prevent unnecessary stress on participants. The following table (Table 8) outlines the professional development activities and the purpose of each activity.

Table 8.

Professional development undertaken

| Training | Purpose |
|---|--|
| Extensive discussions with Paramedic PTSD sufferers on potential triggers | To ensure the interview questions were written and asked in a sensitive manner. To reduce triggers. |
| Four sessions with a Crisis Counsellor | To discuss body language, tone and phrases for interviews. To be aware of signs of stress and how to support accordingly. |
| Emergency Service Debrief Workshop | To enable the researcher to appropriately debrief interview and focus group activities with participants. |
| Mental Health First Aid Training | To gain further knowledge of mental health issues including substance abuse, gambling and self-harm. To gain skills in communication and approach when there is a mental health crisis. |

Due to the nature and content of data collection, the researcher attended monthly debrief and support sessions from a psychologist at Edith Cowan Psychological Centre, to ensure the researcher's own mental health wellbeing was maintained.

The following chapter presents the data collected based on the processes described in this chapter.

Chapter 4

Results and Discussion



'Christmas Nightmare'

Used with kind permission from Daniel Sundahl, Dansun Photo Art.

Aims of this Chapter

This chapter reviews and discusses the results from survey 1 and survey 2. It presents an overview of the research findings from the Veteran Paramedic interviews and focus groups and provides examples through the presentation of direct quotes from the semi-structured interviews.

This thesis addresses the issues of preparing novice (student) paramedics novice (student) paramedics for the mental health challenges of the profession. Due to the limited research and literature on this topic area, surveys 1 and 2 were conducted to gain an insight into the current provision and perceived need for this inclusion into undergraduate paramedicine programs.

4.1. Results and discussion from survey 1 and 2

Responses were obtained from 16 course coordinators from accredited paramedicine undergraduate degree programs. This represented a 100 percent response rate from course coordinators across all states and territories of Australia and New Zealand. Responses were obtained from 302 novice (student) paramedics; 100 from first year, 108 from second year, 87 from third year, and 7 from the fourth year of an extended course. Demographic information about the novice (student) paramedic participants is shown in Table 9.

Table 9

The demographics of novice (student) paramedics who undertook the survey

| State/Territory/Country | Novice (student) paramedics |
|------------------------------|-----------------------------|
| New Zealand | 55 |
| Australian Capital Territory | 3 |
| New South Wales | 26 |
| Northern Territory | 0 Included in other states |
| Queensland | 68 |
| South Australia | 37 |
| Victoria | 40 |
| Western Australia | 63 |
| Tasmania | 10 |
| Total | 302 |

Note. An accredited undergraduate Paramedicine program is not offered in the Northern Territory (NT) and so residents of the NT study at universities in other states.

4.1.1. Questions related to student preparation

Course coordinators and novice (student) paramedics were asked to respond to the following questions:

- Should the mental health challenges of the paramedic profession be part of the undergraduate curriculum?
- Does your undergraduate course currently include the preparation of novice (student) paramedics for the mental health challenges of the paramedic profession?
- Are the mental health challenges of the paramedic profession covered in appropriate depth?

- Has your course suitably prepared your novice (student) paramedics / you for the mental health challenges of the profession?

Responses from course coordinators and novices to each of these questions are summarised in Table 10.

Table 10

The proportion (%) and number of respondents who answered yes or no for questions relating to mental health preparation

| Question | Course Coordinators | | Novice (student) paramedics | |
|---|---------------------|------------|-----------------------------|--------------|
| | % (N) | | % (N) | |
| | Yes | No | Yes | No |
| Should the mental health challenges of the paramedic profession be part of the undergraduate curriculum? | 100% (15) | 0% (0) | 97% (274) | 3% (8) |
| Does your undergraduate course currently include the preparation of novices for the mental health challenges of the paramedic profession? | 75% (12) | 25% (4) | 74% (225) | 26% (78) |
| Are the mental health challenges of the paramedic profession covered in appropriate depth? | 64% (7) | 36% (4) | 57% (113) | 43% (84) |
| Has your course suitably prepared your students/you for the mental health challenges of the profession? | 36% (5) | 64% (9) | 46% (113) | 54% (131) |

All course coordinators (100%) and most (97%) novice (student) paramedics reported that mental health challenges of the paramedic profession should be part of the undergraduate paramedic education and training curriculum. Three quarters of course coordinators (75%) and novices (74%) agreed that mental health challenges of the paramedic profession are currently included within undergraduate paramedic courses. However, there remain a significant percentage of respondents (36% of course coordinators and 43% of novices) who consider this topic is not covered in appropriate depth. Importantly, two-thirds (64%) of course coordinators and more than half (54%) of novices reported students were not suitably prepared for the mental health challenges of the paramedic profession. The paramedic profession does not have uniform work readiness criteria against which the ability to meet mental health challenges can be measured, self-reporting based on individual paramedic personal assessment is a powerful indicator of this.

Course coordinators and novice (student) paramedics were asked how the topic of mental health challenges of the paramedic profession is taught and should be taught within the undergraduate curriculum. All responses from course coordinators and novices are summarised in Table 11. It should be noted that each respondent may have included more than one theme in their response.

Table 11

The proportion (%) and number of respondents reporting how preparation for mental health challenges is taught and how it should be taught.

| Mode of Instruction | Course Coordinators | | Novice (student) paramedics | |
|-----------------------|----------------------------|-----------------------------------|-----------------------------|-----------------------------------|
| | % (N) | % (N) | % (N) | % (N) |
| | How is the material taught | How should the material be taught | How is the material taught | How should the material be taught |
| Lecture | 100% (11) | 86% (12) | 81% (162) | 69% (171) |
| Discussion | 100% (11) | 93% (13) | 63% (126) | 81% (202) |
| Activity | 82% (9) | 86% (12) | 36% (73) | 65% (162) |
| Independent research | 9% (1) | 21% (3) | 34% (68) | 26% (65) |
| Group research | 36% (4) | 64% (9) | 9% (19) | 24% (61) |
| A standalone unit | 45% (5) | 43% (6) | 24% (48) | 32% (79) |
| Placement / practicum | 19% (1) | 7% (1) | 9% (19) | 11% (27) |

Most course coordinators and novices reported mental health challenges in the paramedic profession were addressed using multiple teaching methods (by selecting more than one mode of instruction in the survey) and most had a preference that this topic be taught in this way. Whereas lectures were the most common way the topic was addressed, both course coordinators and novices reported a preference for learning about the topic through discussion. Teaching the topic through activity-based education was also a preference for both course coordinators (86%) and novices (65%). There was little support by either group for teaching the topic as placement / practicum..

4.1.2. Questions related to positive anticipation

Course coordinators and novices were asked what novice (student) paramedics most look forward to about commencing paramedicine as a career. This question elicited six themes:

1. Caring for people.
2. High acuity work.
3. Diversity of work and patients.
4. Making a difference to patients and their families.
5. Using clinical skills and knowledge.
6. Engaging with the community.

Responses from course coordinators and novices to each of these themes are summarised in Table 12. It should be noted that each respondent may have included more than one theme in their response.

Table 12

The themes, proportion (%) and number of respondents who identified each theme when asked what novice (student) paramedics most look forward to about commencing paramedicine as a career

| Question | Themes | Course Coordinators % (N) | Students % (N) |
|--|-----------------------------|------------------------------|-------------------|
| What do students / did you look forward to most about commencing their / your career as a paramedic? | Caring for people | 18% (3) | 34% (72) |
| | High acuity work | 35% (6) | 20% (42) |
| | / career | | |
| | Diversity of work | 12% (2) | 14% (31) |
| | and patients | | |
| | Making a | 24% (4) | 12% (26) |
| | difference to | | |
| | patients and their families | | |
| | Using clinical | - | 10% (22) |
| | skills/knowledge | | |
| | Engaging with the | 12% (2) | 10% (21) |
| | community | | |

Close to a third of novices (34%) and 18% of course coordinators reported caring for people was the greatest positive anticipation for novices prior to commencing a career as a paramedic. 35% of course coordinators and a fifth of novices (20%) reported the prospect of high acuity work was most anticipated. Almost a quarter (24%) of course coordinators and almost an eighth (12%) of novices reported making a difference to patients and their families

was most anticipated. The diversity of work and patients was considered an area of positive anticipation for 14% of novices and 12% of course coordinators. Given the extent of the investment in undergraduate course teaching clinical skills and knowledge, the use of clinical skills and knowledge was not cited by any course coordinators and by only 10% of novices as the most anticipated positive theme. Engagement with the community was considered the most positively anticipated response by only 12% of course coordinators and 10% of novices.

4.1.3. Questions related to confidence (most)

Course coordinators and novices were asked what do novice (student) paramedics feel most confident about when commencing their / your career as a paramedic?

This question elicited nine themes:

1. Communication with patients.
2. Using clinical skills and knowledge.
3. Working in a team.
4. Commitment to the profession.
5. Being able to keep calm.
6. Building a rapport with patients.
7. Feeling passionate about my job.
8. Having support from colleagues.
9. Not yet confident.

Responses from course coordinators and novices who responded to each of these themes are summarised in Table 13.

Table 13

The themes, proportion (%) and number of respondents who identified each theme when asked what novice (student) paramedics felt most confident about commencing as paramedicine as a career

| Question | Themes | Course Coordinators % (N) | Novice (student) paramedics % (N) |
|--|-------------------------------------|---------------------------|-----------------------------------|
| What do novice (student) paramedics / you feel <u>most</u> confident about when commencing their/your career as a paramedic? | Communication with patients | - | 29% (59) |
| | Using clinical skills and knowledge | 64% (7) | 23% (48) |
| | Working in a team | 18% (2) | 12% (24) |
| | Commitment to the profession | - | 12% (24) |
| | Being able to keep calm | - | 9% (18) |
| | Building a rapport with patients | - | 7% (14) |
| | Feeling passionate about my job | - | 6% (12) |
| | Having support from colleagues | 9% (1) | 3% (7) |
| | Not yet confident | 9% (1) | - |

More than a quarter (29%) of novices reported they felt most confident about communicating with patients, yet no course coordinators identified this as a theme. More than half of course coordinators (64%) and a fifth of novices (23%) reported being most confident about using clinical skills and knowledge. Almost a fifth (18%) of course coordinators and 12% of novices felt they were most confident in working as a team and in their commitment to the profession. Slightly fewer novices (9%) cited being able to keep calm, 7% cited building a rapport with patients and still fewer (6%) cited feeling passionate about their job. Seven novices (3%) and one course coordinator (9%) reported novice (student) paramedics did not yet feel sufficiently confident to identify a theme. Other low

volume responses included attending mentally ill patients and having the physical strength required to undertake the role.

4.1.4. Questions related to confidence (least)

Course coordinators and novices were asked what do novice (student) paramedics feel least confident about when commencing their / your career as a paramedic?

These themes were:

1. Clinical decision making.
2. Personal mental health wellbeing.
3. Working with children.
4. Getting a job.
5. Dealing with aggressive intoxicated patients.
6. Understanding other cultures.
7. Working with mental health patients.
8. Communication with patients and families whose English is not their primary language.
9. Dealing with the death of a patient.
10. Adapting to shift work.
11. Complex cases.
12. Driving an ambulance in bad weather.
13. Being in charge of a case.
14. Putting practice into reality.
15. Being able to act quickly.

Responses from course coordinators and novices who responded to each of these themes are summarised in Table 14.

Table 14

The themes, proportion (%) and number of respondents who identified each theme when asked what novice (student) paramedics felt least confident to about commencing paramedicine as a career

| Question | Themes | Course Coordinators % (N) | Novice (student) paramedics % (N) |
|---|---|---------------------------|-----------------------------------|
| What do novice (student) paramedics feel <u>least</u> confident about when commencing their/your career as a paramedic? | Clinical decision making | 33% (5) | 30% (56) |
| | Personal mental health wellbeing | - | 17% (32) |
| | Working with children | 13% (2) | 11% (21) |
| | Getting a job | - | 9% (17) |
| | Dealing with aggressive intoxicated patients | - | 8% (15) |
| | Understanding other cultures | - | 8% (15) |
| | Working with mental health patients | 7% (1) | 6% (12) |
| | Communication with ESOL patients and families | - | 6% (12) |
| | Dealing with the death of a patient | - | 4% (8) |
| | Adapting to shiftwork | - | 4% (8) |
| | Complex cases | 20% (3) | - |
| | Driving an ambulance in bad weather | 7% (1) | - |
| | Being in charge of a case | 7% (1) | - |
| | Putting practice into reality | 7% (1) | - |
| | Being able to act quickly | 7% (1) | - |

Clinical decision making was identified by a third of course coordinators (33%) and more than a quarter of novices (30%) as the area of least confidence upon commencing a career as a paramedic. There was some agreement between course coordinators (13%) and novices (11%) that working with children was an area of least confidence. Novices also noted that personal mental health wellbeing was an area of least confidence (17%). A fifth of course coordinators (20%) and no novices noted complex cases as an area of least confidence. Getting a job (9%), dealing with aggressive patients (8%) and understanding other cultures (8%) were each cited by students though no course coordinators reported these themes. Similarly, communication with patients and families who do not speak english (6%), dealing with the death of a patient (4%) and adapting to shiftwork (4%) were reported by novices but not by course coordinators. A third of all themes were reported by course coordinators, these included complex cases (20%), driving an ambulance in bad weather (7%), being in charge of a case (7%), putting practice into reality (7%) and being able to act quickly (7%). One course coordinator and 12 novices cited working with mental health patients as an area of least confidence. Other responses that were mentioned in the open comments included: wearing the uniform, knowing when a patient can be left at home, and issues relating to law and ethics.

4.1.5. Questions related to fears

Course coordinators and novices were asked what novice (student) paramedics fear about commencing paramedicine as a career.

This question elicited 10 themes:

1. Making a clinical mistake.
2. Personal mental wellbeing.
3. Not getting a job.
4. Treating children.
5. Aggressive and abusive patients.
6. The death of a patient.
7. Multiple casualties.
8. Working with unsupportive colleagues.
9. Being accepted as an equal.
10. Motor vehicle accidents.

Responses from course coordinators and novices who responded to each of these themes are summarised in Table 15.

Table 15

The themes, proportion (%) and number of respondents who identified each theme when asked what novice (student) paramedics fear most when commencing their career as a paramedic

| Question | Themes | Course Coordinators % (N) | Novice (student) paramedics % (N) |
|---|--------------------------------------|---------------------------|-----------------------------------|
| What do novice (student) paramedics / you fear most when commencing their / your career as a paramedic? | Making a clinical mistake | 40% (4) | 38% (62) |
| | Personal mental wellbeing | - | 23% (37) |
| | Not getting a job | 10% (1) | - |
| | Treating children | - | 13% (21) |
| | Aggressive and abusive patients | - | 11% (18) |
| | The death of a patient | - | 8% (13) |
| | Multiple casualties | 10% (1) | 5% (8) |
| | Working with unsupportive colleagues | 20% (2) | 2% (4) |
| | Being accepted as an equal | 10% (1) | 1% (1) |
| | Motor vehicle accidents | 10% (1) | - |

Making a clinical mistake received the most responses from both course coordinators (40%) and novices (38%). Although 23% of novices feared for their personal mental wellbeing, no course coordinators noted this as a fear. Conversely, 20% of course coordinators reported novices feared working with unsupportive colleagues yet only 2% of novices agreed. Fears identified by novices but not course coordinators included treating children (13%), aggressive and abusive patients (11%) and death of a patient (8%). Small numbers of course coordinators and novices cited multiple casualties (10% and 5%) and being accepted as an equal (10% and 1%). Not getting a job and motor vehicle accidents

were each identified as the most feared event for novices by one course coordinator each but not by novices. Other fears reported by novices included litigation, lack of experience, facing death on a regular basis, getting injured and not measuring up to paramedic expectations.

4.1.6. Discussion

The 100 percent participation from accredited undergraduate paramedicine course coordinators is indicative of the interest the paramedic education and training community has in mental health issues and the importance educating this topic.

4.1.6.1. Preparation

All course coordinators (100%) and almost all (97%) novices believed mental health challenges within the paramedic profession should be part of the undergraduate paramedic education and training curriculum. This highlights the perceived importance of proactively addressing the mental health challenges of paramedicine. Moreover, this result supports the inclusion of this topic within the learning phase.

Responses from three quarters of both course coordinators (75%) and novices (74%) revealed agreement that the paramedic profession's mental health challenges are currently included within undergraduate paramedic courses. This shows that despite there being no formal requirement to include preparation for the mental health challenges of the profession, most courses have at least included some level of provision. Anecdotal reports reveal some courses have only recently included this content. However in the absence of related literature, this is interpreted as a growing awareness amongst paramedic educators about the value of this topic and as part of the ongoing evolution of optimal education and training courses to meet the needs of their students and the profession.

Importantly, a significant percentage of both course coordinators (36%) and novices (43%) reported that mental health challenges within paramedicine were not covered in appropriate depth within their courses. Moreover, two-thirds (65%) of course coordinators reported students were not suitably prepared for the mental health challenges of the paramedic profession. These are pertinent responses and demonstrate a need for additional inclusion of educational content in this area. It may also be argued that if the inclusion of content related to personal and colleague mental health and wellbeing were a formal requirement in the accreditation of courses, additional resources may be allocated to this area by education providers as a necessary content area. Paramedic education and training curricula are crowded with many valuable topics and so course coordinators may have difficulty in meeting competing demands when designing courses. Further, there may be resourcing issues that limit the time and resources spent on this topic. Importantly more than half (54%) of novices reported they will not be suitably prepared for mental issues in the paramedic profession.

It is noteworthy that when course coordinators were asked if novices were adequately prepared for the mental health challenges of the paramedic profession only 25% responded in the affirmative whereas 75% responded in the negative. This thinking by course coordinators as they reflect on their own paramedic experiences may explain why they have sought to include mental health preparation within undergraduate paramedicine courses.

It is encouraging that this research has revealed agreement between course coordinators and novices about the need to include this topic in the curriculum. While the inclusion of the topic in a lecture format was a popular choice for both course coordinators and novices, the opportunity for discussion and activity-based was also seen as advantageous. Independent research by novices would serve to raise awareness, but further engagement in collaboration with others would encourage open conversation. The use of a variety of

learning opportunities throughout the course would make this topic a mainstream area of development and encourage the consideration of personal coping strategies and how to support others. It is a recognised pedagogical principle that teaching using multiple modes ensures optimum learning for cohorts of students who will have disparate and varied learning styles (Jones, 2007).

4.1.6.2. Positive anticipation

As previously indicated, the results suggested that almost a third of novices (30%) and a quarter (25%) of course coordinators reported that caring for people was the greatest positive anticipation for novices prior to commencing a career as a paramedic. This aligns with the first of the top ten reasons to become a paramedic listed by the NSW Ambulance Service (Ambulance Service of New South Wales, 2016).

The finding that half of course coordinators (50%) and almost a fifth of novices (18%) reported the prospect of high acuity work was most anticipated clearly reveals high acuity work is considered important. This response was noted in a variety of ways such as the use of lights and sirens, the urgency of a situation, and the excitement of trauma calls. The difference between the findings reported by course coordinators and students may be due to the greater knowledge and experience of course coordinators compared with novices. Given the nature of service to the community within paramedicine it is worth noting that making a difference to patients and their families was most anticipated by 33% of course coordinators and 11% of novices. Respondents phrased these responses in different ways including helping people on their worst day, caring for people in their darkest hour, and making a bad situation better.

4.1.6.3. Confidence (most)

Of the nine identified themes in which students had most confidence there was agreement between course coordinators on two; using clinical skills and knowledge, and working as a team. Whereas the correlation of these two themes reveals common views by both course coordinators and novices, only four themes were reported by novices. These were commitment to the profession, being able to keep calm, building a rapport with patients and feeling passionate about their job. All of these are beneficial and valuable characteristics of paramedics as cited in Ambulance Officer recruitment documentation (St John Ambulance WA, n.d.). Perhaps understandably, small numbers of course coordinators and novices did not yet feel sufficiently confident to identify a theme. The agreement between course coordinators and novices regarding student ability to use clinical skills and knowledge and to work as a team is particularly useful given these are key aspects for successful paramedics (St John Ambulance WA, n.d.). Being confident about working as a team also suggests interpersonal support and mentorship are highly valued. This also suggests novices see value in their communication skills, which have been honed within their courses, placements, volunteer work, employment and domestic lives.

4.1.6.4. Confidence (least)

Clinical decision-making was the most identified area of least confidence for novices by both course coordinators and novice (student) paramedics. It may be novices are comfortable with what they have learned yet need support and validation from others to make final decisions. Novices noted personal mental health and wellbeing as an area of least confidence for 14% of responses. This may be a result of the national (e.g., Knowles, 2015) and international (e.g., The Guardian, 2015) media attention focusing on mental health within paramedicine as well as heightened awareness due to the survey used in this study.

Course coordinators reported five areas of least novice confidence that were not reported by novices. These were complex cases, driving an ambulance in bad weather, being in charge of a case, putting practice into reality, and being able to act quickly. This is likely to be a consequence of course coordinators having significantly greater paramedic experience than novices, and thus having a broader understanding of specific challenges that graduates will encounter. Getting a job was also mentioned by novices (8%), which shows awareness that there may be limited positions in Australia. Novices being confident in their ability to find employment, or by their being least confident in other areas, may explain that more novices did not focus on employment issues as an area of least confidence. Other low volume responses included: wearing the uniform, knowing when a patient can be left at home, law and ethics.

4.1.6.5. Fears

A sixth (16%) of novices most feared their personal mental wellbeing would be impacted. As noted above, this may be a consequence of current media attention focusing on mental health within paramedicine as well as heightened awareness raised by this study. Alternatively, this finding may indeed reflect increasing self-awareness within students about the demands of paramedicine and human psychological frailty (Beyond Blue, 2014). Making a clinical mistake received the most responses from both course coordinators (36%) and novices (27%). Given the clinical nature of paramedicine work, plus the potential negative consequences of making a clinical error, this fear is understandable in both novice (student) paramedics and course coordinators. It is even possible that fear of making a clinical error may serve as a motivating factor among many novice paramedics to be clinically vigilant. That almost a fifth (18%) of course coordinators reported novice (student) paramedics feared working with unsupportive colleagues (with only 2% of novices agreeing) may be reflective

either of the course coordinators' own experiences as novice (student) paramedics and or an awareness of the importance of supportive colleagues in practice. Not getting a job, multiple casualties, being accepted as an equal, and motor vehicle accidents were each reported as most feared by coordinators but not by novices. This is likely to be a consequence of the greater experience of course coordinators within the profession, which provides clinical coordinators with a different perspective to novices.

4.2. Results and discussion from veteran semi-structured interviews

Semi-structured interviews were conducted with 20 veteran paramedics, their experiences as paramedics is representative of all states and territories of Australia and New Zealand. The number of interviews by the country/state/territory is reported in Table 16.

Table 16

The number of interviews by country/state/territory

| Country/State/Territory | Number of Interviews |
|------------------------------|----------------------|
| Northern Territory | 2 |
| Queensland | 2 |
| New South Wales | 2 |
| Victoria | 3 |
| Australian Capital Territory | 2 |
| South Australia | 2 |
| Tasmania | 2 |
| Western Australia | 5 |
| New Zealand | 7 |

Nine veteran paramedics who had worked across a variety of geographical areas during their career were counted in multiple states/territories/countries.

Interviewees consisted of 20 veteran paramedics, 14 males and 6 females, between the ages of 39 and 50+ years, with a minimum of 15 years' experience as a paramedic. Levels of experience within paramedicine covered both metropolitan and rural areas across Australia

and New Zealand. To maintain further demographic information is withheld by the researcher.

The following questions were included in the semi-structured interviews:

1. What did you look forward to the most as you commenced your career as a paramedic?
2. What did you feel most confident about as you commenced your career as a paramedic?
3. What did you feel least confident about as you commenced your career as a paramedic?
4. What did you fear the most as you commenced your career as a paramedic?
5. Tell me about your experiences as a paramedic.
6. Tell me how you survived the mental health challenges of the profession?
7. What strategies did you use?
8. Is there any advice you would give a novice (student) paramedic?

The results from semi-structured interviews with veteran paramedics are presented in two sections questions 1 to 4 and 5 to 8. Themes and subthemes for each question are presented and illustrated with direct comments from the participants.

4.2.1. Questions one to four

The first four questions were originally asked in the course coordinator and student surveys and were included in the veteran semi-structured interviews to gain comparative data, as well as to build a rapport between the interviewer and interviewee prior to asking potentially difficult questions. The four major responses from each question are presented below.

4.2.1.1. Question one

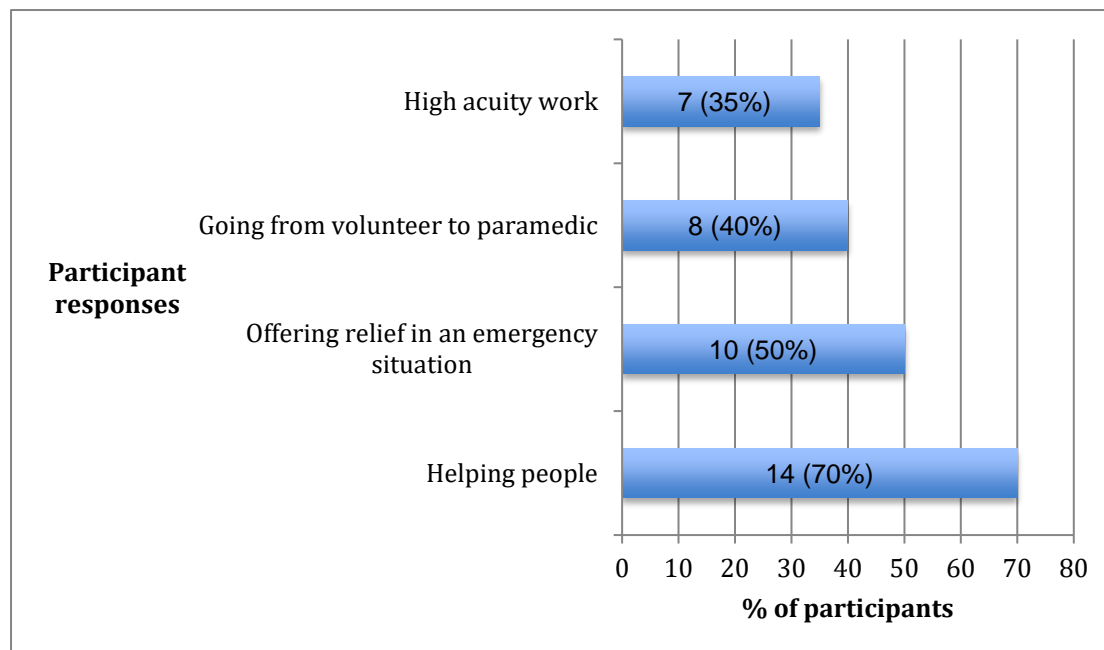


Figure 8. The four major themes, number and proportion of interviewees (%), who identified each theme when asked what veteran paramedics most looked forward to when commencing paramedicine as a career.

Veteran paramedics cited helping people as the greatest positive anticipation they felt prior to commencing a career as a paramedic. This was similar to caring for people, which had the most responses from novices (30%) in the student survey. This was also reported by a quarter of course coordinators (25%) in their survey. Half of the veteran paramedics stated that offering relief in an emergency situation was a positive anticipation, which is a similar result to a third of course coordinators and 11% of students who identified making a difference to patients and their families as a positive anticipation. Example responses include:

I just knew I wanted to help people in their hour of need, I couldn't wait.

I looked forward to helping, when you arrive seeing that relief on their

faces.

Sometimes it's just having a chat with an elderly person, that makes them feel a lot better, knowing that someone cares. That's what I looked forward to doing on a permanent basis.

I was super pumped to get out there and start helping people.

It's a great thing, to be able to help people!

Going from volunteer to paramedic was a common response from veteran paramedics (40%). There are links to the structure of the occupation within some ambulance services 15 or more years ago, whereby many paramedics commenced the paramedic role and training pathway as a volunteer. This is illustrated by the following comments:

Getting paid for a job I loved was what I looked forward to.

Being considered a real paramedic, part of the crew was one of the things I looked forward to.

I was a vollie (volunteer) for a long time and thought the paramedics made it look easy. They made smooth decisions and they seemed to have an answer for everything and I thought that's what I want to be.

Over a third of veteran paramedics specified high acuity work as a source of anticipation which was also identified by half of the course coordinators and 18% of students.

Being part of the action and remedy was what appealed and I looked forward to it loads.

The lights and sirens, being part of the action was what I looked forward to, the reality was very different.

4.2.1.2. Question two

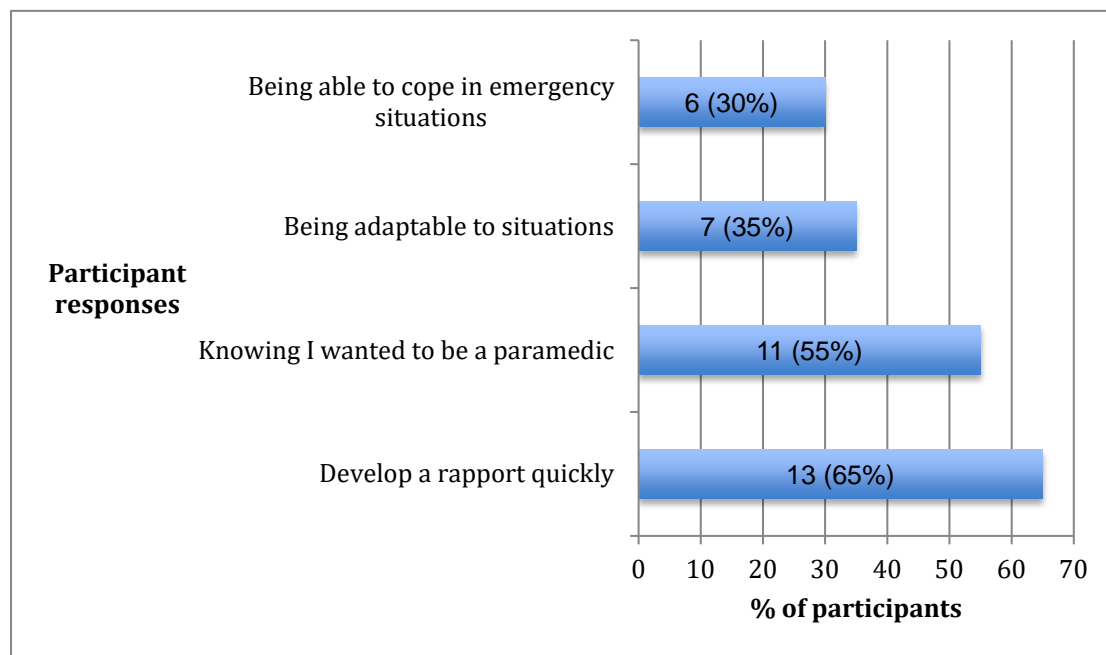


Figure 9. The four major themes, number and proportion of interviewees (%), who identified each theme when asked what veteran paramedics felt most confident about when commencing paramedicine as a career.

Veteran paramedics recounted the ability to develop a rapport quickly with people as being their greatest source of confidence prior to commencing a career in paramedicine. A quarter of students cited communication with patients as an area of confidence, this can be seen as similar to building a rapport.

I have always been able to talk to anyone regardless of the situation.

If I was confident about anything it was my ability to connect with people of all ages

Confidence in knowing they wanted to be a paramedic was reported by over half of the veteran paramedics. This may be linked to the structure of training and employment present within some ambulance services 15 or more years ago, whereby volunteer paramedic work was a prerequisite for applying for a paid paramedic position. It could be argued that undertaking a role as a volunteer would provide an individual sufficient exposure to the role of a paramedic to allow a person to be certain of the career path they were following. Similarly, commitment to the profession was identified by some students (11%) as suggested by the following:

I started volunteering in the town I was born, I loved it and knew I wanted to be a paramedic more than anything.

Being a paramedic was the only thing I wanted to do.

I have owned and ran a successful business, done a variety of jobs but when I started volunteering that was it, I just knew I had found my thing.

I just always wanted to be a paramedic.

Over a quarter of veteran paramedics, reported that being adaptable and able to cope in emergency situations was an area of confidence. This could be comparable to being able to keep calm, which was also cited by students (8%) such as:

I'm like a chameleon I can adapt and cope to any situation, while it's happening anyways.

Having experienced some pretty serious accidents I knew I could adapt and deal with most situations that I would be confronted with. I was up for the challenge.

Both course coordinators and students identified using clinical skills and knowledge whereas this was not significantly mentioned by veteran paramedics. Again, the career pathway could explain this result because veteran paramedics would have already been exposed to clinical skills as volunteers.

4.2.1.3. Question three

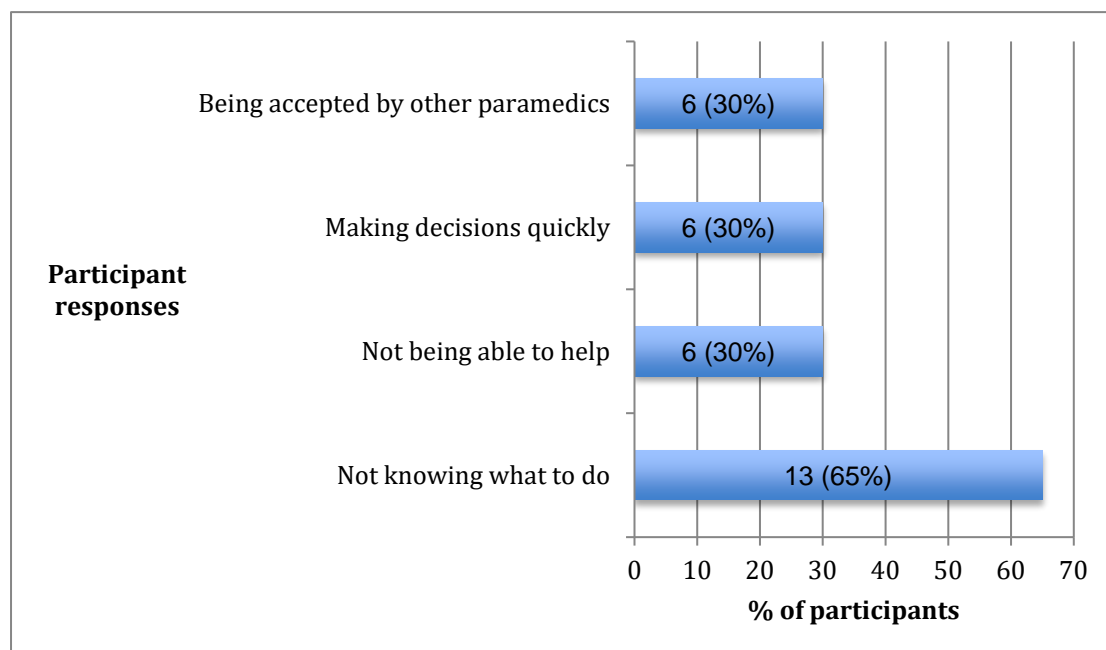


Figure 10. The four major themes, number and proportion of interviewees (%), who identified each theme when asked what veteran paramedics felt least confident about when commencing paramedicine as a career.

Nearly two thirds of veteran paramedics reported not knowing what to do at a call generated feelings of least confidence upon commencing their career as a paramedic. Additionally, almost a third cited/suggested/reported not being able to help or being unable to make decisions quickly as generating most feelings of least confidence. This was supported

by course coordinators (45%) and a quarter of novices who reported clinical decision making as the area of least confidence. This result is illustrated by the following comments:

Being least confident in the possibility I wouldn't know what to do to help a person, an adult, a child, a baby, anyone.

What if I was too slow? What if I made the right decision and it was too late? What if I couldn't think it all through? I was not confident about that.

Being accepted by other paramedics was mentioned by almost a third of veteran paramedics. Further questioning established a link to the process of being a volunteer before becoming a paramedic whereby veteran paramedics identified that the transition from non-paid and limited responsibilities (volunteer) to paid and increased responsibilities made a difference amongst peers. For example:

Going from vollie [volunteer] to paramedic was tough, especially as I was known as a vollie at the station. I am not sure I was ever really accepted, till I became an ICP [intensive care paramedic].

I wasn't confident that I would be accepted by the paramedics. I was young and knew I didn't know much.

Veteran paramedics did not mention dealing with specific patient types or cultures whereas both course coordinators and students specified working with children (18%, 9%), aggressive, intoxicated (7%, 7%) and mentally ill patients (9%, 5%) as a source of least confidence. Again, this could be due to the training process experienced by some of the veteran paramedics who began their careers 15 or more years ago when they would have been exposed to a wide variety of patients over extended periods of time. Current novices

have a wide variety of backgrounds and many have limited or no exposure to patients or the skills involved in dealing with patients prior to commencing their undergraduate degree.

Nearly a quarter of novices reported personal mental wellbeing as an area of least confidence. This may be due to the topic being discussed across the media, the community, professional bodies and various mental health awareness projects. Mental wellbeing was not a contemporary topic when veteran paramedics commenced their careers and which may explain why no veteran paramedics recalled considering their mental wellbeing.

4.2.1.4. Question four

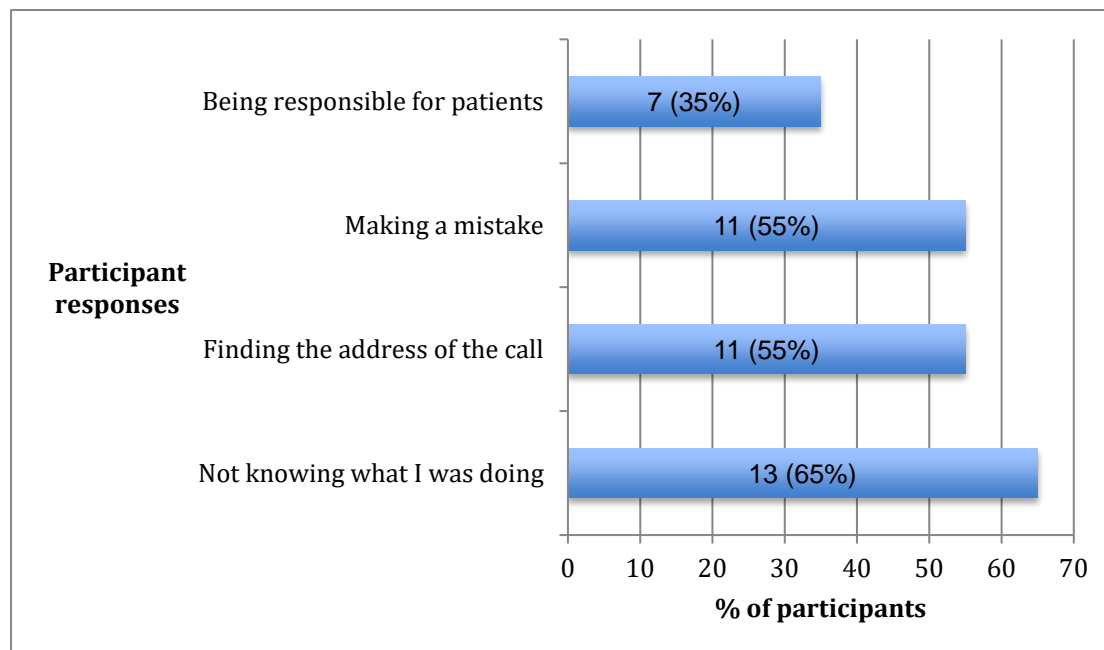


Figure 11. The four major themes, number and proportion of respondents (%), who identified each theme when asked what veteran paramedics most feared when commencing paramedicine as a career.

Similar to the results of question three, ‘not knowing what I was doing’ was identified as the source of most fear by veteran paramedics (65%) when they commenced their career in paramedicine. Making a mistake was also cited/suggested/reported by more than half of veteran paramedics (55%). These are similar fears to making a clinical mistake, which was the most reported by both course coordinators (36%) and students (27%). Upon further discussion with veteran paramedics, it was clear that the potential outcome of not knowing or being able to help ultimately could affect the life and wellbeing of a patient and the career of the paramedic. Over a third of veteran paramedics recalled being responsible for patients, which is related to these areas.

The weight of the responsibility. The privilege.

I still remember to this day how petrified I was attending a (emergency number) call and that I wouldn't know what to do.

My instructor told me. You will kill people and you have to accept that. You can't avoid it. It's not going to happen all the time on a daily basis but that is part of your job, so you have to be prepared to accept that potential. You can cause people harm, not on purpose, maybe lack of time, education, situation. It's often something you find out later in the job, then you realise that you could have done more at a previous job. I was half way through my training. I was single crew, I shocked this fella once and then again and he just about hit the roof and swung at me. 'What the hell did you do that for', the first shock had worked. He didn't need the second one and when I pulled the strip out later I could see. I didn't check the monitor before I did the second shock. It could have gone the other way. My fear of making a mistake was realised. I learnt though.

Over half of the veteran paramedics recounted finding the address of the call as a fear. Neither the course coordinators nor the novices mentioned this as an issue. This may be linked to the role of volunteer or paramedic 15 or more years ago, where satellite navigation or virtual maps did not exist on ambulances. Knowing where to go was based upon paper maps and local knowledge. Discussion with veteran paramedics revealed extensive land development and new suburbs were problematic because they are not always updated on satellite navigation systems.

For me one of the biggest fears I had, I had for a long time especially when I moved stations and worked in different areas, was simply not finding the address. I was scared I would have to go somewhere and I couldn't find it.

I was also really scared about not knowing where I was driving. Someone could be really sick in the back and I have no idea where I am going. It is still a fear of mine today but we have sat nav (satellite navigation) now.

Interestingly, one participant reported that they did not recall having any fears as they started their career as a paramedic.

I didn't have any fears, I think that might be part of the nature of being an invincible 20 year old.

4.2.1.5. Recency

It is acknowledged that the veteran paramedics and three of the course coordinators were recollecting how they felt when they commenced their careers as paramedics 15 or more years ago, while the novice (student) paramedics were considering their feelings in real time. This could affect the responses of the veterans and course coordinators especially because the profession was relatively young with a lesser scope of practice when they commenced their careers. In addition, medicine and resources have developed substantially during the last 15 years. However, there were many corresponding responses which demonstrate similar anticipations, confidence and fears prior to commencing a career in the profession.

The responses from veteran paramedics were mainly focused on calls and clinical skills. This is in contrast to resilience, mental health and wellbeing issues which had very low response rates. It is not surprising that calls and clinical skills are at the forefront of a novice (student) paramedic's mind due to being motivated to commence clinical training for their chosen profession.

4.2.2. Questions five to eight

The final four questions were developed to gain an insight into the experiences and survival strategies used by veteran paramedics, to cope with any mental health challenges they encountered throughout their careers. Due to the nature of the questions, there was some overlap in responses. This has been themed according to the particular question. When reporting results and in subsequent discussion the focus has been on the words used by the veteran paramedics. These are central to this study. The main themes were confirmed by the focus group activities.

The following questions were presented to the veteran paramedics for their response:

5. Tell me about your experiences as a paramedic.
6. Tell me how you survived the mental health challenges of the profession.
7. What strategies did you use?
8. Is there any advice you would give a novice (student) paramedic?

4.2.2.1 Question five

Veteran paramedics were asked to comment on their related experiences as a paramedic. Responses to the question were intended to elicit a general view of experiences, which were then expanded in questions six and seven. Some interviewees gave multiple responses, all were counted.

Table 17

The themes, subthemes and proportion of respondents (%), who identified each theme when veteran paramedics were asked about experiences from their paramedic careers

| Theme | Participants % (N) |
|---|--------------------|
| I love/loved the job | 70% (14) |
| Experienced long term effects of shift work | 50% (10) |
| <i>Subthemes:</i> | |
| No time to eat or drink | 30% (6) |
| High levels of stress due to the volume of calls and not knowing when the shift was going to finish | 20% (4) |
| Lost colleagues to mental illness leading to suicide | 45% (9) |
| Witnessed/experienced workplace bullying | 45% (9) |
| <i>Subthemes:</i> | |
| Distrust in organisational support | 35% (7) |
| Dismissive partner or manager | 15% (3) |
| Absorbed the negative culture of colleagues and profession | 10% (2) |
| Increased confidence when in uniform | 45% (9) |
| The role has changed dramatically over the last 15 years | 45% (9) |
| <i>Subthemes:</i> | |
| Greatly reduced/no down time between calls | 25% (5) |
| Limited back up due to remote locations | 20% (4) |
| Have experienced violence on calls | 40% (8) |
| <i>Subthemes:</i> | |
| Increase in alcohol, prescription, illicit drug and mental illness related calls | 30% (6) |
| Struggled to let outcomes and connections go | 35% (7) |
| <i>Subthemes:</i> | |
| Communicating loss was most difficult | 35% (7) |

In the following section, each theme and subtheme is presented and illustrated with examples of direct quotes from the veteran paramedics.

Love For The Role

Seventy percent of the veteran paramedics expressed their ‘love’ and passion for the role. Participants affirmed:

This job is the love of my life, I even married a paramedic.

I love being a paramedic and all that that entails.

It's an honour to do this job, but you do pay a price personally.

I don't remember the jobs; people say to me what's the worse job you have ever been too? Honestly, I don't remember. They don't stand out I have no sort of conscious beacon. My experiences were happy and positive. I could see the progression all the way through and everyday I would go home thinking it was great. It was like the longest honeymoon in the world. It was just absolutely great, I was blessed with a couple of very good mentors as well.

I loved the job but was glad of the rest when I retired.

There is no better job.

During interviews, veterans consistently spoke of their affection for the profession and their paramedic family. This was often associated with a sense of belonging and immense pride in the role. While this is positive, several veterans identified feelings of loss and reduced self-worth upon leaving the service. It could be argued that these might be

common emotions when leaving a role that was enjoyed, however, this is perhaps intensified within paramedicine due to the overlaps in work and social activities, as well as the feelings of being needed and helping others as identified in the responses to earlier questions.

Participants stated:

I lost my family (paramedic), my sense of identity, my worth I suppose. What impact was I making now? I wanted to go back but couldn't.

I was lost, it certainly added to my illness. I didn't recognise myself not being a paramedic. I would wake up at my usual times and just lay there, thinking what am I going to do now?

When I left the ambulance service, it took me a long time to stop wanting to know where the ambulance was going.

Those that have successfully exited the ambulance say they do not miss the drunks at 2am but they do miss the family, camaraderie and the connection with the people we work with is really really strong and that's what they miss.

Shift Work

Half of the veteran paramedics admitted to experiencing long term negative effects of shift work as illustrated by the following comments:

Paramedics are at risk because of the profession that they are in, but it is so much more than that. Its such a complex issue. The fact that you are a shift worker, being exposed to stresses, there is some extra triggers right there, each of us are really just one trauma away from mental illness. We have circadian rhythm disruptions and that

sort of thing, also its what it does to your family being a shift worker, experiencing stress and whatever else you have going on within your family. Mental health challenges of the profession are just one small piece of the pie. It's a piece that when it is not dealt with affectively, it affects all the other pieces.

The shift work was a killer, the roster was crazy. You never felt fully rested, it accumulates and causes long term problems.

I know you get four days off but by the time you have got over the night shifts, you are starting day shift again. It has really messed with my system.

Shifts cause problems with eating and drinking patterns, digestion and sleep, even going to the toilet. I didn't go for days. How can it not have long term effects?

It's a nightmare when you are changing shifts; it takes days to catch up. I still have sleep problems two years after doing days only. The roster is a scared cow, no one wants to lose it.

There are many other health professionals such as medicine, nursing and the fire services that have investigated the effects of shiftwork, yet the paramedicine profession has limited research (Sofianopoulos, Williams, and Archer, 2012). The few studies that were found in the literature show a clear impact on the health and wellbeing of paramedics both physically and psychologically (Clohessy & Ehlers, 1999; Shepard & Wild, 2011). However, there is a need for further investigation to identify ways to combat the negative effects of shift work. These negative effects include ongoing fatigue, poor health and wellbeing and safety for both the paramedic and patients (Courtney, Francis, & Paxton, 2012; Sofianopoulos, Williams, & Archer, 2012; Murray, 2013; Devine, 2014).

When discussing issues related to shift work, veterans linked the effects specifically to:

- Eating and digestion issues.
- Disruption to sleep patterns.
- Ongoing tiredness with changing shift patterns.
- Increased feelings of stress and irritability.
- High risk of injury.

Twenty percent of those who cited shift work as an issue added that not knowing when a shift was going to end increased stress levels.

Participants said:

We get so many calls at night now, there is sometimes no time between calls. We used to go back to the station in between calls and rest but now you just stay out for call after call after call. You never know when you are going to get back and end the shift.

I never knew when I was going to get home. It got worse when I had kids.

So I think there are two aspects to the mental health challenges. It's how you deal with being a shift worker, you may never get home on time and may be missing for Christmas, birthdays, all those sorts of things. Then there is dealing with the particularly traumatic, which for different people is a different sort of job that affects them.

Shift finish times are unpredictable; this is due to the nature and commitment needed for emergency calls whereby paramedics are not always able to clock off at the end of their shift if on a call, causing disruption to their social, home and family life. This has also been cited by the spouses and partners of paramedics as compromising and reducing family time,

with many having to take on additional workload, for example primary care of children and the home which can add stress to relationships, home life and feelings of guilt due to missing special occasions (Regehr, 2006).

One participant stated;

When I was on nights I never saw my wife or kids. It was the old cliché of ships that pass in the night. I missed out on a lot with my wife and kids growing up but they knew Daddy was out there helping people.

Shift work by its very nature does not always fit in with the majority of working schedules, which are predominantly during the day. Several paramedics commented they found that their friendship and social activities changed significantly as a result of shift work.

For example, participants said;

When I was off there was never anyone other than other paramedics around. So, you tend to work and socialise with each other. It can get intense but you get used to it.

They are the ones I can see on downtime and they understand.

I think you surround yourself with other paramedics because of the shift work.

Shift work could be a contributing factor to the sense of community and belonging to colleagues and the profession. Many participants referred to their colleagues as their 'other' family. The reasons for this could be linked to the relationships formed with crew partners due to the long hours worked together in close proximity, often with a full shift being spent using the ambulance as their base. The stressful, unpredictable and challenging nature of prehospital work is likely to build high levels of trust between colleagues, particularly when

confidence in each other's decisions both clinically and for safety is needed. These factors would be reflected throughout the shift groups and wider paramedic community. It could be suggested that the converse of this result should be considered. If there is a poor relationship and no trust between colleagues then working long hours, in challenging situations could potentially add to the stress and/or fatigue experienced by individuals.

The Council of Ambulance Authorities (CAA) reported that shift work has a negative influence on the wellbeing of paramedics in its report, *Shift Hours in the Australian Ambulance Industry: An Issues Paper on Workforce Health and Safety, Patient and Public Safety* published in 2007. This report also refers to the acknowledgement of the Australian Medical Association that there is a high risk to doctors and their patients through the high levels of fatigue experienced from ongoing shift work. As a result, the CAA recommended the following:

- A change in roster design to minimise consecutive night shifts.
- Predictable and regular rosters.
- Shift length limit to two 12-hour night shifts per week.
- Adequate rest periods inbetween shifts.

(CAA, 2007, p.53)

Loss of a Colleague

Sadly, 45% of the veteran paramedics had lost colleagues due to mental illness leading to suicide. This loss was identified by veteran paramedics across all states and territories of Australia and New Zealand.

I lost three colleagues in as many months, I was devastated. Still am.

Losing your mate its tough, too tough. You know, how can I have not known, not see there were issues. I think of his family, you know paramedic and home.

I cannot comprehend why, I cannot understand why, just why.

Everyone knows someone who has suffered. It's like tumble weed throughout the service especially those of us that have worked across stations and states.

Four veterans spoke of the loss of colleagues at length, stating that they had sought help themselves to cope with their feelings of anger and guilt.

I couldn't believe it. I was numb then I got angry then I felt guilt. Could I have done something? Anything more than I did anyway.

I was furious, enraged! Why? What a waste? I went into the depot and xxxx [name] lunch bag and drink bottle was in the fridge, that's when the loss really hit me. I had to go home, I couldn't see for the tears. I got support and it really helped.

I was devastated, the guilt was immense and I was mad at xxxx [name], really mad. I had to forgive xxxx [name] and myself for feeling that way, I'm healing. xxxx [name] will always be with me. I have our insider joke laminated in the van, makes me smile.

The shock and disbelief felt by family, friends and colleagues after losing someone to suicide often leads to feelings of anger and guilt, which can lead to increased stress and increased risk of mental illness to the individual (Lifeline, 2018).

Investigations into the high rates of mental illness and suicide within paramedicine have been conducted across Australia and New Zealand. One such investigation, conducted by the Western Australia Chief Psychiatrist, Dr Nathan Gibson, was implemented after five

suspected suicide deaths of paramedics/volunteers from Western Australia between December 2013 and March 2015. The focus of the investigation was to determine if the individuals' roles as first responders had contributed to their deaths and offer recommendations to the ambulance service on future mental health and wellbeing support for staff. While acknowledging the substantial tragedy for families, friends and colleagues, in addition to the cause for concern within the ambulance service, government and wider community, the findings determined that there was little evidence to suggest that their roles and the exposure to critical incidents were key factors in the losses. Reference was made to the low levels of organisational satisfaction, it was also noted that this is echoed in other reviews across Australian ambulance services in particular the 'cultural divide' between management and paramedics, (Gibson, 2015).

For example, one participant stated:

The service can be pretty hard nosed about mental illness. Gets swept under the mat a lot. When something bad happens it's all action stations. We get more calls and see management a lot. Then it goes quiet again. It ripples through the service.

Workplace Bullying

Some 45% of the veteran paramedics claimed they had either experienced and/or witnessed workplace bullying. 35% of respondents who mentioned distrust in the organisational support available, often claiming they felt their confidentiality was compromised and, by using the support available within their service, they were risking future shift availability. 15% of respondents who specified that they had had a dismissive partner/manager and therefore felt they had no support in their development or ongoing

wellbeing. About 10% of participants claimed they themselves absorbed the negative culture of colleagues and the profession in order to fit in and progress within the service.

Participants suggested:

I saw newbies catch some shit many times. I stepped in a couple times when it was out of hand but its just part of the job. Like anything it's sink or swim. It comes down the lines, like birds pecking on a wire. Just got to stay clear of the arse holes.

I do wonder if the people that have gone up the ranks have also missed out on managerial training and then been in situation and pulled someone up for doing something that they have done, completely inappropriately. I think it is very easy for a manager to forget what it is like to do a 14 hour shift and actually knowing that the response at 3am is not going to be the same as the one at 9am when I've had a good night's sleep. Even I worry about things like that, that will I make a clinical mistake.

I became desensitised; I became a real hard nosed bastard. I was a bully and couldn't see it. I thought I was doing a good job telling individuals to suck it up and get on with the job. I even sacked paramedics who I thought were doing a crap job when really they were suffering. I hate the person I was. Then I broke down! It took me by surprise. I cannot express how much I loathe that person, I have contacted those I can and apologised. I am not convinced that has done any good but I had to do something. I lost myself, my identity, my career, everything.

The sexual innuendos and comments about my boobs or ability to do the man jobs, lifting, were common. I got used to it, those upstairs were just as bad so I sucked it up, not great for girl power though but I just wanted to do the job. Mind you in the

end I gave as good as I got, if you cant beat them join them as my old papee used to say.

I was hounded when I was off sick. I had been diagnosed with PTSD, hospitalised twice for self harm and an attempted suicide. They didn't believe me, told me I was faking it and to get back to work or I would lose my job. They knew information that they shouldn't. I couldn't trust anyone.

The work culture was oppressive and institutionalised.

I encountered a few traditional sorts of paramedics, the sort of hard man character. Just gave me great negative models of how I was not going to do things because I don't want to look like that.

These types of issues are being formally reported more widely, with many paramedics taking to the media to share their stories. The Chief Psychiatrist's review (Gibson, 2015) mentioned above, suggested seven recommendations, of which three were related to addressing the need for cultural change.

- Conflict resolution in the workplace.
- Performance Management.
- Employee engagement. (Gibson, 2015)

The related ambulance service has reviewed the recommendations and continues to develop the support services available to support staff. This process of review and development has also been undertaken by many other ambulance services. Several paramedics confirmed this during interview and focus group activities.

The comments above are supported by participants who advised:

Things are changing for the better now. I work in the [location] and we are doing a lot more at the base level. We have wellbeing coordinators and specific courses with annual workshops for existing paramedics.

The culture is changing slowly, it will take time, but the intention is there.

Paramedic Uniform

Wearing the paramedic uniform increased the confidence of 45% of those interviewed.

When asked what was it about the uniform the following comments were consistently mentioned:

- Authority and confidence to control a situation.
- A sense of unity with emergency services.
- Respect from the community.
- A sign help has arrived.

Participants recalled:

The confidence I have as a paramedic. I can walk into a room, if I have my uniform on, and control the situation in my paramedic capacity. Take charge of that room, look after the relatives.

People listen to you in the uniform but they also have great expectations.

The expectation is to make things better and that's not always possible regardless of your level of knowledge and effort.

Everyone loves a uniform don't they? I love mine, if only it could talk it would tell some tales. I still have my original boots! I feel like I can do anything when I'm in uniform. It's like my superman outfit.

As with the love for the job, the sense of pride and belonging the paramedic uniform instills across the profession was clearly evident when interviewing the veterans. The uniform was also mentioned by those that had left the profession, loss of identity and lack of self-worth were felt when they no longer wore the uniform.

When you leave you don't have the right to wear the greens anymore, the badge or drive the truck. That hits real hard, real real hard. I think that was the worst part, hanging up my boots.

Who am I, if not in uniform, I'm just [name] plain old [name].

In the context of student paramedic learning, wearing a paramedic uniform has been found to enhance the simulated experience of students because it allows them to fully immerse themselves in the role and identify with the profession (Mills et al, 2016). The uniform is clearly a powerful symbol of the profession, many universities now have student paramedic uniforms, including the green trousers and boots. This contributes to developing a sense of belonging and community from a very early stage.

Change of the Role

It was generally acknowledged by all the veteran paramedics interviewed that the role of the paramedic profession had changed substantially over the last 15+ years. About 45% of participants discussed the changes specifically when responding to this question. When asked what had changed the explanations were consistently as follows:

- A significant increase in calls.
- A rise in primary and community based care, where the patients are not always transported to hospital.
- Reduced or no downtime after critical incidents.
- Greater awareness of the ramifications of care giving.
- Increased growth and geographical spread of the population.
- Closure or the merging of ambulance stations.

Specifically, 30% of veterans commented on the lack of time to eat, drink and rest between calls. There were 25% of participants who sighted the increased volume of calls being a source of high levels of stress as illustrated by the following comments:

Ambulance staff are eating on the run, no domiciliary stations where you can sit and break bread with other humans. Sit in a human space with other humans.

There wasn't support then, there were a few reasons for that. We had the 'if its too hot in the kitchen' kind of mentality. You were seen as a personal failure, if you couldn't cope there was something wrong with you or with the way you did things.

Psychological support came in the late 80's early 90's, a good 10 years after I had commenced my career. It was received really badly, they came in as a management instrument to fix a staff problem. Only been in the last few years that the firm's attitude to the use of psychological counselling services become normalised.

We didn't get any feedback in those days, you had no idea from an external point of view whether you did good and bad.

Its about clinical decision making you know making those hard decisions that at one time you were filled with confidence whereas now I'm not like that anymore. It's a harder thing to do now. It's like oh my God, weighing up ramifications if I get it wrong. These things take longer than it used to. I know that part of that is normal aging and part of it is attributable to the job. I now know that the ramifications of these decisions are wider than what they used to be'

I dumbed down my practice to avoid responsibility.

Working now in a population that is more resilient, I don't have to make decisions in the same way as the metro area. I was using other people in vicarious decision making, I have learnt about that now.

Chaplain support used to be 1:1, you knew the chaplain, he would just turn up. He would have a coffee with you and talk about things if you wanted and not if you didn't. Now the job is much bigger there is no time and since he has gone its become faceless and a call from a teenager following a script. Why am I going to talk to someone I don't know?

Its really dangerous because whether we like it or not our job is changing, we are becoming more involved in primary care more than we ever have in the past. It used to be just all emergency stuff but now it's not. A huge amount of our work is primary care work and that gets to the social side of it as well, where you see the social misfits, beaten kids, wives and husbands. I never used to see all that sort of work as it was all EMS (Emergency Medical Services). Massive growth in low acuity stuff, the health service is devolving responsibility, everything now is profit driven. If they can't do it they just drop it and the ambulance service picks up the pieces in the

communities. That's a side of the job we are not getting a handle on and that's the side reflects on how we do our job and the effects it has.

Downtime after critical incidents has been linked to decreasing the symptoms of depression. A minimum of 30 minutes is suggested to allow the paramedics to regroup and rest before attending another call (Halpern, Maunder, Schwartz, & Gurevich, 2012).

However, this time is not always available, for example:

Going into a house full of kids and five generations and they are covered in scabies and all sorts of bits and pieces and having to deal with that can be a lot harder and more difficult to manage than a personal level depending on where you come from than just picking someone up from the side of the street and chucking them in the truck and taking them to hospital. If it's a broken leg, you pull it straight, give some pain relief and she'll be all right till they get to hospital to be fixed. But when you know you have a group of kids coming through that are 5, 7, 11, 13 and they are still breathing after dad has beaten them after he beat the wife and you have to deal with that. We don't do that very well, we have no processes for that, we are not taught how to put it in a box afterwards. I know many that struggle with that, our biggest strength in the ambulance service is our ability to debrief ourselves around the smoko room table but its becoming harder and harder to do it because of the workload. You used to be able to have down time when you could sit and debrief and vent. The teams become very tight which is really important. If you haven't got a tight team you haven't got the opportunity to vent and debrief and nobody knows when you are having an off day or have done a shitty job. I think that time is critical our job is evolving so much we have to have the ability to do that and we don't. They have where you can ring or see someone who doesn't understand what you are talking

about. On paper, the system is great but the reality is quite different. Needs to be those that have experience.

You don't have to be available straight after a traumatic call, but really when its busy you do! They will keep calling you asking if you are available. It's an unspoken thing

Its all about taking the time, if you are not ready you are not available, I set the precedent early on.

When I get advised that one of my crews have had a nasty call, I get there as soon as I can and we have some time to chat. If not I will catch them at the end of the shift for a coffee.

The fire service and the police have very structured debriefing we do not have that. That's why its always been left to the teams and groups, its getting harder and harder to manage. We need to be very careful with the young people coming on board, having older people with more life experience cope better with some of the jobs. Generally speaking, at 20/21 being put into some of the situations, that we do is terrible and has a profound affect on them. You don't always have the information to know what's coming.

It is clear the nature of the work of a paramedic has evolved greatly over the years. One of these aspects is the chance to be together at a station in between calls, this has greatly declined over time with the changes in the role. This seems to have a detrimental effect on the wellness of paramedics, it has limited the opportunities for social and habitual contact as well as reduced occasions to rest, eat and share experiences and emotions.

In addition, experiencing limited back up support due to working in a remote location was mentioned by 40% of veterans as a change in the paramedic role.

Single crew is troublesome, you are sitting on someone with two broken arms and legs and all you can give them is Panadol.

We can phone the ICP [Intensive Care Paramedic] but when we are in a bad area we can't always get through. The radios don't always work either.

As we are remote, we rely on each other and the local services more. We have very limited back up available.

I was a vollie [volunteer] for a long time and thought the paramedics made it look easy. They made smooth decisions and they seemed to have an answer for everything and I thought that's what I want to be. As we were single crewed you quickly learn how to cope and utilise anything you had and could possibly use, some of them were quite odd.

Violence

There were 40% of the veteran paramedics stated they had experienced violence, both verbal and physical, on calls. This has been reported widely in the media, with perpetrators being prosecuted and at times imprisoned. Maguire, O'Meara, Brightwell, O'Neill, and Fitzgerald (2014) have reported the risk of serious occupational injury amongst paramedics was more than seven times higher than the national average. Boyle, Koritsas, Coles, and Stanley (2007) found 87.5% of paramedics surveyed had experienced some form of violence while undertaking their roles in the community. During discussions, 30% of veterans linked

the rise in violence against paramedics to the increase in alcohol use, illicit drug taking and mental illness related calls. This supports the suggestions made by Boyle and Wallis (2016) who raised the possibility of a reduction in respect for paramedics and community helpers due to a change in society's values and norms, which is leading to the increase in violence during calls.

Participants recalled:

Society has changed, you have been called there in a helping capacity and yet you are being met with violence.

I consider myself to be a decent paramedic and I'm like if I don't know what's going on anyone with less training would be completely stumped then I had this guy at me, yelling in my face threatening me.

It's scary, I think my career has only a few more years left in it. It's the violence, its not so much I can't cope with it, its just I don't need to. I've done my time, I've done what I wanted to do as a paramedic, I don't have to do this.

Now people are saying why not upskill that paramedics and make them negotiators or carry a weapon or basic policing, that's not what we are there for. Definitely part of our job is negotiation but you cannot negotiate with someone in some of those situations. I don't think we should be carrying weapons, as soon as we start to carry weapons; the weapons get used on us. The last thing I want to be carrying is a Taser or a gun, that's not what the ambulance service is for.

When I look back and think about my time, the number of alcohol and drug related calls has gone up hugely. Yes, we used to get the odd overdose but nothing like now.

The variety of drugs available now makes patients really hard to treat without knowing what they have taken. I remember some kid trying to break in the truck thinking he could get high on the contents, he was brazen, didn't care that we were coming down the track. Next day we picked him up off the street having overdosed, we got him back but he came up fighting. He got well known as a regular in the town.

Concerns have been raised regarding the potential risk of novices being exposed to violence while on practicum with ambulance services or other health care providers. The need for some form of preparation prior to commencement of practitioner postings has been highlighted as a valuable action (Boyle & Wallis, 2016).

This preparation could be undertaken through sharing the lived experiences and advice from veteran paramedics as a segue into developing the following skills:

- Knowledge of mental illness, including addictions.
- Practical communication skills on how to approach distressed patients, including de-escalation techniques.
- Physical safety awareness.

This could provide a foundation for novices to gain valuable exposure and experience in a safe and constructive environment through the use of case studies and simulations prior to practicum.

Outcomes

Struggling to let outcomes and connections with patients go, was cited by over a third of the veteran paramedics. When discussing this further, all recalled this being a particular challenge in the early stages of their careers, while this reduced over time, specific types of calls remained difficult move forward from regardless of years in service. Upon further investigation it was clear the calls that were most difficult to let go of were the calls, patients and/or situations that related to them on a personal level, in particular children. Previous research has found that the calls involving children and colleagues caused the most emotional distress (Regehr, Goldberg, & Hughes, 2002).

When I started I wanted to know how every single one of my patients were going and now I have learned that once I have dropped them at the door that's it, I've done my job.

You make connections with patients and their relatives in the worst of circumstances. I had to learn to let it go. In the beginning I would lay awake for hours going over a particular call. What did I do, what order did I do it, could I have done it differently, would it have changed the outcome, did I say that right thing, round and round.

It really is about who and what you relate too. It doesn't have to be dramatic. It just brings back a memory or makes you think of someone close. It's like it haunts you for a while.

It's human to relate to these situations, my view is that it's the people that put up a wall as I wonder what they are blocking out. I wonder what may be building.

Communication

Veteran paramedics (35%) recalled communicating the death of a patient to family or friends was the most difficult aspect of the role. All participants who discussed this said they could remember the first and last time in great detail. This demonstrates the impact on the individuals as suggested by the following:

We knew it was useless before we even started resuscitation; I'm not even sure why we started it. I think it was because it was a child; you have to be seen to be doing something, even if it is hopeless. The mother was begging us not to stop, I had to explain her baby had died and there was nothing we could do. That was the hardest thing I had ever done, well up to that point anyway.

It was awful; the wife just would not accept it. She called me a liar, got angry, cried, screamed, hugged me, I went through every emotion with her. I will never forget it.

I don't think it is something you ever feel you have done right, telling someone that their husband, mum, daughter or friend has died is so sad. At least when they are breathing even artificially they feel there is some hope, but when they are dead, they are dead. How can you communicate that well?

The data collected gave valuable insight into the experiences of the veteran paramedics. The following section details the responses to questions 6 and 7 and provides additional detail to many of the issues raised above. These responses are specifically related to how veteran paramedics survived the mental health challenges and the strategies they used.

4.2.2.2. Questions six and seven

Veteran paramedics were asked how they survived the mental health challenges of their profession and what strategies they used.

Tell me how you survived the mental health challenges of the profession?

What strategies did you use?

During interviews with participants, these questions were asked to ensure the interview captured maximum relevant data. The two questions are similar and often merged naturally during the interviews. They are therefore presented in Table 18 and discussed together because of the considerable overlap between the responses of the veterans to these questions.

Table 18

The themes, subthemes and proportion of respondents (%) who identified each theme when veteran paramedics were asked about the survival strategies from their paramedic careers

| Theme | Participants % (N) |
|--|--------------------|
| Used black humour | 70% (14) |
| Learnt to accept feelings experienced | 45% (9) |
| Talked things through with crew partner or colleagues | 45% (9) |
| Subthemes: Having a respected close knit community of colleagues | |
| | 35% (7) |
| Created own support network | 30% (6) |
| Utilised organisational psychological support | 25% (5) |
| Became part of an independent paramedic support group | 20% (4) |
| Dehumanised patients | 45% (9) |
| Kept fit and healthy: | 40% (8) |
| Subthemes Fostered good sleep hygiene | 20% (4) |
| Adopted a routine to unwind and switch off before going home after a shift | 35% (7) |
| Used alcohol or prescription and illicit drugs to cope | 40% (8) |
| Subthemes: Kept my feelings hidden | 20% (4) |
| Consciously not drinking or taking drugs | 10% (2) |
| Use gambling to cope | 10% (2) |
| Consciously not socialising with colleagues | 10% (2) |
| Kept on learning and developing practice | 40% (8) |
| Subtheme: Had confidence in myself and my judgments | 15% (3) |
| Having hobbies outside of paramedicine | 30% (6) |
| Felt appreciated by patients and their families | 25% (5) |
| Left the service | 25% (5) |
| Subtheme: Did not feel like I survived | 5% (1) |
| Receiving or received treatment for diagnosed mental illness (PTSD) | 20% (4) |
| Subtheme: Attempted suicide | 15% (3) |

Black humour

Humour is defined as '*The quality of being amusing or comic, especially as expressed in literature or speech*' (Oxford Dictionaries, n.d.). Black humour 'presents tragic, distressing, or morbid situations in humorous terms; humour that is ironic, cynical, or dry' also known as gallows humour (Oxford Dictionaries, n.d.).

The most prevalent strategy used by the veteran paramedics interviewed, was the use of black humour. There were 70% (n=14) of participants who named this as a coping strategy they used. This result is supported by a study of stress and the coping strategies used by 608 paramedics in Canada, where black humour was named as a coping strategy by 90% of the participants (Coser cited by Christopher, 2015, p. 612).

There have been many studies and articles exploring the use of black humour to cope with difficult and traumatic events. These include; Alexander and Klein (2001); Halpern et al, (2012); Mildenhall (2012); Shepard and Wild (2014) and Christopher (2015). Links have been made between death and humour as far back as Ancient Greek history (Stevanoic, cited in Christopher, 2015) in Freudian theory (Freud, 1927) and in cartoon and anecdote format in the media on a daily basis (Bray, 2010).

The need to deal with emotions related to what is seen, heard or done and move on quickly is something that is particularly relevant to first responders; paramedics, the police and fire fighters, in addition to nurses, doctors and the military (National Volunteer Fire Council, 2012; Beyond Blue, 2014; Devine, 2014; Ambulance Victoria, 2016).

While black humour is widely used, it in no way reduces the trauma of the event. Instead, black humour acts as an opportunity to relieve tension and cope in difficult circumstances. It is acknowledged that one individual's perception of a situation or event can

differ from another. The variations in responses can be applied to the use of black humour as what is humorous to one individual may be deemed as distasteful and shocking to another.

Stress reliever

Using black humour can relieve stress and allow the sufferer to distance themselves from distressing events (Kuiper, 2012). Charman (2013) found that after an individual detaches himself or herself from the event, they could then reframe the incident, making the memory less intense and overpowering. This process allows the mind to focus and structure thoughts and feelings away from the distressing event, which can also provide a sense of control in an otherwise chaotic situation.

Re-framing thoughts is a recognised technique for stress management (Scott, 2017). This technique attempts to change the way in which an individual views an event or situation, to encourage more positive feelings and memories, often focusing on the constructive elements and outcomes. This can have both psychological and physical benefits.

It is suggested a simpler form of this process occurs naturally as part of a human defence mechanism which is indicated in the responses of the veteran paramedics. Therefore, the addition of structured reframing techniques and stress management education may serve to aid the long term mental health and wellbeing of paramedics.

For example:

I was telling a rookie that singing out loud to keep track of chest compressions using the BeeGees song Staying Alive is very useful but perhaps not the best choice of lyric in a public situation.

I was holding a catastrophic haemorrhage on this guys neck in the back of the ambulance. The guy sneezed and caused the haemorrhage to splash everywhere, the wife was screaming at the driver to go faster while I was plugging the dam. The patient was laughing and told his wife to be quiet and turned to me and said in a loud voice that there was going to be loads of shit to clean up. He sneezed again and covered his wife in blood, I'm sure he did it on purpose. Shame he died before seeing the look on her face.

In one interview, a participant discussed the use of humour as also being a strategy to manage difficulties when treating patients who are known to the paramedic, which in turn reduces the stress of a call for the attending paramedics.

For example:

We had this well-known community member call us for hypoglycaemia. He had had a bad run-massive medical history stroke, dysphagia, dementia, diabetes, lost a leg, etc. So we give him some glucose and wake him up, all good, super chatty. His wife was pissed because he was drunk and a little stoned. I was trying to be empathetic and he asks me where he can find sympathy in the dictionary? And I'm like, errr, not sure of the page number but it's in there? He tells me that it's between shit and syphilis. And I tell him that I hope that with everything else that he has, that neither of those things are present at the moment.

We had this patient that was having a "seizure" and when we get there she is on the ground, doing her best impression of a flopping seal. She was clearly not having a seizure, and as we told her to get up because she wasn't having a fit, she stopped shaking, stood, and yelled at us that she was having a fit. My partner turned around

and told her that he had seen better shaking by her at the disco, to which she laughed, then shakes her way to the stretcher, allowed us to buckle her in before resuming her fake seizure all the way to the hospital.

Social support

A participant stated:

We spend a lot of time with people that understand what we have been through and what we have seen. Our humour is a massive part of it – coping by using dark humour.

The ambulance service can have a strong camaraderie across paramedic crews, shift groups, services and the profession as a whole. The use of black humour is embedded in the culture and promotes cohesion and social support during testing times (Mildenhall, 2012). This type of humour is part of social connection and assertion of common values (Coser, cited by Christopher 2015). However, while this can offer support and positive interaction, there is also a risk of negative impacts through peer pressure and potential bullying.

Claims of ongoing bullying and intimidation within ambulance services across Australia and New Zealand have been increasingly reported by the media in recent years. Black humour and its related undertones could ensure the social norms and expectations within the culture are adhered to, in addition to manipulating and protecting the practices and image of the group and/or profession.

The use of black humour is a socially acceptable way to share experiences and relate to others. It can be used to release tension, as well as providing an opportunity to seek clarity from colleagues in a less formal way (Watson, 2011). While paramedics have opportunities

to debrief and discuss calls, these are often more clinically orientated as opposed to discussing their personal emotions such as fear, sadness and confusion related to events. Feelings of guilt connected to patient outcomes and an individual's own clinical practice is often addressed during a debrief of events.

McAlister and McKinnin (2009) found the use of humour as a stress relieving coping strategy increases with the length of service. This implies that novice (student) paramedics may use this strategy less often but are likely to become desensitised to the shock and distaste for this type of humour as their experience increases. Additionally, they have a desire to fit in to the working environment and culture so would be more willing to adopt this strategy.

For example:

We used to laugh and joke about calls all of the time, mostly in bad taste. I was pretty shocked when I first started but soon joined in. I can't say why, it just is. It's part of the culture, kind of like a release valve.

This indicates that novices quickly adopt this strategy to fit in, be part of the group and relieve stress in a similar way to their peers. Rosenberg (cited Christopher, 2015) suggested socialisation as a coping strategy is passed onto new recruits. This message to new recruits includes knowledge of the situations when the use of black humour is socially acceptable.

The majority of the veteran paramedics interviewed commenced their careers as volunteer ambulance officers. Their education was undertaken through short programs and on the job training where qualifications were gained via competence based diplomas. This process would have given the trainees immediate exposure to the culture of an organisation, where they quickly learnt expected behaviour and social norms.

In recent years, undergraduate degrees in paramedicine have become an increasingly popular pathway into this profession which is likely to grow further, particularly with national paramedic registration expected to be launched in 2018 (Paramedics Australasia, 2017).

Placements are embedded within undergraduate course programs in order that novice (student) paramedics gain relevant experience. During these experiences, students are expected to observe and practice clinical skills, in addition to absorbing the culture of the organisation in which they will potentially become employed. The short duration of the placement could limit the opportunities for exposure to the social norms and potentially delay this part of novice (student) paramedic's holistic education and training. This addition may be overcome by introducing mental health and wellbeing education within undergraduate degree programs and, in turn, raise awareness of a suite of useful coping strategies. These strategies can be used, in addition to external support.

The inclusion of wellbeing strategies within the training phase could also promote peer support, particularly when feelings related to an incident or incidents become overwhelming. By commencing peer to peer support at an early stage, it maximises the opportunity for wellbeing strategies to become embedded in the psyche of students. This could in turn encourage the use of humour as a potential gateway to a more meaningful discussion or opportunity to extend support. For example, black humour could be used to inject some humour into a stressful situation with a view to lightening and calming events, giving an opportunity to support a colleague who is affected by a traumatic event.

Acceptable use of black humour

Several participants stated the black humour used at work or when socialising with colleagues, was not appropriate around friends or family members outside of the profession because it has the potential to be shocking and distasteful. Humour around children and

violence is not accepted and part of an ‘unwritten rule’ when employing this paramedic related socially acceptable behaviour.

For example;

There are memories of jobs that come on at the most inappropriate times, like everyone will be talking and it will relate to a job I have been to. Then I think oh no somebody died so I can't say that. You can't say that at the dinner table, it ruins the conversations, it took me a while to learn that.

Individuals outside of the profession often do not fully understand the use of humour as a coping strategy or the justification for the stories or jokes. They are unlikely to have had the same experiences and may not need to relieve stress in this way (Rowe & Regehr, 2010).

Suppress emotions

A participant stated;

Using humour helps a lot but some feel that if they make a joke about it they have dealt with it. I'm not sure it really gets to the heart of the issue. It can be an opener.

The comment above suggests that while the use of black humour can alleviate immediate emotion, it may suppress stress and anxiety through denial and withdrawal from the situation, particularly if a deeper conversation does not ensue (Mulky, 1989 cited by Christopher, 2015). Additionally, the use of black humour can have a negative impact on others who cannot relate to the humour which then results in stress for the individual. Users of this type of humour should be mindful and be willing to aid those affected, (Sultanoff, cited Christopher, 2015).

Health benefits

Research has shown there are positive health benefits in the use of humour. Positive health benefits include the release of endorphins in the brain (Feagai, 2011) and a reduction in general anxiety and the stress hormone cortisol (Buxman, 2008). It was observed during interviews and meetings with veteran paramedics that when the subject of the camaraderie between paramedics was discussed, their body language and facial expressions changed profoundly. The emotions exhibited were uplifting, positive and happy, with some participants laughing at fond memories. These observations were significant when compared to those emotions exhibited when discussing leaving the service.

With paramedics soon to become registered health professionals, the use of black humour could be a concern when reviewing professional conduct. While there appears to be unwritten rules around its use outside of paramedic groups, it is often deemed as unprofessional (Dean & Major, 2008). However, the benefits of this coping strategy and forms of social support should not be ignored.

Acceptance

Acceptance that feelings relating to the role will be experienced was cited as a survival strategy by 45% of veteran paramedics interviewed as suggested by the following comments:

I have accepted that there are times I'm going to be sad.

I give myself the option that I can be sad about a job. Some people say 'oh I can't be sad' but I think you should be allowed to be sad about it. There may be some aspects that get to you; maybe it's a child that is the same age as yours. Not every bad job

will affect everyone in the same way. You may go to a fatal car crash and it doesn't affect you at all, then you go to the next job and you don't even think about it. But then the next job might be 99-year-old lady who has been on the floor for three days because her friends and family haven't noticed she is missing. That may affect you more than the person in the car crash, just because it's a different situation.

To ride a motorcycle I have to acknowledge that it is not a safe thing, that the outcome of something happening is not going to be good and my chances of walking without even a limp are remote. I think you have to view paramedicine the same way.

It's what I wanted to do so I knew I was going to be exposed to these sort of things. So I have accepted that there are times I'm going to be sad about things and have that time when I'm a bit sad and think well I am a paramedic and I did all I could.

You evolve over this job, it's the cliché you never stop learning because you never stop seeing something different, everyday you don't know what might trigger you until it bites you on the arse. I have been lucky till now as mine hasn't happened yet, but it will. Whether it's a casual call or some sort of situation with it, something will rise that will really bite ya. I have seen this happen to other ambulance officers, go to a job good as gold and for no particular reason there is something in that job whatever it may be, that makes your own mortality become very apparent and I think those are the triggers that actually create a lot of ongoing problems.

These views suggest the acceptance that negative feelings will be experienced is helpful to coping with the challenges of the profession. If feelings of sadness, anger or frustration are not accepted it can be seen as beneficial in the short term. This denial can

delay the negative feelings and memories and as a consequence cause significant stress and potential mental health issues in the long term. Beaumont (2016) stated that allowing oneself to feel sadness as it is experienced is better for personal health and wellbeing.

Talking things through

The opportunity to talk things through with crew partner or colleagues was discussed by 45% of veteran paramedics. This emotional release through discussion was also linked to having a respected close knit community of colleagues (35%) and utilising organisational psychological support (35%). For example:

We go to a major incident and we can break it down together into a series of injuries by using science, whereas the fire fighters and the cops see a mangled body.

Talking to someone who had been through the fire was far more useful, they could relate to you far more.

I start doubting myself and then I go and speak to Manager, the more I speak to him, the more I start backing myself up and answering my own questions.

If I couldn't talk with my partner, I would talk to my other paramedic mates, we were all there for each other.

The support available at work is pretty good, if going through the job isn't enough.

During discussions, veteran paramedics continuously referred to the importance of trusting and supportive relationships to enable clear and informed clinical decision making

and subsequent actions when on calls. In addition to talking through outcomes after handovers. Data revealed that 30% formed their own support networks comprised of colleagues, friends and family, whereas 20% became part of an independent paramedic support group.

You can't get away with doing this job unless you have a really good support network. One that is professionally aligned, people that will understand your stories, the context and the language we use to describe our experiences, paramedic feedback.

In recent years, Ambulance services have been increasing the level of internal peer support. Examples of this can be seen across Australia and New Zealand and include The Priority One Program in Queensland Ambulance Service (QAS,2016), Peer Support Mental Wellness Program (WFA, 2016) and Ambulance Victoria Peer Support Program (AV,2016).

Additionally, there are community based charities and social groups that have been founded by paramedics or associates to offer support outside of the service, such as Sirens of Silence (2015) and various social media sites. Social support has been found to have a constructive impact on wellbeing and enhanced mental health outcomes (Shakespeare-Finch, Rees, & Armstrong, 2015).

The concept of seeking support is promoted within the mental health domain with services and information available in the form of counselling, psychological and psychiatric services and through websites, leaflets, self-help books, stories and call centres. This support is aimed at sufferers, their families and carers. Organisations and charities are working hard to reduce the stigma and offer access to all who need the support both directly and indirectly. The latest offering is online psychological help which enables users to obtain text, email or

live chat support and remain anonymous. The concept of offering access to support all potential users in a wide variety of ways is a positive. However, to a sufferer, the number of services and information available is potentially overwhelming which could lead to further withdrawal. Support and suggestions offered by peers can be particularly helpful, and reviewing information together can also be an important part of offering support.

The manner in which one has been supported may affect how one supports others (Beyond Blue, 2017). Learning through experience and example has both positive and negative aspects.

I witnessed colleagues being unsupported and suffering. If I knew then what I know now I would have been having conversations with them, I would have been more understanding. Maybe I would not have participated in the complaining, I would have maybe encouraged them to head off to other services and that sort of thing. At the time most made the decision to leave it, there wasn't a cognisant process of getting themselves sorted.

Allowing oneself to be supported is something that paramedics can struggle with as they are used to be in the caring rescuer role. For example:

I didn't believe I had a problem, why would I need support? I definitely didn't need a quack. I was the life and soul; I was xxxxx [name] the main man, not a mental health patient. Truth be told looking back towards the end, every time I came across an attempted suicide I didn't wonder why they had tried, I knew.

We paramedics are proud beasts; we have huge, enormous egos. We do the saving we don't get saved, crazy huh. I crashed hard and felt ashamed. I went into myself; I

didn't want anyone to know that I was getting help. I still feel it now, only my wife knows.

I needed help but was too busy helping others. I was holding up a colleague, so focused on his break down that I didn't see my own signs. The carer caring for all but themselves, that was me.

There have also been claims of workplace bullying and loss of shifts due to the declaration of needing support. In recent years, ambulance services have been reviewing wellbeing services, training and Chaplain services in order to alleviate this issue.

In the context of learning, Best, Hajzler, Ivanov, and Limon (2008) found that peer mentoring as a formal strategy to enhance the development and practice of clinical skills in a university setting has proved beneficial to both the mentor and mentee. This concept could also be used to prepare novices for formal and informal mentoring roles as they progress in their careers as paramedics.

Dehumanising patients

The strategy of treating an injury or illness as opposed to a person was used by 45% of the veteran paramedics interviewed. For example:

I treat the injury and not the person.

A person lying down is very different to a person standing up.

When they approach you to say thank you, struggle to remember who they are. I work on a body and not a person. My job is to fix them up and get them to hospital. It's a little baby that has to be dealt with, I need to do this, this and this. That's it! Its not

Mary, Jo, Peter or Bob it's a body that has to have this and this. It gives you the ability to step back and be objective especially particularly as an ICP (Intensive Care Paramedic). You have to make hard decisions so have to be objective.

Its not my job to get emotional. My job is to do the business, if I am focusing on the patient emotionally then it could cloud my judgement.

Paramedics reported problematic and negative feelings, in addition to identifying a lack of control when they had emotional connections with their patients and relatives (Avraham, Goldblatt, & Yafe, 2014). In contrast, those that could detach themselves and feel a sense of control experienced positive and empowering feelings. While this does not directly suggest dehumanising patients is beneficial, it does align with the concept of becoming task orientated through visualisation. In this case the paramedic becomes highly task orientated and focused on clinical procedures thus forming a psychological barrier between themselves and the patient and so forming emotional protection (Regehr, Goldberg, & Hughes, 2002).

Good health practices

Keeping fit and healthy was a coping strategy for 40% of the veterans. This strategy was also linked to fostering good sleep hygiene (20%). Together with the shift work and stresses of the job mentioned earlier, paramedics are at a higher risk of unhealthy diets and poor levels of fitness. These issues can lead to increased chances of sleep problems, gastrointestinal issues and a lowered ability to fight common illness (Kent, Mason, & Batt, 2016).

Healthy body healthy mind, it's my mantra since I was diagnosed. It has really helped me continue working.

The environment in which paramedic's work has a direct influence on their food choices and eating patterns. Due to the unpredictable nature of calls there are often extended periods of no food intake followed by opportunistic eating. This may lead to unhealthy food choices such as high fat and fast foods (Anstey, Tweedie, & Lord, 2015). Similarly, hydration is often sacrificed due to the erratic nature of the role.

What I am going to eat is a priority, taking food and drink for the shift is much better than hoping that you will get time to buy something, as that's usually a servo pie or mouldy sandwich, chips and chocolate.

It's the obvious things that made me feel better both mentally and physically, eat and drinking healthy, keeping fit and sleeping well.

Strategies that include healthy eating, hydration, physical fitness and sleep hygiene are seen to benefit individuals and be a positive strategy (Worksafe Queensland, n.d; Courtney, Francis, & Paxton, 2012). The addition of mental wellbeing activities could also be of value, thus offering a holistic approach to a person's overall wellbeing.

One participant advised:

It's all reactive as opposed to proactive. Normalising the process that your mental resilience is of great or greater importance than your physical ability to do the job, should just be routine.

Becoming and maintaining a fit and healthy lifestyle is a popular concept and is part of several health promotion campaigns both nationally and statewide. These types of

recommendations could be adopted by ambulance services as a form of positive support for the workers wellbeing.

The Livelighter Campaign was developed in Western Australia. It promotes healthy lifestyles through suggested activities recipes, advice, facts and access to professional help (Livelighter, 2017). The Healthy Weight Guide is an Australian Department of Health Project offering an online tool for losing weight and maintaining a healthy lifestyle (Department of Health, 2016).

Act-Belong-Commit is a national campaign that inspires individuals of all ages to protect their wellbeing through mentally healthy activities and links to organisations. One of the slogans is '*Keeping mentally healthy is just as important as staying physically healthy*' (Act-Belong-Commit, 2017). The A-B-C guidelines embedded within this national campaign include some of the advice imparted by veteran paramedics such as having a life outside of the profession, taking up creative therapies, staying positive, and staying fit and healthy (Act-Belong-Commit, 2017).

There have been several studies on the effects of shiftwork on paramedics, particularly focused on fatigue and quality of sleep. Sterud, Ekeberg, and Hem (2006) found that metropolitan paramedics suffer from greater exposure to fatigue, ill health (physical and mental) and poor sleep patterns due to shift work and roster patterns. This study was replicated with rural paramedics by Courtney, Francis, and Paxton (2012) who found rural paramedics are at even greater risk of high levels of fatigue, mental illness and poor sleep quality.

The severity of the mental illnesses, depression and anxiety were significantly higher than the population average and were prevalent in over 50% of the sample. Though the study was based upon a single ambulance service the findings reflect that of other studies which

have been reviewed in an extensive literature review of the effects of shift work on sleep by Sofianopoulos, Williams, and Archer (2012). These authors made the following recommendations based on their review of many sleep and fatigue studies:

Factors contributing to health and wellbeing:

- *Increasing physical fitness increases efficiency on memory-loaded tasks, alertness and increase of entrainment of the desynchronised circadian rhythm. There is an emphasis on regular exercise to maintain a healthy body.*
- *Diet is also important, avoiding caffeine products in the hours prior to sleep and fast foods. Being organised and having nutritious high-protein lighter meals.*
- *Maintaining close personal and social ties, stable and healthy relationships with people who understand the demands of shift work.*
- *Ensuring a comfortable sleep environment, which promotes quiet. Filtering out noise and light with a comfortable temperature.*

Sofianopoulos, Williams, and Archer (2012)

A participant stated:

Sleep hygiene is the most important thing. Working out why you can't sleep. I used to put a mattress up against the window so it wasn't too light. I made sure I didn't go to bed too late. I reduced drinks a few hours before so I wouldn't get up for the toilet and if I did I had a bucket or bottle so I didn't fully wake up. It worked for me for years.

Routine

Adopting a routine to unwind and switch off before going home after a shift was cited by 35% of the veterans, which links to the theme of normalising strategies in order to cope with the challenges of the role. Again strong links to wearing a uniform were made as illustrated by:

It takes getting out of the uniform into civvies to relax and chat.

A process of finishing my day, getting out of the uniform is part of that, as is a run or a bike ride.

The ride home is my time to unwind and work through the shift. I get in the shower and have a beer, then I'm good to go. My wife knows the routine.

I would never turn up to work in my uniform, it used to annoy people. So, I would wear normal clothes to work and normal clothes home. It's a bit like throwing a switch, when I put my uniform on its throwing a switch and doing the business, then when work is over I put my clothes on now and drive home.

I get home and go for a run with the dog, I never go straight to bed.

Misusing substances to cope

There were 40% of veteran paramedics who admitted to using alcohol and/or prescription and/or illicit drugs to cope with the challenges of the profession. Reference was also made to issues with gambling (10%). These issues are highlighted by the following comments:

When I couldn't stop my mind going over and over calls, I would drink or take anything to forget. In no time at all I was an addict with a real problem.

It started with a few beers after a shift, then a few more, then a few drinks before a night shift, more on days off, then all the time. A mate tried to talk to me but I wasn't interested I couldn't see how bad it had got, until I got sent home for being unfit for my shift. Then it all fell apart.

I would consume anything to forget, I didn't want to think or see the images. I lost everything, I mean everything, all because I thought that I was tough and wouldn't accept that I needed to deal with stuff.

After high stress there is an emptiness.

I didn't realise I was trying to block out things, I just started to drink heavily and loved the pokies. The buzz was so addictive and made me feel invincible, similar to the adrenaline high at work.

Of those that referred to using illicit substances to cope, five participants discussed keeping their feelings and struggles hidden from colleagues, family and friends. They claimed that misusing substances and gambling helped them to have another focus and forget any underlying issues. Drinking, drug misuse and gambling are all noted as common strategies for coping with the ongoing stress and trauma within first responder roles (First Responders Recovery, 2015).

I drank to get rid of my feelings and the fact I couldn't cope. It was easier than facing anything.

By getting out of it, I didn't have to think about anything. I kept it all locked away, I was scared of what others would think.

A young paramedic deteriorated over a few years, he went off work then came back completely wooden, they build a wall. He turned to alcohol to cope.

Hard to watch! Often triggers being managed poorly. They think they are bullet proof but turn to something else to cope.

Conversely, some veterans were cognisant of the risks and maintained strategies to combat this.

I knew there was a big drinking culture so consciously stayed away from it.

It would have been very easy to do the social thing, in the beginning I had some awesome times but after a few months I realised I couldn't do the job, learn and keep up after heavy nights and days. I know that some took xxxx [a substance] to stay awake and xxxx [a substance] to sleep if the alcohol didn't knock them out.

Whenever I went to work social events, booze ups that sort of thing, I always took two non-paramedic mates with me as I didn't want to stand around talking about work. I never got involved with anyone at work, because when you go home what else have you got to talk about.

Emotional suppression was also discussed with veterans who did not cite substance misuse. An unwillingness to admit or talk about their feelings through avoidance techniques was mentioned, this was despite the knowledge that this is not seen as a beneficial coping

strategy. Mildenhall (2012) stated '*they hide fear and vulnerability, and protect the professional identity of the ambulance worker as an emotionally strong individual*'. (p.318.).

Other comments included:

There is a negative attitude towards mental health patients, generally in our cultures we have a certain fear of mental health, so anyone suffering from a mental health problem becomes unknown, they don't fit the biomedical view of the world, they are seen as non compliant, more a generalised social view and it's a stigma.

I wouldn't even admit it to myself so I was never going.

I would change the subject or say I had to go if anyone ever approached me about it.

We tend to blame rather than look at why, what needs to change. I have found that since I have become open about my mental health issues the more people come and talk to me about theirs.

Continuous learning and development of practice

There were 40% of veterans who stated that their strategy was to focus on learning and developing their practice. This was linked to having confidence in oneself and personal judgments.

Participants recalled:

I was half way through my training. I was single crew, I shocked this fella once and then again and he just about hit the roof and swung at me. He said 'What the hell did you do that for?', the first shock had worked. He didn't need the second one and when

I pulled the strip out later, I could see. I didn't check the monitor before I did the second shock. It could have gone the other way. It's all about experience. That's the reality of the job, you don't win all the time. High acuity you lose as often as you win, there is always something to learn. It's a great job! You have to be able to trust the people you work with and keep on learning.

It's something not to be scared of, it's a challenge to then learn and apply to the next thing.

This job is the best, so much to experience and learn. I'm 20 years in and still learning every day. I reckon that's what keeps me sane.

Learning gives you confidence and confidence gives you the ability to make good judgement calls. It's as easy as that.

Paramedicine professional bodies are offering a wide variety of continuing professional development events and resources to both novices and experienced paramedics. These are generated nationally and internationally and include clinical and non-clinical topics. The recent focus on the paramedic has been holistic with an emphasis on mental health and wellbeing including examples such as the Survive and Thrive Annual Symposium, which is a collaboration between all two paramedicine professional bodies and a peak employer group, Australia New Zealand College of Paramedicine, Paramedics Australasia and the Council of Ambulance Authorities. Sessions and resources are available to all paramedics via personal attendance, video link or recordings. This has increased opportunities for those studying and practising even in the most isolated and remote areas.

Hobbies

There were 30% of veterans who claimed having a hobby outside of paramedicine was a conscious strategy to relieve stress.

There are people that live for the job. The uniform doesn't mean a jot to me, I am employee and a professional ICP. There are people that live and breathe the ambulance services, they have nothing else.

I ride my bike, helps me to de-stress and chill.

I bust it all out at the gym after a shift, 24hour gyms are a god send.

I joined a running club, it gets me out and away from work talk.

Feeling appreciated

A quarter of veteran paramedics felt appreciated by patients and their families as illustrated by the following comments:

Seeing the relief on the patient or family member's faces is gold. All the thank yous are nice but it's just that look of appreciation, makes me proud to be a paramedic.

I remember we got this amazing commendation, the person wrote that we had done so much and they were so grateful for the help. I looked up the job and found that I had held this persons hand and taken them to hospital. I hadn't even given them the bed I had put them in the grey chair. I felt like I did barely anything and they were so

grateful. It wasn't even a notable case but this person was so grateful that they took the time to write the letter and put it in the mail.

It's lovely to get a letter saying thank you, I don't always remember the call but knowing that what we do is appreciated means a lot.

Thompson (2016) insightfully wrote “*These clinicians are known for the noise of their approach and the speed of their response, but, for many, the tools of their art and the scope of their practice is unknown.*” (p1).

Left the service

Some veterans (25%) found they needed to leave the service to survive. One veteran stated they did not feel that they did survive.

Sadly I saw many colleagues suffer. You could almost pinpoint the time of year/month in someone's careers. It would be after 8/9 years and something would happen and you could see them become disillusioned, unhappy and bitter. Not wanting to accept any form of change, everything put in front of them became a challenge. You see, can see their career would be over in the next few years.

It scary to watch people who you think have excellent coping strategies deteriorate, sometimes it's just time to move on.

It was accumulated sadness, a collective sadness of the world that got me down. I soak it all up, all paramedics are grief sponges.

I went back for a while and just couldn't settle or cope. I changed career.

I had to leave to survive.

Diagnosed with a mental illness

There were 20% of veterans who stated that they were receiving or had received treatment for a diagnosed mental illness, which they attributed to their role as a paramedic.

I was diagnosed with PTSD [Post-traumatic Stress Disorder] three years, I have good days and bad days. I see a psych regularly and have been looking into creative therapies.

Getting the diagnosis was hard as I didn't want to admit anything to myself let alone talk about it. I'm now 'in recovery' and learning to live day to day.

I tried to go back on the road three times and just couldn't. My whole life has been turned upside down as I am no longer fit to work.

Of the veteran paramedic participants in this research, 15% admitted to having attempted suicide at least once and attributed this to the role.

I have tried to take my own life many times and now have strategies in place when I get those feelings. I don't think it will ever go away, I have learnt to live with it. My close family tell me too. I used to feel like everyone was watching everything I did but now they trust that I know when to go to hospital.

No one really understands suicide, taking your own life feels like the only option available, I know to get help when I start planning.

The comments and strategies shared by the veterans, have offered a valuable insight into their own survival, learning and coping strategies. These suggestions and reflections are

of great value to novice (student) paramedics in addition to the advice offered in the next question.

4.2.2.3 Question eight

Veteran paramedics were asked if they had any advice for novice (student) paramedics. This is in keeping with the concept of sharing as indicated by the wisdom of the Aboriginal Elders to educate and prepare novice (student) paramedics. The advice provided by veterans has been presented in three main focus areas which are outlined in Table 19:

- Support.
- Health.
- Profession.

Table 19

The proportion (%) and number of respondents to question 8, is there any advice you would give a novice (student) paramedic?

| Theme | Participants % (N) |
|--|--------------------|
| Support | |
| Support others and be supported | 65% (13) |
| Talk jobs through with a crew partner, colleague or manager | 50% (10) |
| Utilise the organisational support available | 35% (7) |
| Work within a team you can trust and who can trust and enable you | 25% (5) |
| Ask friends and family to keep an eye on you | 15% (3) |
| Health | |
| Stay healthy, physically and psychologically | 65% (13) |
| Have a laugh at work | 30% (6) |
| Become self aware, have coping strategies for the mental health challenges now and over time | 25% (5) |
| Learn about mental health | 20% (4) |
| Use creative therapies, bibliography, mindfulness, yoga and relaxation strategies | 15% (3) |
| Take time out when you need it | 15% (3) |
| Profession | |
| Be aware the profession will affect you | 40% (8) |
| Be honest about your feelings and address them | 35% (7) |
| Keep learning | 30% (6) |
| Have a career plan 1, 3, 5 years | 25% (5) |
| Have another skill you can call upon | 25% (5) |
| Try not to absorb the negative attitudes of colleagues and patients | 10% (2) |
| Have a life outside of the service | 10% (2) |

The advice given by veteran paramedics can be collated into three core themes focusing on support, health and the professional. The advice in the words of the veterans is presented below.

Support

Offering support is intrinsically entwined in paramedicine and there is no surprise that this is one of the most common pieces of advice given by veteran paramedics.

*The crucial piece of advice I can give is to support and be supported. We are a family, we laugh, we roar, even tear up together and like a family we need to **stick together** and look out for one another.*

*You have to prepare yourself for all parts of the job. It's not always about trauma. The ambulance service can be pretty clinical in its approach to paramedic welfare and mental health therefore you have to **speak out and get help when you need it**.*

*People need to be aware the job is not easy, it's fantastic but it's hard. The reality programs don't help! **You need to chat stuff through, clear your mind.***

*When a call just won't leave me, it goes round and round in my head, can't sleep, can't eat. I talk it through with my partner the next day. Maybe I should do it earlier, but this is my way. I would say to a student **talk before the end of the shift and again if you need it**. Don't let it stay in your head.*

*You can't always be prepared for the job; you can't always be prepared for what you see and how you get treated. Just don't do what I did and do the same as was done to me. **Seek help early**, make it part of your self care routine like eating.*

*No one knows how they are going to react when you first see a big smash or something like that. I didn't know how I would react. You can read about it in the textbooks and see the pictures and you still don't know what your reaction is going to be. All I can say is **keep talking**.*

*When I have had a bad day Doctor xxx [name] comes over and just sits on my porch with me. This kind of **inter-professional support** in remote areas keeps us sane. We all rally round and just know when things are bad. The organisation only turns up when something goes wrong so we rely on each other. We eat and chat together daily, with one super market, which closes at six it makes us come together. So, you are forced to be with each other or you starve. So when working remotely go with it, you will find it's the best way to offload and feel comfort.*

*'I asked my **friends and family to keep an eye on me**. To let me know if they noticed any changes in me. It really helped me to get to know myself and my mental health. So that's what I would offer as advice.*

Health

Staying fit and healthy, both physically and psychologically was also one of the most common pieces of advice offered by the veteran paramedics who were interviewed.

*When it's full on, its full on. No time for anything not even a pee, an eat or drink. "Be prepared" is what my mentor said to me and he was right so that's what I will say, **be prepared**.*

*Take **prepared food** on shift so you can eat.*

*When up north or in the summer try to maintain two or three litres of water a day. Up there you don't drink the water, you chew it, the calcium levels are so high. It is so important to **hydrate** I really notice the difference when I don't.*

***Sleep hygiene** is the most important thing. Working out why you can't sleep. I used to put a mattress up against the window so it wasn't too light. I made sure I didn't go to bed too late. I reduced drinks a few hours before so I wouldn't get up for the toilet and if I did I had a bucket or bottle so I didn't fully wake up. It worked for me for years.*

***Go to bed between shifts**; make it a personal life choice. You choose the life so do what you have to do.*

*Make sure you have a **laugh at work**, even dark humour, it really helps.*

*Don't flog yourself into the ground; **find your sense of humour**. While you may be feeling yuk about a call, once you assimilate it, you will feel better*

Get to know yourself and how you react to things. Work out what you need to do to feel better.

The best thing I ever did was do a Mental Health First Aid course, I learnt about mental health and communication, I now understand myself, patients and colleagues better.

I can now look at things that people have written about psychological first aid and the things that people have to do if they have been in a career where they are exposed to, whether vicariously or directly, to trauma. These sort of things will happen, so I can look at them and think thank God its not because I'm nuts. It's because of the paramedic ability to externalise around these things. Knowledge helps.

Don't push the available button, till you are ready and take a mental health day off when you need it.

Professional

The veteran paramedics also gave advice related specifically to the profession.

*I have supported many paramedics in dark times and even lost a few. This career affects every part of your life so **get your house in order and live life to the full.***

***Be honest about how you feel,** allow the feelings and address them as they arise*

It's the things we relate too, I went to a sudden death of a young mum; her four year old son was there. He was saying 'daddy daddy what's happened to mummy'. The

*dad was just completely beside himself and couldn't cope. He couldn't explain to the son, I had to explain to this poor little guy that his mummy had just died. As a young dad myself, I related there. Just as we were getting ready to go, I found out there was a 6 month old baby in the room next door. Oh my gosh this is a family, it could be a mirror image of my family, how would I cope? How do I take that home? Can I talk to my wife about that? Who can I talk to about that to help resolve my own feelings of anxiety and emotions? At that time I probably didn't talk about them as effectively as I could have, I held on to the feelings longer than I needed to, rather than acknowledge the things, expose them to the light, learn grow and move on. I dwelt on that emotion for too long because I didn't want to burden anyone else with that. I could have handled that better, so I think that **honestly and openly label your feelings with someone you trust** it maybe some outside of the situation. It maybe that you don't want to take anything home to your own family. **It's important to have a safe place to go.***

*Treat the job like an apprenticeship, **keep learning**, work on what's best practice for you and keep lifting the bar.*

*The job is magic, we have to deal with the fatigue and all the rest of it. If you **put the effort in** then it's something you will enjoy very much.*

*The most powerful conversations in the paramedic professional start with I had this patient that I went to a call which. People are listening not because it's a war story but because it has the potential for them **to learn something**. The story goes and then people ask questions. It's extremely powerful as it preps other people for what they might meet, especially if you are new.*

Adopt this: every time you get to a point rather than make a diagnoses on the spot
***think:** this is emergency medicine, its resuscitation. What's happening? What else can happen? What if this happens? What else will happen?*

*If I do a job and I can't sleep and I can't stop thinking about it, I say I'm pretty bummed about this let's talk it through. I choose to communicate. Clinically I relive the scenario. Why did I do this? You were fearful of this why? **Communicate and question yourself***

*Lower your expectations; it is not all high acuity work; take the opportunity to hone your skills. Have a **career plan** for three and five years, you just don't know how long you have.*

*Paramedicine is reactive and not proactive then when they leave they suddenly have time on their hands and maybe it's not a life skill we have. **Having a plan** and managing life as opposed to a bell or a phone to tell you what you have to do.*

*I associate a lot of the positive experiences I have had with being able to align my clinical practice with being able to teach and encourage other people. It's not for everyone, but you can and should **develop another avenue to augment your career.***

***Stay positive;** don't get drawn in to negativity. Negativity is very destructive, its very easy to disappear in a black hole.*

*Have an interest, hobby, anything that is not connected to paramedicine. **Have an identity other than a paramedic.***

The following is proposed as self-care advice for first responders in the text 'Finding the Silver Lining, Stress, Resilience and Growth in Ambulance Practice' which is used in training by Queensland Ambulance Service by Murray (2013).

1. *Care for your body.*
2. *Care for your emotional self.*
3. *Care for your cognitive self.*
4. *Know where you will get support – and use it.*

(Murray, 2013, p.86)

These suggestions summarise much of the advice provided by the veteran paramedics and offers a comprehensive starting point for the practice of holistic wellbeing for new, existing and past paramedics.

This study contributes to the understanding of factors that impact on the mental health and wellbeing of paramedics. The evidence provided supports the preparation of novice (student) paramedics for mental health challenges as part of the accredited undergraduate curriculum through the sharing of coping strategies in the form of advice. This is based upon the veteran paramedics professional and lived experiences and contributes to positive mental health and wellbeing. This advice was validated through focus groups formed from veteran paramedics with a similar length of experience.

Collectively the themes represent a way forward in the preparation of novice (student) paramedics by using the experiences of those that have lived and successfully coped with mental health issues while working as a paramedic. Previous literature often ignored the potential for preparing novices for the mental health challenges of the profession and focused on paramedics already working on road.

The data has added to a better understanding of the mental health and wellbeing of paramedics and the strategies used to cope with the challenges faced throughout their careers, in addition to how novice (student) paramedics could be prepared in their learning phase.

The next chapter provides an overview of this research and presents the contribution made to the mental health and wellbeing of novice (student) paramedics.

Chapter 5

Final Discussion



'Peaceful Mind'

Used with kind permission from Daniel Sundahl, Dansun Photo Art.

Aims of this Chapter

This main aim of this research was to explore the preparation of novice (student) paramedics for the mental health challenges of the profession by utilising the wisdom of veteran paramedics. This chapter presents an overview of the research findings and also the contribution this research has made to the understanding of mental health and wellbeing of novice (student) paramedics and the relevance to an undergraduate curriculum. This final discussion also focuses on the context, experiences of veteran paramedics and connections with course coordinators in an attempt to draw together the key threads underlying the research. Finally, the researcher shares positive suggestions for change and future research.

5.1. Summary of research

This research study addressed the potential of preparing novice (student) paramedics for the mental health challenges of the profession by utilising the wisdom of veteran paramedics, as part of the accredited undergraduate paramedicine degree curriculum.

The research questions were:

1. Are novice (student) paramedics being prepared for the mental health challenges in accredited paramedicine undergraduate degrees?
2. What do novice (student) paramedics fear most about commencing their career as a paramedic?
3. What do novice (student) paramedics feel least confident about when they commence their career as a paramedic?
4. What do novice (student) paramedics feel most confident about when they commence their career as a paramedic?
5. Do novice (student) paramedics believe awareness of, and techniques for addressing the mental health challenges of the profession should be part of the undergraduate curriculum?
6. Do course coordinators believe awareness of, and techniques for addressing, the mental health challenges of the profession should be part of the undergraduate curriculum?
7. Do veteran paramedics feel the sharing of their mental health survival strategies will benefit the preparation of novice (student) paramedics for mental health challenges?

Due to limited literature and research on the preparation of novice (student) paramedics for the mental health challenges, the research was divided into two studies.

Study one used quantitative and qualitative approaches and surveyed course coordinators and novice (student) paramedics. The main focus of data collection was on the potential for formal inclusion of preparation for the mental health challenges within the undergraduate curriculum. In addition, information on individual confidence, anticipation and fears upon commencing a career as a paramedic were collected as comparative data.

Study two used a qualitative narrative approach whereby veteran paramedics were interviewed using semi-structured questions. The veterans were asked to recount their stories, coping strategies and offer advice to novice (student) paramedics based on their lived experiences during their careers. In addition, to confidence, anticipation and fears experienced upon commencing the career as a paramedic was collected as comparative data.

Collectively a mixed method approach was used to allow the triangulation of information through the use of multiple sources and research methods to collect and analyse data. This method facilitates validation of the themes through corroborating findings (Creswell, 2013). The purpose of using triangulation was summarised by Morse (as cited in Creswell, & Plano Clark, 2006) as the opportunity “to obtain different but complementary data on the same topic” (p. 62). The benefits of this multi method approach has allowed the researcher to be confident about results

Thematic analysis was used to analyse the data collected. The key findings from each study are summarised below.

Participants from study one were 16 course coordinators and 302 enrolled novice (student) paramedics from across Australia and New Zealand. The data collected illustrated there was widespread recognition for the need to include preparation for the mental health challenges of the profession within accredited undergraduate courses.

In study two, data from the 20 semi-structured interviews with veteran paramedics, was analysed for themes. These themes were then validated during three focus group activities. The three core themes of advice provided for novice (student) paramedics were:

- Support.
- Health.
- Profession.

The data collected regarding confidence, anticipation and fears experienced upon commencing the career as a paramedic from course coordinators, novice (student) paramedics and veteran paramedics was collected as comparative data. This data will be used in the creation of education resources to engage novices and commence discussion around the profession leading to mental health and coping strategies.

5.2. Overview

Despite anecdotal evidence that this topic is valued by those involved in the education and training of novice (student) paramedics, as well as the paramedics themselves and their employers, this study is the first to research this area amongst undergraduate course coordinators and novices and to conduct in depth interviews with veteran paramedics to elicit their advice to novice (student) paramedics. The 100% response rate to the course coordinator survey and the completion of novice (student) paramedic surveys from all undergraduate degree programs across Australia and New Zealand during the study period, in addition to the willingness of veteran paramedics to participate in interviews and focus groups is strongly indicative of the importance of mental health within paramedicine is perceived.

The negative effects of stress, anxiety and depression are well known. Stress within employees has been documented in a number of emergency service professions and has been

found to occur within paramedicine across a variety of nationalities and cultures (Shepherd & Wild, 2011; Regehr, Goldberg, & Hughes, 2002; Clohessy, & Ehlers, 1999). Thus, it is likely that characteristics within the prehospital working environment, rather than characteristics within individuals, lead to stress. Therefore, educational programs that are directed in this area will be most successful in supporting paramedics to meet the mental health challenges of paramedicine. In particular, the undergraduate education programs that provide the qualifications of choice for Australian and New Zealand employers. These programs are ideal environments in which to begin to prepare novice (student) paramedics to meet the mental health challenges of their profession. Whereas undergraduate teaching cannot, and must not, replace ongoing programs and initiatives by paramedic organisations intended to support mental health, inclusion of teaching designed to foster the ability of novice (student) paramedics to successfully meet the challenges of the paramedic profession does offer a valuable opportunity to proactively address the challenges that arise in the prehospital environment.

There is value in promoting accredited undergraduate degree programs to include comprehensive preparation for the mental health challenges of the paramedic profession, to raise awareness of mental health and to educate novice (student) paramedics prior to commencing their professional careers. They are a captive audience and there is great potential in enhancing self-care, in addition to patient care through better understanding within their preparatory learning environments. Furthermore, there exists the opportunity in the same learning environments to teach coping strategies to meet the mental health challenges through the use of the lived experience and advice from veteran paramedics. The advice offers common sense, profession specific, highly credible lived experiences and connects veterans to novices in a unique and positive educational way.

5.3. Contributions of the current study

Contribution to research

Collectively the themes represent a way forward in the preparation of novice (student) paramedics by identifying key coping strategies through the experiences of those that have lived and successfully coped with mental health issues while working as a paramedic. Previous literature and research tended to ignore the potential for preparing novices for the mental health challenges of the profession and focused on paramedics already working on road. This is the first research study to explore the area of novice (student) preparedness for the mental health challenges of the paramedic profession.

Contribution to policy

After extensive literature and internet searches, there is currently no formal paramedic only, support services or websites available to all novice (student) paramedics outside of professional membership, as with other health professions, for example, medical students. The following recommendation is made:

- Specific mental health and coping strategy support is made available for novice (student) paramedics from professional paramedicine organisations.

Contribution to education

Based on the results of the course coordinator and novice (student) paramedic survey for question one, 'Should the mental health challenges of the paramedic profession be part of the undergraduate curriculum?' (100%, 97%), there is clear agreement that preparation should be part of the accredited undergraduate paramedicine degree course. Therefore, the following recommendation is made:

- The inclusion of mental health preparation for all novice (student) paramedics throughout training and courses, using the guidelines as outlined in chapter four.

Contribution to practice

Based on the findings of this research, guidelines have been created to assist accredited undergraduate paramedicine degree course and unit coordinators with embedding the preparation for the mental health challenges of the profession within their curriculums. As the courses vary widely across Australia and New Zealand the guidelines offer content and activity ideas which are intended to be utilised across the course as opposed to only in one specific unit or module of study. This will ensure continuous development of knowledge, skills, awareness and coping strategies for the novice (student) paramedics.

As described in Chapter 1 these guidelines (see Table 20) can be used for the creation of education resources and learning activities. It is anticipated that these guidelines will:

- raise awareness.
- reduce stigma.
- increase knowledge and skills.
- encourage open discussion and related activities.
- improve patient care.
- promote self and colleague care.
- outline where to seek support.

Table 20

Guidelines to assist accredited undergraduate paramedicine degree courses to embed preparation for the mental health challenges for the paramedic profession

| Topic inclusion | Content | Application |
|--|---|--|
| Mental Health | What is mental health? Stigma Research within paramedicine | Interactive presentation Research Research activity Discussion |
| Mental Illness | Definitions Relatable stories, poems, videos and art | Lecture Research activity Discussion Shared experience |
| Approach to mental health patients | Safety Communication Empathy De-escalation techniques | Examples Role play Group practice Discussion |
| Legal responsibilities, medication and inter professional care | Duty of care Restraint – physical and chemical Other professionals | Lecture Examples Role play Discussion Research |
| Overview of treatments and short/long term care | Brief overview of treatments Input from Psychologist | Lecture Research activity Examples |
| Self care | Own signs and symptoms Advice from veteran paramedics Family and friends Coping strategies | Self evaluation Video's Testimonies Advice from veteran paramedics Creation of own strategies based on interests and likes |
| Approach and care of colleagues | How/when to approach Acceptance of response Information | Examples Role play Strategy |
| Support available | Online Telephone In person Organisational | Interactive lecture Research activity Share findings Reflection |

Commencing with a definition of mental health will ensure novices begin with a clear understanding and any misperceptions can be corrected at this early stage. The use of credible definitions and the addressing of stereotypes is important here.

Moving on to mental illnesses through definitions of mental health illnesses, symptoms and common behaviours add to understanding. Context should then be presented in the form of lived experiences, for example; videos, reflections, poems and art. This will aid understanding, reduce stigma and promote empathy. A brief overview of treatments adds to knowledge and introduces care plans, ongoing treatments, support, risk of relapse and who is who here.

Further context from a paramedicine perspective is particularly helpful. For example, the viewpoints of both the patient and the paramedic who has been called to the scene. Input from patients reflecting on what helped and what did not are also useful, as are the detailed experiences of care given to patients by paramedics. The next stage is to include examples of Clinical Practice Guidelines including legal responsibilities which will bring this section together. Further, content relating to safety, communication, de-escalation techniques and restraint will expand this section and enable deeper more practical application of what has been learnt. Scenarios and role plays will further reinforce and consolidate the topic and application.

The final phase is to consider sensitive handovers at hospitals and acting as a role model from whom others may learn. Considerations should include:

- that the patient can hear the hand over.
- the need to adhere to any care plan.
- the use of sensitive language.
- having patience with frequent calls to specific patients.

By creating a positive, practical and empathetic approach towards mental health over time, novices are more likely to feel safe to consider their own mental health and wellbeing as well as that of their colleagues. This training should include;

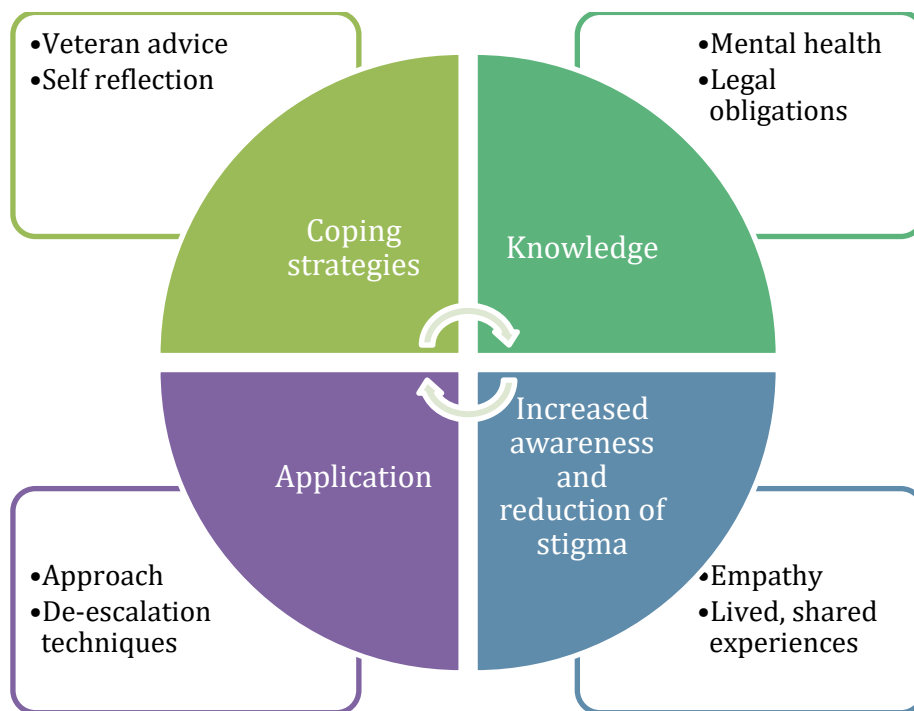
- mental health concerns of a colleague.
- careful consideration and planning of their approach.
- timings.
- what to say.
- the importance of acceptance when support is not wanted.
- time for reflection, examples and role play.
- sensitive introduction to self-care.
- own mental health.
- own signs and symptoms.
- listening to others.
- the maintenance of wellbeing.
- links to general health and fitness.

The addition of reflections from paramedics who have lived experience of mental illness will add credibility and permission to engage here. Time to discuss and reflect on advice given is also key. Self-reflection activities, discussion and opportunities to share ideas will aid the application and openness. Some students may struggle with this, so ‘what would you do if’ scenarios and more experiences of veteran paramedics may help. This, in turn, will lead to increased likelihood of novices seeking further knowledge and support.

How and where to gain support for mental health in practice is the last phase. Provide information on all the different types of services that can provide support. Having students research available support services and sharing this information with peers will be an

engaging and helpful activity. Knowing where to gain support will also encourage sharing of information, helping others and self which may encourage the continued development of coping strategies and support seeking. Input from a psychologist at this point will add context and an insight into the process and experience of psychological support from both the practitioner and patient points of view.

Figure 12. Summary of educational resource



By exposing novices to all aspects of mental health, the opportunity to gain a broader more holistic knowledge and skill base will be maximised. This may also encourage the normalisation of mental illness within a clinical setting for both patients and paramedics as part of the curriculum and paramedic role.

5.4. Future research

Future research into the effect the inclusion of preparation for the mental health challenges of the profession has on novice (student) paramedics when it is embedded within

accredited undergraduate degree programs, will be an important exploration into the impact of preparation and potential changes support seeking. Therefore the following recommendations are made:

- Longitudinal study is undertaken focusing on the impact of the preparation of novice (student) paramedics from the first year of enrolment to graduation to the first five years in service and beyond
- Conduct a study focusing on the range of teaching methods used to embed preparation for the mental health challenges into the undergraduate curriculum.

Overall, it is recommended that the momentum of research into the mental health and wellbeing of novices and paramedics continues to expand and explore strategies and support to reduce the negative effects on these workers.

5.5. Last words

In the spirit of sharing the wisdom of the Elders, the last words of this thesis are left to those who have travelled the path and survived.

I'm not the person I was when I first started in the ambulance service, I feel like the family car that's been handed down after a couple or three generations. There's a bit of rust and a few dents and its not running as smoothly as it once did. I attribute some of that to aging but a lot of it to the career.

To ride a motorcycle I have to acknowledge that it is not a safe thing, that the outcome of something happening is not going to be good and my chances of walking without even a limp are remote. I think you have to view paramedicine the same way.

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Appendix A

Definition of Terms

| Terms | Definition or explanation |
|--|---|
| Council of Ambulance Authorities (CAA) | This is the representative body for ambulance services in Australia, New Zealand and Papua New Guinea. |
| Mental Health | <i>'A mental illness is a health problem that significantly affects how a person thinks, behaves and interacts with other people.'</i> (Mental Health WA, 2015) |
| Mental Health Challenges | Experiences that have an impact on mental health wellbeing. |
| Mental Health Wellbeing | <i>'a sense of wellbeing, confidence and self-esteem. It enables us to fully enjoy and appreciate other people, day-to-day life and our environment.'</i> (Mental Health WA, 2015) |
| Paramedics Australasia (PA) | This is a professional association, which represents members who provide paramedic services in the community. |
| Student Paramedics Australasia (SPA) | This is a special interest group of PA, which supports student paramedics. |
| The Network of Australasian Paramedic Academics (NAPA) | This is in a special interest group within PA. Members have an interest in paramedic education. They meet regularly, have educational focus groups and support post graduate studies. |
| Veteran Paramedic | In the context of this study a Veteran Paramedic is an individual who has undertaken the necessary training and examinations to practice as a paramedic. Participants will have had at least ten years as an emergency first responder in addition to experience across other paramedic activities such as call centre duties, patient transport, the mentoring and/or training of paramedics. Through these experiences and working with other emergency response workers, these individuals would have developed positive mental health coping strategies that have facilitated their survival. Participants will also have expressed a willingness to share their lived experiences. |
| Novice Paramedic | In the context of this study a novice paramedic is a third year university student enrolled in an undergraduate degree in Paramedicine. The novice would have had limited or no on road experience and not be currently employed by an ambulance service. Individuals in training and developing skills and knowledge through the undergraduate degree program. Experience and further development of skills is through clinical |

| | |
|-----------|--|
| | placements organised and attended throughout the program, these occur in a variety of areas, for example: hospital wards, emergency departments, operating theatres, general practitioner surgeries, transport services |
| Anxiety | <p>There are different types of anxiety disorders those particularly relevant to this study are:</p> <p><i>Generalised Anxiety Disorder (GAD)</i>– sufferers feel anxious and worried most of the time. They feel things will go wrong and they will not be able to cope despite there being no indication of any such events.</p> <p>Post-Traumatic Stress Disorder (PTSD) - this can develop after traumatic events e.g. disasters, accidents, violence. This maybe through personal experience or through observation. Sufferers relive their experiences when the memories are triggered. They can become angry, nervous, have trouble sleeping and are generally withdrawn (Kitchener et al, 2014)</p> |
| Stress | <p><i>‘Stress is a natural human response^[SEP]to pressure when faced with challenging and sometimes dangerous situations’ (Lifeline, n.d.)</i></p> <p><i>‘If stress lasts a long time or overwhelms^[SEP]our ability to cope, it can have a negative affect on our health, wellbeing, relationships, work and general enjoyment of life’ (Lifeline, n.d.)</i></p> |
| Paramedic | <p><i>Paramedics are health professionals who provide specialist out-of-hospital emergency health care and unscheduled care to the community (Student Paramedics Australasia, 2015).</i></p> <p>In the context of this study the following roles within an ambulance service are included:</p> <ul style="list-style-type: none"> • <i>Paramedic (Paramedic)</i> • <i>Intensive Care Paramedic (ICP)</i> • <i>Retrieval Paramedic (RP)</i> • <i>General Care Paramedic (GCP)</i> • <i>First Responder (FR)</i> • <i>Patient Transport Attendant – Level 1 (PTA1)</i> • <i>Patient Transport Attendant – Level 2 (PTA2)</i> • <i>Basic Life Support Medic</i> <p>(Paramedics Australasia, 2012)</p> <ul style="list-style-type: none"> • Ambulance Officer • Ambulance Service Worker |

Appendix B

Survey 1

Course Coordinator Questionnaire

This questionnaire includes 3 parts as follows:

Part A: Your University

Part B: Your undergraduate degree program

Part C: Your thoughts

PART A: Your University. Please cross (X) in the box for your most appropriate answer and fill in the blanks when necessary

A1. Which state is your institute in?

- | | |
|--|---|
| <input type="checkbox"/> 1. Northern Territory | <input type="checkbox"/> 2. New South Wales |
| <input type="checkbox"/> 3. Queensland | <input type="checkbox"/> 4. South Australia |
| <input type="checkbox"/> 5. ACT | <input type="checkbox"/> 6. Victoria |
| <input type="checkbox"/> 7. Western Australia | <input type="checkbox"/> 8. New Zealand |

A2. How many undergraduate students do you currently have enrolled on your program?

PART B: Your undergraduate paramedicine degree program

B1. Does your undergraduate program include the mental health challenges of the paramedic profession?

- ☐ 1. Yes (go to question B2) ☐ 2. No (go to question B4)

B2. Which unit/s is this topic included in?

B3. How is it covered? Tick all that apply

- ☐ 1. A lecture
- ☐ 2. A discussion
- ☐ 3. An activity
- ☐ 4. Independent research
- ☐ 5. Group research
- ☐ 6. A stand-alone unit
- ☐ 7. Other, please specify

B4. Do you feel this topic is covered in appropriate depth?

- ☐ 1. Yes
- ☐ 2. No
- ☐ 3. Not sure

B5. Do you believe that the mental health challenges of the profession should be part of the undergraduate curriculum?

- ☐ 1. Yes (go to question B6)
- ☐ 2. No
- ☐ 3. Not sure

B6. How should it be covered? Tick all that apply

- ☐ 1. A lecture
- ☐ 2. A discussion
- ☐ 3. An activity
- ☐ 4. Independent research
- ☐ 5. Group research
- ☐ 6. A stand-alone unit
- ☐ 7. Other, please specify

B7. Do you consider your students are suitably equipped for the mental health challenges of the paramedic profession?

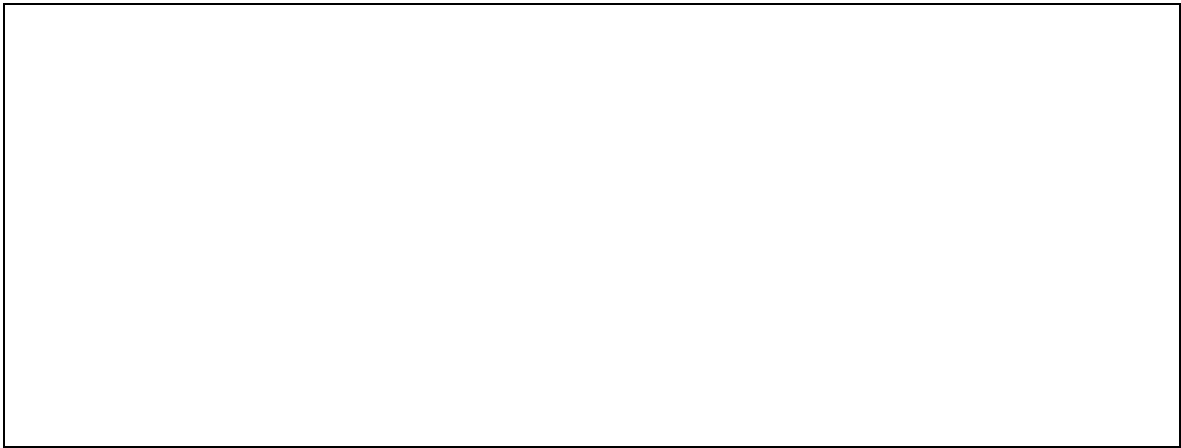
☐ 1. Yes

☐ 2. No

☐ 3. Not sure

PART C: Your thoughts

C1. What do you think students look forward to the most about commencing their career as a Paramedic?



C2. What do you think students feel the most confident about when they commence their career as a Paramedic?



C3. What do you think students feel the least confident about when they commence their career as a Paramedic?

C4. What do you think students fear the most about when they commence their career as a Paramedic?

Thank you for your participation in this questionnaire. Your time and contribution is of great value and very much appreciated.

Appendix C

Survey 2

Novice (student) paramedic Questionnaire

This questionnaire includes 3 parts as follows:

Part A: Your University

Part B: Your undergraduate degree program

Part C: Your thoughts

PART A: Your University. Please cross (X) in the box for your most appropriate answer and fill in the blanks when required

A1. Gender

- ☐ 1. Male ☐ 2. Female

A2. Age

- ☐ 1. Under 20 ☐ 2. 20 – 24
☐ 3. 25 – 29 ☐ 4. 30 – 34
☐ 5. 35 – 39 ☐ 6. 40 – 44
☐ 7. 45 – 49 ☐ 8. Above 50

A3. Which state/territory is your institute in?

- ☐ 1. Northern Territory ☐ 2. New South Wales
☐ 3. Queensland ☐ 4. South Australia
☐ 5. ACT ☐ 6. Victoria
☐ 7. Western Australia ☐ 8. New Zealand

PART B: Your undergraduate paramedicine degree program

B1. Does your undergraduate program cover the mental health challenges of the paramedic profession?

- ☐ 1. Yes (go to question B2) ☐ 2. No (go to question B4)

B2. Which unit/s is this topic covered in?**B3. How is it covered?** Tick all that apply

- ☐ 1. A lecture
- ☐ 2. A discussion
- ☐ 3. An activity
- ☐ 4. Independent research
- ☐ 5. Group research
- ☐ 6. A stand-alone unit
- ☐ 7. Other, please specify

B4. Do you feel this topic is covered in appropriate depth?

- ☐ 1. Yes ☐ 2. No ☐ 3. Not sure

B5. Do you believe that the mental health challenges of the profession should be part of the undergraduate curriculum?

- ☐ 1. Yes (go to question B6) ☐ 2. No ☐ 3. Not sure

B6. How should it be covered? Tick all that apply

- ☐ 1. A lecture
- ☐ 2. A discussion
- ☐ 3. An activity
- ☐ 4. Independent research
- ☐ 5. Group research
- ☐ 6. A stand-alone unit
- ☐ 7. Other, please specify

B7. Do you consider yourself suitably equipped for the mental health challenges of the paramedic profession?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

PART C: Your thoughts

C1. What do you look forward to the most about commencing your career as a Paramedic?

C2. What do you feel the most confident about commencing your career as a Paramedic?

C3. What do you feel least confident about commencing your career as a Paramedic?


C4. What do you fear the most about commencing your career as a Paramedic?

Thank you for your participation in this questionnaire. Your contribution is of great value and very much appreciated.

All the very best in your career as a member of the most trusted profession.

Appendix D

Veteran Paramedic Recruitment Poster



Are you a Paramedic with 15+ years experience?

Would you like to share your experience to help prepare Paramedic Students for the mental health challenges of your profession?

What will I do?

Share your experience and mental health strategies via interview.
Or
Participate in a focus group to validate the shared experiences and strategies collected during the interviews.

What is it for?

An ECU PhD study exploring the preparedness of Paramedic Students, with a focus on utilising your lived experiences and mental health strategies to raise awareness and prepare our future Paramedics.

Who do I contact?

Lisa Holmes l.holmes@ecu.edu.au

Alexmcgee91.wordpress.com

Appendix E

Veteran Paramedic Semi-Structured Interview Questions

This semi-structured interview form with the recording attempts to capture the personal information and narratives of survival from veteran paramedics, in relation to the mental health challenges of the profession.

The semi-structured interview questions are to guide the interview and are in 2 parts:

Part A: Personal details

Part B: Narrative collection

PART A: Personal details.

A1. Name

A2. Gender

☐ 1. Male

☐ 2. Female

A3. Age

☐ 1. 25 – 29

☐ 2. 30 – 34

☐ 3. 35 – 39

☐ 4. 40 – 44

☐ 5. 45 – 49

☐ 6. Above 50

A4. Years in service as a Paramedic

☐ 1. 5 - 9 years

☐ 2. 10 - 14 years

☐ 3. 15 – 19 years

☐ 4. 20 – 24 years

☐ 5. 25 + years

A5. Highest or current education level

☐ 1. Diploma

☐ 2. Advanced Diploma

☐ 3. Bachelor Degree

☐ 4. Master Degree

☐ 5. PhD/Dr

☐ 6. Others, please specify

A6. Which state have you undertaken the majority of your Paramedic Career?

- | | |
|--|---|
| <input type="checkbox"/> 1. Northern Territory | <input type="checkbox"/> 2. New South Wales |
| <input type="checkbox"/> 3. Queensland | <input type="checkbox"/> 4. South Australia |
| <input type="checkbox"/> 5. ACT | <input type="checkbox"/> 6. Victoria |
| <input type="checkbox"/> 7. Western Australia | <input type="checkbox"/> 8. New Zealand |

PART B: Narrative

B1. What did you look forward to the most as you commenced your career as a paramedic?

B2. What did you feel the most confident about as you commenced your career as a paramedic?

B3. What did you feel least confident about as you commenced your career as a paramedic?

B4. What did you fear the most as you commenced your career as a paramedic?

B5. Tell me about your experiences as a Paramedic?

B6. Tell me how you survived the mental health challenges of the profession?

B7. What strategies did you use?

B8. Is there any advice you would give a novice (student) paramedic?

End of the Interview

Thank participant for their contribution

Confirm consent

Leave mental health support contact details – x4 organisations - Brochures, contact details and websites

Save recording

Appendix F

Veteran Paramedic Focus Group Questions

This focus group question form with the recording attempts to validate the narratives of survival from the veteran paramedics interviewed, in relation to the mental health challenges of the profession.

The focus group questions are to guide the interview and are in 2 parts:

Part A: Representative personal details

Part B: Representative narratives

PART A: Representative personal details.

A1. Gender

1. Male participants

2. Female participants

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

A2. Age of participants

1. 25 – 29

2. 30 – 34

3. 35 – 39

4. 40 – 44

5. 45 – 49

6. Above 50

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

A3. Years in service as a Paramedic of interviewee participants

1. 5 - 9 years

2. 10 - 14 years

3. 15 – 19 years

4. 20 – 24 years

5. 25 + years

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

A4. Highest or current education level of interviewee participants

1. Diploma

2. Advanced Diploma

3. Bachelor Degree

4. Master Degree

5. PhD/Dr

6. Others, please specify

Is this representative?☐ 1. Yes☐ 2. No☐ 3. Not sure**A5. Which state did veteran paramedic interviewees undertaken the majority of their****Paramedic Career**

1. Northern Territory

2. New South Wales

3. Queensland

4. South Australia

5. ACT

6. Victoria

7. Western Australia

8. New Zealand

Is this representative?☐ 1. Yes☐ 2. No☐ 3. Not sure**PART B: Narrative**

B1. What did interviewee participants look forward to the most as they commenced their career as a paramedic?

Is this representative?☐ 1. Yes☐ 2. No☐ 3. Not sure

B2. What did interviewee participants feel the most confident about when they commenced their career as a paramedic?

Is this representative?☐ 1. Yes☐ 2. No☐ 3. Not sure

B3. What did interviewee participants feel least confident about as they commenced their career as a paramedic?

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

B4. What did interviewee participants fear the most as they commenced their career as a paramedic?

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

B5. Listed are very brief statements regarding the experiences of interviewee participants in the paramedic profession.

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

B6. Listed are the themes of the stories of survival from the interviewee participants.

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

B7. Listed are the strategies given by the interviewee participants?

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

B8. Listed is the advice from the interviewee participants to novice (student) paramedics?

| |
|--|
| |
|--|

Is this representative?

☐ 1. Yes

☐ 2. No

☐ 3. Not sure

End of the focus group activity

Validate data and note comments

Thank the focus groups for their contribution

Confirm consent

Leave mental health support contact details – x4 organisations - Brochure, Contact details and Websites

Save recording

Appendix G

Informed consent for Survey Participants



Dear Research participants

You are invited to participate in this survey of “Undergraduate Paramedicine Degree Program Coordinators”, part of the requirement for PhD study, School of Medical Science at Edith Cowan University, 270 Joondalup Drive, Joondalup, Perth, WA 6027.

The purpose of this study is to explore the preparedness of undergraduate novice (student) paramedics for the mental health challenges of the paramedic profession. This survey will take approximately fifteen minutes to complete. Your participation in this research is very much appreciated and completely voluntary. You may decline to answer any question. You should also be aware that you have every right to withdraw from this research process at any time.

ECU Human Research Ethics Committee has approved this research. Ensuring confidentiality and anonymity is part of the researcher’s responsibility. All data provided will be used only in the aggregate without identifying any person or organisation at any time and any place. Other than my supervisors, no one will have any access to any data collect during this research.

If you require any further information concerning this research, please contact me:

Lisa Holmes
School of Medical Science
Edith Cowan University
270 Joondalup Drive, Joondalup
Western Australia, 6027
Email: l.holmes@ecu.edu.au

If you have any concerns or complaints about the research project and wish to talk to an independent person, you may contact the:

Research Ethics Officer
 Edith Cowan University
 100 Joondalup Drive, Joondalup
 Western Australia, 6027
 Phone: (08) 6304 2170
 Email: research.ethics@ecu.edu.au

Informed Consent Document

I, the participant, have read the information above and clearly understand the contents provided. I also am informed that I have a full right to withdraw from this study at any time.

I willingly agree to participate in this study.

| | |
|-------------------|------------|
| Participant | Date |
| Researcher | Date..... |

Further information on the study can found overleaf

Exploring the preparedness of novice paramedics for the mental health challenges of the paramedic profession.

Using the wisdom of the Elders.

Paramedics have been voted the most trusted professionals for the last decade but shockingly have one of the highest rates of work related stress, anxiety and suicide (Readers Digest, 2014; Maguire, 2014). This study seeks to investigate the preparedness of undergraduate novice (student) paramedics, for the mental health challenges of the profession and utilise the experiences of veteran paramedics. There is currently no formal requirement for its inclusion in accredited undergraduate degree programs, despite there being specific paramedic professional competencies.

This survey is conducted to identify if there is any inclusion of preparation for the mental health challenges of the profession, within the accredited paramedicine undergraduate degree programs throughout Australia. A qualitative narrative study will then be undertaken, whereby stories of survival will be collected from veteran paramedics in order to inform future provision within the learning phase.

By exploring this area the research will:

- Raise awareness of the need to prepare undergraduate novice (student) paramedics for the mental health challenges of the profession
- Utilise the experiences of veteran paramedics to provide opportunities to openly engage and reflect on this area as part of the undergraduate degree curriculum
- Give veteran paramedics the opportunity to share their experiences to positively benefit novice (student) paramedics
- Enable accredited undergraduate degree programs to meet the specific mental health related Paramedic Professional Competency Standards
- Encourage an openness to mental health issues and support through the education of future paramedics, managers and policymakers
- Promote further study in this area

Appendix H

Informed consent for interview participants



Dear Research participants

You are invited to participate in this interview of “Veteran Paramedic’s”, part of the requirement for PhD study, School of Medical Science at Edith Cowan University, 270 Joondalup Drive, Joondalup, Perth, WA 6027.

The purpose of this study is to explore the preparedness of undergraduate novice (student) paramedics for the mental health challenges of the paramedic profession. This recorded interview will take approximately one hour, if necessary and appropriate further interview may be requested. The data collected from this interview may be used for publication as part of this and future research, all personal and identifying characteristics will be removed.

Your participation in this research is very much appreciated and completely voluntary. You may decline to answer any question. You should also be aware that you have every right to withdraw from this research process at any time.

It is important to acknowledge that interviews of this nature may bring both positive and negative memories to mind, relevant information will be provided for you to access appropriate support.

ECU Human Research Ethics Committee has approved this research. Ensuring confidentiality and anonymity is part of the researcher’s responsibility. All data provided will be used only in the aggregate without identifying any person or organisation at any time and any place. Other than my supervisors, no one will have any access to any data collect during this research.

If you require any further information concerning this research, please contact me:

Lisa Holmes
School of Medical Science
Edith Cowan University
270 Joondalup Drive, Joondalup
Western Australia, 6027
Email: l.holmes@ecu.edu.au

If you have any concerns or complaints about the research project and wish to talk to an independent person, you may contact the:

Research Ethics Officer
Edith Cowan University
100 Joondalup Drive, Joondalup
Western Australia, 6027
Phone: (08) 6304 2170
Email: research.ethics@ecu.edu.au

Informed Consent Document

I, the participant, have read the information above and clearly understand the contents provided. I also am informed that I have a full right to withdraw from this study at any time.

I willingly agree to participate in this study.

Participant Date

Researcher Date.....

Further information on the study can found overleaf

Information on the study:**Exploring the preparedness of novice paramedics for the mental health challenges of the paramedic profession.***Using the wisdom of the Elders.*

Paramedics have been voted the most trusted professionals for the last decade but shockingly have one of the highest rates of work related stress, anxiety and suicide (Readers Digest, 2014; Maguire, 2014). This study seeks to investigate the preparedness of undergraduate novice (student) paramedics, for the mental health challenges of the profession and utilise the experiences of veteran paramedics. There is currently no formal requirement for its inclusion in accredited undergraduate degree programs, despite there being specific paramedic professional competencies.

A survey was conducted to identify current levels of preparation for the mental health challenges of the profession, within the accredited paramedicine undergraduate degree programs throughout Australia.

This interview is part of the qualitative narrative study, whereby your experiences and stories of survival will be collected to inform future provision within the learning phase.

By exploring this area the research will:

- Raise awareness of the need to prepare undergraduate novice (student) paramedics for the mental health challenges of the profession
- Utilise the experiences of veteran paramedics to provide opportunities to openly engage and reflect on this area as part of the undergraduate degree curriculum
- Give veteran paramedics the opportunity to share their experiences to positively benefit novice (student) paramedics
- Enable accredited undergraduate degree programs to meet the specific mental health related Paramedic Professional Competency Standards
- Encourage an openness to mental health issues and support through the education of future paramedics, managers and policy makers
- Promote further study in this area

Appendix I

Informed consent for focus group participants



Dear Research participants

You are invited to participate in this focus group meeting of “Veteran Paramedic’s”, part of the requirement for PhD study, School of Medical Science at Edith Cowan University, 270 Joondalup Drive, Joondalup, Perth, WA 6027.

The purpose of this study is to explore the preparedness of undergraduate novice (student) paramedics for the mental health challenges of the paramedic profession. This recorded activity will take approximately one hour. The data validated and collected from this activity may be used for publication as part of this and future research, all personal and identifying characteristics will be removed.

Your participation in this research is very much appreciated and completely voluntary. You may decline to answer any question. You should also be aware that you have every right to withdraw from this research process at any time.

It is important to acknowledge that activity of this nature may bring both positive and negative memories to mind, relevant information will be provided for you to access appropriate support.

ECU Human Research Ethics Committee has approved this research. Ensuring confidentiality and anonymity is part of the researcher’s responsibility. All data provided will be used only in the aggregate without identifying any person or organisation at any time and any place. Other than my supervisors, no one will have any access to any data collect during this research.

If you require any further information concerning this research, please contact me:

Lisa Holmes
School of Medical Science
Edith Cowan University
270 Joondalup Drive, Joondalup
Western Australia, 6027
Email: l.holmes@ecu.edu.au

If you have any concerns or complaints about the research project and wish to talk to an independent person, you may contact the:

Research Ethics Officer
Edith Cowan University
100 Joondalup Drive, Joondalup
Western Australia, 6027
Phone: (08) 6304 2170
Email: research.ethics@ecu.edu.au

Informed Consent Document

I, the participant, have read the information above and clearly understand the contents provided. I also am informed that I have a full right to withdraw from this study at any time.

I willingly agree to participate in this study.

Participant Date

Researcher Date.....

Further information on the study can found overleaf

Exploring the preparedness of novice paramedics for the mental health challenges of the paramedic profession.

Using the wisdom of the Elders.

Paramedics have been voted the most trusted professionals for the last decade but shockingly have one of the highest rates of work related stress, anxiety and suicide (Readers Digest, 2014; Maguire, 2014). This study seeks to investigate the preparedness of undergraduate novice (student) paramedics, for the mental health challenges of the profession and utilise the experiences of veteran paramedics. There is currently no formal requirement for its inclusion in accredited undergraduate degree programs, despite there being specific paramedic professional competencies.

Initially surveys were conducted to identify current levels of preparation for the mental health challenges of the profession, within the accredited paramedicine undergraduate degree programs throughout Australia. In addition, interviews with veteran paramedics were undertaken as part of this qualitative narrative study, whereby experiences and stories of survival were collected. This focus group meeting is to validate the findings to ensure they are representative of the paramedic experiences.

By exploring this area the research will:

- Raise awareness of the need to prepare undergraduate novice (student) paramedics for the mental health challenges of the profession
- Utilise the experiences of veteran paramedics to provide opportunities to openly engage and reflect on this area as part of the undergraduate degree curriculum
- Give veteran paramedics the opportunity to share their experiences to positively benefit novice (student) paramedics
- Enable accredited undergraduate degree programs to meet the specific mental health related Paramedic Professional Competency Standards
- Encourage an openness to mental health issues and support through the education of future paramedics, managers and policy makers

Promote further study in this area

Appendix J

Support Information for Participants

There are many agencies and groups that can offer you and your colleague's further support and information. The following list provides the details of just a few:

Beyond Blue

www.beyondblue.org.au/

Beyond blue is the national initiative to raise awareness of anxiety and depression, providing resources for recovery, management and resilience.

Helpline: 1300 22 4636

Online chat and email support is also available

SANE Australia

www.sane.org/

SANE Australia is a national charity helping all Australians affected by mental illness lead a better life – through support, training, and education.

Helpline: 1800 18 SANE (7263)

Online chat is also available

Sirens of Silence Charity Inc.

www.sirens of silence.org.au

This charity was founded in 2015 to raise awareness of Anxiety, Depression, PTSD and Suicide Prevention within the Ambulance Industry.

The Black Dog Institute

www.blackdoginstitute.org.au

The **Black Dog** Institute is a world leader in the diagnosis, treatment and prevention of mood disorders such as depression and bipolar disorder. The website contains lots of information, links and access to support groups.

Crisis Assessment Teams

<https://www.health.govt.nz/your-health/services-and-support/health-care-services/mental-health-services/crisis-assessment-teams>

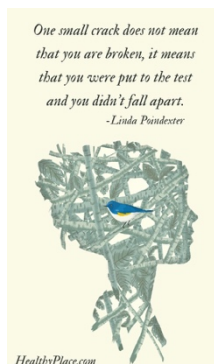
This website provides information on local community services across new Zealand.

Samaritans NZ

<http://www.samaritans.org.nz/>

This organisation offers confidential support to anyone who is feeling depressed, distress, lonely or contemplating suicide.

Helpline: 0800 726 666



Appendix H

Link to article in the Australasian Journal of Paramedicine:

Student paramedic anticipation, confidence and fears: Do undergraduate courses prepare student paramedics for the mental health challenges of the profession?

Lisa Holmes, Russell Jones, Richard Brightwell, Lynne Cohen

<https://ajp.paramedics.org/index.php/ajp/article/view/545>

Nothing was going to burst my egotistical bubble. As far as I could see the armour, the thick skin I had donned for nearly 15 years was still intact. I was a paramedic, a life saver, the knight in shining armour..... the hero. Hero's always come out on top...don't they?

Chris Mawson (2015, p. 194)

What we do isn't normal-so why do we think it's OK to be comfortable with that? Why is it any surprise to hear that first responders are dying every month because they can't take the memories any longer? I'm uncomfortable with how comfortable we've become.

Natalie Harris (2017, p. 76)