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Preparing for death, dying and bereavement care: student paramedic perspectives on a novel learning module

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ABSTRACT

Emergency ambulance personnel are commonly the last health professionals to care for people in the moments before death and the first to provide families with bereavement care, particularly when death is sudden or unexpected. Despite this, paramedic training seldom discusses, simulates or assesses termination of resuscitation, or breaking bad news to family. This paper describes paramedicine students' experiences of a dedicated learning module designed to prepare them for patient death and caring for bereaved families. A lecture, small-group case studies and actor-led simulations were embedded into paramedic degree students' final year of study. Students shared their perspectives on learning about death, dying, and bereavement through focus groups or an online survey. Students found talking about death and supporting acute grief unfamiliar and uncomfortable. Eager to provide reassurance in a crisis, many expressed ongoing concerns about saying the wrong thing. Participants wanted greater integration of challenging communication and cultural responsiveness throughout their degree, noting opportunities for learning during clinical placements were precious but limited. Actor-led simulation of patient death and family grief presented an important but unfamiliar divergence from standardized, action-packed resuscitation scenarios. Greater acknowledgement of death, dying and bereavement throughout training could better prepare paramedics for the realities of emergency ambulance work.

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Introduction

Most Australians and New Zealanders die out of hospital settings, commonly in private residences or aged residential care [1]. As populations age, emergency ambulance services play an increasingly important role in community-based care for people nearing the end of life [2–4]. Ambulance practice has traditionally centred on rapid, clinician-led life-saving interventions, which can contrast with the patient-centred, holistic approach underpinning palliative care [5].

Paramedics are experts in resuscitation, and simulation is widely used to develop these skills [6,7]. With a focus on high-fidelity technical and clinical skills development, these scenarios rarely reflect the sometimes chaotic realities of an emergency response scene. Around 80–85% of people in cardiac arrest who are attended by Australian and New Zealand emergency ambulances die on scene [8]. Key contextual information about the patient is often hard to elicit, and events sudden or unexpected, making the decision to terminate resuscitation challenging [9–11]. Adequate preparation and support are crucial for both the quality of care and the well-being of ambulance personnel [12–14]. Despite this, research consistently identifies a gap in paramedic education and guidance relating to patient death, dying, and bereavement care [15–19].

This paper describes an innovative learning module designed to address this gap and presents a mixed-methods formative evaluation of student paramedic experiences. The research aimed to explore:

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- How student paramedics responded to a novel module on termination of resuscitation and patient death; and
- How learning about death, dying, and bereavement could be further strengthened within paramedic education.

Methods

Education module

The module, developed in response to student paramedics' concerns [20] is embedded within an intermediate life support course in the penultimate semester of a paramedicine degree. An initial two-hour session includes didactic teaching about resuscitation decision-making and small group case studies to explore termination of resuscitation and management of the deceased, bereaved family members and co-responders. A second session of learning consists of smaller tutorial groups undertaking two simulated scenarios:

1. A middle-aged, usually well adult family member found by the family in bed, in the morning, with lividity.
2. An actively dying adult family member who has recently been discharged from hospital with a pending referral to hospice.

Simulations were undertaken in familiar, dedicated simulation environments to replicate an emergency ambulance response to a typical home setting. These include simple home furnishings, manikins as patients, a high-fidelity patient monitor simulator and operational-grade ambulance equipment. Unique to this module, two actors were present in the simulation room in each scenario, playing the role of family members. These actors drew on their experience as paramedics with diverse cultural backgrounds to depict realistic family responses. Most of the time dedicated to each scenario is spent pre-briefing and de-briefing. Students were asked to volunteer to be the two-person 'responding crew', whilst others in the tutorial group observed (along with faculty) via a one-way mirror, from the control room. All students (responding and observing), actors and faculty participated in debriefs, which followed an evidence-based approach incorporating reaction, recollection, reflection, analysis and application [21].

Research design

A convergent QUAL-quant mixed methods design [22] was used to elicit student paramedic perspectives on learning about death, dying and bereavement care. Research design and data analysis were underpinned by a critical realist epistemological position [23]. All students who had access to the module were invited to participate in an online survey or focus group to describe their experiences and perceptions of learning in this area. Two cohorts of students were recruited: one in late 2024 and the other in early 2025.

Qualitative data collection

Focus group transcripts were the primary source of data, as these forums yielded rich and insightful discussions. Four open-ended questions (two in sentence completion format) were included in the survey. Survey responses quoted in the results of this paper are coded for each question as per Table 1.

Table 1. Questionnaire open-ended items.

Open-ended question	Quote codes
What has been most useful in preparing me for patient death so far, has been …	(Best preparation)
When it comes to patient death, what concerns me most is …	(Greatest concern)
What do you think is most important to help future paramedics prepare for termination of resuscitation and patient death?	(Important for future)
Is there anything else you would like to add, or think we should have asked about, regarding the termination of resuscitation or patient death?	(Additional thoughts)

Quantitative data collection

The survey tool was adapted from a measure previously piloted and validated with undergraduate student paramedics in Aotearoa, New Zealand [20]. The Likert scale measured students' confidence and concerns regarding the termination of resuscitation and patient death. The survey was included to capture the perspectives of remote students and others who may have had limited engagement with the learning module and/or focus groups. Due to the self-selected and anonymous nature of the survey respondent sample, quantitative data analysis was limited to descriptive statistics, including frequencies and Likert response distributions.

Data analysis and integration

Focus group recordings were manually transcribed by the first author to facilitate initial immersion and familiarization, and then imported into NVivo [24] for coding. Open-ended survey responses were also included in the qualitative data set. Analysis of qualitative data was guided by reflexive thematic analysis [25]. Initial coding and grouping were primarily undertaken by the first author. Thematic development was conducted in consultation with the second author and focus group facilitator. This stage of analysis included revisiting specific focus group discussions, identifying impactful quotes and moments of resonance or disagreement within focus group discussions, and identifying convergence and divergence with open-ended survey responses. Later, both thematic refinement and naming, as well as the selection of illustrative quotes, were undertaken in collaboration with all co-authors of this paper. Reporting in this manuscript was guided by GRAMMS [26] and RTARG [27] within the limitations of editorial parameters.

Ethical considerations

Ethical approval was obtained from both the University of Auckland Human Participants Ethics Committee [UAHPEC Ref: 27904] and the Auckland University of Technology Ethics Committee [AUTEC Ref: 24/205]. Student participation in the research was voluntary, and faculty were not involved in direct recruitment or data collection. Focus groups were conducted by a member of the research team who was not known to the student participants and was not involved in any of their teaching, learning, or assessment. Limited demographic data were collected and reported collectively to protect the anonymity of survey respondents. Focus group participants completed written consent forms, whilst online survey participants clicked to indicate they understood the participant information statement 'By completing this questionnaire, you will be indicating your consent to participate in this research.' Focus group participant demographics were not collected due to ethical concerns about identifying students.

Results

Twenty-three students participated in one of four face-to-face focus groups, each lasting 45–60 min. Fifty-one responses were included in the survey data analysis. Six incomplete surveys (<50% of questions answered) were excluded. The survey respondent demographics are presented in Table 2.

Confidence, experience and learning preferences varied, reflecting a diverse cohort with differing personal and professional experiences. As shown in Figure 1, survey respondent confidence was highest for identifying cardiac arrest and identifying and verifying patient death. Lowest self-reported confidence was in withholding or terminating resuscitation and providing cultural support to bereaved relatives. Four main themes were developed from the combined focus group transcripts and open-ended question responses. These themes are summarized in Table 3 and further described, with illustrative quotes, below.

No one really talks about death

Focus group participants and survey respondents pointed out that there was little prior discussion of death, dying and bereavement across their paramedicine degree. For many, this module was the first time they had simulated or even considered withholding or terminating resuscitation.

Table 2. Survey respondent sample.

	n **(%)**
Age groups (years)	
School-leavers (<26)	32 (63%)
Mid-life (26–44)	15 (29%)
Mature (45+)	4 (8%)
Gender	
Female	38 (75%)
Male	11 (2%)
Gender diverse	2 (4%)
Ethnicity [multiple selections possible]	
NZ European	43 (84%)
Māori	7 (14%)
Other	9 (18%)
Prefer not to say	3 (6%)
Current or past health employment experience	
Full-time emergency ambulance	11 (22%)
Part-time emergency ambulance	8 (16%)
Other healthcare role	13 (25%)
No previous experience	19 (37%)

> 'I feel like it's a very taboo topic. No one really talks about death and finding the right things to say to the family' (Focus group participant)

Several students wanted better acknowledgement of dying and bereavement throughout their degree and identified simulation of patient death as the single most important action to help future paramedics prepare for patient death.

> 'Normalising death in education and being well-aware that ROSC [return of spontaneous circulation] is the minority of outcomes' (Important for future, Survey respondent)

Survey respondents and focus group participants indicated that acknowledgement and validation of death and dying work as an important and growing part of the paramedic role.

> 'Some students are tempted to think that the job of a paramedic is to save lives, so I think that emphasising throughout training that our goal is to do the best for the patient rather than saving them is important to prime students for the reality that not every life can or should be prolonged.' (Survey respondent)

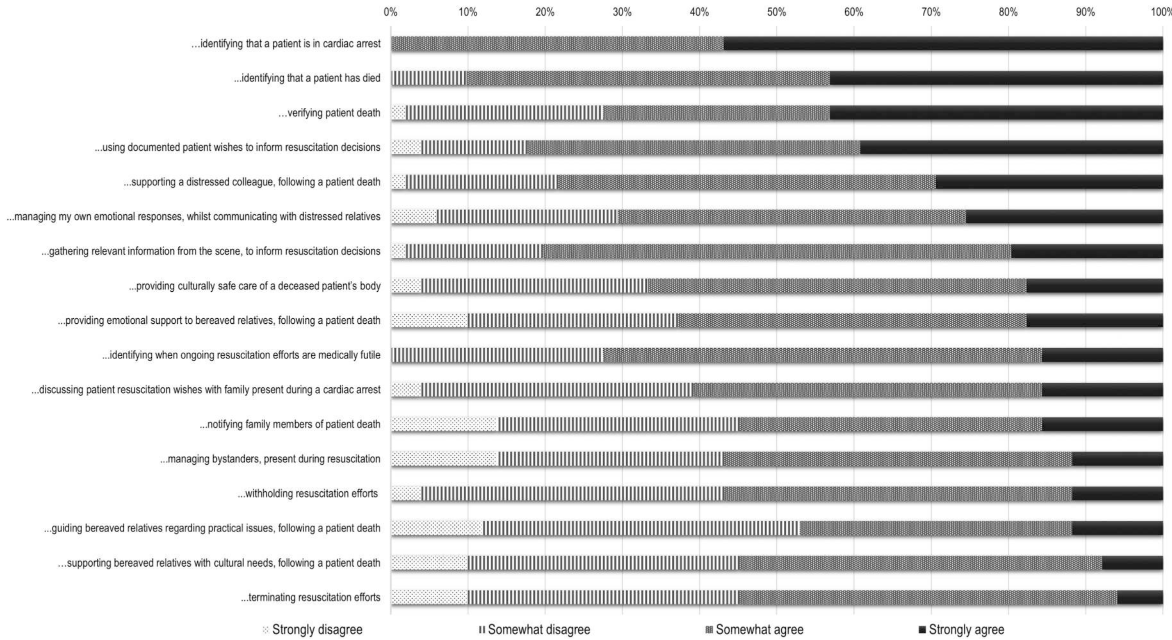

Figure 1. Student paramedic self-rated confidence with termination of resuscitation and patient death.

Table 3. Themes.

Theme	Illustrative quote
Theme 1: No one really talks about death Open discussion of death, dying and bereavement was rare, but welcome.	'Death should be talked about more right through the degree, not just at this stage' (Survey respondent)
Theme 2: Uncomfortable silence Being present with acute grief was very uncomfortable. Many students were worried about what to say, and what not to say.	"You're dancing around the topic, because that's your natural emotion as a human being […] When you see someone in distress, you try, you want to so desperately, say 'it's going to be okay.' You want to make sure that they're okay. You don't want to say 'he's dead.' (Focus group participant)
Theme 3: Responding to diverse grief reactions There was uncertainty about responding to diverse deaths, acute grief reactions and cultural needs, whilst managing personal emotions.	' … but what if it was a four-year-old child and a mother? Like [we should simulate] more situations where it's going to be very emotionally charged … it's going to be easy for you to forget or say the wrong thing, because it's just another level, when it's, you know, a screaming mother and a child.' (Focus group participant)
Theme 4: Precious clinical learning opportunities Students noted opportunities for mentorship were limited and wanted to be able to observe expert practice.	'Paramedics assume that we just know how to talk to a family and tell them that someone's passed away or died. So they … don't really take us through that process.' (Focus group participant)

Uncomfortable silence

Giving time for actor family members to process bad news and being present during acute grief reactions was unfamiliar and uncomfortable for many students. Students usually demonstrated competence in simulations through quick and decisive action, which contributed to a need to act, say or do things. Simulating the withholding or withdrawal of advanced life support gave students the opportunity to practice empathetic presence rather than technical skills:

> ' … And your mind's racing a million miles an hour because you've got this checklist in your mind from a clinical perspective. And it's like, ' Okay, spiritually, let's just pause.' Let's actually give the family the space. I could understand how you would feel, like: 'Can I just have a minute?' But because we're looking at it from a clinician lens – trying to tick things off, because our entire degree is based on algorithms. This is the one time where we can go – Okay, let's just all just stop for a second. Let's give them their time when they're ready.' (Focus group participant)

Talking to people who are distressed is a fundamental skill for paramedics, and having actors present in scenarios really challenged the students. Talking to people who are distressed is a fundamental skill for paramedics. The use of actor family members presented a novel opportunity for students to simulate skills for navigating challenging conversations, which differed from their usual methods of demonstrating competence during simulations (demonstrating technical skills and verbalizing assessment and decision-making). Pivoting to the use of language that was appropriate for (lay) family members was difficult. Many found it uncomfortable or even unbearable to say the patient had died. A fear of saying something catastrophic or 'wrong' was prevalent in both survey responses and focus group discussions. Eight survey respondents identified saying something 'wrong' as their greatest concern.

> ' … I always want to do what is right for the patient and their family, I am worried that I may say the wrong thing to family.' (Greatest concern, Survey respondent)

Students who participated in the simulation tutorials identified that simulations provided a safe opportunity to practice and reflect on strategies for breaking bad news and communicating with the acutely bereaved.

> 'Doing simulations and being in an environment where it's ok to make mistakes or say the wrong things and get feedback on it.' (Best preparation, Survey respondent)

Responding to grief

An open-ended question invited students to reflect on their greatest concern, and nearly half of all responses referred to the emotions and behaviours of family members. These concerns centred on possible conflict when terminating resuscitation and the students' responses to family members' acute grief reactions. Students recognized that family responses to death are variable and influenced by context and culture. This consideration of culture contrasted with the standardized approach to resuscitation.

> ‘ … I feel like going into a resus … it doesn’t make any difference to me what religion or culture they are, because we do it exactly the same. And then afterwards is when [culture] matters … asking them what to do afterwards with the body or whatever.’ (Focus group participant)

Students valued reflecting on scenarios where actors portrayed cultural and spiritual needs. This helped them to consider diverse cultural customs surrounding death and dying but also identified a lack of knowledge and confidence. Students requested additional training opportunities to address the cultural needs of patients and families throughout the degree programme.

I came straight out of high school, got into this degree, and then, through placements, I got exposed to different people, different cultures, and different situations. It’s good to be more open to what other people have to say and their beliefs, their values in life … We all have different ways of expressing our grief and how we want to go about, you know, after somebody’s died. So, it’s been a good eye-opener, I think. (Focus group participant)

Precious clinical learning opportunities

Clinical placement and formal mentoring were considered some of the most helpful learning experiences relating to termination of resuscitation and patient death. However, 9 survey respondents (18%) reported having no formal mentoring in this area. Several focus group participants mentioned they were rarely involved in talking to bereaved family and didn’t always have access to safe debriefing opportunities after termination of resuscitation.

> ‘It’s definitely easier to talk with the class and lecturers than on the road. Because sometimes it’s mentors you haven’t worked with before. It’s the first job you’ve gone to with them. Maybe they don’t really know where you’re at with your learning, so they like they brush over the debrief … So the classroom setting is a really safe and valuable space for talking and learning.’ (Focus group participant)

Several focus group participants highlighted the desire to observe expert care of bereaved family. Acknowledging the limited opportunities for mentoring during clinical placements, participants suggested that faculty could repeat scenarios, acting in the role of the responding crew, or record video exemplars for reference.

> ‘It will be really nice to have a, like, a shining just like gold standard example … [faculty] go and show us how they would deal with a family in grief or something … showing us an example of how it works and doing it really well, would be really valuable.’ (Focus group participant)

Discussion

As part of a formative evaluation, this study has described students’ perspectives on a novel module on the termination of resuscitation and patient death. In this discussion, we explore key findings in relation to existing literature and identify opportunities for improvement in this important area of education.

Student experiences

Simulation has been widely adopted in healthcare education to develop essential end-of-life communication skills, particularly in palliative care, aged care, and intensive care contexts[28,29]. Simulation of sudden and unexpected death in emergency settings is less common, perhaps due to educator concerns about adverse impacts on student well-being or resuscitation self-efficacy, but these concerns are not evidence-based [30–32].

Students in this study valued this module of learning and sought greater integration, acknowledgement, rehearsal, and discussion of care involving death, dying and bereavement. Effective communication, cultural responsiveness, and empathy are fundamental skills in paramedic care. Self-awareness and emotion regulation are critical to paramedic wellbeing.

Opportunities to improve learning

Participants were keen for more opportunities to practice important and challenging communication. They wanted better integration, acknowledgement, discussion and simulation of frailty, death and dying across

the paramedic curriculum. Diverse actors drawing from their own cultural heritage provided particularly useful learning. Greater cultural responsiveness is needed across paramedicine practice, [33,34] and is particularly crucial in the context of death, dying and bereavement [35]. Increasing opportunities to observe skilled, experienced professionals responding to challenging communication scenarios would be valuable. This could be achieved through videos, role-plays or having faculty repeat scenarios and demonstrate how they would respond.

Simulation learning is important, but it is also resource-intensive in an era when student attendance in class is low, and interest in asynchronous learning modalities is high [36]. It is unclear how remote learning modalities impact professional and personal development, including communication and collaboration skills [37,38]. The focus of simulation assessment is often on technical skills and clinical decision-making. The scenarios in this module focused on fundamental non-technical skills, including team leadership, challenging communication, cultural responsiveness, ethical complexity and emotion regulation [39–41]. Australia and New Zealand's paramedicine workforces are younger than ever, with increasing attrition rates [42–44]. Paramedicine students who enter the degree directly from high school may benefit most from this learning, as they are likely to have less personal and professional exposure to death, grief, and challenging conversations [20]. Palliative, end-of-life and bereavement care is an increasing part of emergency ambulance work, but death in emergency care can be framed as a failure, at odds with paramedic identity as lifesavers [5]. This education module gave paramedic students a chance to value and respond to family, cultural and psychological needs. Integration of palliative care principles at the end of life may strengthen other person-centred care in emergency medical services [45,46].

Strengths and limitations

Whilst simulation of palliative care has been widely adopted and studied, little has been published evaluating simulation of sudden and unexpected death and termination of resuscitation in the emergency ambulance context. Student perceptions of learning are a crucial component of educational research and development. It is particularly important to explore students' experiences in challenging and emotionally charged areas of professional development. This study employed mixed methods to explore student experiences, providing depth and detail while also offering a relatively broad reach, with 46% of students participating. Unavoidably, the samples of student participants and respondents were self-selected and may not represent the wider student paramedic population.

Conclusion

Healthcare education must evolve to meet population, professional, system and workforce needs. Previously, paramedics learning about death, dying, and bereavement have been heavily reliant on mentoring and on-the-job experience. However, changes to paramedic work and workforce have reduced opportunities for apprentice-style learning through social modelling, coaching, and debriefing. It is neither realistic nor acceptable to expect that such an important part of emergency ambulance work is solely learnt 'on the road.' Therefore, dedicated teaching using novel approaches is needed to prepare paramedic students for the emotional and cultural complexities of end-of-life care.

Ethical considerations

Ethical approval was obtained from both the University of Auckland Human Participants Ethics Committee [UAHPEC Ref: 27904] and the Auckland University of Technology Ethics Committee [AUTEC Ref: 24/205].

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Author contributions

CRediT: **Natalie Elizabeth Anderson:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Visualization, Writing – original draft, Writing – review & editing; **Eillish Satchell:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Visualization, Writing – original draft, Writing – review & editing; **Bruce Tseng:** Conceptualization, Funding acquisition, Investigation, Resources, Writing – original draft, Writing – review & editing; **Brayden Shaw:** Conceptualization, Funding acquisition, Investigation, Writing – original draft, Writing – review & editing; **Mel McAulay:** Conceptualization, Funding acquisition, Investigation, Resources, Writing – original draft, Writing – review & editing.

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Data availability statement

The data collected in this study are potentially identifiable, and participants did not consent to the wider sharing of their data.

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References

[1] Adair T. Who dies where? estimating the percentage of deaths that occur at home. BMJ glob health. 2021 Sep;6(9).
[2] Fogg C, England T, Daniels H, et al. Prevalence and severity of frailty amongst middle-aged and older adults conveyed to hospital by ambulance between 2010 and 2017 in Wales. Age and Ageing. 2025 May 3;54(5).
[3] Anderson NE, Robinson J, Moeke-Maxwell T, et al. Paramedic care of the dying, deceased and bereaved in Aotearoa, New Zealand. Progress in Palliative Care. 2021;29(2).
[4] Blackmore TA. What is the role of paramedics in palliative and end of life care? Palliative Medicine. 2022;36(3):402–4.
[5] Juhrmann ML, Butow PN, Platts CM, et al. It breaks a narrative of paramedics, that we're lifesavers': A qualitative study of health professionals', bereaved family members' and carers' perceptions and experiences of palliative paramedicine. Palliative Medicine. 2023 Sep;37(8):1266–79.
[6] Diamond A, Bilton N. The current state on the Use of simulation in paramedic education. Australas J paramedicine. 2021;18:1–5.
[7] Bienstock J, Heuer A, Zhang Y. Simulation-Based training and Its Use amongst practicing paramedics and emergency medical technicians: An evidence-based systematic review. International journal of paramedicine; 2022 (1):12–28.
[8] Bray J, Howell S, Ball S, et al. The epidemiology of out-of-hospital cardiac arrest in Australia and New Zealand: A binational report from the Australasian resuscitation outcomes consortium (Aus-ROC). Resuscitation. 2022;172:74–83.
[9] Eli K, Huxley CJ, Gardiner G, et al. Ethical issues in termination of resuscitation decision-making: an interview study with paramedics and relatives of out-of-hospital cardiac arrest non-survivors. BMJ open; 2024 19;14(11): e085132.

[10] Milling L, Kjaer J, Binderup LG, et al. Non-medical factors in prehospital resuscitation decision-making: a mixed-methods systematic review. Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine. 2022;30(1):24.
[11] Milling L, Lassen AT, Mikkelsen S. Transparency in out-of-hospital cardiac arrest resuscitation: decision-making when patients are in the grey area between treatment and futility. European Journal of Emergency Medicine. 2021;28(6):414–5.
[12] Campos A, Ernest EV, Cash RE, et al. The association of death notification and related training with burnout among emergency medical services professionals. Prehospital Emergency Care. 2021;25(4):539–48.
[13] Satchell E, Gott M, Moeke-Maxwell T, et al. Family experiences of out-of-hospital deaths where ambulance services respond in aotearoa New Zealand. Paramedicine. 2026;23(2):82–93.
[14] Huxley C, Reeves E, Kearney J, et al. Relatives' experiences of unsuccessful out-of-hospital cardiopulmonary resuscitation attempts: a qualitative analysis. Bmc Emergency Medicine. 2024;24(1):208.
[15] Anderson NE, Slark J, Gott M. When resuscitation doesn't work: A qualitative study examining ambulance personnel preparation and support for termination of resuscitation and patient death. International Emergency Nursing. 2020;49:100827.
[16] Somers A. Are paramedic graduates effectively prepared for death? A scoping review. J paramedic pract. 2021;13(10):408–13.
[17] Satchell E, Gott M, Juhrmann M, et al. Emergency ambulance care of families during death, dying, and bereavement: A document analysis of Australian and Aotearoa New Zealand clinical practice guidelines. Australas emerg care. 2025.
[18] Risson H, Beovich B, Bowles KA. Paramedic interactions with significant others during and after resuscitation and death of a patient. Australas emerg care. 2022.
[19] Cameron C, Lunn TM, Lanos C, et al. Dealing with dying – progressing paramedics' role in grief support. Progress in Palliative Care. 2021;29(2):91–7.
[20] Anderson NE, Slark J, Faasse K, et al. Paramedic student confidence, concerns, learning and experience with resuscitation decision-making and patient death: A pilot survey. Australas emerg care. 2019;22(3):156–61.
[21] Wilson A, Asbury E. Improving simulation debriefing in paramedic education: the paramedic debrief model. Australas J paramedicine. 2019;16:1–10.
[22] Creswell JW, Plano Clark VL. Designing and conducting mixed methods research. Thousand Okas, CA: Sage publications; 2017.
[23] Fletcher AJ. Applying critical realism in qualitative research: methodology meets method. International Journal of Social Research Methodology. 2016;20(2):181–94.
[24] Lumivero. NVivo [14]. 2023.
[25] Braun V, Clarke V. Thematic analysis: A practical guide. Sage; 2021.
[26] O'Cathain A, Murphy E, Nicholl J. The quality of mixed methods studies in health services research. J health serv Res Pol. 2008;13(2):92–8.
[27] Braun V, Clarke V. Supporting best practice in reflexive thematic analysis reporting in palliative medicine: A review of published research and introduction to the reflexive thematic analysis reporting guidelines (RTARG). Palliative Medicine. 2024 Jun;38(6):608–16.
[28] Pun JKH, Cheung KM, Chow CHJ. Teaching end-of-life communication: priorities, challenges, scope – systematic review. Bmj Supportive & Palliative Care. 2023.
[29] Randall D, Garbutt D, Barnard M. Using simulation as a learning experience in clinical teams to learn about palliative and end-of-life care: A literature review. Death Studies. 2018;42(3):172–83.
[30] DeMaria S, Silverman ER, Lapidus KA, et al. The impact of simulated patient death on medical students' stress response and learning of ACLS. Medical Teacher. 2016;38(7):730–7.
[31] Tucker G, Urwin C, Unsworth J. The impact of unsuccessful resuscitation and manikin death during simulation on nursing student's resuscitation self-efficacy: A quasi-experimental study. Nurse Education Today. 2022;119:105587.
[32] Hinzmann D, Wijnen-Meijer M, Corazza L, et al. Experiences of medical students and nursing trainees from unexpected death through simulation training. BMC Medical Education. 2023 Sep 14;23(1):667.
[33] Penney S, Dicker B, Harwood M. Cultural safety in paramedic practice: experiences of Māori and their whanau who have received acute pre-hospital care for cardiac symptoms from paramedics. Journal of Primary Health Care. 2024;16(2):180–9.
[34] Livingston G, Grant J, Sengstock B. Paramedics' understandings and perceptions of cultural safety and the provision of culturally safe care. BMC Health Services Research. 2025 May 6;25(1):647.
[35] Satchell E, Moeke-Maxwell T, Gott M, et al. Experiences of bereaved Māori whānau in out-of-hospital death where emergency ambulance services respond. Kōtuitui: New Zealand Journal of Social Sciences Online; In Press.
[36] Beovich B, Gosling C, Williams B. Lecture attendance among university paramedic students: A sequential mixed methods study. Australas J paramedicine. 2021;18:1–9.
[37] Corman MK, Phillips P, McCann L. The future of paramedic education: problematizing the translucent curriculum in paramedicine. Paramedicine. 2025.

[38] Hosseini A, Ghasemi E, Nasrabadi AN, et al. Strategies to improve hidden curriculum in nursing and medical education: a scoping review. BMC Medical Education. 2023;23(1):658.
[39] Bennett R, Williams B. Desirable non-technical skills for paramedicine: A delphi study. Australas J paramedicine. 2022: 19.
[40] Cormack S, Scott S, Stedmon A. Non-technical skills in out-of-hospital cardiac arrest management: A scoping review. Australas J paramedicine. 2020;17(1).
[41] Campbell I, Hill L, Copson J. Towards an understanding of the embedded nature of everyday ethical reasoning in paramedic education and practice. Paramedicine. 2024;21(4):147–54.
[42] Middleton R, Capper T, King R, et al. Understanding paramedic attrition: A scoping review exploring why paramedics are leaving the profession. Australas emerg care. 2025.
[43] AHPRA Paramedicine Board. Statistics; 2025. Available from: https://www.paramedicineboard.gov.au/News/Statistics.aspx.
[44] Te Kaunihera Manapou Paramedic Council. Ngā Tauanga Manapou: Paramedic Statistics. Wellington, New Zealand: https://paramediccouncil.org.nz; 2025.
[45] Gage CH, Gwyther L, Stassen W. The dynamic of control: A qualitative analysis of the perspectives of patients and family members with palliative care needs on emergency medical services. Palliat care Soc pract. 2026;20:26323524251409346.
[46] Murphy-Jones G, Laverty D, Stonehouse J. Infusing the palliative into paramedicine: Inter-professional collaboration to improve the end of life care response of UK ambulance services. Progress in Palliative Care. 2021;29(2):66–71.