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Chaplaincy and spiritual care in Australian ambulance services: an exploratory cross-sectional study

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ABSTRACT

Ambulance staff wellbeing programs aim to support the bio-psycho-social and sometimes spiritual needs of paramedics. While evidence demonstrates strong connections between spirituality and/or religion to wellbeing outcomes, little is known about spiritual care in ambulance services or its impact. The aim of this study was to investigate paramedics' perspectives on the role and value of Australian ambulance chaplains. A cross-sectional online study of registered paramedics in Australia was conducted between November and December 2022. Analysis of the 150 responses identified that paramedics viewed the chaplain's role as one built on professional caring relationships that provided proactive and reactive care in paramedic workplaces. Chaplains were perceived to promote wellbeing by incorporating emotional, psychological, social and spiritual care, and assisting paramedics to access additional support. Perceived religiousness of chaplains and organisational factors were barriers to paramedics accessing chaplains, while pre-existing relationships and shared experiences positively influenced paramedics decision to seek chaplain support.

KEYWORDS

Ambulance; chaplaincy; emergency medical services; paramedicine; spiritual care

Introduction

Paramedics experience occupational stress resulting in compassion fatigue, burnout, moral distress/injury, depression and anxiety at higher rates than the general population (Copel et al., 2023; Ghahramani et al., 2021; Rosen et al., 2022; Xu et al., 2020). Evidence from research and government enquiries on these impacts have led to enhanced staff support for healthcare workers across Australia, including in Australian ambulance services, with models of care designed to meet the physical, psychological, social, emotional and sometimes spiritual needs of staff (Beyond Blue, 2020; Claringbold et al., 2022; Education Employment References Committee, 2019). However, the inclusion of spiritual care in Australian ambulance services is inconsistent and contentious, with the terms 'chaplaincy' and 'spiritual care' invoking strong and complex responses in individuals.

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Contemporary spiritual care has evolved to include practitioners of all spiritual, religious and non-religious traditions. It aims to support all people (regardless of their beliefs) and promote wellbeing by helping people to find meaning, purpose and connection with themselves, others and/or a higher power (Puchalski et al., 2014). Despite literature demonstrating the positive effects of chaplaincy and spiritual care, preconceived ideas about the role of chaplains and religion, as well as the desire for non-religious support and concerns about chaplains caring for minority communities, continue to impact the use and perceived value of chaplaincy (Cunningham et al., 2017; Layson et al., 2022; 2023; Pater et al., 2021; Roberts et al., 2018).

Contemporary research has also identified positive outcomes resulting from chaplain care, including the promotion of spiritual wellbeing, improved coping and sense of hope, improved quality of life and lower rates of burnout, anxiety and depression (Damen et al., 2020; De Diego-Cordero et al., 2022; Koenig, 2015; Wachholtz & Rogoff, 2013). Additionally, chaplains have been shown to provide care to diverse groups, including staff, patients and bystanders in the community (Aiken, 2022; Gouse, 2017; Grimell, 2022; Torke et al., 2022). Consequently, offering spiritual care is considered an important element in the provision of holistic person-centred care and the promotion of wellbeing by the World Health Organization and other peak health bodies (Peng-Keller et al., 2022; World Psychiatric Association, 2019).

Aim

Previous studies in first responder settings, albeit limited, have identified perceived value of chaplains through the provision of proactive and reactive relational care, often with staff who did not identify with the same spiritual or religious beliefs as the chaplain (Gouse, 2016; Moosbrugger, 2006; Tunks Leach et al., 2022, 2023). However, generalising these findings to the broader ambulance community is problematic as the ambulance context is considerably different, therefore limiting the conclusions that can be drawn (Claringbold et al., 2022). Therefore, the aim of this study was to examine paramedics' perspectives on the role and value of ambulance chaplains across multiple Australian jurisdictions using a quantitative instrument derived from the findings of earlier qualitative studies (Tunks Leach et al., 2020, 2022, 2023).

Methods

Study design, theoretical framework and reporting

This cross-sectional online survey used convenience sampling to recruit paramedics across multiple Australian jurisdictions. The research questions that framed the survey sought to identify: (1) Who uses ambulance chaplains? (2) What is the role of chaplains in Australian ambulance services? (3) What factors impact a chaplain's effectiveness? and (4) How do chaplains add value to Australian ambulance services?

A pragmatic worldview underpinned this study. This ontological stance suggests that participants bring multiple realities and diverse perspectives to the study, and that it is important to hold all worldviews as equal (Creswell & Plano Clark, 2018; Halcomb & Hickman, 2015). Epistemologically, and in line with the pragmatic approach, we selected

the research design most appropriate to answering the research questions (Creswell & Plano Clark, 2018; Halcomb & Hickman, 2015). Additionally, a salutogenic theoretical perspective was used to interpret findings, in order to better understand how chaplains promote health, wellbeing and coping, along with how they support ill-health (Antonovsky, 1979; Haugan & Eriksson, 2021). The STROBE cross-sectional checklist informed the writing of this paper (von Elm et al., 2007).

Setting

This study took place in jurisdictional and private paramedic organisations across all eight Australian states and Territories. Australian paramedics provide emergency and primary care in ambulance services, clinics and hospitals, as well as in non-clinical areas like education, research and public health (Paramedicine Board, 2022; Williams et al., 2021). Paramedics in Australia are tertiary-qualified practitioners who are registered with the Australian Health Practitioner Regulation Agency (AHPRA). They have diverse skills allowing them to practice independently or under medical direction to provide healthcare to patients, frequently in unpredictable and dynamic settings (Ross et al., 2022; Williams et al., 2021).

At the time of this publication, chaplains were included as part of staff support teams in five out of eight Australian States and Territories, with New South Wales employing the highest number of chaplains, followed by Victoria, Queensland, the Australian Capital Territory and Northern Territory, overall consistent with population sizes. No chaplains were employed in Tasmania, and no information was available as to whether chaplains were employed in South Australia or Western Australia. While two Australian professional spiritual care organisations have produced frameworks or standards for practice for their members (Spiritual Care Australia, 2023; Spiritual Health Association, 2022), there are no mandatory requirements for chaplain education or licensure in Australia, so the current workforce includes practitioners with Masters Degree qualifications and Clinical Pastoral Education, through to volunteers with no formal chaplain-specific education.

Recruitment

Following ethics approval, social media was used to recruit participants via convenience and snowball sampling over a period of six weeks between November and December 2022. Convenience sampling is the use of a setting or available groups willing to complete the study (in this case, Australian paramedics), while snowball sampling occurred as paramedics themselves shared the link to the survey with peers (Collins, 2010; Parker et al., 2019). The Australasian College of Paramedicine also promoted the study to their members via email and social media.

Participants

Eligible participants were AHPRA-registered paramedics, currently or previously employed by Australian jurisdictional or private companies. Informed consent was sought and implied from all participants by completing and submitting the survey.

Instrumentation

This survey represents Phase 3 of an exploratory sequential mixed methods study. This approach is recommended when little is known about a topic, as is the case with ambulance chaplaincy, and where no previous peer-reviewed studies on the topic have been undertaken (Halcomb & Hickman, 2015). The study began with qualitative semi-structured interviews with paramedics and chaplains (Phase 1). A joint display was used to map qualitative findings from Phase 1 to the design of quantitative questions, resulting in a survey "grounded in the culture and perspectives of the participants" (Phase 2) (Creswell & Plano Clark, 2018; Schneider et al., 2016, p. 87). To ensure face, content and construct validity, the resulting survey was reviewed by an expert panel of seven academics and practitioners representing the fields of paramedicine, spiritual care and epidemiology. The expert panel was asked to provide feedback on the clarity, relevance and structure. Feedback resulted in minor modifications to the survey, before final testing, ethics approval and implementation (Phase 3) (Brink et al., 2012).

While the focus of the overall study was to learn about the role and value of chaplains from the perspective of those who had experience with or would use ambulance chaplains, we felt it was important to also include the perspectives of those who would not use chaplains to gain a deeper understanding of the issues and better answer the research questions. Consequently, at the beginning of the survey participants were stratified into two groups based on their responses to the question: "Would you ever seek support from an ambulance chaplain?" Participants who responded "no" were presented with three questions, while participants who responded "yes" were presented with twenty-four questions (Appendix 1). Questions about demographic characteristics were included at the end of the survey as was the question "Is there anything further you wish to tell us about chaplains in ambulance organisations?" to which participants could provide free-text responses.

Ethics approval

UTS Health and Medical Research Ethics Committee approved this research project (ETH22-7416).

Data collection

Data were collected and managed using REDCap electronic data capture tools (Harris et al., 2019) hosted at the University of Technology Sydney (UTS) in Australia. Prior to commencing the study participants were presented with a Participant Information Form and consent was implied on submission of a completed survey. No data from incomplete surveys were included in this study. Privacy and continentality were assured through no identifying data being collected (eg. IP address), and any potentially identifying data were removed during data cleaning and prior to publication.

Sample size

A sample size of 378 was calculated using an Australian Government sample size calculator, based on the Australian paramedic population size of 22,500 and a confidence interval of 95% (Australian Bureau of Statistics, 2022).

Data analysis

Data were downloaded, cleaned and analysed in IBM SPSS Statistics (Version 29). Chi-square analyses were conducted on past and future use of chaplain support with age, years of service and spiritual and religious identity. Cramer's V was used to determine the strength of associations (Kirkwood & Sterne, 2003) and interpreted as weak if the effect size (ES) was ≤ 2, moderate if ES was 0.2-0.8, and strong if ES was >0.8 (Ferguson, 2016). Statistical significance for descriptive data were established when $p = < .05$ (Kirkwood & Sterne, 2003). Descriptive analysis was conducted on remaining data. Where a 5-point Likert scale was used in the survey, explicit categories were reported by combining 'strongly agree' and 'agree' ('explicit agreement'), 'very important' and 'important ('explicit importance'), 'strongly disagree' and 'disagree' ('explicit disagreement'), and 'not at all important' and 'unimportant ('explicit unimportance') (Joshi et al., 2015). The neutral position ("neither agree nor disagree" or "neither important nor unimportant") remained unchanged and independent of the other responses. Free-text quotes were reviewed and thematically analysed to identify recurring themes (Braun & Clarke, 2013, p. 178). These findings were then mapped back to the survey questions to illustrate salient points.

Results

A total of 150 paramedics responded to this survey. Findings included chaplaincy use, how paramedics perceive the role of chaplains, paramedic perceptions on the value or impact of chaplaincy, and the factors that impact the chaplain's effectiveness.

Demographic characteristics

A total of 202 paramedics commenced the survey. Of these, 52 responses contained incomplete data and were removed leaving 150 participants (see Table 1). Most respondents were male (59.3%), aged 50+ (32.7%), employed for between 5-9 years (22.0%), employed in a jurisdictional ambulance service ($n = 137$) and worked in New South Wales (NSW) ($n = 72$). The biggest spiritual or religious identity was 'Atheist' ($n = 57$), followed by 'Agnostic' ($n = 43$) and 'Open to spiritual matters' ($n = 40$), however as more than one response could be selected, some identified as 'agnostic' but 'open to spiritual matters'.

When asked if chaplains were available in their ambulance service, most participants indicated that they did not know (77.4%, $n = 127$). A small number (9.1%, $n = 15$) indicated that they did have access to chaplains, and 13.4% ($n = 22$) indicated that they did not.

Chaplaincy use

Most participants indicated they had not previously sought chaplain support (62.7%, $n = 94$). Approximately half of the participants indicated they would not seek chaplain support in future (51.3%, $n = 77$) and the other half indicated they would (48.7%, $n = 73$). A little over half of all male participants (55.1%, $n = 49$) and less than half of

Table 1. Participant demographics ($N = 150$).

Demographic characteristics	n	%
Gender identity		
Male	89	59.3%
Female	53	35.3%
Non-binary	3	2%
Prefer not to say	3	2%
Prefer to self-describe	2	1.4%
TOTAL	150	
Age		
20-29	20	13.3%
30-39	47	31.3%
40-49	34	22.7%
50+	49	32.7%
TOTAL	150	
State of employment*		
New South Wales	72	48.0%
Victoria	34	22.7%
Queensland	31	20.7%
Tasmania	8	5.3%
South Australia	7	4.7%
Western Australia	5	3.3%
Northern Territory	4	2.7%
Australian Capital Territory	3	2.0%
TOTAL	164	
Employed in state service or private sector*		
Jurisdictional service	137	91.3%
Private sector	20	13.3%
TOTAL	157	
Years of service		
<5	28	18.7%
5-9	33	22.0%
10-14	21	14.0%
15-19	24	16.0%
20-24	21	14.0%
>25	23	15.3%
TOTAL	150	
Spiritual or religious identity*		
Atheist	57	38.0%
Agnostic	43	28.7%
Open to spiritual matters	40	26.7%
Monotheistic	26	17.3%
Belong to religious community	22	14.7%
Active participant in spiritual activities	13	8.7%
Polytheistic	4	2.7%
TOTAL	205	

Note. * Option to select more than one.

female participants (41.5%, $n = 22$) indicated they would seek chaplain support. Of the eight participants who identified as non-binary, preferred to self-describe or preferred not to disclose their gender identity, 75.0% ($n = 6$) stated that they would not seek support from a chaplain. The 56 participants who had previously accessed chaplain support represented all spiritual or religious beliefs or non-belief, and most indicated they would seek chaplain support again in future (n = 50, 89.3%).

The relationship between previous use of a chaplain and duration of ambulance service was not significant (χ^2 (5, $N = 150$) = 6.656, p = .248, V = .211). Similarly, there was no relationship between previous use of a chaplain and age of participants (χ^2 (3, $N = 150$) = 6.011, p = .111, V = .200). Conversely, the relationship between future use of a chaplain and duration of paramedic service was significant, with moderate effect

(χ^2 (5, $N = 150$) = 17.148, p = .004, V = .338). The relationship between future use of a chaplain and age was also significant, with moderate effect (χ^2 (3, $N = 150$) = 11.692, p = .009, V = .279). These results indicate that older paramedics and those with more years of service were more likely to seek chaplain support in future.

A significant relationship with moderate effect was noted between those who had not used chaplains and those who identified as atheist (χ^2 (1, $N = 150$) =18.239, $p = <.001$, V=.349), indicating those who identified as atheist were unlikely to have accessed a chaplain. Similarly, the relationship between those who had previously accessed chaplaincy care and those who identified as monotheistic was significant, with moderate effect (χ^2 (1, $N = 150$) = 10.578, p = .001, V = .266), as was the relationship between those who had previously accessed chaplaincy care and those who identified as belonging to a religious community (χ^2 (1, $N = 150$) = 10.487, p = .001, V = .264), with these groups more likely to have accessed chaplaincy support.

A significant relationship with moderate effect was noted between future use of a chaplain and those who identified as atheist (χ^2 (1, $N = 150$) = 39.778, p = <.001, V = .515), indicating that those who identified as atheist were unlikely to seek future chaplain support. Similarly, the relationship between future use of a chaplain and being an active participant in spiritual activities (χ^2 (1, $N = 150$) = 7.363, p = .007, V = .222), belonging to a religious community (χ^2 (1, $N = 150$) = 14.665, p = <.001, V = .313), monotheistic (χ^2 (1, $N = 150$) = 16.270, p = <.001, V = .329) and open to spiritual matters (χ^2 (1, $N = 150$) = 24.993, p = <.001, V = .408) were all significant with moderate effect, indicating those who identify with these groups would likely seek chaplain support in future. No significant relationships were identified between those who would use a chaplain in future and those who identified as agnostic (χ^2 (1, $N = 150$) = 1.233, p = <.267, V = .091). Due to inadequate responses from those who identified as polytheistic, assumptions were violated resulting in insufficient data to report (Kirkwood & Sterne, 2003).

A significant relationship with moderate effect was noted between previous use of a chaplain and future use of a chaplain (χ^2 (1, $N = 150$) = 59.017, p = <.001, V = .627), indicating that those who had previously used chaplaincy were likely to seek chaplain support in future.

What is the role of an ambulance chaplain in Australia?

Questions relating to this research question sought to understand what paramedics understood the role of an ambulance chaplain to be with reference to proactive care (care provided outside of significant jobs) and reactive care (care during and immediately after significant jobs), in line with themes identified in previous studies (Tunks Leach et al., 2020, 2022, 2023).

Proactive care

Paramedics who indicated they would use chaplaincy were asked to consider the importance of ambulance chaplains conducting assessments of their needs (Table 2). The majority of participants considered chaplains to play an important role in assessing their emotional, mental and social health needs, and approximately half considered

Table 2. Assessments conducted by ambulance chaplains.

Needs	Explicit importance	Neither important nor unimportant	Explicit unimportance
Emotional health needs	93.2% ($n = 68$)	4.1% ($n = 3$)	2.7% ($n = 2$)
Mental health needs	85.0% ($n = 62$)	12.3% ($n = 9$)	2.7% ($n = 2$)
Social health needs	83.6% ($n = 61$)	15.1% ($n = 11$)	1.3% ($n = 1$)
Pastoral and spiritual health needs	53.4% ($n = 39$)	32.9% ($n = 24$)	13.7% ($n = 10$)
Physical health needs	52.0% ($n = 38$)	41.1% ($n = 30$)	6.9% ($n = 5$)

Table 3. Counselling, education and guidance activities desired from ambulance chaplains.

Needs	Explicit importance	Neither important nor unimportant	Explicit unimportance
Normal or abnormal reactions to significant jobs	91.8% (n = 67)	5.5% (n = 4)	2.7% (n = 2)
Accessing further support beyond chaplain care	89.0% (n = 65)	4.1% (n = 3)	6.9% (n = 5)
Life purpose or meaning making	85.0% (n = 62)	8.1% (n = 6)	6.9% (n = 5)
Personal wellbeing	85.0% (n = 62)	10.9% (n = 8)	4.1% (n = 3)
Moral and/or ethical support	80.8% (n = 59)	9.6% (n = 7)	9.6% (n = 7)
Spiritual or religious support	48.0% (n = 35)	31.5% (n = 23)	20.5% (n = 15)

assessment of their pastoral, spiritual or physical health needs to be within the remit of chaplains.

Paramedics were then asked what types of supportive conversations they wanted chaplains to be able to engage in. More than 90% of participants indicated they felt it was important or very important for chaplains to be able to engage in supportive conversations relating to work stress, personal stress and paramedic experiences.

Beyond supportive conversations, the majority of participants reported that it was very important or important for chaplains to engage in counselling, education and guidance relating to normal and abnormal reactions to significant jobs, accessing support beyond chaplain care, life purpose and meaning making, and personal wellbeing. Less than half of the participants felt that spiritual or religious support was important (Table 3).

An additional question exploring participant expectations of the role of spiritual and religious care in chaplaincy were diverse. While approximately half (50.7%, $n = 37$) of participants saw corporate expressions of spirituality or religion (e.g. weddings, funerals) as important, just over a third felt that individual expressions or religious beliefs (e.g. prayer) were important (38.4%, $n = 28$).

When it came to a broader understanding of chaplains' roles in ambulance organisations, most participants (83.6%, $n = 61$) felt their role was to listen, empathise and validate, not diagnose or 'fix', and 78.1% ($n = 57$) thought chaplain should be adaptable to meet organisational requirements.

Reactive care

Participants who indicated they would use chaplains were asked about the provision of support at significant jobs. Most indicated they would request chaplain support for jobs with actual or potential emotional impact such as paediatric death or death by suicide (91.8%, $n = 67$), cumulative trauma arising from paramedic work (86.3%, $n = 63$), and

Table 4. Desired ambulance chaplain activities at significant jobs*.

Chaplain activity	Yes
Provide emotional support for family members or bystanders (eg. grief support).	86.3% ($n = 63$)
Help family members or bystanders connect to support.	83.6% ($n = 61$)
Participate in the post-incident clinical debrief.	80.8% ($n = 59$)
Support other first responders.	72.6% ($n = 53$)
De-escalate or calm family members or bystanders.	68.5% ($n = 50$)
Provide spiritual or religious support for family members or bystanders.	68.5% ($n = 50$)
Act as a liaison between paramedics and family members or bystanders.	54.8% ($n = 40$)
Provide safety for family members or bystanders.	50.7% ($n = 37$)
Provide physical care to family members or bystanders (eg. providing shelter, food/water, physical safety).	43.8% ($n = 32$)
Support paramedic needs, which may include practical support such as retrieving equipment from the ambulance vehicle or paramedic wellbeing needs.	34.2% ($n = 25$)
I do not use chaplains for clinical jobs	5.5% ($n = 4$)

Note. * Option to select more than one

major disasters (75.3%, $n = 55$). A very small number indicated they would not request chaplain support for significant jobs (5.5%, $n = 4$).

Participants were also asked how they wanted chaplains to provide support on the scene of significant jobs (Table 4). Scene support primarily focussed on supporting family, bystanders and other first responders through the provision of emotional, practical and spiritual or religious support. Direct care of paramedics was more important in the aftermath of these jobs.

When asked if ambulance chaplains should be operationally trained, uniformed and capable, the majority of participants (90.5%, $n = 66$) strongly agreed or agreed. A further 91.8% ($n = 67$) indicated they wanted chaplains to be available for individual paramedic post-incident support (separate to group clinical debriefs).

Participants who indicated they would not use chaplains were also asked how they would want chaplains to support them should they ever choose to access this service. Participants indicated a preference for emotional (22.1%, $n = 17$), social (13.0%, $n = 10$), and mental health support (10.4%, $n = 8$). When asked how they would want chaplains to support bystanders should they choose to use them, 45.5% ($n = 35$), indicated they would access chaplains to provide bystanders with emotional support and 33.8% ($n = 26$) to provide spiritual or religious support.

Paramedic perceptions on the value and impact of chaplain-provided support

Paramedics who indicated they would access chaplains for support were asked about the value and impact of care provided by chaplains. Most participants strongly agreed/agreed that chaplains better understand paramedic experiences because they are situated within their workplace (79.5%, $n = 58$), and 85.0% ($n = 62$) indicated that having chaplains in their workplace promoted trust and rapport.

Paramedics who had engaged with chaplains believed that this had positively impacted their wellbeing. A large majority of 90.5% ($n = 66$) responded that knowing a chaplain makes it easier to reach out if they need help, and 89.0% ($n = 65$) agreed/strongly agreed with the statement "situating chaplains in my workspaces means I can engage in supportive conversations when it suits me". Additionally, 64.4% ($n = 47$) felt that chaplains could proactively check in on their wellbeing, and 80.8% ($n = 59$) agreed

or strongly agreed that knowing a chaplain had taken over care of bystanders at significant jobs made them feel better.

Paramedics who indicated they would access chaplains for support believed chaplaincy should be included in staff support teams, with 91.8% ($n = 67$) agreeing with this statement. Free text comments again added to our understanding of this theme:

> Reaching out to a chaplain has been of enormous benefit to me … I would not have reached out had I not known the chaplain I was reaching out to. There is a great sense of comfort I feel knowing our local chaplain and knowing I can reach out and have that support (Female, 30-39 years, jurisdictional service).

Factors that impact a chaplain's effectiveness

Paramedics who indicated they would access chaplains for support were asked about the importance of chaplain attitudes and attributes (Table 5). All respondents identified it was important for chaplains to be approachable, confidential, non-judgemental and supportive, with strong importance also placed on being a good listener, trustworthy, empathic, discrete, available and a relationship-builder.

Participants were asked if ambulance chaplains should have tertiary qualifications in chaplaincy or pastoral care. Most were undecided (38.4%, $n = 28$), while 32.9% ($n = 24$) strongly agreed/agreed and 28.7% ($n = 21$) disagreed/strongly disagreed. When participants were asked if they thought ambulance chaplains with additional healthcare qualifications could better support them, only 38.4% ($n = 28$) strongly agreed/agreed. However, several free text comments revealed that participants valued clinically experienced chaplains who could provide a deeper level of support to paramedics:

> I'm in a service where the ambulance chaplains are … also operational staff. I love this model as the chaplains completely understand the operational and organisational issues we encounter and make them FAR more relatable to us. (Female, 30-39 years, jurisdictional service).

Table 5. Ambulance chaplain attitudes and attributes.

	Explicit importance	Neither important nor unimportant	Explicit unimportance
Confidential	100% ($n = 73$)	./.	./.
Approachable	100% ($n = 73$)	./.	./.
Non-judgemental	100% ($n = 73$)	./.	./.
Supportive	100% ($n = 73$)	./.	./.
Good listener	98.6% ($n = 72$)	1.4% ($n = 1$)	./.
Trustworthy	98.6% ($n = 72$)	./.	1.4% ($n = 1$)
Discrete	95.9% ($n = 70$)	4.1% ($n = 3$)	./.
Empathic	95.9% ($n = 70$)	4.1% ($n = 3$)	./.
Available	94.5% ($n = 69$)	5.5% ($n = 4$)	./.
Proactively builds relationships	94.5% ($n = 69$)	5.5% ($n = 4$)	./.
Adaptable	93.1% ($n = 68$)	5.5% ($n = 4$)	1.4% ($n = 1$)
Team player	85.0% ($n = 62$)	10.9% ($n = 8$)	4.1% ($n = 3$)
Does not express religious views without express invitation	75.3% ($n = 55$)	19.2% ($n = 14$)	5.5% ($n = 4$)
Connected to the wider community	60.3% ($n = 44$)	30.1% ($n = 22$)	9.6% ($n = 7$)
Leadership	54.8% ($n = 40$)	35.6% ($n = 26$)	9.6% ($n = 7$)
Multifaith approach	52.0% (n = 38)	37.1% (n = 27)	10.9% ($n = 8$)

To better understand the factors impacting chaplain effectiveness and potential barriers to their use, the perspectives of the participants who indicated they would not use chaplains (51.3%, $n = 77$) were sought. Their responses indicated that they would rather talk to a secular or non-religious counsellor (74.0%, $n = 57$) or seek help from another staff support team member (64.9%, $n = 50$). The majority (63.6%, $n = 49$) didn't want to talk to a religious person, were not convinced chaplains could provide the type of support they needed (57.1%, $n = 44$); and would rather seek help outside their organisation (42.9%, $n = 33$). It is noteworthy that 37 of the 78 free-text responses made reference to the association between chaplains and religion. For example:

> I strongly feel that support roles should be appropriately trained professionals with NO religious agenda. (Female, 50+ years, jurisdictional service)

> I have seen a large regional city station refuse to work with the 'local Chaplain' because they were judgmental (strong religious beliefs), and lacked clinical skills/experience … (Male, 30-39 years, jurisdictional service)

> As a survivor of faith-based abuse, I would absolutely never use any faith-based support, regardless of any claimed neutrality. (Gender withheld, 30-39 years, jurisdictional service)

Discussion

The aim of this study was to examine paramedics' perspectives on the role and value of ambulance chaplains across multiple Australian jurisdictions using a quantitative instrument derived from the findings of earlier qualitative studies. Paramedics in this study provided an understanding of chaplain use or non-use, and how this choice was impacted by personal beliefs and/or previous experience with a chaplain. They also shared their understanding of a chaplaincy role that was situated in their workplaces and built on relationships, providing holistic care to paramedics and the wider public. Paramedics believed the value of chaplains arose from trusting relationships, resulting in a reduction or removal of barriers to accessing help when required. However, several factors acted as barriers or facilitators to chaplaincy, both at an organisational level and relating to the field and practice of chaplaincy more broadly.

The results identified that paramedics who are more open to spirituality and religion were more likely to use chaplaincy than those who identified as atheists. Additionally, the majority of those who identified as women, non-binary or who preferred to self-describe their gender, stated that they would not use a chaplain, possibly for reasons relating to historical discrimination of women and members of the LGBTQIA+ community by some conservative religious organisations (Ezzy et al., 2022; Whitaker, 2019). It is noteworthy however, that participants who had previously used chaplains indicated they would use chaplains again in the future. Previous research has identified the importance of prior contact with chaplain as indicative of future use of a chaplain (Cunningham et al., 2017; Liefbroer et al., 2017; Liefbroer & Nagel, 2021). While it's not possible to determine if this is the case from this study, further research is required to determine whether the presence of caring relationships can be more influential than, or as powerful as, spiritual beliefs in determining chaplain use.

For the participants who indicated they would use chaplains, the role was seen to be both proactive and reactive. Participant responses suggested that chaplaincy is a

'frontline' wellbeing role grounded in relationships and situated in paramedic workplaces. It addressed more than just spiritual and religious needs, and incorporated a holistic perspective which included emotional, psychological and social wellbeing. These findings indicate that ambulance chaplains have the potential to promote and support health, wellbeing and flourishing in order to pre-empt and prevent ill-health.

The focus on psychological elements of care identified in this study is a novel finding in the ambulance setting although similar themes have been identified in other chaplaincy contexts (Nieuwsma et al., 2013; Prazak & Herbel, 2022). Nieuwsma et al. (2014) reported that seeing a pastoral counsellor was associated with an increased likelihood of seeing a mental health professional. This finding suggests a need for a review of ambulance chaplains' skillsets to ensure they are equipped to undertake basic mental health assessment and to refer paramedics to psychological specialists when appropriate. Additionally, opportunities for collaboration between chaplains and psychologists to identify those struggling with mental ill-health earlier and connect them to specialised support needs to be explored.

Ambulance chaplains also provided care beyond just the workplace. Supporting paramedics with both professional and personal issues, along with bystanders and other first responders was seen to be part of the role. Similar findings have been identified in settings including the military and hospitals (Aiken, 2022; Cadge & Rambo, 2022; Carey & Rumbold, 2015; Liberman et al., 2020; Nolan & Damen, 2021). Additionally, chaplains caring for paramedics and bystanders as outlined in this study, align with World Health Organization's International Statistical Classification of Diseases (ICD) and Related Health Problems which describe interventions that can be undertaken by spiritual care practitioners (Carey & Gleeson, 2017; World Health Organization, 2017).

The value of chaplains identified by paramedics in this study arose through the relational care chaplains provided to paramedics in the course of their everyday work, which resulted in reduced barriers to help-seeking and reduced emotional burdens on paramedics as they perform their role. Situating chaplains in paramedic workplaces, sharing experiences, establishing trusted professional caring relationships, assuming care of bystanders and developing a deeper comprehension of the realities of being a paramedic, appeared to contribute to paramedics' sense of wellbeing, along with recognising ill-health and helping people connect to further support services. These activities align with a salutogenic perspective of wellbeing, which focuses on factors that contribute to health and not just those that contribute to disease (Haugan & Eriksson, 2021). While other studies conducted in chaplaincy settings have identified similar findings with rapport and relationships being central to chaplain effectiveness (Hodgson et al., 2021; McCormick & Hildebrand, 2015; Prazak & Herbel, 2022), this is an original finding in the paramedic wellbeing literature. These self-reported findings by paramedics were not measured using established tools, however they offer promising insights and highlight further the need for research to formally measure the outcomes of chaplain care.

Factors impacting chaplains' effectiveness included the need for clarity of the chaplain's role and frameworks for practice, and how ambulance organisations implement chaplaincy programs. Participants identified the importance of chaplains being trained in ambulance culture and procedures, and equipped (eg. uniforms) to undertake their role safely and effectively. Similar findings have been found in military chaplaincy

literature where chaplains/padres train and serve in the field alongside their staff (Behlin, 2021; Besterman-Dahan et al., 2012; Grimell, 2022). However, one of the biggest factors detracting from chaplain effectiveness was the lack of understanding about the chaplain's role. Widespread discussion exists in spiritual care literature regarding the problematic nature of poorly defined chaplaincy roles and standards for practice (Best et al., 2021; Carey & Rumbold, 2015; Holmes, 2021; McCormick & Hildebrand, 2015; Tunks Leach et al., 2022) and the results from this study support these views.

As previously discussed, spiritual wellbeing can include religion, but it also extends beyond religion to help all people regardless of beliefs to make meaning, find purpose, foster connection and provide hope (Puchalski et al., 2014). Many elements of ambulance chaplain wellbeing work identified in this study fall into this category and align with the wider spiritual care literature (McCormick & Hildebrand, 2015; Pater et al., 2021; Taylor, 2021). Despite participants indicating spiritual care was not important, many elements of chaplain practice identified in this study that were rated as very important, suggesting that there may be a lack of shared language and understanding about what constitutes spiritual care. This is one potential factor creating a barrier to accessing chaplaincy. Additionally, to ensure chaplain success in their role and greater accessibility for staff, chaplaincy programs should ensure diverse representation of all belief systems, clearly communicated frameworks for practice, and minimum standards of training for chaplains in line with recommendations from peak bodies (Spiritual Care Australia, 2023; Spiritual Health Association, 2020).

Limitations

While this survey was open to all AHPRA-registered paramedics in Australia, the low response rate mean that the results are not necessarily representative of the Australian paramedic population due to factors including sampling and non-response bias (Sedgwick, 2014; Wang & Cheng, 2020). Additionally, while this study used a cross-sectional observational design that examined correlations and relationships, causation could not be determined. Finally, self-report outcome measures have limitations, such as differing interpretations of scale values and social desirability bias (Cook et al., 2021). The results from this study should therefore be interpreted as exploratory and hypothesis-generating, and viewed in that context. Despite these limitations, the findings from this study have the potential to inform future studies investigating chaplaincy in ambulance services.

Conclusion

Findings from this study identified that ambulance chaplains provide care to paramedics in the places where they work, extending beyond the provision of spiritual care to incorporate holistic approaches to promote and support paramedic wellbeing. It appears that in the presence of professional caring relationships and shared experiences, this care supports people of all spiritual and religious beliefs or none. However, in the absence of relationships and clear communication around the role of chaplains in pluralist organisations like ambulance services, barriers remain for a significant number of

staff to access their care. Ambulance organisations should provide clear communication of chaplains' frameworks for practice, establish minimum standards for education, and ensure chaplaincy programs represent diverse belief systems to maximise opportunities to provide spiritual care to all who choose to access it.

Ethics approval

UTS Health and Medical Research Ethics Committee approved this research project (ETH22-7416).

Authors' contributions

KTL, TLJ, JL and PS contributed to the study conception and design. Material preparation, and data collection were performed by KTL as part of her doctoral studies. All authors contributed to data analysis. The first draft of the manuscript was written by KTL under the supervision of her co-supervisors TLJ, JL and PS, and DD. All authors commented on previous versions of the manuscript and approved the final manuscript.

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Data availability statement

Data that support the findings of this study may be made available from the corresponding author following consideration of what use and application is proposed. However, restrictions apply and data are not publicly available.

References

Aiken, C. (2022). Australian chaplaincy support of health care staff: Presence, professional and relational. *Journal of Religion and Health*, *61*(2), 948–961. https://doi.org/10.1007/s10943-022-01526-4

Antonovsky, A. (1979). *Health, stress and coping*. Jossey-Bass.

Australian Bureau of Statistics. (2022). *Sample size calculator*. Australian bureau of statistics. https://www.abs.gov.au/websitedbs/d3310114.nsf/home/sample+size+calculator

Behlin, D. (2021). *The role of the military chaplain in times of crisis*, [Doctoral Dissertation, Regent University]. ProQuest Dissertations Publishing. https://www.proquest.com/docview/2530920804?pq-origsite=gscholar&fromopenview=true

Best, M., Rajaee, G., & Vandenhoeck, A. (2021). A long way to go understanding the role of chaplaincy? A critical ceflection on the findings of the survey examining chaplaincy responses to Covid-19. *The Journal of Pastoral Care & Counseling: JPCC*, *75*(1_suppl), 46–48. https://doi.org/10.1177/1542305021992002

Besterman-Dahan, K., Gibbons, S. W., Barnett, S. D., Hickling, E. J., Besterman-Dahan, K., Gibbons, S. W., Barnett, S. D., & Hickling, E. J. (2012). The role of military chaplains in mental health care of the deployed service member. *Military Medicine*, *177*(9), 1028–1033. https://doi.org/10.7205/milmed-d-12-00071

Beyond Blue (2020). *National mental health and wellbeing study of police and emergency services*. Beyond Blue. https://esf.com.au/wp-content/uploads/2021/06/Beyond-Blue-phase-three-report.pdf

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beninners*. Sage Publications.

Brink, H., van der Walt, C., & van Rensburg, G. (2012). *Fundamentals of research methodology for healthcare professionals* (3rd ed.). Juta and Co.

Cadge, W., & Rambo, S. (2022). *Chaplaincy and spiritual care in the twenty-first century*. University of North Carolina Press.

Carey, L., & Gleeson, B. (2017). *Spiritual-care intervention codings - summary table*. La Trobe. https://doi.org/10.4225/22/5b113afc54441

Carey, L., & Rumbold, B. (2015). Good practice chaplaincy: An exploratory study identifying the appropriate skills, attitudes and practices for the selection, training and utilisation of chaplains. *Journal of Religion and Health*, *54*(4), 1416–1437. https://doi.org/10.1007/s10943-014-9968-2

Claringbold, G., Robinson, N., Anglim, J., Kavadas, V., Walker, A., & Forsyth, L. (2022). A systematic review of well-being interventions and initiatives for Australian and New Zealand emergency service workers. *Australian Journal of Psychology*, *74*(1), 2123282. https://doi.org/10.1080/00049530.2022.2123282

Collins, K. (2010). Advanced sampling designs in mixed research: Current practices and emerging trends in the social and behavioral sciences. In A. Tashakkori & C. Teddlie (Eds.), *SAGE handbook of mixed methods in social & behavioral research* (2 ed.). SAGE Publications, Inc. https://doi.org/10.4135/9781506335193

Cook, C. E., Wright, A., Wittstein, J., Barbero, M., & Tousignant-Laflamme, Y. (2021). Five recommendations to address the limitations of patient-reported outcome measures. *The Journal of Orthopaedic and Sports Physical Therapy*, *51*(12), 562–565. https://doi.org/10.2519/jospt.2021.10836

Copel, L. C., Smeltzer, S. C., Byrne, C. D., Chen, M.-H., Havens, D. S., Kaufmann, P., Brom, H., Durning, J. D., Maldonado, L., Bradley, P. K., Mensinger, J., & Yost, J. (2023). A thematic analysis of shared experiences of essential health and support personnel in the COVID-19 pandemic [Article]. *PloS One*, *18*(3), e0282946. https://doi.org/10.1371/journal.pone.0282946

Creswell, J., & Plano Clark, V. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage.

Cunningham, C. J., Panda, M., Lambert, J., Daniel, G., & Demars, K. (2017). Perceptions of chaplains' value and impact within hospital care teams. *Journal of Religion and Health*, *56*(4), 1231–1247. https://doi.org/10.1007/s10943-017-0418-9

Damen, A., Schuhmann, C., Leget, C., & Fitchett, G. (2020). Can outcome research respect the integrity of chaplaincy? A review of outcome studies. *Journal of Health Care Chaplaincy*, *26*(4), 131–158. https://doi.org/10.1080/08854726.2019.1599258

De Diego-Cordero, R., Iglesias-Romo, M., Badanta, B., Lucchetti, G., & Vega-Escaño, J. (2022). Burnout and spirituality among nurses: A scoping review. *Explore (New York, N.Y.)*, *18*(5), 612–620. https://doi.org/10.1016/j.explore.2021.08.001

Education Employment References Committee. (2019). *The people behind 000: mental health of our first responders* (978-1-76010-909-7). Commonwealth of Australia. https://www.aph.gov.

au/Parliamentary_Business/Committees/Senate/Education_and_Employment/Mentalhealth/Report

Ezzy, D., Beaman, L., Dwyer, A., Fielder, B., McLeay, A., Rice, S., & Richardson-Self, L. (2022). LGBTQ + non-discrimination and religious freedom in the context of government-funded faith-based education, social welfare, health care, and aged care. *Journal of Sociology*, *59*(4), 931–951. https://doi.org/10.1177/14407833211072566

Ferguson, C. J. (2016). *An effect size primer: A guide for clinicians and researchers* (4th ed.). APA. https://doi.org/10.1037/14805-020

Ghahramani, S., Lankarani, K. B., Yousefi, M., Heydari, K., Shahabi, S., & Azmand, S. (2021). A systematic review and meta-analysis of burnout among healthcare workers during COVID-19. *Frontiers in Psychiatry*, *12*, 758849. https://doi.org/10.3389/fpsyt.2021.758849

Gouse, V. (2016). An investigation of an expanded police chaplaincy model: police chaplains' communications with local citizens in crisis. *Journal of Pastoral Care & Counseling: Advancing Theory and Professional Practice through Scholarly and Reflective Publications*, *70*(3), 195–202. https://doi.org/10.1177/1542305016666554

Gouse, V. (2017). Ministry of presence: an investigation of communication between police chaplains and local civilians in crisis, [Doctoral Dissertation, Regent University]. ProQuest Dissertations Publishing.

Grimell, J. (2022). Military chaplaincy in Sweden: a contemporary perspective. *Journal of Health Care Chaplaincy*, *28*(1), 81–94. https://doi.org/10.1080/08854726.2020.1745490

Halcomb, E., & Hickman, L. (2015). Mixed methods research. *Nursing Standard (Royal College of Nursing (Great Britain): 1987)*, *29*(32), 41–47. https://doi.org/10.7748/ns.29.32.41.e8858

Harris, P. A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L., McLeod, L., Delacqua, G., Delacqua, F., Kirby, J., & Duda, S. N, REDCap Consortium (2019). The REDCap consortium: building an international community of software platform partners. *Journal of Biomedical Informatics*, *95*, 103208. https://doi.org/10.1016/j.jbi.2019.103208

Haugan, G., & Eriksson, M. (2021). *Health promotion in health care – vital theories and research* (1 ed.). Springer International Publishing. https://doi.org/10.1007/978-3-030-63135-2

Hodgson, T. J., Carey, L. B., & Koenig, H. G. (2021). Moral injury, Australian veterans and the role of chaplains: an exploratory qualitative study. *Journal of Religion and Health*, *60*(5), 3061–3089. https://doi.org/10.1007/s10943-021-01417-0

Holmes, C. (2021). From chaplaincy to spiritual care: turning points for an emerging health profession. *Asia Pacific Journal of Health Management*, *16*(4), 54–61. https://doi.org/10.24083/apjhm.v16i4.691

Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: explored and explained. *British Journal of Applied Science & Technology*, *7*(4), 396–403. https://doi.org/10.9734/BJAST/2015/14975

Kirkwood, B., & Sterne, J. (2003). *Essential medical statistics* (2nd ed.). Blackwell Science.

Koenig, H. (2015). Religion, spirituality, and health: A review and update. *Advances in Mind Body Medicine*, *29*(3), 19–26.

Layson, M. D., Carey, L. B., & Best, M. C. (2023). The impact of faith-based pastoral care in decreasingly religious contexts: The Australian chaplaincy advantage in critical environments. *Journal of Religion and Health*, *62*(3), 1491–1512. https://doi.org/10.1007/s10943-023-01791-x

Layson, M. D., Tunks Leach, K., Carey, L. B., & Best, M. C. (2022). Factors influencing military personnel utilizing chaplains: A literature scoping review. *Journal of Religion and Health*, *61*(2), 1155–1182. https://doi.org/10.1007/s10943-021-01477-2

Liberman, T., Kozikowski, A., Carney, M., Kline, M., Axelrud, A., Ofer, A., Rossetti, M., & Pekmezaris, R. (2020). Knowledge, attitudes, and interactions with chaplains and nursing staff outcomes: A survey study. *Journal of Religion and Health*, *59*(5), 2308–2322. https://doi.org/10.1007/s10943-020-01037-0

Liefbroer, A. I., & Nagel, I. (2021). Does faith concordance matter? A comparison of clients' perceptions in same versus interfaith spiritual care encounters with chaplains in hospitals. *Pastoral Psychology*, *70*(4), 349–377. https://doi.org/10.1007/s11089-021-00947-4

Liefbroer, A. I., Olsman, E., Ganzevoort, R. R., & van Etten-Jamaludin, F. S. (2017). Interfaith spiritual care: A systematic review. *Journal of Religion and Health*, *56*(5), 1776–1793. https://doi.org/10.1007/s10943-017-0369-1

McCormick, S. C., & Hildebrand, A. A. (2015). A qualitative study of patient and family perceptions of chaplain presence during post-trauma care. *Journal of Health Care Chaplaincy*, *21*(2), 60–75. https://doi.org/10.1080/08854726.2015.1016317

Moosbrugger, D. P. (2006). The leadership of a law enforcement chaplain: Influence, effectiveness, and benefit to the agency and community. A case study of the Arlington Police Department. [Dissertation, Regent University. ProQuest Dissertations & Theses Global.

Nieuwsma, J. A., Fortune-Greeley, A. K., Jackson, G. L., Meador, K. G., Beckham, J. C., & Elbogen, E. B. (2014). Pastoral care use among post-9/11 veterans who screen positive for mental health problems. *Psychological Services*, *11*(3), 300–308. https://doi.org/10.1037/a0037065

Nieuwsma, J. A., Rhodes, J. E., Jackson, G. L., Cantrell, W. C., Lane, M. E., Bates, M. J., Dekraai, M. B., Bulling, D. J., Ethridge, K., Drescher, K. D., Fitchett, G., Tenhula, W. N., Milstein, G., Bray, R. M., & Meador, K. G. (2013). Chaplaincy and mental health in the Department of Veterans Affairs and Department of Defense. *Journal of Health Care Chaplaincy*, *19*(1), 3–21. https://doi.org/10.1080/08854726.2013.775820

Nolan, S., & Damen, A. (Eds.) (2021). *Transforming chaplaincy: The George Fitchet reader*. Pickwick Pulbications.

Paramedicine Board. (2022). Paramedicine Board of Australia Registrant data. Australian Health Practitioner Registration Agency. https://www.paramedicineboard.gov.au/News/Statistics.aspx

Parker, C., Scott, S., & Geddes, A. (2019). *Snowball sampling*. SAGE Research Methods Foundations. https://doi.org/10.4135/9781526421036831710

Pater, R., Visser, A., & Smeets, W. (2021). A beacon in the storm: Competencies of healthcare chaplains in the accident and emergency department. *Journal of Health Care Chaplaincy*, *27*(3), 172–189. https://doi.org/10.1080/08854726.2020.1723188

Peng-Keller, S., Rauch, R., & Winiger, F. (2022). *The spirit of global health*. Oxford University Press.

Prazak, M., & Herbel, D. O. (2022). The role of military chaplaincy in addressing service member help avoidance: A critical review with treatment implications. *Journal of Health Care Chaplaincy*, *28*(1), 108–127. https://doi.org/10.1080/08854726.2020.1793094

Puchalski, C. M., Vitillo, R., Hull, S. K., & Reller, N. (2014). Improving the spiritual dimension of whole person care: Reaching national and international consensus. *Journal of Palliative Medicine*, *17*(6), 642–656. https://doi.org/10.1089/jpm.2014.9427

Roberts, D. L., Kovacich, J., & Rivers, M. J. (2018). The comprehensive female soldier support model. *Journal of Health Care Chaplaincy*, *24*(1), 1–19. https://doi.org/10.1080/08854726.2017.1312817

Rosen, A., Cahill, J. M., & Dugdale, L. S. (2022). Moral injury in health care: Identification and repair in the COVID-19 era. *Journal of General Internal Medicine*, *37*(14), 3739–3743. https://doi.org/10.1007/s11606-022-07761-5

Ross, L. J., Eade, A., Shannon, B., & Williams, B. (2022). Out-of-hospital or pre-hospital: Is it time to reconsider the language used to describe and define paramedicine? *Australasian Emergency Care*, *25*(3), 177–178. https://doi.org/10.1016/j.auec.2022.01.002

Schneider, Z., Whitehead, D., LoBiondo-Wood, G., & Haber, J. (2016). *Nursing and midwifery research* (5 ed.). Elsevier.

Sedgwick, P. (2014). Cross sectional studies: advantages and disadvantages. *BMJ (Clinical Research ed.)*, *348*(mar26 2), g2979–g2276. https://doi.org/10.1136/bmj.g2276

Spiritual Care Australia. (2023). *Capabilities framework for spiritual care practitioners*. Spiritual Care Australia. https://www.spiritualcareaustralia.org.au/public/103/files/SCA%20Capabilities%20Framework.pdf

Spiritual Health Association. (2020). *Capability framework for spiritual care practitioners in health*. Spiritual Health Association. https://www.spiritualhealth.org.au/standards

Spiritual Health Association. (2022). *Standards*. Spiritual Health Association. https://www.spiritualhealth.org.au/standards

Taylor, E. J. (2021). Healing communication: A precision instrument for spiritual care. *Seminars in Oncology Nursing*, *37*(5), 151213. https://doi.org/10.1016/j.soncn.2021.151213

Torke, A. M., Varner-Perez, S. E., Burke, E. S., Taylor, T. A., Slaven, J. E., Kozinski, K. L., Maiko, S. M., Pfeffer, B. J., & Banks, S. K. (2022). Effects of spiritual care on well-being of intensive care family surrogates: A clinical trial. *Journal of Pain and Symptom Management*, *65*(4), 296–307. https://doi.org/10.1016/j.jpainsymman.2022.12.007

Tunks Leach, K., Lewis, J., & Levett-Jones, T. (2020). Staff perceptions on the role and value of chaplains in first responder and military settings: A scoping review. *Journal of High Threat & Austere Medicine*, *2*(1), 1–16. https://doi.org/10.33553/jhtam.v2i1.25

Tunks Leach, K., Simpson, P., Lewis, J., & Levett-Jones, T. (2022). The role and value of chaplains in the ambulance service: Paramedic perspectives. *Journal of Religion and Health*, *61*(2), 929–947. https://doi.org/10.1007/s10943-021-01446-9

Tunks Leach, K., Simpson, P., Lewis, J., & Levett-Jones, T. (2023). The role and value of chaplains in an Australian ambulance service: A comparative study of chaplain and paramedic perspectives. *Journal of Religion and Health*, *62*(1), 98–116. https://doi.org/10.1007/s10943-022-01685-4

von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., & Vandenbroucke, J. P, STROBE Initiative (2007). Strengthening the reporting of observational studies in epidemiology (STROBE) statement: Guidelines for reporting observational studies. *BMJ (Clinical Research ed.)*, *335*(7624), 806–808. https://doi.org/10.1136/bmj.39335.541782.AD

Wachholtz, A., & Rogoff, M. (2013). The relationship between spirituality and burnout among medical students. *Journal of Contemporary Medical Education*, *1*(2), 83–91. https://doi.org/10.5455/jcme.20130104060612

Wang, X., & Cheng, Z. (2020). Cross-sectional studies: Strengths, weaknesses, and recommendations. *Chest*, *158*(1S), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

Whitaker, R. (2019). From virgin births to purity movements: Christians and their problem with sex. *The Conversation*. https://theconversation.com/from-virgin-births-to-purity-movements-christians-and-their-problem-with-sex-118327

Williams, B., Beovich, B., & Olaussen, A. (2021). The definition of paramedicine: An international delphi study. *Journal of Multidisciplinary Healthcare*, *14*, 3561–3570. https://doi.org/10.2147/jmdh.S347811

World Health Organization. (2017). *The world health organization international statistical classification of diseases and related health problems, tenth revision, australian modification (ICD-10-AM), Australian classification of health interventions (ACHI) and Australian coding standards*. WHOICD-10-AM/ACHI/ACS.

World Psychiatric Association (2019). *Religion, spirituality and psychiatry*. World Psychiatric Association. https://www.wpanet.org/religion-spirituality-and-psychiatry

Xu, H. G., Kynoch, K., Tuckett, A., & Eley, R. (2020). Effectiveness of interventions to reduce emergency department staff occupational stress and/or burnout: A systematic review. *JBI Evidence Synthesis*, *18*(6), 1156–1188. https://doi.org/10.11124/jbisrir-d-19-00252

Appendix 1. Survey questions

1. Have you ever sought support from an ambulance chaplain?
   - Yes
   - No
2. Would you ever seek support from an ambulance chaplain?
   - Yes
   - No

(At this point the survey breaks into two streams, depending on the response to question 2)

Yes stream

In this survey, we ask you to consider ambulance chaplains across four domains: (1) the skills and attributes of an ambulance chaplain, (2) the role and value of chaplains in your day-to-day work, (3) the role and value of chaplains at significant jobs, and (4) the role and value of chaplains within the wider ambulance organisation.

Skills and attributes of an ambulance chaplain

Please reflect on the qualities, skills and attributes of ambulance chaplains and answer the following questions using the following scale: (1) not at all important, (2) unimportant, (3) neither important or unimportant, (4) important and (5) very important.

3. How important is it that you have an established working relationship with an ambulance chaplain?

1	2	3	4	5

4. How important to you are the following attitudes and attributes in establishing a working relationship with an ambulance chaplain? Please answer the following questions according to the following scale: (1) not at all important, (2) unimportant, (3) neither important or unimportant, (4) important and (5) very important.

a.	Adaptable	1	2	3	4	5
b.	Approachable	1	2	3	4	5
c.	Available	1	2	3	4	5
d.	Committed	1	2	3	4	5
e.	Community minded	1	2	3	4	5
f.	Confidential	1	2	3	4	5
g.	Discrete	1	2	3	4	5
h.	Does not express religious views without express invitation	1	2	3	4	5
i.	Empathic	1	2	3	4	5
j.	Good listener	1	2	3	4	5
k.	Leadership	1	2	3	4	5
l.	Multifaith approach to spirituality/religion	1	2	3	4	5
m.	Non-judgemental	1	2	3	4	5
n.	Proactively builds relationships with people	1	2	3	4	5
o.	Supportive	1	2	3	4	5
p.	Team player	1	2	3	4	5
q.	Trustworthy	1	2	3	4	5
r.	Other (please specify)					

5. How important are the following ambulance chaplain skills and activities to you? Please answer the following questions according to the following scale: (1) not at all important, (2) unimportant, (3) neither important or unimportant, (4) important and (5) very important.

a. Assessment of:

Pastoral and spiritual wellbeing needs	1	2	3	4	5
Emotional wellbeing needs	1	2	3	4	5
Mental health wellbeing needs	1	2	3	4	5
Physical wellbeing needs	1	2	3	4	5
Social wellbeing needs	1	2	3	4	5

b. Supportive conversations relating to:

Work-related stress	1	2	3	4	5
Personal stress	1	2	3	4	5
Holding space to listen to paramedic experiences or narratives	1	2	3	4	5

c. Counselling, guidance and education relating to:

Accessing further support beyond chaplain care	1	2	3	4	5
Spiritual or religious support	1	2	3	4	5
Moral and/or ethical support	1	2	3	4	5
Personal wellbeing	1	2	3	4	5
Life purpose or making meaning of events	1	2	3	4	5
Normal or abnormal reactions to significant jobs	1	2	3	4	5

d. Spiritual or religious ritual relating to:

Private prayer or worship	1	2	3	4	5
Paramedic weddings, funerals, baptisms or other service	1	2	3	4	5

e. Other (please specify)

Please respond to the following statements by selecting the most appropriate response: (1) strongly disagree, (2) disagree, (3) undecided, (4) agree and (5) strongly agree.

6. Ambulance chaplains should have a tertiary qualification in chaplaincy or pastoral care.

1	2	3	4	5

7. Ambulance chaplains with healthcare qualifications* are better able to support me than ones without.

1	2	3	4	5

The role and value of chaplains in paramedic day-to-day work

Please consider the role and value of chaplains in your everyday work (i.e. not at significant jobs) and respond to the following statements by selecting the most appropriate response: (1) strongly disagree, (2) disagree, (3) undecided, (4) agree and (5) strongly agree.

8. Situating chaplains in paramedic workspaces promotes rapport and trust with paramedics.

1	2	3	4	5

9. Situating ambulance chaplains in my various workspaces means I can engage in supportive conversations when it suits me including during my shift or in between jobs.

1	2	3	4	5

10. Ambulance chaplains better understand paramedic experiences because they are situated in our workspaces.

1	2	3	4	5

11. Ambulance chaplains promote wellbeing in my workplace by acting as advocates between management and staff.

1	2	3	4	5

12. Knowing an ambulance chaplain makes/would make it easier to reach out when I need help.

1	2	3	4	5

13. Ambulance chaplains proactively check in on my wellbeing.

1	2	3	4	5

The role and value of chaplains at significant jobs

For this section, please consider the role and value of chaplains when they are called to attend significant jobs.

14. What types of clinical jobs would you consider requesting chaplain support for? (Choose all that apply)
    a. Jobs that are significant due to magnitude (eg. major disaster)
    b. Jobs that are significant due to actual or potential emotional impact (eg. suicide, paediatric death)
    c. Jobs that are significant due to my or my colleague's personal reaction (eg. cumulative trauma, trigger from sight/sound/smell)
    d. I would not use chaplains for clinical jobs
    e. Other (please specify)

15. If an ambulance chaplain attends clinical jobs, I want them to: (choose all that apply)
    a. Support paramedic needs, which may include practical support such as retrieving equipment from the ambulance vehicle or paramedic wellbeing needs.
    b. De-escalate or calm family members or bystanders.
    c. Create a sense of safety for family members or bystanders.
    d. Act as a liaison between paramedics and family members or bystanders.
    e. Provide physical care to family members or bystanders (eg. providing shelter, food/water, physical safety).
    f. Provide emotional support for family members or bystanders (eg. grief support).
    g. Provide spiritual or religious support for family members or bystanders.
    h. Help family members or bystanders connect to support.
    i. Support other first responders.
    j. Participate in the post-incident clinical debrief.
    k. I do not use chaplains for clinical jobs

    Please respond to the following statements by selecting the most appropriate response: (1) strongly disagree, (2) disagree, (3) undecided, (4) agree and (5) strongly agree.

16. It is important to me to have a trained, uniformed chaplain who is safe and capable in a clinical setting.

1	2	3	4	5

17. It makes me feel better about leaving a significant job when I know I have an ambulance chaplain to provide support to family members/bystanders.

1	2	3	4	5

18. I want ambulance chaplains to be available for post-incident support if I choose.

1	2	3	4	5

The role and value of chaplains within ambulance organisations

Please consider chaplain activities and their impact within ambulance organisations more broadly and please answer the following questions according to the following scale:
(1) strongly disagree, (2) disagree, (3) undecided, (4) agree and (5) strongly agree.

19. Chaplaincy should be included in ambulance staff support teams

1	2	3	4	5

20. I would talk to an ambulance chaplain because they are outside the ambulance hierarchy.

1	2	3	4	5

21. The chaplain's role is to listen, validate and empathise, not diagnose or fix.

1	2	3	4	5

22. The chaplain's role should be adaptable to meet organisational requirements.

1	2	3	4	5

No stream

3. Why wouldn't you seek support from an ambulance chaplain? (Choose all that apply)

a. Because I have not needed one
b. There have been no chaplains available
c. I'm uncertain about what chaplains do
d. They are for patient or bystander support, not paramedic support
e. I do not trust them to maintain confidentiality
f. I am not convinced Chaplains can provide the type of support I need
g. I don't want to talk to a religious person
h. I would rather talk to a secular/non-religious counsellor
i. I would rather seek help from another staff support team member (eg. Peer support, psychology)

j I would rather seek help outside of my organisation
k. Other (please specify)

4. If you were to choose to access a chaplain, how would you want them to support you? (Choose all that apply)

a. Provision of emotional support
b. Provide physical support
c. Provide spiritual or religious support
d. Provide social support
e. Provide mental health
f. I would never use a chaplain for support.
g. Other (please specify)

5. If you were to choose to access a chaplain, how would you want them to support **bystanders, family or community members**? (Choose all that apply)

a. Provision of emotional support
b. Provide physical support
c. Provide spiritual or religious support
d. Provide social support
e. Provide mental health support
f. I would never use a chaplain for support.
g. Other (please specify)

Final question

Is there anything further you wish to tell us about chaplains in ambulance organisations? (Free text)

Demographic information

Gender: (check box that applies to you)

Female
Male
Non-Binary
Prefer to self-describe/other (please specify):
Prefer not to say

Age: (check box that applies to you)

20-29 years old
30-39 years old
40-49 years old
50+ years old

Ethnic identity: (Insert)

Do you identify as: (check box that applies to you)

Aboriginal
Torres Strait Islander
Both
Neither

Please describe your own spiritual or religious worldview: (check as many that apply)

Atheist – there is no god
Agnostic - unsure
Polytheistic – believe in many gods

Monotheistic – believe in one God
Active participant in spiritual activities
Belong to a religious community
Open to spiritual matters

State/Territory of employment: (check as many that apply)

ACT
NSW
Vic
Tas
NT
WA
Qld
SA

Which service are you employed by? (check as many that apply)

State service
Private company
Both

Do you have access to a chaplain through your ambulance service? (check box that applies to you)

Yes
No
I don't know

How many years have you worked as a paramedic (including intern year)? (check box that applies to you)

<5 years
5-9 years
10-14 years
15-19 years
20-24 years
>25 years