ISSN 1447-4999

PROFESSIONALISM

Is the Australian Paramedic Discipline a Full Profession?

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Abstract

Background: Over the past century the Australian paramedic discipline has changed dramatically; moving from its origins of an ambulance driver to its current practitioner role and integral member of the Australian health care system. However, at present the Australian paramedic discipline is not considered a full profession. The issue of whether the discipline currently believes it is a profession, and if it wants to achieve full professional status will be examined.

Objectives: This paper has two objectives - to examine if the Australian paramedic membership views the discipline as a profession, and if paramedic community wants to be considered a profession within Australia.

Methods: A convenience sample was used for this study that included participants who attended the inaugural National Association Paramedic Academics in September, 2008. An investigation of professionalisation attitudes were investigated using a paper-based self-report questionnaire.

Findings: A total of 63 experts participated in the study. Forty (63.5%) of the participants were male and 23 (36.5%) were female, with 44% of the participants ($n=28$) being between 35-44 years of age. The majority of the participants reported that the paramedic discipline would benefit from being recognised as a full profession ($M=4.62$, $SD=.771$) within Australia and that the higher education sector has an important part to play in this process (4.49 , $SD=0.74$). The majority felt that national registration would not occur within the next 2 years ($M=2.52$, $SD=1.12$). A significant difference ($p=0.001$) between participants from Victoria, New Zealand and Queensland about whether the paramedic discipline would achieve national registration produced was noted.

Conclusions: The findings from the survey suggest two points in relation to professionalism of the paramedic discipline within Australia. Firstly, the paramedic discipline is not a profession and secondly, the paramedic discipline wants to become recognised as a

profession. Other professional factors such as national registration, autonomy and the development of a unique body of knowledge require further investigation.

Keywords: *higher; education; paramedic; profession; professionalisation; professionalism; registration*

Introduction

This study intends to examine the current *professional* state-of-play of the Australian paramedic discipline. Many unanswered questions currently exist regarding the professional status of the paramedic discipline. For example, does the discipline currently believe it is a full profession, or, if not, does it actually want to become a full profession? Furthermore, what professional traits are currently lacking as a profession? Examination of the Australian paramedic discipline's professional status will inform what national strategies need to be taken to ensure the path to professional status is clear.

The Australian health system urgently requires an alternative health care workforce which may include, for example, multi-skilling of service providers and extended service delivery. The paramedic discipline has the capacity and potential for this expanded scope of service delivery,¹ particularly with the growth of relatively well-established undergraduate and postgraduate programs offered within the Australian Higher Education sector. It also has suitable independent clinical practice and emergency clinical skills to undertake such roles, and does not have high rates of attrition compared to other health-related disciplines, such as nursing or physiotherapy.^{2,3}

Despite these optimistic views however, if an alternative approach to health delivery such as multi-skilling, or an interdisciplinary model of health care is embraced; a clear problem for the paramedic discipline exists. Since the paramedic discipline is not yet recognised as a profession,¹ any attempts to develop new professional roles or domains of professional practice also have the potential to provoke a 'turf war' with other health care disciplines, and ultimately, provide a vessel for takeover or direct accountability to another profession. Gardner and McCoppin stress the importance of protecting professional domains to avoid encroachment and loss of power.⁴ These losses are created by two forms of encroachment; vertical and horizontal, and are manifested by struggles over occupational territories of practice as explained by Williams:^{5, p. 354}

The threat to the occupational boundaries of professionals, which can take forms: vertical and horizontal. Vertical encroachment can be from above (medicine, for instance) or from below, whereby less qualified workers do some of the tasks previously done by a professional. Horizontal encroachment refers to the occupational take-over of one profession by another, where both have similar status and power.

The most likely professional group to consume the paramedic discipline may be nursing, given their historical ties (ambulance nursing education from the 1970s) and, it would appear, the ongoing reliance for nursing educators to teach and co-ordinate core paramedic curriculum in undergraduate and postgraduate programs. While this 'takeover notion' is perhaps controversial, (one aspect of this is not - the paramedic discipline does not have formal professional status,^{2,6} and until it does,) it will continue to be vulnerable from non-paramedic influences and as such, will have limited independence in areas such as paramedic education and training across Australia.

Therefore, investigating the current view of professionalism for the paramedic discipline is warranted. The objectives of this paper are to examine if the paramedic discipline believes it is a profession and, whether or not it wants to be considered a profession.

Method

Design

This pilot study used a convenience sample that involved participants at the inaugural National Association Paramedic Academics in September, 2008. An opportunity to recruit national and

international leaders in paramedic education and training for the pilot study arose in early September 2008. This opportunity emerged within a funded project from the Australian Learning and Teaching Council entitled 'Paramedic Network Meeting'. The inaugural meeting aimed to form a collaborative network of paramedic academics from Australia and New Zealand, for the enrichment of education and research within the discipline. An investigation of attitudes towards professionalisation was elicited using a paper-based self-report questionnaire.

Participants

All participants had qualifications or positions directly involved in the education and training of paramedic personnel from the ambulance or health industry and/or university or polytechnic sector. Seventy-nine people confirmed interest in attending the meeting with a total of seventy-five attending on the day, representing all, but one (Northern Territory) state/territory from Australia. Staff from all universities/polytechnics from Australia and New Zealand was represented. The inclusion of participants from New Zealand provided an important international dimension to the data analysis, since paramedics in New Zealand are currently undergoing changes to their national registration scheme.⁷ All university course co-ordinators, heads of departments and the majority of paramedic academics and senior ambulance educators were present, representing a significant proportion of content experts from the Australia and New Zealand context. Ethical approval was sought and received from the Monash University Standing Committee on Ethics in Research Involving Humans (SCERH).

Instrumentation

A self-report instrument designed to assess the professionalisation of the paramedic sector was used. Participants were asked to complete a 5-point Likert Scale (1 = strongly disagree - 5 = strongly agree) 14 item questionnaire. Section 1 asked participants about their personal and professional characteristics, while section 2 asked participants about their views on the current and future standing of the professionalisation of the Australian discipline. In trialling this instrument, a variation of the Delphi technique was employed to obtain independent opinions from academics, educators and researchers in paramedic practice and other health care disciplines. All participants were known to the researchers. A small pre-pilot study was conducted with the intention of testing the face validity and content validity of the survey items. Face validity refers to the extent to which an instrument or test appears to measure what it purports to measure, while content validity refers to how well a scale's items represent the intended content area.⁸

Procedures

Participants were informed about the study via an explanatory letter distributed during the Paramedic Network Meeting, prior to completing the questionnaire. There were no exclusion criteria. Participants were advised of the anonymous and confidential nature of the study and that they could withdraw from the study prior to submitting the questionnaire. No incentives were offered and one questionnaire format was used for all participants who agreed to take part. All questionnaires were collected by an individual who was not involved in the study.

Data Analysis

Data processing included the entry of all results into Statistical Package for the Social Sciences (SPSS) Version 17.0. (SPSS Inc., Chicago, Illinois, USA). Descriptive statistics, t-test or one-way analysis of variance (ANOVA) test was used to compare the differences between gender, age group, occupation, residence and length of occupation. All confidence intervals (CIs) are 95%, $p < 0.05$ is considered statistically significant and all tests are 2-tailed unless otherwise stated.

Results

Participant demographics

The characteristics of the participants are described in relation to age, gender, state of residence, employment status, current professional role, and length of current professional role. The response rate was 96.9%. Of the 63 participants involved in the study, 44% of participants ($n=28$) were between 35-44 years of age, whilst only 4.8% of participants were less than 30 years of age. The ages of participants ranged from 25 to 63 with the overall mean age being 43.92 years ($SD=8.60$) (see

Table 1). As expected, the number of male participants was higher than their female counterparts given the traditional male dominated paramedic workforce. Forty (63.5%) of the participants were male and 23 (36.5%) were female.

Table 1: Age of participants

Age Group	N	%
25-29	3	4.8
30-34	4	6.3
35-39	13	20.6
40-44	15	23.8
45-49	12	19.0
50-54	9	14.3
55-59	3	4.8
> 60	4	6.3
Total	63	100%

The majority of participants lived in Victoria (n=22; 34.9%) or South Australia (n=13; 20.6%). Over 12% (n=8) of the participants were from New Zealand, providing an international dimension to the data. The Northern Territory was the only Australian state/territory not represented. The majority of participants either worked at a University (n=34; 54%) or Ambulance Service (n=27; 42.9%) with the remaining participants (n=2; 3.2%) working at a hospital. The majority of participants were in academic roles (n=34; 54%) closely followed by paramedic-specific roles (such as paramedic, paramedic manager, paramedic clinical instructor) (n=27; 42.8%). Participants were employed in their current professional role ranging from 1 to 25 years with a mean of 5.57 years (SD=5.19).

Professionalisation Results

The majority of participants reported that the paramedic discipline would benefit from being recognised as a full profession (M=4.62, SD=.771) and that the higher education sector has an important part to play in this process. These results are further reinforced with the moderate mean score of 3.10 (SD=1.10) that the discipline already exhibits the traits of a professional body. The majority of participants reported that they did not believe national registration would not occur within the next 2 years (M=2.52, SD=1.12). Regarding whether the discipline should align itself with nursing or medicine to improve its chances of becoming a profession, paramedic participants felt this alliance should be with medicine (M=3.29, SD=1.30), compared with nursing (M=2.05, SD=1.14). Further distribution of scores is described in Table 2.

Table 2: The Professionalisation of Paramedics (N=63)

Professionalisation of Paramedics	Mean	CI 95%	SD
The Australian Paramedic sector will benefit from becoming recognised as a profession.	4.62	4.42-4.81	0.77
The Australian Paramedic sector already exhibits the characteristics of a profession.	3.10	2.82-3.37	1.10
The Australian Paramedic sector already possesses its own unique body of knowledge.	3.37	3.09-3.64	1.08
The Australian Paramedic sector already has a high degree of clinical autonomy in the provision of emergency health care.	3.30	3.03-3.57	1.07
The Australian Paramedic sector will have national registration within the next 2 years.	2.52	2.24-2.81	1.12
The Australian Paramedic sector should align itself with Nursing to enhance its chances of becoming a profession.	2.05	1.76-2.34	1.14
The Australian Paramedic sector should align itself with Medicine to enhance its chances of becoming a profession.	3.29	2.96-3.61	1.30
The Australian Paramedic sector depends upon Higher Education to enhance its chances of becoming a profession.	4.49	4.31-4.68	0.74

Demographic comparison

The question regarding how strongly participants felt the paramedic discipline possessed clinical autonomy was statistically significant for ambulance service employees ($M=3.70$, $SD=0.95$) and Higher Education employees ($M=3.67$, $SD=1.03$; $t(59) = 2.45$, $p=0.016$).

A one-way ANOVA with post-hoc test was conducted to evaluate the relationship between results and where participants lived. There was a statistically significant difference at the $p<0.05$ level in several items within section 2. Participants from South Australia and New Zealand produced a significant effect regarding whether the discipline possessed clinical autonomy, $F(4, 53) = 3.5$, $p=0.013$. Post-hoc comparisons using Tukey HSD indicated that the mean score for South Australia ($M=2.62$, $SD=0.87$) was significantly different from New Zealand ($M=4.25$, $SD=0.87$).

Whether the discipline would achieve national registration produced a significant effect between participants from Victoria, New Zealand and Queensland, $F(4, 53) = 5.7$, $p<0.001$. Post-hoc comparisons using Tukey HSD indicated that the mean score for South Australia ($M=2.23$, $SD=0.92$) and Victoria ($M=2.32$, $SD=1.04$) was significantly different from New Zealand ($M=4.00$, $SD=0.92$).

Whether the sector should align itself with the profession of medicine produced a significant effect between Victoria and Queensland $F(4, 53) = 3.1$, $p=0.02$. Post-hoc comparisons using Tukey HSD indicated that the mean score for Victoria ($M=2.91$, $SD=1.44$) was significantly different from Queensland ($M=4.71$, $SD=0.48$).

Further independent t-tests and ANOVA analyses did not reveal statistically significant findings from other dependent variables such as gender, age, or length of employment. While not expecting significant differences in gender; given the recent changes in paramedic education from its former vocational roots to Higher Education, one may have expected statistical differences in age and length of employment, particularly as this move in some quarters is still seen as contentious.

Discussion

The findings from the pilot study suggest two points in relation to professionalism. Firstly, the paramedic discipline is *not* currently viewed as a full profession, and secondly, the paramedic discipline *wants* to become recognised as a full profession. Additional findings suggest that the paramedic sector believes that achieving this goal lies in the far future. This is evident especially in the rather low responses to questions about the achievement of national registration in the near future.

For over a century, a range of scholars have postulated what it takes to become a fully recognised profession and what constitutes a profession. Given the range of characterises that have been put forth, there appears to be consensus with certain professional traits (e.g., altruism, distinct body of knowledge, code of ethics, etc).⁹ One theory that encompasses these consistently cited traits is Greenwood's model, which includes the following five traits:¹⁰

1. unique body of knowledge,
2. authority,
3. community sanctions,
4. ethical codes, and
5. a professional culture.

At present, two traits are not demonstrated by the Australian paramedic sector: professional authority; and unique body of knowledge.

It is argued these are not demonstrated, given the absence of national registration, regulation, accreditation of paramedics or national curricula standards for paramedic education programs. Reynolds also states that these two traits are not achieved by the discipline.¹¹ In this paper she examined whether the paramedic discipline should be considered a profession using Greenwood's professional model. Whilst the rationale for using Greenwood's model was not clarified by Reynolds,

it is clear that little has changed in relation to the two missing professional characteristics (a distinct body of knowledge and professional authority) in the six years since the paper's publication in 2004.

In comparing the professionalisation process of other akin health disciplines such as nursing and physiotherapy, the main factors that contributed to both fields achieving professional status stemmed from their alliance and subordination with the medical profession and subsequent acceptance of the divisions of labour.^{12,13} This allowed both fields the opportunity to develop specific occupational niches, or areas of profession-specific expertise. Results from this study suggest that a strategic alliance with medicine could be considered ($M=3.29$, $SD=1.30$), particularly as a way of protecting professional boundaries and improving the chances of achieving national registration. However, no clear explanation can be given for the statistical difference ($p=0.02$) between participants from Victoria and Queensland. Findings suggest that the paramedic membership does not believe that aligning with the nursing profession would enhance its chances of achieving the status of becoming a profession ($M=2.05$, $SD=1.14$). Anecdotally, this finding could stem from the resentment on the dominance and influence nursing still has on paramedic education and training in Australia. In part, this is due to the difficulties in attracting practicing paramedics to take up academic positions in universities plus the small number of paramedics with postgraduate qualifications.¹⁴

In the health care disciplines, an important part of their evolution from semi-professional to full professional status was due to the successful transition from vocational education to the Higher Education sector. The transition provided the context for specific and unique bodies of knowledge and research-led practice to develop. Furthermore, this unique knowledge also contributed to the establishment of greater autonomy and extended scope in clinical practice. Participants reported that the paramedic field possessed clinical autonomy ($M=3.30$, $SD=1.0$), with this being statistically significant between Higher Education employees (educators) and ambulance service employees ($p=0.01$). While this item did not refer to specific clinical hierarchies, (e.g. ambulance officer, ambulance paramedic, or intensive care paramedic) it would be interesting to investigate if any significant differences in autonomy existed among paramedic clinicians.

The first ambulance paramedic course offered in Geelong, Victoria in 1961, signalled one of the initial steps in the move from a vocation to a semi-profession. This could be seen as the first authentic attempt at creating a paramedic-specific body of knowledge, which can be described as the development of skills, knowledge, behaviours and attitudes that are unique and specific to disciplines.⁹ Development of a unique body of knowledge is best achieved within the Higher Education sector, particularly given the capacity to establish and implement evidenced-based practice, and participate in collaborative research projects. Put simply, Higher Education is the hallmark of full professional status.¹⁵ The shift from its vocational origins to the Higher Education environment was seen as an important part of the paramedic professionalisation process as indicated in the pilot study results with a ($M=4.49$ $SD=0.74$). Reynolds notes "researched-based enquiry will generate new knowledge that is owned and directed by paramedics in distinguishing pre-hospital care in its own right".^{11, p.2} With the integration of research-led (both quantitative and qualitative) teaching into paramedic education, evidence-based practice is now being published in peer-reviewed paramedic journals, book chapters, and paramedic-specific textbooks, thus adding to the emerging body of paramedic scholarship and knowledge.

The nursing and physiotherapy professions achieved national registration and regulation through national accrediting and professional associations. These associations have produced accredited education programs with national curriculum standards and clinical practice consistent with industry in each respective state or territory. Both professions were also able to regulate the admission and evaluation of foreign trained nurses and physiotherapists into the country for migration purposes. In other words, they were able to control their *own* scope of practice and *own* body of knowledge. The formation of these professional associations was another critical factor in the professionalisation process: political influence and lobbying powers.^{12, 16} This raises the question; *can the paramedic discipline achieve national registration and regulation without the required influence, authority, and lobbying efforts?* At present, it would appear not, given current relations between the Australian

College of Ambulance Professionals (ACAP) and the Council of Ambulance Authorities (CAA) surrounding the issue of national registration.

These lobbying influences have the capacity to work both explicitly and implicitly on governments, medicine, other allied health professions, service payers (e.g., private health insurance companies), and the general public. Moreover, they can assist in developing a culture and professional recognition amongst its members, which further reinforces the respect and trust it projects to other disciplines and the broader public. The importance of public perceptions should not be underestimated, for example, does the general public refer to paramedics as ‘paramedics’ or ‘ambulance drivers’? If it is the latter, what does this say about how the discipline is viewed by typical citizens at large?

The paramedic discipline now offers entry-level programs at both undergraduate and postgraduate levels in over ten universities Australia-wide, in turn creating pressure for the discipline to be recognised as a profession. The maximum benefits of a new paramedic education system to a national audience will be greatly limited without two features being in place – *National Registration and Regulation*.^{17,18} Registration, in the context of health care professionals, is the process of licensing and registering clinicians to practice at a uniform national standard of care.¹⁹ Registration aims to protect the public by ensuring a measure of quality assurance is provided by each profession in their provision of clinical services to members of the public. It also provides a framework and accreditation guidelines that can inform education and training development to achieve national consistency.²⁰

The Australian paramedic discipline has never been registered at the state, territory or national level despite recent lobbying efforts to put this in place²¹⁻²³ and it appears unlikely in the near future this will occur especially when the Council of Ambulance Authorities has noted “there will be no rapid progress in advancing the issue of registration of paramedics.”^{24, p.8} This point is reinforced with results from our study, whereby participants reported a rather negative findings that national registration would not be achieved in the near future (M=2.52, SD=1.12). Furthermore in a review of their ambulance service, the New South Wales Government finds that ‘the operational benefits of registration do not appear to outweigh the costs in the short to medium term’. They stated:

“It is likely that more momentum for registration of ambulance paramedics will ensue as the industry in Australia continues its transition from one that transports patients to hospitals to one where paramedics are recognised for the quality of healthcare provided to patients.”^{25, p.92}

It is important to highlight, that despite the clear challenges that are faced by some states in Australia, such as the recent St John Ambulance Inquiry in Western Australia²⁶ at the same point in time, the New Zealand Government has recommended that its paramedic sector urgently form a national registration body. They noted:

“We believe that it is essential for paramedics to be registered under the Act [Health Practitioners Competence Assurance Act 2003] and urge the industry to take the necessary steps to be considered for registration ... we recommend that work to achieve registration proceed”^{27, p.11}

Having professional registration has many benefits, including the provision of self-regulation, quality standards, accreditation of education programs, continuing education specifications, portable qualifications between different jurisdictions, and improving public perceptions, whilst achieving positive and safe outcomes for patients.^{27,28} Whilst other allied health care disciplines such as nursing, optometry, physiotherapy, psychology, and podiatry have national registration, the majority of these emerging health professions have all attained their professional status since moving away from the medical model^{19, 27} and thus can provide the paramedic discipline with a potential road map to follow in its quest to achieve professional registration as well as recognition as a full profession.

While the pilot study suggests the paramedic discipline wants to become recognised as a profession, the data also implies comparing variables will importantly inform further research identifying why these differences may (or may not) exist. For example, will there be differences in states where

university-based education has existed longer than in other states? Are there likely to be inter-generational differences and/or gender based differences of opinion? Will the views of paramedic staff from industry differ significantly from those of academic personnel? Will industrial campaigning for professional rates of pay in states such as South Australia have any significant impacts?

While results from the pilot study have guided and informed the researcher to undertake further investigations, specific results should be interpreted with caution, particularly given the small sample size and the recruitment of participants via convenience sampling. Despite these limitations, the results between different groups have raised some interesting questions, thus providing the researcher and reader with a broader sense of why particular variables may or may not be causal in nature.

Conclusion

The findings from the survey suggest two points in relation to paramedic professionalism. Firstly, the paramedic discipline is not yet a full profession, and secondly, the paramedic discipline wants to become recognised as a full profession both internally and externally to the field. In addition, other features such as national registration, regulation, accreditation of education programs, and establishment of a unique body of knowledge are still to be fully achieved by the discipline. In order to achieve these however, the discipline urgently needs to develop a consistent and standardised curriculum nationally, that is taught largely by staff who are paramedics. Establishing nationally-consistent graduate attributes has the capacity to galvanise the discipline nationally, and provide the necessary curriculum blueprint from which contemporary curricula can be developed. Without this, a unique body of knowledge, accreditation of programs and registration are not possible. Further research in these areas is urgently required if the paramedic discipline wants to become recognised as a profession by its members and the general public it serves.

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Acknowledgment

We would like to acknowledge the Australian Learning and Teaching Council for its financial support in the establishment of the paramedic network meeting, from which, these data were collected. This project did not receive any funding.

This Article was peer reviewed for the Journal of Emergency Primary Health Care Vol.8, Issue 1, 2010