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Hobbs, Lisa, [Devenish, Scott](#), [Long, David](#), & [Tippett, Vivienne](#) (2021)

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Australasian Journal of Paramedicine, 18, Article number: 857.

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<https://doi.org/10.33151/ajp.18.857>

Research

Facilitators, barriers and motivators of paramedic continuing professional development

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<https://doi.org/10.33151/ajp.18.857>

Abstract

Introduction

As registered health professionals, Australian paramedics are required to abide by professional registration standards including the maintenance of continuing professional development (CPD). The broader health literature identifies facilitators, barriers and motivators for engaging in CPD, however the body of knowledge specific to paramedicine is weak. This research seeks to address this gap in the paramedicine body of knowledge.

Methods

This study adopts a constructivist grounded theory methodology. Data were collected through semi-structured interviews, and analysed using first and second cycle coding techniques. Paramedics from various state-based Australasian ambulance services and private industry (N=10) discussed their experiences specific to their attitudes, perceptions and engagement about CPD.

Results

Paramedic CPD goes beyond the traditional approach to mandatory training. Paramedics are motivated by factors such as modality of delivery, professional expectations, clinical/professional improvement and, sometimes, fear. Facilitators included organisational support, improved clinical knowledge, practitioner confidence, self-directed learning opportunities and perceived relevance of content. Barriers include cost, workload/fatigue, location, rostering, lack of incentive to engage, lack of employer support and technological problems.

Conclusion

By understanding what facilitates or motivates engagement in CPD activities, paramedics can navigate their CPD in conjunction with regulatory requirements. Although paramedics report some similar experiences to other health professionals, there are nuances that appear specific to the discipline of paramedicine. Of interest, a unique finding related to fear influencing paramedic CPD engagement. The results of this study informs paramedic employers and paramedic CPD providers with insights to assist in the development of positive CPD experiences and interactions.

Keywords:

paramedic; paramedic education; paramedic continuing professional development (CPD); lifelong learning (LLL)

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Introduction

The facilitators, barriers and motivating factors of health professionals' engagement in continuing professional development (CPD) has been discussed extensively in the peer-reviewed literature, however there is a dearth of research focussed on the paramedic context. For the purposes of this study, CPD was defined as formal or informal learning activities or opportunities that can be linked to the provision of a gold standard of patient care, practitioner professionalism and/or competence, and clinical advancement (1). The wider health literature demonstrates benefits in moving the focus of CPD from mandated activities to an intervention that facilitates filling professional performance gaps of the learner (2). Shifting this focus highlights the subtle differences between CPD and life-long learning (LLL). Often, the goal of CPD is to support the practitioner to develop competencies and navigate any professional challenges they may encounter within their discipline (2-7). LLL is also linked to practitioner competence, however it is a philosophy that supports professional growth, and encompasses broader concepts such as quality improvement and professionalism (1,8-10). Australian paramedics are now registered health professionals and as such are required to engage in CPD. Through understanding facilitators, barriers and motivators, paramedics can begin to traverse the gaps between CPD and LLL by choosing formal and/or informal LLL activities and opportunities (1).

Table 1. Facilitators of CPD

- Improved clinical skills
- Positive patient outcomes
- Gold standard of patient care
- Collegial 'buy-in'
- Participant satisfaction
- Relevance to discipline
- Employer/organisational support (financially/time)
- Accessibility (time, cost, facilitator expertise, training resources, multimodal, self-directed and interactive activities)
- Clear learning outcomes
- Demonstrated correlation to practitioner improvement or patient safety/care
- Approachability and expert knowledge of the facilitator/presenter
- Meaningful feedback from facilitators is provided
- Multidisciplinary collaborative education and networking opportunities
- Personal growth
- Career progression

Source: References 3,8,11,14,16-20

Participation in CPD is a mandatory requirement to maintain professional/regulatory standards in many professions (6-9,11-15). However, professional obligation is not the sole reason why health professionals engage in CPD activities. Learners who feel personal and/or professional fulfilment when participating in CPD activities are more likely to continue to engage in LLL

(1,6,7). Factors that assist engagement in CPD are referred to as 'facilitators' (Table 1). Conversely, there are factors that can act as barriers to paramedics being able to feel that they can fully engage in CPD opportunities. Healthcare professions including medicine, nursing, occupational therapy, sonography, ophthalmology and pharmacy commonly report barriers to their engagement in CPD (3,8,11,14,16-20) (Table 2).

Table 2. Barriers of CPD

- Time constraints (workload/shift work/unsocial working hours/fatigue)
- Lack of ability to access either paid or unpaid study leave
- Lack of ability for the employer to provide relief staff, competing priorities (ie. work-life balance, lack of ability to attend conferences, face-to-face training, time and location of CPD activities)
- Financial and/or personal burden associated with participating in the CPD activity
- Didactic or content that is focussed on a single technique or intervention
- Perceived lack of knowledge/dedication of the facilitator or presenter in relation to the material being presented
- Negative interactions/feedback from the facilitator
- Perceived relevance to and/or confidence of the participant
- Lack of CPD activities offered in rural and/or remote locations
- Lack of resources/problems with technology
- Lack of appropriate mentorship to practice new learning
- Organisational confusion or lack of strategic leadership
- Organisational culture
- Suspicion of the organisational motives for providing specific CPD activities
- Lack of managerial/organisational support to implement new learning into clinical practice
- Limited incentive to participate
- Lack of employer recognition of self-directed CPD achievements

Source: References 3-6,8-10,11-13,16-23

A balance between facilitators and barriers to CPD can often be found in the factors that motivate a professional to engage in professional development activities. Motivators commonly reported in the literature include improved patient outcomes; improved clinical skill, practitioner confidence and job satisfaction; financial and career prospect benefits; professional obligation; or peer pressure (4,7-9,12,22,24,25). Of particular note, CPD opportunities that are meaningful to the participant and/or draws from previous knowledge or experience will have maximum educational impact for the learner (26,27).

Aims and objectives

The aim of the study was to investigate the facilitators, barriers and motivating factors for paramedics engaging in CPD activities and opportunities. Paramedics are required by employers and regulatory authorities to engage in professional development activities. Additionally, CPD offerings are now

accessible to paramedics from sources other than the employer such as universities and professional bodies. Therefore, identifying factors that can motivate or facilitate paramedics to undertake CPD opportunities can provide stakeholders with information to assist in development of learning activities. Likewise, identification of barriers to paramedic engagement in CPD activities can provide insight into the types of CPD that paramedics would be less likely to voluntarily undertake.

Methods

Study design

This qualitative research used semi-structured, face-to-face interviews to collect data. Interviews were transcribed and then analysed using a constructivist grounded theory methodology based on the work of Charmaz (28). Although this iterative approach utilised coding to build conceptual categories and employed theoretical sampling and theoretical sensitivity (28), the study did not utilise theoretical saturation as a concept. Instead, data collection continued to the point where it was deemed by the researchers that there were sufficiently rich data collected to undertake the study.

Participants

Participants (N=10) were qualified and currently practising paramedics in Australasian jurisdictional or private ambulance services. For inclusion in the study, participants were required to have completed their paramedic qualification either through vocational education and training (VET) facilitated by the employer; or graduated from a pre-employment tertiary degree; and be currently employed as a paramedic in a jurisdictional or private ambulance service in Australia or New Zealand; completed any probationary requirements of the employer and be working independently as a qualified paramedic. Paramedics classified as intern or student paramedics (ie. not independently qualified) or not currently employed in a paramedic role by an Australian or New Zealand ambulance service provider were excluded from the study.

Procedures

Following ethical approval, participants were recruited through membership of Paramedics Australasia and the Australian & New Zealand College of Paramedicine (Paramedics Australasia and the Australian & New Zealand College of Paramedicine have since amalgamated and are now known as the Australasian College of Paramedicine). Forward passive snowballing was also utilised as a recruitment strategy. Prospective participants were provided with an information package containing participant information, a consent form and a glossary of terms that could be referred to during the interview process. Interviews were organised at a time and via a method that was convenient for the participant. The interviews followed a semi-structured interview guide, which enabled the exploration of rich concepts and points of theoretical interest to arise through a conversational process between the participant and the researcher (29). Data analysis was conducted by repeatedly reviewing transcripts, coding and

then categorising significant segments of the raw data with titles or names that summarise and interpret each piece of the data (28,30).

Ethics

Ethical approval was gained from the Queensland University of Technology Human Research Ethics Committee (HREC) (approval number 1800000232).

Results

Ten participants completed the semi-structured interview process. Half (N=5) of the participants had qualified as paramedics by completing in-house VET facilitated by their employer. Of these VET participants, 40% had then proceeded to complete a paramedic degree after becoming qualified paramedics. The other half of the participants in this study completed a tertiary degree before being employed as a paramedic.

The conceptual category of 'time' emerged as being both a facilitator and/or a barrier to engaging in CPD. This appeared to differ depending on the physical location or ambulance employer of the individual. Paramedics working in metropolitan areas reported not having time to attend CPD events on their rostered days off because they felt too fatigued from the workload including lack of breaks and/or shift extensions. These participants felt that they needed to utilise their days off to recover from the workload which made it difficult to participate in CPD. Some paramedics have employer support to enable roster changes and swap shifts with colleagues to facilitate time off work to attend a CPD event or activity. Other participants working in different ambulance services reported that their employer was unable or unwilling to enable roster changes, making physical attendance at CPD events/activities and university examinations virtually impossible.

"I don't mind the 12-hour shifts... but I don't enjoy the fact that we run for 12 hours nonstop that ends up being 13 or 14 hours, and after your run of shifts like that you get a few days off... We are not given any time or at least I haven't in the past been given any time outside of work or during work hours to get things [CPD] done." Participant T

Financial costs were reported as another barrier to paramedic CPD experience. Tertiary qualifications and industry specific conferences were cited as generally being financially burdensome. As this category was explored, it was further revealed that some participants felt the financial cost of their self-funded CPD activities outweighed any financial benefits (ie. pay increase or tax-benefit) they may have been eligible to claim post completion of the CPD activity. Many of the participants identified cost as sometimes being more than a financial concept. These participants believed that at times they felt a cost to their personal or family life that was associated which they felt

to be a barrier to their engagement in CPD.

“I paid for my master’s and my graduate certificate, myself. And I put my family into a very tight [financial] situation for probably about five years and was about another 3 or so years until we recovered from that. So, over a period of about 8 years, I put my family into financial strain, in order to be able to do my studies... it was purely for my own professional development. There was no pay rise associated with it.” Participant J

One of the barriers to CPD described by participants was a perception that some colleagues, supervisors and employers placed limited value on paramedics taking self-onus of their CPD and engaging in extra qualifications, courses and/or activities that were supplementary to ‘mandatory requirements’. The participants described a perceived broad cultural attitude towards CPD of “going through the motions” or “jumping hoops” to ensure that minimum standards or regulatory obligations were met. However, for the paramedics who actively engaged in self-sources LLL and CPD, they were at times made to feel that their efforts were either not endorsed, supported or valued by their supervisors, managers and/or employer. The concept of a lack of organisational support being a barrier to CPD was reported by many of the participants who felt their self-sourced CPD had been impacted negatively when they were unable to access study leave to attend university examinations or roster changes to attend conferences. For one paramedic, the lack of organisational support coupled with a direct supervisor who stated they would never approve a roster change resulted in him withdrawing from an undergraduate degree in paramedicine which he had undertaken to complement his ambulance diploma and paramedic experience. Conversely, several paramedics reported positive experiences of organisational support by way of university fee assistance and/or pay increases related to completion of approved CPD activities.

An unexpected finding was ‘fear’ as a barrier to engaging in CPD. The concept of fear was distilled into two different categories: patient focussed, and educator/trainer related. One conceptual category emerging from the data explored patient focussed experiences of sometimes feeling fearful of learning a new procedure and the first few instances of implementing the new knowledge gained. The fear of becoming a novice again and/or not being a perfect practitioner was described as a factor that could hinder engagement in CPD. The reasons related back to the potential for negative impact on patient care, being professionally embarrassed, and/or potentially disciplined for errors that might jeopardise patient safety. Fear was also related to classroom experiences that had occurred during employer facilitated training sessions. The educators providing the training were other paramedics working as clinical support officers or clinical educators. Participants reported times where they were too fearful to practise in class or ask questions and/or actively engage in learning due to the didactic and at times “unprofessional” teaching style of the trainer.

“... the way that we sometimes train... our trainers giving us these horror stories... the reality is that sometimes you scare people off by giving them the horror stories... we’re afraid of doing it... You don’t want to be that officer, that activated PCI and spent all of this money for nothing.” Participant F

The study’s findings about motivating factors indicated improving the quality of patient care and patient safety was an important outcome of CPD. A professional obligation or duty of care to ensure that clinical knowledge and skills were current to ensure that practices contributed to a high standard of health care was reported in the findings. Additionally, financial advantage, such as career progression and promotion leading to a pay increase or tax benefits, were revealed as motivating factors for some paramedics to engage in CPD activities. Of note, some jurisdictional ambulance service’s incremental pay increases were linked to the successful completion of some types of CPD.

Interest in the topic of learning and/or personal enjoyment from engaging in the activity appears to be another motivating factor. Participants in this study were enrolled in, or had completed, tertiary qualifications in health-related courses including undergraduate degrees, graduate certificate, master degree and PhD. Although some of these courses had benefited their paramedic career (eg. Master Degree in Critical Care Paramedicine), participants did not view these activities as CPD. Participants rationalised that the study undertaken was internally motivated and therefore not considered to be CPD. These participants felt that tertiary study only counted if it was industry specific and directly relatable to their patient care or paramedic career. Participants enrolled in tertiary studies outside a paramedicine curriculum described this as more akin to LLL, but something different to CPD because their studies had not been prescribed and at times nor had it been supported by their employer.

Discussion

Many of the findings from this study echoed facilitators, barriers and motivators of CPD that are commonly described in allied health and education literature. A common finding in the literature, confirmed by this study, is the provision of gold standard care as an important factor associated with good CPD (3,4,6,11,14,18). The extant literature also describes time as one of the most commonly reported barriers to professionals engaging in CPD (3-6,8-13,17-22). Paramedics are shift-workers who experience fatigue from workload and staffing shortages in some metropolitan and rural areas (1), therefore it was not surprising that the responses from the participants in this study mirrored those of other health professionals. Interestingly, time was described as a facilitator by paramedics, which is the opposite of what is generally reported in the literature for other healthcare professionals (3-6,8-14,17-21). Working in rural or remote areas with a low case load provided an ability to engage in online CPD or self-directed study, uninterrupted while on shift.

Swapping rosters or shifts in order to facilitate attendance at conferences or CPD events, endorsed by the employer, possibly is a paradox compared to busy metro station locations.

Financial cost is well documented in the literature as being a barrier to engagement in self-directed CPD (3,11,13,16,18). The paramedics in this study agreed that financial cost could be a barrier, however some also defined cost as meaning more than a financial liability. The intangible concept of cost is described in the literature to include broader implications including time, personal burden, stress and associated professional challenges (2,5,6). Cost was echoed by paramedics who discussed how their families had been, at times, impacted negatively by their decisions to undertake postgraduate study or attend CPD events. Likewise, paramedics described lack of organisational support in accessing study leave to have added to the personal cost they felt was impacting negatively engagement in self-directed CPD. Noteworthy in the literature is the ability of some financial cost associated with CPD to be mitigated by the learner claiming work-related self-education tax deductions, accessing study leave entitlements, or reaping the reward of pay increases linked back to CPD completion (7,11,31). However, participants in this study felt that any such benefits were scarce.

One avenue of theoretical interest was the concept of fear. Specifically, fear being a barrier to both engaging in CPD and implementing new learning into professional practice. This was put in the context of paramedics describing how fear was associated with them feeling like a novice again after learning and implementing a new skill, procedure or drug management protocol into their scope of practice. The literature revealed similar findings in nursing (5,13). Fear was also correlated with the instructional/educational delivery of ambulance service educators, recounting 'horror stories' of paramedics incorrectly performing treatment or skills which resulted in negative patient outcomes and/or disciplinary action against the paramedic. These horror stories were recounted by the educators while they were teaching that exact skill/procedure to the paramedic. Threatening communication and fear appeal are two terms that have been used interchangeably in the literature, however a fear appeal is described as a persuasive message rather than a threat (32). The negative impact of the educational style experienced by some participants in this study is mirrored in other health and education literature (18,33,34).

The professionalisation of paramedicine has been examined previously in the literature (35,36). As paramedics in Australia have recently joined 15 other professions in becoming registered health professionals, the results of this study indicate that they are increasing their awareness of professional obligations including active engagement in CPD as an ongoing responsibility. Nursing literature links the professionalisation of nursing to the attainment of specialist skills and knowledge unique to that role (5). Some of the participants in this study drew similar links between paramedic engagement in CPD and paramedic professionalism. Participants expressed the view that taking self-onus of CPD was an indicator of a higher level of

professionalism and that merely 'ticking the boxes' of mandatory training equated to a lower professional standard. This concept has been examined in other literature where evidence suggests that the learning objectives of CPD can be at risk of being overlooked by some practitioners who are complying with mandatory obligations to 'tick the box' rather than spending the time to critically reflect on their practices (7,14).

Another transferable finding from this study, which confirms similar results in the literature, is that people are more likely to engage in CPD that they find personally interesting or enjoyable (11,19,26,27). This ideal was reflected in the findings of this study. Paramedics reported personal interest and/or enjoyment as a motivation behind engaging self-directed learning opportunities such as postgraduate study or industry conference attendance. Furthermore, participants discussed these interactions as assisting the development of other skills such as reflective practices. Similar to nurses, paramedics are developing into autonomous and reflective practitioners as a result of increasing their engagement in CPD activities (5) and are using their personal resources to participate in CPD activities (6). Conversely, paramedics reported that mandatory CPD linked to content such as organisational policy or recertification of arbitrary sign-offs, felt more like a "tick and flick exercise" than a learning activity and thus was not enjoyable. This sentiment is reflected in the research which postulates that if CPD activities are not enjoyable, interesting or deemed relevant by the participant, they will be less motivated to engage (3,10,18,19).

Participants in this study reported varied levels of organisational support of their engagement in CPD activities outside of mandatory workplace training. Some paramedics had experiences of employers supporting their LLL endeavours, however, paramedics reported a perceived lack of organisational support. The literature regarding positive and negative experiences where organisational or managerial support has affected practitioner engagement in CPD aligns with the findings of this study (6,13,16,18). The experience of the paramedic who dropped out of a tertiary degree is also echoed in health research that found participants reported an inability to engage in CPD, correlated to lack of job satisfaction, professional isolation and a decrease of confidence in clinical skills (22). There are jurisdictional ambulance service employers with polices, incentives and/or programs that support self-directed CPD (1). However, equity of access to these opportunities appears to be questionable.

Conclusion

This study identified factors which motivate or facilitate paramedics to undertake CPD opportunities, and barriers that hinder or prohibit their engagement in CPD activities. Many of the facilitators, barriers and motivating factors for paramedics engaging in CPD activities and opportunities mirror that of other health professions such as medicine and nursing. Findings unique to paramedics from this research indicated time can be a facilitator, and fear can be a barrier to engaging in CPD. The

study found that paramedics are generally motivated to engage in CPD to develop themselves both clinically and professionally. Furthermore, paramedics actively seek personally and professionally meaningful CPD opportunities.

Acknowledgements

The authors would like to acknowledge and express sincere gratitude to the paramedic participants in this study, who took the time to give open and authentic interviews. The robust discussions and, at times, vulnerable disclosures, opened avenues of theoretical interest that enabled the gathering of rich data for the study.

Competing interests

The authors declare no competing interests. Each author of this paper has completed the ICMJE conflict of interest statement.

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