Abstract

Background. Paramedics have witnessed a huge shift in their role as providers of pre hospital emergency care although little is known about how student paramedics manage the competing demands they face in practice.

Aim: to explore how student paramedics experience the changing healthcare landscape.

Method: semi structured, focus groups and thematic content analysis was adopted. A purposive sample of student paramedics at different stages of their diploma preparatory training were invited to participate in a focus group interview.

Findings: Participants' considered that the perception from others of what the emergency paramedic service is for is largely a traditional one, as a service to transport patients to hospital. This appears to influence how they manage complex, clinical situations.

Student paramedics' clinical decision making is frequently influenced by the emotional environments in which they work, combined with difficult communication with patients and the lack of support from the different professional groups involved in patient care.

Conclusion: This study has highlighted the complexity of situations that student paramedics find themselves in while making decisions which has important implications for paramedic educators and those supporting them in practice.

Key Words

Student paramedics, emergency care, clinical decision making, collaboration, NHS landscape

Key Points

The role of the paramedic is changing.

Paramedics frequently make clinical decisions in emotionally charged environments.

The role of the paramedic is largely considered by the public as one to transfer patients to hospital.

Expectations of the paramedic role need to change.

A lack of support services impacts on the actions of the emergency care, paramedic service.

Reflective Questions

What does this study tell me about the experiences of student paramedics?

How will the findings from this study impact on preparing student paramedics for their role?

What do the findings mean for those who support student paramedics in clinical practice?

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The role of the paramedic in the UK has changed over the past few decades (Smith, 2017). A once protocol-driven vocation, associated with limited clinical decision-making and responsibility, para medicine has emerged as an autonomous profession involving an expanding scope of practice (NICE, 2017). In part, this may have been driven by the changing focus on models of care delivery, with increased attention on the provision of alternatives to hospital admission (Pollock, 2019). Paramedics are therefore required to demonstrate a higher level of clinical decision-making and clinical judgement than that which was historically required (Simpson et al, 2017). Whilst emergency care remains a fundamental aspect of the paramedic role, calls to less urgent or acute conditions have become a growing aspect of their job (NICE, 2017). The new approaches to health care delivery require different ways of working, with

more treatment being provided away from acute hospitals and closer to home (Miller et al, 2016). However, making decisions around the most appropriate place of treatment for patients is complex and involves the use of intricate clinical decision-making skills and judgement in order to provide safe and effective care (Simpson et al, 2017).

The perceptions of the paramedic role, both internal and external to their profession, has focused predominantly on their importance as emergency care providers, transporting acutely unwell patients to hospital (Crowe et al, 2016; Wankhade, 2016). This outdated and stereotypical perspective of their role, may result in an undervaluing of their clinical decision-making abilities and creates a significant perception-reality mismatch (Simpson et al, 2017).

In practice, paramedics are regularly faced with making time dependent clinical decisions in emotionally charged environments. The often limited local support services further restrict the options available to them (Crowe et al, 2016) and factors such as patient and carer knowledge and expectations add to the complexity (Nixon, 2013). These decisions are then played out in a constantly changing and highly politicised environment where targets have become markers of quality (Collen, 2007). Little is known about how student paramedics manage these competing demands where the focus is supporting the delivery of care closer to home.

This study therefore aims to explore how student paramedics undertaking a part time diploma in paramedic science experience this changing healthcare landscape. The findings feed into the broader discussion around the role of paramedics, the changes in health care delivery and managing public expectations.

Methods

A qualitative methodology with a phenomenological inquiry was employed, with three focus groups (FG). The focus groups, guided by an interview schedule were facilitated by academics from the university's school of nursing who were not known to participants. The one off interviews took place at the university, lasted approximately 90 minutes each were audio-recorded and transcribed verbatim. Bias was minimised by the framing of open ended questions and by two members of the research team facilitating the interviews (Stake, 2010).

Setting and Population

The study was conducted with 15 student paramedics undertaking a diploma in higher education, to explore contemporary views and lived experiences. Students had on average, eight years of experience within the ambulance service prior to commencing as a student on the diploma programme. The participants were all employed by ambulance services and supported by Trusts to complete their academic programmes and were from years one and two of the diploma course with equal numbers of males and females divided between the three focus groups.

Data Analysis

Data analysis was informed by the descriptive nature of the research and based on the transcripts alone (Samuelson et al, 2012). The inductive process began by the four members of the research team reading and re reading transcripts, followed by the use of a thematic map (National Voices, 2012) to develop emergent themes with the use of notes, comments, descriptions and potential meanings linked by extracts from the transcripts (Glaser and Strauss, 1967). Member checking and data saturation were not considered appropriate. Analysis from the 3 focus group interviews resulted in the

identification of 2 main themes and related sub themes representing the experience of participants. Each theme will be discussed in detail.

Ethical approval was granted by Liverpool John Moores University. UREC 18/NAH/028. Data was stored on a password protected, university computer.

Findings

Impact of the Immediate Context

Highly Emotional Situations

It was apparent that the types of cases that participants studying part time for their diploma in para medicine, even allowing for their previous experience in the service have to deal with are vast. The emotional responses from carers, in often volatile situations, appeared to test their decision making ability, as participants recalled.

'I know what I'm doing but you've got the family member screaming in your face, that's when you're trying to keep your cool' (FG 1).

'They're swearing at you, they're threatening you and stuff, so you're trying to make a clinical judgement and thinking, what am I going to do next? Am I going to do this? They could hit me any second but I need to stay nice and calm, while they're swearing at me' (FG1).

The difficulties experienced in maintaining focus, when managing distraught family members as well as the patient, was evident.

'It's an emotional, stressful situation. It's pitch black, you're trying to keep your concentration even though you're knackered. You've got family members sobbing and crying around you' (FG 1).

This was especially relevant when participants in the study were caring for a child.

'An adult, you're not going to attempt resuscitation because they're past resuscitation.

But if you went to a kid, you're not going to say to the parents, no' (FG 1).

Managing Expectations

Where the needs of the patient and expectations of the family were conflicting, participants suggested that they sought compromise by offering care that was not supported by knowledge they have acquired at university as students. This ensured they maintained control over the environment, enabling them to manage the situation more effectively as student paramedics.

'The patient's family member was just pushing us and we thought well, if it's going to make this patient's family feel better as well, it sometimes has a kind of placebo effect' (FG1).

The patients themselves were key to influencing the actions the student paramedics took, particularly in relation to whether or not they are transferred to hospital. However, one participant highlighted an example, where their clinical decision-making was invalidated by the patient demands and expectations.

'When a patient says they've got a pain score of 10 and they're sat on their phone and exhibiting behaviours that kind of makes you think that might not quite be true, but we go along with that' (FG2).

It was suggested that the easy access patients had to information online undermined the participants' ability to make the make appropriate clinical decisions. 'You lose count of the amount of times you walk in and you can see the screen on the PC blinking away in the corner with Wikipedia on and straight away you know you're on to a loser' (FG2).

Furthermore, the impression that patients associate the arrival of a paramedic with the need to go to hospital, was clear. Little could be done to dissuade some patients, even when alternatives were offered reinforcing the expectations of the patient and their family and how they influenced the actions and decisions participants made.

'They insisted that they go to hospital so everything will be normal and they could go to a walk in, could go to the GP and you mention that to them and they don't like it. They want to go to A&E even if you're telling them about the pressures and the waiting times, they will still insist' (FG2).

Frustration was expressed by one participant, who felt that these cases undermined their clinical judgement, leaving them powerless to act in what they perceived to be in the patients best interests.

'This is an ongoing problem they've had for two years but they've not seen their GP. But four o'clock in the morning they decide, well I want to go to hospital now. Has it changed? Is it any worse? No everything is still the same. They like to phone you and for you to say we'll take you to hospital now' (FG2).

Impact of the broader context

Perceptions of colleagues

The narrative of the participants suggests a sense of being professionally undervalued. This made decision-making in relation to hospital transfers difficult, where the external pressures, organisational targets and public expectations resulted

in transporting patients to hospital, even when the decision went against clinical opinion.

'There's been a massive increase in the management wanting you to leave people at home, and there's people in a management position who just base what they do purely on statistics. We've been approached, say, by a paramedic or a boss and told, our figures for leaving people at home aren't good enough' (FG1).

Whilst theoretically, the participants felt this should not impact on their decision making, they admitted it was impossible to ignore.

'You're not going to listen to that, you're going to base your decisions purely on the patient in front of you. But some people might take that as pressure, and it starts affecting how they're making clinical decisions' (FG1).

In addition, participants suggested that their actions were restricted by how others reacted to their suggestions.

'You're constrained sometimes by other people's responses to your requests, for what you'd recommend' (FG2).

Support services

A lack of wider support networks added to the complexity of situations as participants described the impact of not having support services available during certain times.

'After hours, social services are not there and then we take them to A&E as a place of safety, that's clogging up A&E' (FG3).

'It's a 24 hour city, it's a 24 hour service, however not everything works 24 hours. So the people you need to speak to at certain times finish at five o'clock' (FG2).

A sense of dissatisfaction was expressed by participants who explained that due to a lack of support services, often the only option for triage services was to request the paramedic service.

'They just go to the default of I'll send an ambulance' (FG1).

Accessing out of hours mental health support services were perceived as particularly problematic.

'So at three o'clock in the morning when you need a community psychiatric nurse to speak to, to try and get a patient a respite bed, nobody there' (FG1).

'I spent three hours in a woman's bedroom. The crisis team wouldn't go so they sent us' (FG1).

However, the importance of working with other agencies was evident as participants recognised the need for a collaborative approach.

'It's about working with other agencies, or what's right for everyone who's involved' (FG1).

'You could call up urgent care can't you if you really need some back up' (FG3).

Discussion

The NHS in England is the largest publicly funded health care system in the world, with healthcare reform and ambitious goals over the last decade resulting in continuous change and transformation (DH, 2019). Given the ambitious aspirations of reform and the promise of improved standards, reduced variation in practice and access to excellent care, transformational change is dependent on new ways of working across multi professional groups (Thomas et al., 2014). The context in which

paramedics function is complex. The need to provide patient-centred, individualized care must be influenced by a shift in the perception of paramedics providing pre hospital care in isolation, to those who have extended scopes of practice and who work closely with members of other health professions in order to deliver care in the most appropriate setting (West et al, 2014).

In this study participants on occasions felt pressurised to take patients to acute hospital services in order to placate individuals and manage expectations. Participants often felt let down by other health care professionals particularly in relation to dealing with those patients with mental health issues rather than experiencing effective team working and cross professional performances which evidence suggests leads to better patient outcomes (Ramanuj and Pincus, 2019).

Participants expressed concerns about the unrealistic expectations from patients resulting in high levels of anxiety for all those involved. This is consistent with what Robertson et al (2018) describe as a result of the negative emotions experienced by patients in situations where there is uncertainty and where their anxiety is often heightened. Additionally, when support from family and friends may be absent, increasingly for some patients the media appears to be a fundamental source of emotional support or guidance and something apparent in this study.

Participants appeared to suggest that the public and other health services did not fully appreciate their role, skills or their ability to make clinical decisions or the paramedic's contribution to the wider functioning of emergency, out of hospital services. Where their autonomy was permitted, their role seem to flourish and they were able to demonstrate their extended the scope of practice.

Participants were able to describe some examples of effective team work and autonomous decision-making. There were positive examples of when participants as student paramedics would be guided by their supervisors and other health professionals to help with clinical decision making particularly when reflecting on stressful or emotionally charged situations they had encountered. This adds strength to the importance of teamwork and shared decision making processes for paramedics, something considered essential for safe and effective, integrated care provision (Higgs et al, 2017).

In England urgent and emergency care consists of a range of services including GP out of hours, Walk in Centres, minor injury units as well as accident and emergency departments. Although there are some commonalities between each of these services, their development has changed the NHS landscape with little evidence of what influences patients' choice in their use of each service (Booker et al, 2018). Findings from the literature suggest a public misconception of what alternatives services to that of a paramedic can offer, even though it appears that the public provide a very clear justification for requesting an ambulance even for symptoms considered by paramedics as inappropriate (Richards et al, 2010). This resonates with the findings from this study, where there appeared to be a disparity in how the paramedic service was viewed and utilised suggesting that different perspectives exist on what paramedic services should be used for.

Increased patient contact, rising expectations from the public and a shifting NHS landscape has intensified the demands placed on clinicians including paramedics, evident in this study. NHS healthcare services comprise of complex systems of decision making processes and multi-dimensional teams, often with competing pressures, opposing mandates and dynamic professional relationships (McLaughlin

and Olsen, 2017) as illustrated in this study. However, teamwork, supportive relationships and the effective use of health series will bring together the skills and knowledge of various disciplines including those of paramedics and provide the linchpin of seamless service provision (West et al, 2014). In this study, participants reported that they felt the public perceived the service they provided as largely traditional one which presents a significant barrier if the profession is to embrace new models of care. Care that is unplanned or identified as urgent are ill defined phrases used to exemplify the transformation of emergency services in England and something which may be having an impact on the appropriate use of paramedic services, particularly when other support services are absent.

Limitations

It should be acknowledged that the limitations to this study are that the findings are based on a small number of interviews. The participants were students undertaking a part time diploma in paramedic science while having been employed by an NHS Trust and some of their reflections may not be based solely on their experiences as a student paramedic. It does not aim to promote generalisability in terms of representing all students studying paramedic practice including those studying full time for a Bachelor of Science but it does identify valuable context for those preparing student paramedics for the role.

Conclusion

Demand for health and social care is rising due to an increase in the number of people with long term conditions and an ageing population. Paramedics form an integral part of the wider, multidisciplinary team but participants in this study have suggested that

the view of the ambulance service and the role that paramedics play is largely a traditional one, as a service to transport patients to acute services. This view appears to have an influence on their clinical decision making and ultimately on whether individuals are transferred to hospital. Managing individuals at home should become the standard approach for paramedic services when appropriate and the expansion of their roles and the extension of their skills will enable this to happen. This can only be achieved if those working with and coming into contact with them including patients, carers and other services recognise the significance of their role and the contribution they have to make. Furthermore, this study has illustrated the need for a deeper understanding of how the public and other services perceive the role of the emergency care, paramedic.

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