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### Article

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## **Clinical decision making in paramedic practice. A qualitative study exploring the challenges of responding to mental health needs.**

### **Abstract**

The paramedic service responds to emergency calls for a variety of reasons with many relating to mental health concerns. This qualitative study aims to explore the views and experiences of student paramedics in relation to clinical decision making for mental health calls. Focus groups were utilised to investigate the participants' perspectives. Thematic analysis was used to organise data and identify key issues. Findings suggested some disparity between what paramedic students were prepared for and the reality of public need. Clinical decision-making in relation to those with mental health problems was significantly influenced by the current provision of mental health services and the lack of mental health specific education for student paramedics. Current changes to the paramedic programme make this an opportune time for a review of curriculum content.

**Key words:** paramedic, mental health, clinical decision making, education

### **Article**

Over recent years, NHS England has increasingly focused on improving the outcomes and experiences of those with mental health problems. The impact of poor mental health extends through the lifespan, affecting all age groups. The Five Year Forward View for Mental Health (Mental Health Taskforce 2016) acknowledges that in order to improve the experiences and outcomes for those needing support a wide-ranging approach is necessary that includes better assessment and access to appropriate services in a timely manner.

Calls to emergency services as a result of mental health crises are increasing with literature suggesting that a minimum 40% of calls are mental health related (Ford-Jones and Chaufan 2017). Indeed, Rees et al (2015) suggest the UK has one of the highest incidence of self-harm in Europe, leading to a reason for hospitalisation. This presents significant challenges for pre-hospital staff including paramedics who are often faced with ambiguous patient presentations and a scarcity of any medical history for that person (Parsons & O'Brien 2011). Despite the Department of Health (DoH) (2014) recommendations for paramedics to be adequately equipped to carry out assessments, and facilitate a joined up approach to mental health care, gaps remain in paramedics' skills and knowledge. Compounded by deficiencies in community mental health services, high quality care remains challenging (Ford-Jones and Chaufan 2017 and Rees et al 2015).

As the role and scope of practice for paramedics develops, their involvement in the management of mental health issues continues to increase. Therefore, the purpose of this paper is to explore the views and experiences of students' and the factors that influence decision making for paramedic students, specifically in the assessment, and response to calls relating to mental health issues.

## **Methodology**

Qualitative methodology was employed to explore the views and experiences of paramedic students undertaking a Diploma in Higher Education to become a qualified paramedic. This approach supports researchers to investigate situations and experiences of participants to achieve a better depth of understanding about the phenomena under investigation (Basit 2010).

### **Data Collection**

The focus groups were undertaken by two members of the research team who were academic members of staff. This was audio recorded, anonymised and transcribed verbatim. A semi-structured approach was used with a schedule of questions agreed by all members of the research team.

### **Sample Size**

A total of 15 student paramedics were recruited for the study, divided between 3 focus groups.

### **Sampling**

Purposive sampling was the basis for participant selection specifically, three focus groups were facilitated with between four and six participants in each. Participants were student paramedics from both year one and two of the Diploma Programme, with many having substantial prior experience as technicians prior to enrolment at university.

Participants were provided with an information sheet detailing the study and all were invited to ask questions. Written consent was obtained before data collection began.

The study received ethical approval from the University's Research Ethics Committee, UREC 18/NAH/028

### **Data Analysis**

Transcripts were read and re-read several times. This led to the creation of notes and ideas leading to the coding phase by each member of the research team. Researchers then searched for themes by combining different codes relevant to the aim of the research (Braun and Clarke 2013). The use of a thematic map assisted in linking themes and facilitating a relationship between them. Examples of narrative within the transcripts were then used to illustrate each theme.

### **Findings**

Disparity between student paramedics' expectations of the role and the reality of paramedic practice was apparent throughout the data. Students perceived their role to be primarily one of attending emergency calls involving physical injury or healthcare needs. Preparation for practice included the understanding and ability to implement protocols and associated medical tasks. However, the level of preparation for managing mental health issues was perceived as poor. Whilst participants' could clearly see the need for better mental health

service provision, the lack of availability in practice of appropriate mental health support services inevitably led to paramedic involvement and transfer to of patients to Accident & Emergency (A&E). Findings from the focus groups highlight a need for education on mental health assessment and training for better intervention.

### **Expectations versus reality**

Paramedics deal with a significant amount of mental health calls, one participant recalls that most calls relate to mental health.

*It's a huge problem*

The impact to the paramedic student from this can be seen here;

*I think it's quite draining, especially after a mental health job, you can sit on a job for 4 hours*

This is further compounded by the worry that other people may need their intervention more urgently

*You're sat looking at your watch thinking I know there's no vehicle for that cardiac arrest which funnily enough is what we do*

When referring to mental health interventions expectations are ambiguous. There is acknowledgement from the participants that mental health covers a wide variety of situations from depression, to suicide and violent acute episodes. However, the language used to assess the situation was equally ambiguous with 'mental health job' being the point of reference. The response to such calls lacked a sense of purpose as there was little attempt to differentiate between presenting mental health symptoms or conditions.

*You can train someone how to speak to a mental health patient but you can't teach them to deal with that persons immediate problem. No amount of training is going to be able to sort that persons problem out*

When asked how this differed from physical illness one participant said

*If you get there and sort of start the healing process...like when it's a broken leg or something you can splint it*

Participants seemed to have low expectations for their interaction with people needing mental health support and did not appear to link their initial response with an opportunity to influence patient recovery or effect clinical outcomes. How to communicate with those who have mental health problems was acknowledged as important by various participants however, they also acknowledged their concern over getting it wrong as responses to their interventions are difficult to predict.

*I'm always scared of saying the wrong thing and making them feel worse*

*Annoying the patient even more*

Both occupational therapists and nurses were thought to be better equipped to respond to mental health needs. However, it was acknowledged that in response to suicide, ambulances do have the necessary equipment to care for that person

*You've got at least a resuscitation kit available to do something about it*

The focus here however, is on the response to physical needs following a mental health episode.

Ultimately, there was a level of frustration at the time paramedics spend with people needing mental health support without the necessary support available

*You've spent lots of time and feel like you've achieved nothing*

### **Structure of mental health services**

It appeared that the lack of options to support those with mental health issues were exacerbating the frustration experienced by the paramedics;

*I don't particularly want to get on my soap box, but the provision of mental health first aid in this country is nothing short of shocking and in some cases third world*

*A&E isn't the right place for them, neither is a police custody suite and neither is the back of an ambulance*

In response to this, participants felt a mental health response vehicle with a mental health practitioner was more appropriate

*If we had a community referral like you can get out of hours GP's, you can get an out of hours mental health worker to the house within one hour...much more appropriate than taking the patient to hospital...but again that's funding. It's not going to change anytime soon*

It was recognised by participants that it is possible to improve the outcomes for those with mental health issues by the use of more bespoke services and better education and training for paramedics in preparation for responding to mental health needs.

*We should have better pathways to go down...our own mental health car*

*We need a mental health casualty...where there are experts in that particular field*

Specifically, participants identified their concerns associated with attending to those individuals at risk of suicide, as they discuss the inappropriateness of A&E as a suitable environment for that person.

*If you leave them at home and they kill themselves you might as well tell (employer) to sack you, you might as well when you get back to the station and find out they're dead put your uniform in the bin and go home*

Participants recognised some people at risk are not typical of mental health calls and therefore, may be missed.

*You could get like a 90 year old lady who's severely depressed phoning an ambulance and they'll say (111) 'well do you really need an ambulance?' and she'd go 'its ok don't send me an ambulance I'm fine' when she's not she's really on the edge*

Triaging as well as responding face to face for mental health calls can therefore be challenging.

### **Role of education and training**

Participants referred to the lack of paramedic education and training in the specialist area of mental health.

*None of us are trained, none of us particularly know what to do with them*

Calls to those with mental health issues appeared to carry a variety of risks for paramedics ranging from their own personal safety, to fear of litigation and job security as well as patient safety.

One participant recalled

*It got really charged....should have been contacting the police beforehand because then we got attacked by the person and because of that we had to retreat*

The participant went on to describe the successful de-escalation that occurred once the police had arrived. This then led to the acknowledgment of how much better prepared the police service appeared to be in dealing with this type of event.

*The police talking to them were brilliant, they were really good and really patient, it felt like they knew what to say and how to deal with it*

One participant reported that the police were better than some paramedics at talking to people appearing to use specific methods of engagement with those who had mental health issues, specifically;

*they've got different techniques, different ways of talking to people*

It was acknowledged by participants that paramedics would benefit from acquiring more techniques for dealing with such situations and there was some discussion about how education could help them with one participant suggesting more training on specific conditions;

*More training on actual conditions, cos they're all under one umbrella of mental health*

However, another questioned the utility of this given the variety of calls they are required to attend and temporary nature of their contact with individuals

*You could say that about all the stuff we go to.... we're here to patch things and get people to the right places*

The importance of mental health education and training was considered particularly important for those who enter the paramedic profession at a young age in order to prepare them for dealing with challenging situations that might involve those with mental health issues.

*You've got people with limited life experience. We have 18 year olds on this course. You are going to ask them in two years with no mental health training, to go to somebody who is either very, very down and needs them or does not want them to be there. I'm not saying 20s or 30s will be any better but with some sort of life training of being in situations where you have to be a bit resilient.*

*I think it's a bit of a frightening situation to put someone in.*

The focus on the need for people skills was seen as important when attending to people at times of great stress. Participants felt this was less likely to happen for school leavers.

## **Discussion**

The Health and Social Care Act (2012) pledges to improve mental health services by delivering parity of esteem with physical health conditions. However, data from this qualitative study of student experiences suggests more ought to be done.

Participants in this study despite being paramedics in training had clear views on the need for improved mental health services and saw the current gaps as having significant impact on their ability to firstly avoid unnecessary admissions to A&E and secondly provide a better patient experience with more suitable avenues for initial response and treatment. Fortunately, the recent budget announcements include an injection of funds for mental health services to include better access to services on a 24 hour a day basis. Options will include specialist ambulances to respond to calls with better support in A&E if admission is necessary (Gilburt 2018).

Whilst, some of this relates to lack of mental health services and therefore options for support, it can also be attributed to processes health care professionals use to make accurate clinical decisions. Jensen et al (2016) focusing on the process used by both paramedics and student paramedics to make their clinical decisions utilised the Dual Process Theory (Norman 2009). The Dual Process Theory suggests there are two options, firstly system 1 is considered intuitive and rapid, influenced by prior experience were-as system 2 is deliberate and rational, based on knowledge. Both systems may be used interchangeably, however in relation to paramedics and student paramedics Jensen et al (2016) found participants relied mainly on rational decision making over intuitive decision making to achieve a provisional diagnosis. Recommendations from this suggest paramedic education would benefit from understanding the process of clinical decision making with options such as case presentations with 'a cognitive autopsy' (p220) to focus on thinking strategies or

simulation with a 'think aloud' (p220) approach, to facilitate exploration of the factors affecting clinical decision making. Key to the success of this approach however, is the link between knowledge base and the clinical decision made. Therefore, in relation to decision making for mental health calls, student paramedics would need additional mental health education as participants suggested very little had so far been delivered.

Participants described a variety of situations that relate to mental health and in particular some that require support from the police. When attending jointly with the police some recalled how the police officers appeared to know how to handle the situation by having different ways of talking and de-escalating the situation. The participants themselves highlighted how the techniques the police used would be beneficial to them. It would appear that different approaches by the police have been underway for a number of years in relation to their response to situations involving mental health issues, with the development of Mobile Crisis Teams (MCT's). Some areas of the country have reported decreased activity in enacting legislation with an emphasis on avoiding the Criminal Justice System. Officers benefited from engaging with the MCT's before deciding whether to detain people (Lancaster 2016). It would seem that access to such specialist support for frontline staff would also benefit the paramedic response especially given the rational decision making processes favoured by paramedics.

Paramedics can be the first point of contact in health care regardless of underlying rationale. As a result, paramedics are required to have a 'hybrid skills set' (Ford-Jones & Chaufan 2017 p2). Findings from this study suggest student paramedics would welcome more education about mental health, as participants indicated a significant level of concern for patient outcomes but felt their interactions were limited. Findings from a survey commissioned by the College of Paramedics are not dissimilar in that whilst paramedics are aware of sections 135 and 136 of the Mental Health Act (1983), more education relating to mental health conditions would be beneficial, particularly issues of patient safety (Berry 2014).

Participants identified the need for resilience as a way of coping with challenging calls. Resilience is thought to be particularly important for healthcare professionals due to the complex, stressful and emotionally challenging environment in which they work. Healthcare students in general report high levels of stress, negative coping and possible retention problems. There is also a correlation established between resilience and the mental health of healthcare professionals (Sanderson and Brewer 2016). In addition, paramedic students on placement work in diverse and sometimes precarious work place environments adding to the stressful nature of pre-hospital care leading to calls for an enhanced level of resilience training (Kennedy, Kenny & O'Meara 2015).

**Recommendations:**

1. With paramedic training now extended to a 3 year degree programme there are opportunities to rebalance expectations with the reality of practice to include additional mental health content.



2. Education in mental health ought to include accurate assessment techniques to facilitate decision-making.
3. Resilience ought to be a priority in better preparing student paramedics for ongoing professional practice.
4. Opportunity for postgraduate development of mental health paramedicine.

Key points:

- Paramedicine requires a unique set of skills in order to respond adequately to a wide variety of calls, often involving precarious working environments and volatile clinical situations.
- Clinical practice is a complex with constraints on assessment skills, mental health specific resources and underpinning knowledge.
- The challenges encountered by paramedics has the potential to impact on their wellbeing.
- Improvements in education and resources may better support clinical decision-making.

Reflective questions:

- What opportunities are there for improved liaison between mental health and paramedic professionals?
- What are the common mental health challenges you experience in your professional practice and how could they be addressed?
- What do you see is the impact for patients if no changes are made to mental health education for paramedics?

References

Basit TN. Conducting research in educational contexts. New York. Continuum International Pub. Group. 2010

Berry M. College of Paramedics evidence into mental health care and policing. Journal of Paramedic Practice. 2014; 6 (10):539-540

Braun V & Clarke V. Successful qualitative research: A practical guide for beginners. London: Sage 2009

Department of Health. Mental Health Crisis Care Concordat Improving outcomes for people experiencing mental health crisis. London. 2014

Ford-Jones PC & Chaufan CA. Critical Analysis of Debates Around Mental Health Calls in the Prehospital Setting. *Journal of Health Care Organisation, Provision and Financing*. 2017; 54 (1):1-5

Gilbert H. Mental health funding in the 2018 Autumn Budget: the devil will be in the detail 31st Oct 2018 Available at: <https://www.kindsfund.org.uk/blog/2018/10/mental-health-funding-2018-autumn-budget> Accessed 18th Nov 2018

Health and Social Care Act. <https://assets.publishing.service.gov.uk/> 2012

Jensen JL, Bienkowski A, Travers AH, Calder LA, Walker M, Tavares W & Croskerry P. A Survey to Determine Decision-Making Styles of Working Paramedics and Student Paramedics. *Canadian Journal of Emergency Medicine*. 2016; 18 (3):213-222

Joint Royal Colleges Ambulance Liaison Committee 2006 Mental Disorder. <http://tinyurl.com/3t4wvxz> (accessed 3 August 2011)

Kennedy S, Kenny A & O'Meara. Student paramedic experience of transition into the workforce: A scoping review. *Nurse Education Today*. 2015; 35 (10):1037-1043

Lancaster A 2016 Evidence for joint police and mental health responses for people in mental health crisis *Mental Health Practice*. 2016; 19 (10):20-26

Mental Health Act (1983): Chapter 20 (online)  
Available at: <https://www.legislation.gov.uk/>

Mental Health Taskforce. *The Five Year Forward View for Mental Health*. 2016

Norman G 2009 cited in Jensen JL, Bienkowski A, Travers AH, Calder LA, Walker M, Tavares W & Croskerry P. A Survey to Determine Decision-Making Styles of Working Paramedics and Student Paramedics. *Canadian Journal of Emergency Medicine*. 2016; 18 (3):213-222

Palmer A. Improving the assessment and referral of mental health patients. *Journal of Paramedic Practice*. 2011; 3 (9):496-503

Parsons V & O'Brien L. Paramedic clinical decision-making in mental health care: a new theoretical approach. *Journal of Paramedic Practice*. 2011; 3 (10):572-579

Rees N, Rapport F & Snooks H. Perceptions of paramedics and emergency staff about the care they provide to people who self-harm: Constructivist metasynthesis of qualitative literature. *Journal of Psychosomatic Research*. 2015; 78:529-535

Sanderson B & Brewer M. What do we know about student resilience in health professional education? A scoping review of the literature. *Nurse Education Today*. 2017; 58:65-71