

A photo-elicitation study of paramedics' perceptions of mental illness.

Jessica Houston, John Rae, Lyle Brewster

Accepted for publication in Irish Journal of Paramedicine, Vol 5, Issue 1. This is the accepted version of the article, post peer-review. A final publisher version will be provided in due course.

Abstract

The number of people with mental illness who are treated by paramedics is increasing and there are a variety of factors that can affect how well this service demand is met. One such factor is paramedics' perceptions of mental illness. Photo-elicitation was used to explore how paramedics felt about mental illness and to generate new ways of thinking about this important aspect of paramedicine practice and education. Highlighted is that paramedics can feel helpless and under-prepared in treating people with mental illness and that two concepts of ancient Greek origins — *aporia* and *phronesis* — offer a useful way forward in thinking about and responding to this.

Introduction

The number of cases involving mental illness treated by paramedics is increasing (Roberts & Henderson, 2009; Shaban, 2015, yet there is limited research on paramedics' perceptions of mental illness (Prenner & Lincoln, 2015). The complex nature of mental illness means that paramedics must go further than being able to implement protocols for the treatment of mental illness; treatment practices must be underpinned by beliefs and attitudes that enable

the very best treatment and care. Matching the rise in demand for acute mental health care with research about how paramedics feel about mental illness will assist in better understanding this aspect of paramedicine practice.

Much of the limited research on paramedics' perception of mental illness comes from the functionalist paradigm — see, for example, Ahmad, Ayu and Rawiyah (2004). These researchers have applied methodologies that are quantitative and with a relatively narrow scope, and this has been beneficial in terms of informing practice guidelines and so forth. Some recent research has sought 'unique and rich description[s]' (Rolfe, U., Pope, C., & Crouch, R., 2020) of paramedics' feelings and responses regarding mental illness and we seek to add to this body of work. Here, we apply an alternative approach to generating new understandings of the topic and apply an arts-based research approach. An important benefit of arts-based research, here photography, is that art can be considered to be prestructural (Rolling, 2010, 107 pg.107). That is, the arts-based researcher is less encumbered by prevailing knowledge and views and therefore more capable of highlighting differences between 'what we know and what we believe' (Rolling, 2010, p. 107). Free from any prejudice about 'what we know', it was considered that a deep understanding of how paramedics perceive mental illness would help to inform professional development programs, more targeted research, refocused undergraduate and postgraduate university-level paramedic programs, and more holistic treatment of people who have mental illness.

Methodology and methods

This project draws from the methodology 'postmodern emergence' and photo-elicitation. In postmodern emergence there is no emphasis on finding a single 'truth'. Rather, there is

emphasis on how an 'assemblage of forms and meanings comes together as a moment of representation, a temporary stability within a dynamic flux of meaning-making in (re)search for new knowledge' (Somerville, 2008). Photo-elicitation involves the insertion of images in interviews to record how subjects respond to these and attribute social and personal meanings. The meanings and emotions elicited may differ from or indeed supplement those obtained through verbal inquiry (Harper 2002, pg. 1).

The participant recruitment strategy involved purposive sampling with the intention of selecting information-rich cases (Palinkas, et al., 2015) in order to gain insight. In this study, this was considered to be more important than being able to generalise findings across a population of paramedics.

Two semi-structured interviews were conducted with each research participant, so six interviews were conducted in total. After first interviews, one of us (JZH) made a series of photographs in response to dialogue from those interviews (See Figure 1 for example) and with the intention of eliciting deeper participant responses. The second interviews involved showing the photographs back to the research participants and extending the conversation about paramedic perception of mental illness. All interviews were audio-recorded and later transcribed, and researcher notes were made in a research journal.

The Charles Sturt University Human Research Ethics Committee approved this research — protocol number H18168. The project ensued with the informed consent of all the participants who had the option to reconsider and withdraw their participation in the study.

Figure 1. Example of images used to elicit deeper participant responses



Analysis and results

Three participants were recruited and the professional background of these varied in terms of length of service and location (metropolitan and rural).

Analysis of the collected materials (transcripts, photographs and research journal notes) occurred in a way that is reminiscent of Carter: 'a double movement of decontextualisation and of recontextualisation, in which new families of association and structures of meaning are established' (Carter, 2004, pg. 13). This is similar in intention to Somerville's method of dismantling and re-assembling her journal notes, transcripts, photographs, in order to 'create a new product from the research' (Somerville, 2007, p. 239). New associations and insight about the perception of mental illness amongst paramedics were thus facilitated and we refer to these as 'helplessness' and 'under-preparedness'.

Helplessness and under-preparedness

The importance of the notions of 'helplessness' and 'under-preparedness' to paramedics' perceptions of mental illness emerged as a primary finding across all three participants and all six interviews. The background to helplessness is the high prevalence of mental illness cases.

As Martina (pseudonym) noted:

Anywhere between 20% to 50% of that workload would've been mental health, dependent on location or time of year. So, yeah – so, I've experienced all forms of mental health. Everything from an anxiety attack right through to a psychotic break, schizophrenic episode, people who have suffered self-harm, self-abuse, abuse from others, physical harm, physical damage ... suicide, completed suicide – yeah, anything you want to name.

Another participant, Gavin, helps to contextualise this by saying:

Nobody is immune to any mental health — I think probably if 99% of the population were honest mental health is part of life and we probably all experience some form of poor mental health at some stage in our lives regardless of where you live or what you do.

All three participants referred to their lack of preparation for dealing with the high prevalence of mental illness. Of course, this is not an issue unique to paramedicine. It is likely that a system-wide strain on mental health services highlights the unpreparedness of paramedics and creates a sense of hopelessness. Gavin spoke about his frustration regarding this:

Some days you really just feel like you're banging against a wall because you want to do the best for your patient — you can see your patient is struggling or suffering but from what you're doing at the scene to going to help, there's this like wall you're trying to punch through, and it's like there's nothing there, and it's like, what's the point, sort of thing, you want to just sit down and have a cup of tea with this person and have a chat for a couple of hours and you think you'd probably do more good than them sitting there being frustrated in a waiting room or a holding area, not receiving any help, and then not being listened to, no one being empathetic, no one considering their plight or their individual circumstance ... I wish there was like a silver lining, but there currently isn't.

Martina had similar frustrations and saw the way forward as being more education:

... it's limited, and you feel frustrated because of the limitations that are either placed on you, resources that are not allocated to you, education and training that's not provided. You have to seek your own, like I did a mental health first aid course ...

it's like the veil is lifted from your eyes and you go, oh, okay, that makes a lot of sense, I mean why haven't we covered that, like if we'd done something like that, even just at university or training... You do feel a bit, sort of like you're just treading water.

In terms of paramedic education, there is a tension between theory and practical experience that impacts on feelings of helplessness when dealing with people with mental illness. Jamie, another participant, noted:

I just think that there are certain aspects of the job that you can't learn in a theoretical manner. So no, I think that there are a lot of aspects of how we work with people with mental health issues as paramedics that I think [are] impossible to learn in a classroom setting. The only way you learn it is to go out and actually do the job ... [exposure] to people suffering from those mental illnesses on a day-to-day basis.

The research participants suggested that the way forward goes beyond formal education; they strongly articulated that there is no singular solution to this apparent aperture in theory versus experience and indeed that both are required. Jamie proposed this:

I don't think you can prepare solely theoretically or solely on the job. I think if I went out as a vocational entry paramedic, I think you'd struggle a bit ... it's really valuable to review cases, like in the classroom, that have happened and to certainly become knowledgeable about ... the legislation and basically the rules that define how we practice. I think it is just a case of developing more experience, going to more jobs, seeing how other people carry themselves.

Gavin highlighted the importance of experience in particular:

It's a very practical, very hands-on job, and I think the students are disadvantaged.

They don't get a lot of exposure throughout their – through your degree

The complexities of practice and on-the-job proficiency in relation to people with mental illness was further highlighted by Gavin:

... even though you could do five broken arms in a month, every one of those would have different contexts and circumstances. But comparatively it's a broken arm. You've got a sequence of things that you deal with. When it comes to the mental health side of jobs it's tricky because you're negotiating essentially with another human being. Not that you're not in trauma jobs, but I mean when the focus of the issue, the reason that you're there is the mental health and the mental wellbeing of the patient, there are a lot of skills mainly in communication and negotiation that you only develop by doing it I think ... I think the more experience that people can get, the better.

Jamie continued:

I think just that exposure and seeing how other people communicate, how other people de-escalate and those sorts of skills, I think is good ... we work in an industry that's all about people, and the only way to become good at it I think is by that exposure at the time. You can't teach someone how to talk to someone, and we discuss that quite a lot — quite a lot. And I don't know how, in this three-year degree they run, I don't know how they can do that, other than just providing more opportunity for them. And it might be working in a mental health facility for a placement.

Interwoven with these notions of under-preparedness were feelings of self-reproach and accountability towards patients, alongside the helplessness, as Martina recounted:

I feel bad for our patients because we're not as well equipped as we could be — should be. There's obviously levels of frustration there as well because you know that you're going to — if that person is profoundly unwell, you're going to feed them into a system that will not provide the kind of long-term health ... We're here to help people and in a lot of cases we can — we can do that quite completely. I mean, as in we can assess ... and assist them and then bring them to the help they need if it's a trauma or medical case. You can actually start them down the path to get them fully back to health, and that is not something that you can do with a mental [health] case.

Discussion

Photo-elicitation allowed for participants 'undoing of the self ... as a necessary condition for the generation of new knowledge' (Somerville, 2008, pg. 216). What was elicited were two important elements of paramedics' perceptions of mental illness, helplessness and under-preparedness. Linked to helplessness and under-preparedness are questions of prevalence and the complexity of treating people with mental illness, and also the important role of experience in this aspect of practice. To further work with and respond to these ideas we introduce and discuss two concepts of Ancient Greek origins — *aporia* and *phronesis*. These may be usefully applied to paramedicine education and care of people who have a mental illness.

Aporia and Phronesis

Undergraduate and initial professional paramedicine education cannot, alone, adequately prepare an individual to respond to the complexities of treating and caring for people who have mental illness mental illness. Each presentation is unique. Further, dichotomising theory and experience may not be productive in the longer run because theory and experience are not mutually exclusive; they are entangled within a complex and ever-evolving field of professional practice. This is why clinical placements and supervised internships serve such an important role in preparing paramedics, however, in most cases these are not focused specifically on mental health issues. It does need to be noted that the chance of a mental health callout occurring on a supervised placement will of course be high and this is because of the prevalence of mental illness. In Australia, 3.2 million people have a mental illness that requires access to mental health services or medications (ABS, 2017) but some people are at much higher risk — for example, one in four young people experience a mental health condition and lesbian, gay and bisexual people between 16-27 years are five times more likely to attempt suicide and six times more likely to meet the criteria for a depressive episode and 48.1% transgender and gender diverse individuals between the ages of 14-25 have attempted suicide in their lifetime (National LGBTI Health alliance, 2020). Rates of major depression are higher in the older population too (Beyond Blue, 2019). So, while supervised clinical experience is very important for student or even novice paramedics, the reality is that much of the 'real' learning about how to manage patients with mental illness occurs once paramedics enter the workforce and probably throughout their career.

This takes us back to the notion of 'under-preparedness' and the work by Roberts and Henderson who noted that paramedics 'currently felt their education is limited and does not prepare them, by their own standards, to adequately address this client groups needs'

(Roberts and Henderson, 2009 pg. 13). Additional education may improve the situation (Roberts & Henderson, 2009 pg. 13) but only if that is supported by experience, and even then, only if that experience serves as a resource for deep learning. This question of deep learning may be what Martina was thinking about when she said: 'I feel very prepared but at the same time, not prepared at all'. That is, there is a difference between having 'covered' mental health topics and being truly knowledgeable, prepared and empowered (not helpless) to provide treatment and care for people with mental illnesses.

A concept of Ancient Greek origin, *phronesis*, is relevant here. *Phronesis* is associated with 'practical wisdom' (Flyvberg 2001, pg. 56-57), and as Dunne (2005) notes, *phronesis* is an 'action oriented form of knowledge' that is 'irreducibly experimental in its nature' (Dunne 2005, pg 375-376). *Phronesis* may have the potential to help resolve, or at least understand, the practice-theory divide we have referred to here and the difference between enacting protocol and providing patient-centred treatment and care confidently. Linked to *phronesis* is another notion of Ancient Greek origin, *aporia*. This can be described as unresolvable problematics, or paradoxes (Green, 2009, p. 11) — as a characteristic of the work of professional practice. Green (2009, pg. 11-12) linked *phronesis* and *aporia* (and also *praxis*) in order to articulate the guiding principles of professional practice. Green considers that *aporia*, in this formulation, refers to 'the confrontation in ones practice with unresolvable problems or paradoxes' and links directly into notions of 'responsibility' and 'decisions' (Green, 2009 pg.10), noting that 'all decision-making, even that which is, properly speaking mundane, or 'practical' is 'haunted' by *aporia* (Green 2009 pg.10). In professional practice there are always moments of uncertainty when, nevertheless, one must act, even though the way forward is not clear or is uncertain (Green 2009, pg. 11-12). The uncertainties, or *aporias*, emerge because of the complexities surrounding mental illness at multiple levels.

Schön's 'swamp' metaphor can be drawn on here to help understand this:

In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution (Schön, 1987, pg. 3).

What does *aporia*, or a confusing problem that defies technical solutions, look like in paramedic professional practice? Gavin's earlier comment about 'banging against a wall' offered some insight. It is likely about having empathy for your patient but not being enabled to assist them enough. Joy Higgs (2012) writes that this 'wall' is omnipresent; if so, this would seem to underscore the value of *phronesis*. During times of uncertainty, it is surely experience and practical wisdom that one looks for. In such cases, theory, experience and practice are usefully drawn together to offer a way forward for here, paramedics working with uncertainty in the area of mental illness. Rather than search for certainty where it does not exist, it may be more productive to embrace 'the messiness of professional practice' (Kinsella, 2010, pg. 566) and learn from that. Jamie seemed to agree when referring to classroom learning. It can be reasonably argued that this makes it particularly important that paramedics learn from and create knowledge about their own practice and embrace the uncertain. Derek Sellman identifies this as something that needs to be developed in professional practice and requires 'more than the routine application protocols or algorithmic responses to the complex issues facing practitioners in everyday work environments' (Sellman, 2012, pg. 115).

An acknowledgement, even a cultivation, of *phronesis* in paramedic practice regarding mental illness may encourage and promote paramedics to create a dialogue in order to share,

discuss and document the *aporias* of practice, especially for novice paramedics. This may help paramedics feel safe in discussing the complexities and ambiguities of their practice. Of course, change may be required in the culture and ethos of paramedicine before there is an acceptance of *aporia* and *phronesis* but this could have positive impacts on the way individuals with mental illness are conceptualised and treated by paramedics.

Conclusion

The use of creative research methods as a means for thinking differently about how paramedics may perceive mental illness has illuminated some unique associations between the complexity of mental illness and the implications that this has for practice, including paramedics' preparation for practice. Highlighting the complexities of mental illness, and also of paramedicine, will hopefully embolden and support paramedics to initiate dialogue with each other and allow the difficulties and ambiguities of this aspect of professional practice to be acknowledged and honoured.

The notions of *aporia* and *phronesis* emerged as important themes regarding paramedics' preparation for and treatment of mental illness. There is, of course, potential for these concepts to applied to other important areas of paramedical practice and also paramedical education.

References

Australian Bureau of Statistics (2017). *Mortality of People Using Mental Health Services and Prescription Medications: Analysis of 2011 data.*

<https://www.abs.gov.au/ausstats/abs@.nsf/0/EB5F81AAC6462C72CA2581B40012A>

Houston, Rae, Brewster. A photo-elicitation study of paramedics' perceptions of mental illness. <https://doi.org/10.32378/ijp.v5i1.225>

[37D?Opendocument](#)

Ahmad, H., Ayu, M., & Rawiyah, R. (2004). Attitudes of Paramedics Towards Mentally Ill Patients. *Malaysian Journal of Psychiatry*, 12(1), 25-31.

Beyond Blue (2019). *Statistics*. <https://www.beyondblue.org.au/media/statistics>

Carter, P. (2004). *Material thinking: The theory and practice of creative research*. Melbourne: Melbourne University Press.

Dunne, J. (2005). An intricate fabric: Understanding the rationality of practice. *Pedagogy, Culture & Society*, 13(3), 367-390.

Flyvbjerg, B. (2004). Phronetic planning research: Theoretical and methodological reflections. *Planning Theory & Practice*, 5(3), 283-306.

Green, B (2009) Introduction: Understanding and researching professional practice. In: Green B (ed.) *Understanding and Researching Professional Practice*. Rotterdam: Sense Publishers, pp. 1–18.

Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies*, 17(1), 13-26. doi:10.1080/14725860220137345

Higgs, J. (2012). Realsing practical wisdom from the pursuit of wise practice. In E. Kinsella & A. Pitman (Eds.), *Phronesis as professional knowledge* (pp. 73-85). Rotterdam: Springer.

Kinsella, E. A. (2010). The art of reflective practice in health and social care: Reflections on the legacy of Donald Schön. *Reflective Practice*, 11(4), 565-575.

National LGBTI Health Alliance (2020). *Snapshot of Mental Health and Suicide Prevention*

Houston, Rae, Brewster. A photo-elicitation study of paramedics' perceptions of mental illness. <https://doi.org/10.32378/ijp.v5i1.225>

Statistics for LGBTI People. <https://www.lgbtihealth.org.au/statistics>

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, 42(5), 533-544.

Prener C, Lincoln AK. (2015) Emergency medical services and “psych calls”: Examining the work of urban EMS providers. *American Journal of Orthopsychiatry*, 85(6), 612.

Roberts, L. a. J, Henderson (2009). Paramedic perceptions of their role, education, training and working relationships when attending cases of mental illness. *Journal of Emergency Primary Health Care*, 7(3).

Rolfe, U., Pope, C., & Crouch, R. (2020). Paramedic performance when managing patients experiencing mental health issues—Exploring paramedics' Presentation of Self. *International Emergency Nursing*, 100828.

Rolling Jr, J. H. (2010). A paradigm analysis of arts-based research and implications for education. *Studies in Art Education*, 51(2), 102-114.

Schon, D. (1983). *The reflective practitioner*. London: Temple Smith

Sellman, D. (2012). Reclaiming Competence For Professional Phronesis. In A. Kinsella & A. Pitman (Eds.), *Phronesis as professional knowledge. Professional Practice and Education: A Diversity of Voices*, vol. 1. Rotterdam: Sense Publishers

Shaban, R. (2015). Paramedics' clinical judgment and mental health assessments in emergency contexts: Research, practice, and tools of the trade. *Australasian Journal of Paramedicine*, 4(2).

Houston, Rae, Brewster. A photo-elicitation study of paramedics' perceptions of mental illness.
<https://doi.org/10.32378/ijp.v5i1.225>

Somerville M (2007) Postmodern emergence. *International Journal of Qualitative Studies in Education* 20(2): 225–243.

Somerville M (2008) “Waiting in the chaotic place of unknowing”: Articulating postmodern emergence. *International Journal of Qualitative Studies in Education* 21(3): 209–220.