

Empathy in paramedic practice: an overview

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Abstract

Background

Although inconsistently defined, empathy is generally considered to be the understanding of another person's reactions, thoughts, feelings and problems and being able to relay this sense of understanding back to the individual. Empathy in healthcare is associated with improved communication, reduced stress, lower complication rates and improved clinical outcomes. Low empathy is associated with decreased patient satisfaction, and provider burnout.

Aim

The aim of this article is to provide an overview of empathy in paramedic practice, and to outline several potential solutions to improve empathy levels among paramedics and paramedic students.

Methods

We conducted unstructured, non-systematic searches of the literature in order to inform an overview of the literature. An overview is a summary of the literature that attempts to survey the literature and describe its characteristics. We thematically structured the results of these searches under the following headings: empathy in paramedic practice, empathy and burnout, and strategies to improve empathy levels.

Discussion

The literature demonstrates that paramedic students have lower empathy scores towards substance users and mental health emergencies, and this may affect future practice as a paramedic. The burden of emotional work in paramedic practice and coping strategies that paramedics develop may also be contributory factors in this lower empathy. There appears to be a relationship between empathy and burnout, with most studies suggesting an inverse relationship. Empathy is an interpersonal skill that can be learned and improved upon through methods such as reflection and simulation.

Conclusion

Empathy in paramedic practice is complex, and understudied. Although some evidence exists to suggest that paramedic students have variable empathy levels towards certain patients, and that these empathy scores can decline over time, there is a distinct lack of research into empathy in practicing paramedics, and this requires further attention. In particular, its relationship to patient care, paramedic burnout, and wellbeing require investigation. Several strategies to teach empathy exist and these can be considered by educators.

Introduction

Though there is no agreed singular definition of empathy, a general consensus exists that describes empathy as the understanding of another person's reactions, thoughts, feelings and problems (Burks and Kobus, 2012; Eisenberg, 2000; Myers, 2000). Empathy involves not only understanding another person, but demonstrating that understanding back while maintaining some level of emotional detachment (Burks and Kobus, 2012). Morse's components of empathy (Table 1) displays empathy as a multidimensional characteristic, encompassing all aspects of the human psyche (Morse et al., 1992). Empathy is not entirely driven by emotions as most would presume, which is what primarily differentiates empathy and sympathy. Empathy encompasses four components that lead to a successful human interaction.

Component	Definition
Emotive	The ability to subjectively experience and share in another's psychological state or intrinsic feelings
Moral	An internal altruistic force that motivates the practice of empathy
Cognitive	The helper's intellectual ability to identify and understand another person's feelings and perspective from an objective stance
Behavioural	Communicative response to convey understanding of another's perspective

Table 1. Morse's Components of Empathy (Morse et al., 1992)

Empathy between healthcare professionals and patients helps to create and open an empathetic environment (Petrucci et al., 2016), which in turn facilitates honest, open communication, reduced stress, and lower complication rates (Canale et al., 2012; Hojat et al., 2004; Reynolds et al., 2000). Empathy is also associated with improved clinical outcomes (Burks and Kobus, 2012), decreased medical errors (Brennan et al., 2004), decreased

burnout and increased well-being of the healthcare professional (Krasner et al., 2009).

The concept of empathy has been well studied in nursing, medicine and other health disciplines, but relatively little attention has been paid to it in paramedicine, with the exception of a number of studies in paramedic students. This gap in the literature is of concern for a number of reasons. First, the nature of paramedic clinical practice is that it often requires rapid establishment of a provider-patient relationship. Any assessment and subsequent treatments need to be based on honest, open communication between both parties. Second, paramedics regularly interact with patients who are vulnerable and are often the subject of negative stereotyping, such as poor health literacy, palliative care, family violence, poor living conditions, and substance use situations (Williams et al., 2017). The paramedic's demeanour in these clinical situations can influence the care provided and patient outcomes. Finally, low empathy is a potential contributing factor for high burnout among providers (and vice-versa). In the context of current mental health concerns in paramedicine, this area warrants further exploration.

Aim

The aim of this article is to provide an overview of empathy in paramedicine, and to outline potential solutions to improve empathy levels among paramedics and paramedic students.

Search strategy

We conducted unstructured, non-systematic searches of the literature. Searches of various electronic databases (MEDLINE, CINAHL, and Google Scholar) were conducted using combinations of keywords including paramedic, empathy, compassion, empathy levels. The authors also referred to their own expertise and prior knowledge of the topic area when authoring this overview. An overview is a summary of the literature that attempts to

survey the literature and describe its characteristics (Grant and Booth, 2009), and is not intended to be exhaustive in its identification of the literature. We have structured the overview thematically under the following headings: empathy in paramedic practice, empathy and burnout, and strategies to improve empathy levels.

Empathy in paramedicine

A number of studies have explored empathy in paramedic students in Canada and Australia. These studies have generally indicated lower empathy scores towards substance users and mental health emergencies. Female students tend to demonstrate higher empathy scores than males (Kus et al., 2018; Pagano et al., 2019; Williams et al., 2012, 2015a). These findings generally align with studies in other healthcare professions students (Brown et al., 2010; Fjortoft et al., 2011; McKenna et al., 2012), while paramedic students tend to display overall lower empathy scores when compared to other healthcare students (Williams et al., 2014, 2015a). These trends may be in part due to a student's struggle to deal with patients' and relatives' emotions and their own in some situations. Themes that emerged in a study of emotion work in paramedic students included '*not sure of what to say*', '*stop myself crying*', and '*getting on with the job*' (Williams, 2013). These themes highlight the significant emotional demands that are placed on paramedic students - demands that they may be inadequately prepared for through their education.

Despite the evidence that paramedic practice places high emotional demands on students, there is a distinct lack of literature that explores empathy among qualified, practicing paramedics. The paucity of literature that exists highlights many of the same concerns evident in the studies of students. For example, Grevin (1996) outlined that both paramedics and paramedic students had significantly low scores on empathy when assessed using the MMPI-2 PK Scale (Grevin, 1996). Regehr et

al. (2002) explored empathy in paramedics and uncovered a significant use of 'cognitive empathy', or in other words, emotional distancing. This perceived lack of emotional empathy may result in impaired communication with patients and caregivers (Nordby and Nøhr, 2008). While often used as a protective strategy, this can result in issues for paramedics in their personal lives.

Empathy and burnout

Similar to other healthcare professionals, paramedics are subject to working long hours with diverse patient contacts and limited resources. Stressful shift work can also lead to poor work-life balance, and combined, these factors can contribute to provider burnout. Due to the lack of research regarding empathy and burnout among paramedics, literature from other healthcare professions has been explored to hypothesize their relationship in paramedicine. A scoping review of these studies by Williams et al. (2017) offers multiple explanations. Low levels of empathy are related to higher likelihood of burnout in some studies, while others suggest that healthcare providers use this desensitization as a defence mechanism against the everyday realities of illness and death (Williams 2017). Others explore the idea that being empathetic could be used as a protective mechanism against burnout (Williams 2017). This highlights the fact that empathy is not only about putting oneself in another's shoes to understand their emotions, but also recognizing that they are separate to one's own emotions. This distinction may aid in the provision more empathic care, and help to preserve a sense of self.

Strategies to improve empathy levels

Results of studies in paramedic students consistently recommend further empathy training and education (Kus et al., 2018; Pagano et al., 2019; Williams et al., 2014, 2015a) in light of low empathy scores demonstrated towards certain vulnerable populations. Empathy is an interpersonal skill

that can be learned and improved upon through methods that target interpersonal skill building, self-reflection and constructive criticism. Aside from empathy, critical thinking, awareness, self-concept, and teamwork all incorporate affective traits, and this supports the broader importance of affective domain development (Batt, 2014). Proven methods to improve empathy in students include simulation based training (Levett-Jones et al., 2019; Williams et al., 2015b), neuroscience-grounded training (Riess et al., 2012), and reflection or feedback based training (Cope et al., 1986; Levett-Jones et al., 2019). Training should attempt to address the populations that professionals may encounter. For paramedics, this means a broad spectrum of society. The role of non-clinical interaction with vulnerable populations has generally demonstrated improved healthcare professional attitudes and valuable insight into these patients' experiences (Ross and Williams, 2015; Varkey et al., 2006).

In addition to education and training, paramedics and paramedic students should also be provided with access to institutional support, such as confidential and independent counselling, and personal tutors in the case of students. The appropriate selection of clinical practice mentors (who may also be termed preceptors), and their preparation is key to student wellbeing (Williams, 2012). A preceptor should be adequately prepared to guide a student through both the clinical and emotional aspects of paramedic practice. This includes training on empathy, giving feedback, and supporting reflection and debriefing (Williams, 2012).

Conclusion

Empathy in paramedic practice is complex, and vastly understudied. Some evidence exists to suggest that paramedic students have variable empathy levels towards certain patient presentations, and that their empathy levels decline over time as they progress through their education. There is a distinct lack of

research into empathy in practicing paramedics, and the trends evident in the student-based studies may allude to factors that contribute to paramedic wellbeing upon graduation. In particular, the relationships between empathy and patient care, paramedic burnout, and wellbeing require further investigation. In the meantime, there are proven strategies that are designed to increase empathy levels through training, such as simulation, reflection, and experiential placements. The implementation of any such empathy training should be considered as a component of a broader affective domain teaching approach within initial and continuing paramedic education programmes.

Reflective questions

1. What is empathy to you? Reflecting on the contents of the article, do you find yourself agreeing or disagreeing with any assertions the authors make?
2. Reflect on your own practice - do you empathise with patients?
3. Do your colleagues demonstrate empathy towards patients?
4. Are there any patients you personally demonstrate less empathy towards? Why do you think this occurs?

How can you improve empathy in your own practice?

References

- Batt, A.M., 2014. Teaching and evaluating the affective domain in paramedic education. *Canadian Paramedicine*. 38(1):22-23.
- Brennan, T.A., Leape, L.L., Laird, N.M., Hebert, L., Localio, A.R., Lawthers, A.G., Newhouse, J.P., Weiler, P.C., Hiatt, H.H., 2004. Incidence of adverse events and negligence in hospitalized patients: results of the Harvard Medical Practice Study I. 1991. *Qual. Saf. Health Care*. <https://doi.org/10.1136/qshc.2002.003822>
- Brown, T., Williams, B., Boyle, M., Molloy, A., McKenna, L., Molloy, L., Lewis, B., 2010. Levels of empathy in undergraduate occupational therapy

- students. *Occup. Ther. Int.* 17, 135–141. <https://doi.org/10.1002/oti.297>
- Burks, D., Kobus, A., 2012. The legacy of altruism in health care: The promotion of empathy, prosociality and humanism. *Med. Educ.* 46, 317–325.
- Canale, S. Del, Louis, D.Z., Maio, V., Wang, X., Rossi, G., Hojat, M., Gonnella, J.S., 2012. The relationship between physician empathy and disease complications: An empirical study of primary care physicians and their diabetic patients in Parma, Italy. *Acad. Med.* <https://doi.org/10.1097/ACM.0b013e3182628fbf>
- Cope, D.W., Linn, L.S., Leake, B.D., Barrett, P.A., 1986. Modification of residents' behavior by preceptor feedback of patient satisfaction. *J. Gen. Intern. Med.* 1, 394–398. <https://doi.org/10.1007/BF02596425>
- Eisenberg, N., 2000. Empathy and Sympathy., in: Lewis, M., Haviland-Jones, J.M. (Eds.), *Handbook of Emotions*. Guilford Press, New York.
- Fjortoft, N., Van Winkle, L.J., Hojat, M., 2011. Measuring empathy in pharmacy students. *Am. J. Pharm. Educ.* 75, 109. <https://doi.org/10.5688/ajpe756109>
- Grant, M.J., Booth, A., 2009. A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Info. Libr. J.* 26, 91–108. <https://doi.org/10.1111/j.1471-1842.2009.00848.x>
- Grevin, F., 1996. Posttraumatic Stress Disorder, Ego Defense Mechanisms, and Empathy among Urban Paramedics. *Psychol. Rep.* 79, 483–495. <https://doi.org/10.2466/pr0.1996.79.2.483>
- Hojat, M., Mangione, S., Nasca, T.J., Rattner, S., Erdmann, J.B., Gonnella, J.S., Magee, M., 2004. An empirical study of decline in empathy in medical school. *Med. Educ.* 38, 934–941. <https://doi.org/10.1111/j.1365-2929.2004.01911.x>
- Krasner, M.S., Epstein, R.M., Beckman, H., Suchman, A.L., Chapman, B., Mooney, C.J., Quill, T.E., 2009. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA - J. Am. Med. Assoc.* <https://doi.org/10.1001/jama.2009.1384>
- Kus, L., Gosling, C., Wilson, T., Batt, A.M., 2018. Exploring empathy levels among Canadian paramedic students. *International Paramedic Practice* 8, 24–29. <https://doi.org/10.12968/ippr.2018.8.3.42>
- Levett-Jones, T., Cant, R., Lapkin, S., 2019. A systematic review of the effectiveness of empathy education for undergraduate nursing students. *Nurse Educ. Today* 75, 80–94. <https://doi.org/10.1016/j.nedt.2019.01.006>
- McKenna, L., Boyle, M., Brown, T., Williams, B., Molloy, A., Lewis, B., Molloy, L., 2012. Levels of empathy in undergraduate nursing students. *Int. J. Nurs. Pract.* 18, 246–251. <https://doi.org/10.1111/j.1440-172X.2012.02035.x>
- Morse, J.M., Anderson, G., Bottorff, J.L., Yonge, O., O'Brien, B., Solberg, S.M., McIlveen, K.H., 1992. Exploring Empathy: A Conceptual Fit for Nursing Practice? *Image J. Nurs. Scholarsh.* 24, 273–280. <https://doi.org/10.1111/j.1547-5069.1992.tb00733.x>
- Myers, S., 2000. Empathic listening: Reports on the experience of being heard. *J. Humanist. Psychol.* <https://doi.org/10.1177/0022167800402004>
- Nordby, H., Nøhr, Ø., 2008. Communication and empathy in an emergency setting involving persons in crisis. *Scand. J. Trauma. Resusc. Emerg. Med.* 16, 1–6. <https://doi.org/10.1186/1757-7241-16-5>
- Pagano, A., Robinson, K., Ricketts, C., Cundy-Jones, J., Henderson, L., Cartwright, W., Batt, A.M., 2019. Empathy levels in Canadian paramedic students: a longitudinal study. *International Journal of Caring Sciences.* 11, 1492–1498.
- Petrucci, C., La Cerra, C., Aloisio, F., Montanari, P., Lancia, L., 2016. Empathy in health professional students: A comparative cross-sectional study. *Nurse Educ. Today.* <https://doi.org/10.1016/j.nedt.2016.03.022>
- Regehr, C., Goldberg, G., Hughes, J., 2002. Exposure to human tragedy, empathy, and trauma in ambulance paramedics. *Am. J. Orthopsychiatry* 72, 505–513. <https://doi.org/10.1037/0002->

- 9432.72.4.505
- Reynolds, W., Scott, P.A., Austin, W., 2000. Nursing, empathy and perception of the moral. *J. Adv. Nurs.* 32, 235–242. <https://doi.org/10.1046/j.1365-2648.2000.01440.x>
- Riess, H., Kelley, J.M., Bailey, R.W., Dunn, E.J., Phillips, M., 2012. Empathy training for resident physicians: A randomized controlled trial of a neuroscience-informed curriculum. *J. Gen. Intern. Med.* 27, 1280–1286. <https://doi.org/10.1007/s11606-012-2063-z>
- Ross, L., Williams, B., 2015. Real engagement improving paramedic attitudes towards the elderly. *Clin. Teach.* 12, 37–41. <https://doi.org/10.1111/tct.12226>
- Varkey, P., Chutka, D.S., Lesnick, T.G., 2006. The Aging Game: Improving Medical Students' Attitudes Toward Caring for the Elderly. *J. Am. Med. Dir. Assoc.* 7, 224–229. <https://doi.org/10.1016/j.jamda.2005.07.009>
- Williams, A., 2013. A study of emotion work in student paramedic practice. *Nurse Educ. Today* 33, 512–7. <https://doi.org/10.1016/j.nedt.2012.03.003>
- Williams, A., 2012. Emotion work in paramedic practice: The implications for nurse educators. *Nurse Educ. Today* 32, 368–372. <https://doi.org/10.1016/j.nedt.2011.05.008>
- Williams, B., Boyle, M., Brightwell, R., Devenish, S., Hartley, P., McCall, M., McMullen, P., Munro, G., O'Meara, P., Webb, V., 2012. An assessment of undergraduate paramedic students' empathy levels. *Int. J. Med. Educ.* 3, 98–102. <https://doi.org/10.5116/ijme.4fba.9190>
- Williams, B., Boyle, M., Howard, S., 2015a. Empathy levels in undergraduate paramedic students. *Int. J. Caring Sci.* 8, 59–68.
- Williams, B., Brown, T., Boyle, M., McKenna, L., Palermo, C., Etherington, J., 2014. Levels of empathy in undergraduate emergency health, nursing, and midwifery students: a longitudinal study. *Adv. Med. Educ. Pract.* 5, 299–306. <https://doi.org/10.2147/AMEP.S66681>
- Williams, B., Brown, T., McKenna, L., Palermo, C., Morgan, P., Nestel, D., Brightwell, R., Gilbert-Hunt, S., Stagnitti, K., Olausson, A., Wright, C., 2015b. Student empathy levels across 12 medical and health professions: an interventional study. *J. Compassionate Heal. Care* 2, 4. <https://doi.org/10.1186/s40639-015-0013-4>
- Williams, B., Lau, R., Thornton, E., Olney, L.S., 2017. The relationship between empathy and burnout – Lessons for paramedics: A scoping review. *Psychol. Res. Behav. Manag.* 10, 329–337. <https://doi.org/10.2147/PRBM.S145810>
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