

Modifiable factors influencing emotional intelligence among medical interns

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Introduction

Emotional intelligence is crucial for medical professionals. Medical interns are expected to have a high degree of emotional intelligence to face their professional career challenges. Emotional intelligence, often measured as an emotional quotient (EQ), is the capacity to recognise and regulate emotion in oneself. It enables one to monitor one's own feelings and emotions and others; and guide decisions and actions, and is crucial to ensure a successful work-related outcome or good performance.¹ A medical intern, also known as a house officer or trainee doctor, is a junior doctor who has just completed medical school.² In Malaysia, medical graduates need to undergo an internship for at least 2 years at the Ministry of Health facilities before being able to register as a medical doctor; a period known to exert physical, mental, and emotional challenges. The potentially challenging period during the internship emphasises the importance of EQ among medical interns during this time.³ A higher EQ enhances physician and patient wellbeing, increases patient safety and augments healthcare teamwork.⁴ However, studies about EQ among medical interns are lacking. Therefore, this study intended to determine the level of EQ among medical interns and its associated factors.

Materials and methods

This nationwide cross-sectional study recruited new medical interns reporting to 17 randomly selected Malaysian hospitals accredited for medical intern training from January to April 2020. They were invited to answer an online questionnaire incorporating the USM Emotional Quotient Inventory (USMEQ-i) to measure EQ, Connor-Davidson Resilience Scale-10 items (CD-RISC-10) for resilience, Brief-Cope to assess coping styles, the Preparedness for Hospital Practice Questionnaire (PHPQ) to assess internship preparedness, the Duke University Religion Index (DUREL) for religiosity, and questions related to sociodemographic and undergraduate training.

Results and discussion

A total of 524 from 619 medical interns responded. Mean (SD) EQ score was 3.08(0.58). Significant factors positively associated with EQ include resilience score (adjusted $b=0.65$; 95% confidence interval (CI) 0.58–0.72; $p<0.001$), preparedness for internship (adjusted $b=0.11$; 95% CI 0.09–0.13; $p<0.001$), approach-

style coping (adjusted $b=0.17$; 95% CI 0.11–0.24; $p<0.001$), and religiosity (adjusted $b=0.09$; 95% CI 0.01–0.17; $p<0.001$). In contrast, avoidant-style coping (adjusted $b=-0.19$; 95% CI -0.28–0.11; $p<0.001$) is negatively associated with EQ. Adjusted R^2 of 67.6% substantiated the goodness of fit of the regression model. This study showed that a few significant modifiable factors influenced EQ among medical graduates; namely resilience, coping style, preparedness for internship, and religiosity. It showed a positive association between emotional intelligence and approach coping style, and a negative relationship with avoidant coping. Approach coping encapsulates constructive responses to stress such as positive reframing, acceptance, seeking helpful information, and reaching for emotional support, while avoidant coping includes self-distraction, denial, venting, substance abuse, behavioural disengagement, and self-blame.⁴

Conclusion

The significant factors influencing EQ in this study (such as coping and resilience) can be learnt and taught as a skill. Programmes or inputs in medical education can be organised to improve EQ by improving coping mechanisms, religiosity and resilience among the medical students. Thus, these findings will aid medical schools for efforts to increase EQ among medical graduates, the medical interns of the future. ■

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References

- Serrat O. Understanding and developing emotional intelligence. In Serrat O (ed), *Knowledge solutions: Tools, methods, and approaches to drive organizational performance*: 329–39. Singapore: Springer, 2017.
- Stöppler MC. *Definition of Intern*. MedicineNet. www.medicinenet.com/script/main/art.asp?articlekey=9956
- Fertleman C, Carroll W. Protecting students and promoting resilience. *BMJ* 2013;347(7923).
- Arora S, Ashrafian H, Davis R *et al*. Emotional intelligence in medicine: A systematic review through the context of the ACGME competencies. *Medical Education* 2010;44:749–64.
- Eisenberg SA, Shen BJ, Schwarz ER, Mallon S. Avoidant coping moderates the association between anxiety and patient-rated physical functioning in heart failure patients. *Journal of Behavioral Medicine* 2012;35:253–61.

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