

Emotional intelligence, empathy and their associations among medical undergraduates in Sri Lanka

D. R. Hemasinghe¹, H. A. N. Hansika¹, H. P. P. D. Heiyanthuduwa¹, G. Ponnampereuma²

¹*Faculty of Medicine, University of Colombo, Sri Lanka*

²*Department of Medical Education, Faculty of Medicine, University of Colombo, Sri Lanka*

Emotional intelligence (EI) and empathy are essential attributes for medical professionals, playing critical roles in doctor–patient communication, teamwork, and resilience. Despite growing global interest, there is limited local data on the levels and inter-relationships of these competencies among Sri Lankan medical undergraduates. This study aimed to assess EI and empathy levels among medical students from selected academic years, and to examine their associations with socio-demographic and behavioural factors. A descriptive cross-sectional study with an analytical component was conducted among 130 medical undergraduates from 3 batches at the Faculty of Medicine, University of Ruhuna. Participants were recruited by stratified sampling and completed an online self-administered questionnaire after giving informed consent electronically. The tool comprised a socio-demographic section, the Quick Emotional Intelligence Self-Assessment, and Davis’s Interpersonal Reactivity Index (IRI), both previously validated for South Asian undergraduate populations. Questionnaires were administered in English, the medium of instruction at the faculty. Descriptive statistics were calculated, and associations were tested using chi-square, independent t-tests, and one-way ANOVA. The mean EI score was 111.5 ± 17.5 (out of 160), and the mean empathy score was 71.6 ± 12.4 (out of 112). Males demonstrated significantly higher EI scores in emotional management ($p=0.016$) and relationship management ($p=0.003$), whereas females showed higher total empathy scores ($p=0.003$). Higher EI scores were associated with satisfaction in studying medicine ($p<0.001$), engagement in extracurricular activities ($p=0.015$ for social emotional awareness; $p=0.014$ for relationship management), and higher income category ($p=0.018$ for social emotional awareness; $p=0.038$ for relationship management). Notably, students dissatisfied with studying medicine recorded higher mean empathy scores ($p=0.009$). EI and empathy were positively correlated. These findings suggest that both EI and empathy are shaped by individual and contextual factors in medical students, underscoring the need to incorporate structured opportunities for emotional skill development within the medical curriculum to support students’ interpersonal competencies and emotional well-being.

Keywords: *Emotional intelligence, Empathy, Medical students, Sri Lanka, Undergraduate education*