

Assessing Knowledge, Attitudes and Practices Towards Artificial Intelligence Among Undergraduates in Health-Related Degree Programs at Sri-Lankan [state] Universities

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By assessing the readiness of future healthcare professionals to embrace AI in healthcare, this research may inform the development of educational curricula tailored to meet the evolving demands of the healthcare sector. The study aimed to assess the knowledge, attitude, and practices (KAP) related to AI among undergraduates enrolled in health related programs. This descriptive cross-sectional survey was conducted among a non-probability sample of 1,100 undergraduates, proportionally selected based on the population distribution across all batches from the Faculties of Medicine (40%), Dental Sciences (25%), Allied Health Sciences (20%), and Veterinary Medicine (15%) in five selected state universities in Sri Lanka. Based on a calculated minimum sample size of 385 and an expected 35% online survey response rate, 1,100 students were invited via Google Forms. A pretested questionnaire was used to assess general opinions rather than subject-specific knowledge related to AI. A total of 424 (38.55%) students responded. Most participants (98.6%) had heard of AI, but **45.4% rated their understanding as “neutral”**, and **30% were unaware of AI’s role in healthcare**. Students’ perspectives were measured by their views on AI’s contribution in healthcare improvement and its ability to replace human professionals. Nearly half (48.7%) expressed positive attitudes towards benefits of AI, while 45% disagreed that AI would replace healthcare professionals. **88.1% reported using AI tools for academic purposes** (Chat GPT, Grammarly, and Quill Bot). This contrast in familiarity was measured on a 5-point scale and suggests that students are more confident using AI for study-related tasks than in clinical contexts. While participants are generally aware of AI, their understanding of its specific applications in healthcare is limited. In conclusion, all the students in health care faculties do not have a very good knowledge of use of AI in health care. Only 50% of the population had positive attitudes towards AI. However, 88% use AI for their academic purposes. These findings support the implementation of targeted AI workshops and integration of AI content into existing curricula within the studied universities. Further, conducting large-scale studies with representative samples from all health faculties across Sri Lanka is essential to guide broader educational improvements.

Keywords: Artificial intelligence, KAP survey, AI in healthcare, medical education, health education, undergraduate students, Sri Lanka