Artificial intelligence in healthcare: Knowledge and perceptions among healthcare professionals in a private hospital in Negeri Sembilan, Malaysia

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ABSTRACT

Introduction: Artificial Intelligence (AI) is leading the way in fundamentally transforming the future of healthcare and medicine. Beyond image processing and diagnosis, AI has also been integrated into healthcare products, prognosis, therapy, and patient monitoring. Thus, this study was conducted to determine the knowledge and perceptions of AI among healthcare professionals in a private hospital in Malaysia. **Materials and Methods:** A cross-sectional study was conducted using a validated survey comprised of demographic data, knowledge, and perceptions of AI. Descriptive analysis and a chi-square test were used to analyze the data. A total of 198 respondents consisting of allied health professionals, nurses, doctors, and other healthcare professionals have participated in this study. **Results:** Most of the respondents had poor knowledge of AI, with only 49.0% of the respondents defining AI as the use of computer algorithms to perform tasks that require human intelligence. Most of the respondents (70.2%) had a moderate perception of AI in healthcare. There was a significant association between perceptions of AI with different genders and positions of healthcare professionals ($p < 0.05$), with males and pharmacists having higher perceptions of AI. **Conclusion:** The lack of knowledge and perceptions of AI may result in significant issues, particularly considering its anticipated widespread utilization in the future. Thus, emphasize the importance of educational interventions to enhance the understanding of AI among healthcare professionals as they play a vital role in the implementation and adoption of AI in healthcare.