

Knowledge and Perception of Healthcare Providers in Tertiary Health Institutions in Plateau State Towards the Use of Artificial Intelligence in Making Medical Diagnosis

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ABSTRACT

Introduction: Artificial Intelligence (AI) refers to technology that allows machines to perform tasks in a manner associated with intelligent beings. In our current world, there is a dire need to analyse complex medical data and images at a lesser time but with greater accuracy, which makes AI an important tool for health care providers. We aimed to explore the knowledge and perception of tertiary healthcare providers in Plateau State, regarding the application of AI in healthcare diagnostics.

Methodology: A descriptive cross-sectional study was conducted among 235 healthcare professionals in all three tertiary institutions in Plateau State via a self-administered online questionnaire. Data was analysed using IBM SPSS Version 25 and Microsoft Excel and was presented in tables and charts. Chi square test was used to test statistical significance between respondents' perception scores and their sociodemographic data with level of significance taken at <0.05 .

Results: This study involved 235 participants, the largest percentage of participants, with 41.7% were those between the ages of 30 to 39 years old, and the group which formed the least percentage of participants, with 12.4%, were from the ages above 50 years. 68.1% had good knowledge while 10.6% had poor knowledge. Years in practice was statistically significantly correlated with perception ($p = 0.048$) with practitioners who had more than 20 years of practice recording the highest good perception score (27.8%)

Conclusion: Majority of the participants in this study had good knowledge about artificial Intelligence and were also receptive of the idea of integrating AI into healthcare. We believe the healthcare providers of Plateau State are ready and willing to adopt AI into their profession if the tools are made available and adequate training is provided on how to best utilise these tools and we highly recommend that Artificial Intelligence-related topics should be added into the medical school and health education curriculum to begin the training process early.

Keywords: Knowledge, Perception, Artificial Intelligence, Medical Diagnosis, Healthcare Providers

