

Unleashing the Benefits of Artificial Intelligence in the Management of PCOS and PCOD: A Paradigm Shift in Women's Health

Prajakta Ghige and Pradnya Walkunde

Students, Department of MCA

Late Bhausaheb Hiray S. S. Trust's Institute of Computer Application, Mumbai, India

Abstract: *This research paper aims to investigate the potential benefits and transformative impact of technology, specifically artificial intelligence (AI), in the management of Polycystic Ovary Syndrome (PCOS) and Polycystic Ovary Disease (PCOD). The study explores how technological advancements, including AI algorithms, machine learning, wearable devices, and mobile applications, can revolutionize the diagnosis, monitoring, and personalized treatment of these complex endocrine disorders. By leveraging large datasets encompassing medical records, hormonal profiles, lifestyle factors, and patient-reported outcomes, this research aims to uncover novel insights, enhance early detection, optimize treatment strategies, and empower women in managing their condition. The ethical considerations and challenges associated with the integration of technology and AI in PCOS/PCOD management are also examined. The findings of this research paper provide valuable insights into the potential benefits and ethical implications of technology-enabled approaches, paving the way for improved healthcare practices and outcomes in PCOS/PCOD management.*

Keywords: Machine Learning, Data-driven approaches, Artificial Intelligence, Diagnosis, Endocrine Disorders, Treatment, Women's Health

REFERENCES

- [1]. An artificial intelligence-based decision support system for early diagnosis of polycystic ovaries syndromeEjayNsugbeNsugbe Research Labs, Swindon, UK
- [2]. <https://www.unicef.org/india/stories/do-pcod-and-pcos-mean-same-thing-or-are-they-different>
- [3]. Epidemiology, pathogenesis, genetics & management of polycystic ovary syndrome in India Mohammad Ashraf Ganie, Vishnu Vasudevan, Imtiyaz Ahmad Wani, Mohammad Salem Baba, Tasleem Arif, and Aafia Rashid
- [4]. <https://www.pacehospital.com/pcod-polycystic-ovary-disease-cause-symptoms-and-treatment>
- [5]. Polycystic ovary syndrome Validated questionnaire for use in diagnosis Sue D Pedersen, Sony Brar, Pd Faris, Bernard Corenblum (2002) The IEEE website. [Online]. Available: <http://www.ieee.org/>