# MenGO: A Novel Cloud-based Digital Healthcare Platform for Andrology Powered by Artificial Intelligence, Data Science & Analytics, Bioinformatics and Blockchain

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## ABSTRACT

Digital innovation & transformation, a technology revolution triggered by the latest advancements in the IT sector, has redefined several socially significant domains including healthcare, agriculture, food, finance, and education since the turn of this millennium. Although the power of digital technology has played a key role in modernizing many areas of the healthcare arena, a critical sub-category like andrology i.e., sexual and reproductive health of men, is yet to reap the full benefit of digitalization. This paper describes and explains how MenGO, the world's 1st data science and analytics powered digital healthcare solution for andrology, is ushering in a new era of men's health, a traditionally neglected domain, with innovative applications of cutting-edge technologies such as artificial intelligence, machine & deep learning, natural language processing, bioinformatics, blockchain, and cloud computing. MenGO offers custom recommendations, contextual guidance, smart alerts, in-depth report analytics, and statistical guidance for physicians, health institutions, biomedical researchers, pharma houses, insurance companies, and common users. The data analytics engine of MenGO helps users with personalized analytics, physicians with predictive and prescriptive analytics, and caregiving institutes with demographic analytics. A one-stop solution for men suffering from chronic ailments like erectile dysfunction, infertility, ejaculation problems, prostate gland issues, etc. MenGO helps users access affordable physiological and psychological treatments through its cloud and big data analytics powered smart and interactive telehealth platform.

**Keywords**: Artificial Intelligence, Machine Learning, Deep Learning, Natural Language Processing, Andrology, Digital Healthcare, Bioinformatics, Genomics, Blockchain, Cloud

## INTRODUCTION

### Background

Andrology is the medical specialty that deals with sexual and reproductive health issues and urological problems that are unique to men. Although it is the counterpart to gynecology, a major medical domain that focuses on sexual, reproductive, and urological health issues of women, andrology has not been as widely covered, discussed, or explored as gynecology. Through ages, the domain of andrology care has been addressing several chronic health problems with far-reaching consequences but has never received the global attention it deserves due to factors such

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