IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 9, May 2025
Impact Factor: 7.67

Polycystic Ovary Syndrome: A Comprehensive Review Of Pathophysiology, Genetics, Diagnostic Criteria, and Emerging Management Approaches

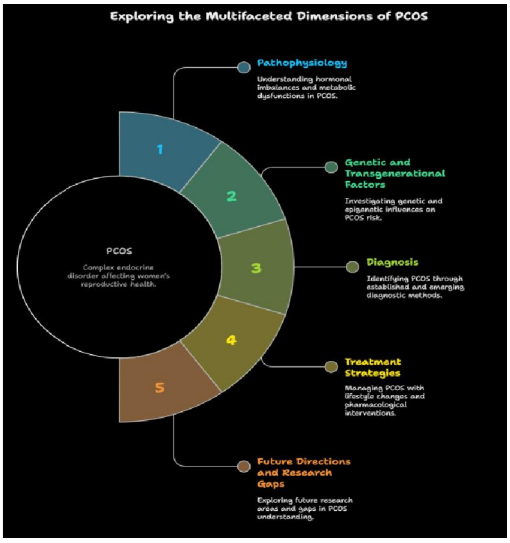
Sarika Joga[1], Vasanthi A V[1], Dr. Sreekanth M[2], Medha Gayatri B[3], Thanmai A[4], Are. Vanitha[5], Gone. Madhura[6]

Assistant Professor, Department of Pharmacology[1]
Associate Professor, Department of Pharmacology[2]
Research Scholar, Department of Pharmacolog[3,4,5,6]
Sarojini Naidu Vanita Pharmacy Maha Vidyalaya, Tarnaka, Secunderabad, Telangana, India
sarikajoga950@gmail.com

Abstract: *Polycystic Ovary Syndrome (PCOS) is a complex endocrine disorder that occurs in 8-13% of women of reproductive age. PCOS is defined as hyperandrogenism, ovulatory dysfunction, and polycystic ovarian morphology, and presents with uncertain and diverse diagnoses and treatments. This review describes the updated recommendations from recently published international guidelines, with newly reported data in the literature, and provides a robust summary of the multidimensional pathophysiology, associated genetics, and diagnostic challenges. In particular, we describe the transgenerational developmental effects of the syndrome, insulin resistance associated with this disorder, and a discussion of the limits of Anti-Müllerian Hormone (AMH) as a diagnostic measure. We relate treatment options (both pharmacological and lifestyle) and describe several practice gaps that further research might address to optimize person-centred care across the lifespan.*

Keywords: PCOS, pathophysiology, diagnosis, AMH, insulin resistance, genetics, lifestyle interventions

Graphical Abstract:



DOI: 10.48175/IJARSCT-27031