



Review of the Status of Knowledge on the Genetic Susceptibility of Indian Women for Polycystic Ovary Syndrome

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ABSTRACT A comprehensive and critical review of the genetic association studies of the polycystic ovary syndrome (PCOS) hitherto conducted in India was made and the information on allele frequencies for 104 variants from 52 genes with odds ratios and p-values, reflecting the patterns of association with PCOS presented. Only 23 different sample units were studied from 11 major cities of India and diabetes pathway genes/SNPs were studied more often than those from the other metabolic and reproductive pathways. Further, a relatively much wider spectrum of genetic variants were explored in the population of Hyderabad when compared to others. Overall, only 29 of the 104 variants studied were associated with PCOS ($p \leq 0.05$), eighteen of those being risk conferring with minor effects, hence not causative and in congruence with the global scenario. The researchers presented an assessment of the present status of genetic research on PCOS among Indian populations, identified the lacunae and future perspectives for research in India.