

9th Annual Congress on Polycystic Ovarian Syndrome and Fertility

KEYNOTE TALKS

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Immune system disorders and women's ability to conceive

The immune system (defined as "the body's defense network of cells, tissues, and organs that protects it from infections and diseases caused by germs like bacteria, viruses, and fungi") significantly impacts women's ability to conceive (and maintain pregnancies). Strong or weak immune system is the primary issue in immune-related infertility. The prime objective of this paper is to present research-based & scientific discussion on how immune system disorders influence women's ability to conceive. Secondary data been used in this work. Data used in this research are largely "qualitative" in nature; they were collected from secondary sources. Method of data analysis is "descriptive". Analysis of data in this work indicate that fertility, reproduction and immunity are intimately linked processes. Pregnancy among women is associated with widespread immunological adaptations that alter immunity to many diseases. It is pertinent to note that immune dysfunction has emerged as a major cause for infertility (in both men and women). The immune system plays a vital role in defending the body from infections, bacteria, and viruses. However, in some women, weak immunity may pose as a threat. This situation may trigger reactions that can disrupt pregnancy. This often occurs in cases of heightened immune sensitivity. It is commonly referred to as "hypersensitivity" which implies an exaggerated or inappropriate immune response. Reproductive immunology examines how such

immune dysfunctions can impact conception and contribute to pregnancy loss, especially when no other physical or hormonal causes are evident. Imbalanced immune response can interfere with conception. This work briefly concludes that disorders in the immune system can make it difficult for both men and women to conceive since it affects hormonal balance. Immune infertility, in terms of reproductive failure, has become a serious health issue. Understanding how the immune system can influence fertility is, thus, crucial.

Biography

Dr. Santosh Kumar Mishra is a Researcher (Scholar) and retired professional from the Population Education Resource Centre, Department of Lifelong Learning & Extension, S.N.D.T. Women's University, Mumbai, India. Trained in demography under a Government of India Fellowship (1986-1987), he earned his Ph.D. from the University of Patna in 1999. He also holds a Post-Master's Diploma in Adult & Continuing Education, a Certificate course in Hospital and Health Care Management, and a Diploma in Human Resource Development. His research interests span demography, sustainable development, health, and related fields. Dr. Mishra has an impressive academic record, having authored or co-authored 6 booklets, 4 books, 32 book chapters, 111 journal articles, 2 monographs, 7 research studies, and 126 conference papers (some with bursary support). He has received multiple recognitions, including the **Certificate of Excellence in Reviewing** (2017, 2018, 2021, 2022) and the **Excellence of Research Award** in 2021 for outstanding contribution to agriculture.