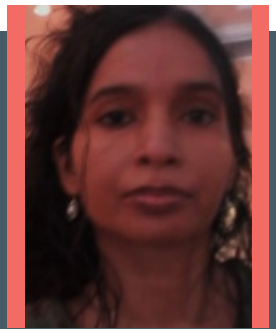

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In vitro fertilization success trends amongst infertile women of Asian-Indian Ethnicity: Breakthroughs in Maternal-Fetal medicine

Abstract:

Objectives: Infertility is a major public health problem globally, including India; the etiopathogenesis of reproductive disorders amongst ethnically disparate populations is indeed complex. Cost-effective, evidence-based intervention strategies are essential for infertility control/prevention. My pilot study aimed to assess the in vitro fertilization success trends amongst infertile women of Asian-Indian ethnicity.
Methods: A prospective clinical research study enrolling infertile women undergoing Assisted-Reproductive-Technology procedures at Indira-IVF Hospital, Udaipur, India was rigorously conducte;. inclusion criteria: age<35 years, Indian ethnicity, Body Mass Index (kg/m2)<25, Anti-Mullerian Hormone (AMH)1.5-2.5 ng/ml, and exclusion criteria: prior ≥2 IVF failures, fibroids, adenomyosis, cervical cancer, thin endometrium, endometriosis. IVF success was determined by assessing total frozen embryos transferred per month, average oocyte yield per donor, oocyte quality, and pregnancy/beta-Human Chorionic Gonadotrophin (HCG) positivity. Psycho-sexual intervention-incorporated marital-relationship counseling sessions/therapy, referrals for psychiatric assessments (cognitive impairment/schizophrenia/depression). Written informed consent of patients was taken at initial enrollment.
Results and Conclusions: Total embryos transferred were 248/April, 240/May, 201/June, 254/July, 230/August, 207/September; number of pregnancies/β-hCG positivity: 171, 171, 139, 179, 176, 163. Subgroup-stratification demonstrated that M-II vs total oocytes retrieved were 72.7%, 66.6%, 83.1%, 73.0%, 72.1% and 74.2%. Overall IVF success rates were 71%/April, 72%/May, 71%/June, 72%/July, 78%/August and 84%/September, and frozen embryo-transfer success was 68%, 75%, 74%, 85%, 77%, 83%. My maternal-fetal medicine study highlights promising IVF success rates in Asian-Indian infertile women; future public health research, awareness-campaigns, psychosocial interventions and pharmacogenetic epidemiological studies are warranted for successful development of predictive biomarkers for infertility management in ethnically disparate populations.

Biography

Saumya Pandey possesses brilliant academic credentials with earned Post-Doctorate: Biochemistry-Molecular Biology, Graduate School of Biomedical Sciences, University of Texas Medical Branch (UTMB), Galveston, TX, USA/Visiting Scientist: Urology (Robotic-Prostatectomy), Department of Urology, New York Presbyterian-Weill Cornell Medical College, New York, NY, USA/Doctorate: Ph.D. Life Sciences, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, UP, India–Chhatrapati Shahuji Maharaj University, Kanpur, UP, India/Doctoral Research Fellowship: Biomedical Sciences, Creighton University, Omaha, Nebraska, USA/M.Sc. Biochemistry, University of Lucknow, Lucknow, UP, India, and recently worked as Head-Clinical Research, IndiraIVF-Hospital, Udaipur-Lucknow, India with 65 first authorship scientific publications in international journals.