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Original Article

Out of pocket expenditure incurred by couples seeking infertility services at tertiary level facilities in India

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Background and objectives: Diagnosis and treatment of infertility, mostly sought at tertiary facilities, contribute to substantial out-of-pocket expenditure (OOPE). This study estimated OOPE among couples seeking care for endometriosis, male infertility, polycystic ovary syndrome (PCOS), tubal factor, and uterine factor, including costs of diagnosis, management, and intrauterine insemination (IUI).

Methods: A cross-sectional study was conducted across five tertiary healthcare facilities (three public, two private) selected through convenience sampling to represent different regions. Based on mean (SD) OOPE INR (₹)144,393 (₹130,943), effect size 0.16, α=0.05, and 80% power, the sample was equally distributed across sites and IVF/non-IVF groups, with ~100 participants per site. Couples were interviewed between April 2022–March 2023. Catastrophic health expenditure was defined as infertility spending exceeding 40% of annual household non-food expenditure. OOPE over the preceding year covered direct medical, non-medical, and indirect costs.

Results: Annual median OOPE was ₹11,317 (US $136.5) (IQR: ₹4,801–₹19,513) US $, higher in private facilities ₹14,217 ($171.4) (IQR: ₹8,030–₹21,848) than public facilities ₹8,355 ($100.7) (IQR: ₹3,785–₹17,386). Direct medical costs were the major contributor: median ₹5,802 ($69.9) (IQR: ₹2,186–₹11,847) Highest OOPE was for endometriosis ₹15,084 ($181.9) (IQR: ₹8,114–₹20,758), followed by uterine factor and male infertility ₹13,211 ($159.3) (IQR: ₹6,654–₹21,521). OOPE increased with absence of insurance (₹6,919; $83.4), comorbidities (₹2,593; $31.3), IUI (₹2,668; $32.1), and PCOS (₹2,004; $24.1). Catastrophic Health Expenditure was associated with comorbidities (OR=1.61), IUI (OR=1.88), and lower per capita income <₹59,400 ($715.7) (OR=3.44). Overall, 59.4% experienced CHE.

Interpretation and conclusions: Infertility care imposes substantial out of pocket expenditure in India. Strengthened insurance coverage and public sector investment are critical for equitable access.

Keywords Catastrophic health expenditure; IUI; Out of pocket expenditure