

## Estimating the cost of diagnosis of infertility and its management including In Vitro Fertilization among infertile couples

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### Recommendation

- Based on study findings, the IVF package for inclusion in public health programmes could be considered at Rs 81,332 for 1st IVF cycle and Rs 35,087 for subsequent cycles.
- Currently, OPD expenses are not covered under PM-JAY. As the majority of expenditure for infertility treatment including IVF is OPD based, this consideration needs to be made for including IVF in the PM-JAY package.
- Since 25% of couples undergoing infertility treatment face catastrophic expenditure, this cost could also be considered for reimbursement under PM-JAY.

### Background

- The World Health Organization (WHO) reports that primary infertility affects 3.9-16.8% of couples in India, among which 8% requires advanced and expensive treatment like In vitro Fertilization.
- Efforts are being made to include IVF in government health schemes like Pradhan Mantri- Jan Arogya Yojana (PM-JAY), necessitating cost assessments.
- This study aimed to estimate cost of diagnosis of infertility and its management including in vitro fertilization and quality of life among infertile couples.

### Methodology

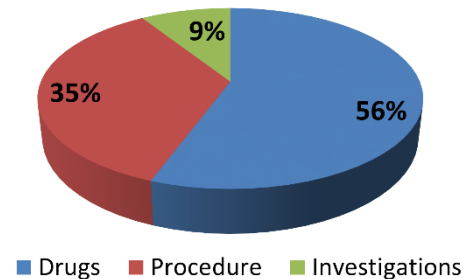
- Health system cost data collected from 3 public and 2 private tertiary hospitals
- 149 participants undergoing IVF were interviewed

### Key Findings

- The average Out-of-Pocket Expenditure (OOPE) for IVF treatment was Rs. 1,10,104 ( $\pm 75,503$ ) at public hospitals and Rs. 2,37,851 ( $\pm 1,09,556$ ) at private hospitals, with 85% incurring catastrophic health expenditure.
- The median out-of-pocket expenditure for infertility treatment at public hospitals was Rs. 7340 (IQR: 3148, 15727), and at private hospitals was Rs. 11834 (IQR: 6087, 196381) with 25% incurring catastrophic health expenditure.
- The health system cost of providing one IVF cycle was Rs. 81,332 ( $\pm 12,849$ ) and infertility management for one year in the public facilities ranged between Rs. 6,822 to Rs. 11,075.



Direct Health Costs contributed to 44% of total Out of pocket expenditure



### Out of pocket expenditure incurred by couples

**85%**  
Catastrophic Health Expenditure for IVF



**25%**  
Catastrophic Health Expenditure for Infertility

**5%**  
Current Insurance coverage

### Conclusion

The health system cost of providing one IVF cycle was estimated to be Rs 81,332. The cost for subsequent IVF cycles was Rs 35,087. The total budget estimates for providing IVF services in India for 3,32,381 females with infertility was estimated to be Rs 2,703 crores for 1st IVF cycle and for the subsequent 2 cycles was estimated to be Rs 2,332 crores and the total budget impact for 3 IVF cycles was estimated to be Rs 5,035