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# Willingness to pay for in vitro fertilization and implications for public funding in the Asia-Pacific (APAC) region: Results from a multi-country survey

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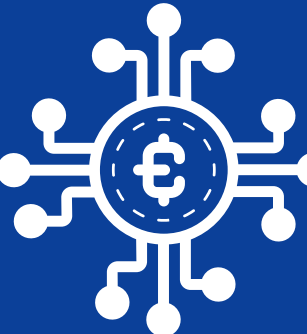


## CONCLUSION

In APAC, there is an affordability and funding gap for in vitro fertilization (IVF). Estimates of potential demand for IVF based on willingness to pay (WTP) showed that most respondents would be unable to cover the price of IVF in the absence of coverage.



Increasing public coverage could generate a more than proportional increase in IVF uptake suggesting that even partial coverage could already substantially improve access to IVF while maintaining sustainability.



Funding strategies should be tailored to country-specific demand and cost structures.



## INTRODUCTION

- Access to IVF is strongly influenced by affordability and the availability of coverage mechanisms that reduce out-of-pocket costs for prospective patients.<sup>1</sup>
- Country-specific evidence on WTP can inform the design of optimal public coverage policies in order to identify out-of-pocket prices that balance access to IVF and sustainability.



## OBJECTIVES

To assess WTP for IVF among reproductive-aged adults in APAC countries (India, Indonesia, and Vietnam); compare WTP between the general population with IVF patients; identify sociodemographic determinants of WTP; and estimate optimal elasticity-based coverage for IVF.



## METHODS

|  |                                |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Design</b>                  | Cross-sectional survey conducted in October 2025 (except for Vietnam, in April 2026).                                                                                                                                                                                                                                                                                                                           |
|  | <b>Population</b>              | Representative adults of reproductive age between 18–45 years from general population and IVF patients in 14 total countries including APAC countries (India, Indonesia, and Vietnam).                                                                                                                                                                                                                          |
|  | <b>Data collected</b>          | Sociodemographic characteristics, knowledge regarding IVF success rate, attitudes towards IVF coverage, familiarity with IVF, and WTP for IVF.                                                                                                                                                                                                                                                                  |
|  | <b>WTP elicitation methods</b> | Contingent valuation method (CVM), price sensitivity meter (PSM), and Gabor–Granger.                                                                                                                                                                                                                                                                                                                            |
|  | <b>Analysis</b>                | Linear regression models were conducted to identify factors likely to be associated with WTP. Demand curves for IVF were estimated using individual WTP. Optimal health insurance coverage was assessed based on price elasticity of demand for IVF (elasticity equal to 1, defined as the unit-elasticity point). Implied public coverage is the share of total IVF cost not paid out of pocket at that price. |



## RESULTS

- Among 11,124 respondents, 2,490 were from India, Indonesia, and Vietnam (~800 per country), including 240 IVF patients, with most respondents being women aged 20–35 years. Mean expected public coverage was similar across countries (53% in India, 54% in Indonesia, and 53% in Vietnam).



### WTP and affordability gap

- Median PPP-adjusted CVM WTP was below the average IVF prices per cycle in all three countries, representing respectively 22.7%, 10.7%, and 19.0% of IVF costs for India, Indonesia, and Vietnam. (**Table 1**)
- Current IVF prices exceeded the unit-elasticity point in all countries, suggesting that increasing public coverage could generate a more than proportional increase in IVF uptake until the corresponding optimal elasticity-based coverage level is reached. (**Figure 1**)
- Among IVF patients in APAC (n=240), WTP was higher than that in the general population.
- PSM yielded estimates similar to CVM, whereas Gabor-Granger resulted in higher values, consistent with potential anchoring effects.

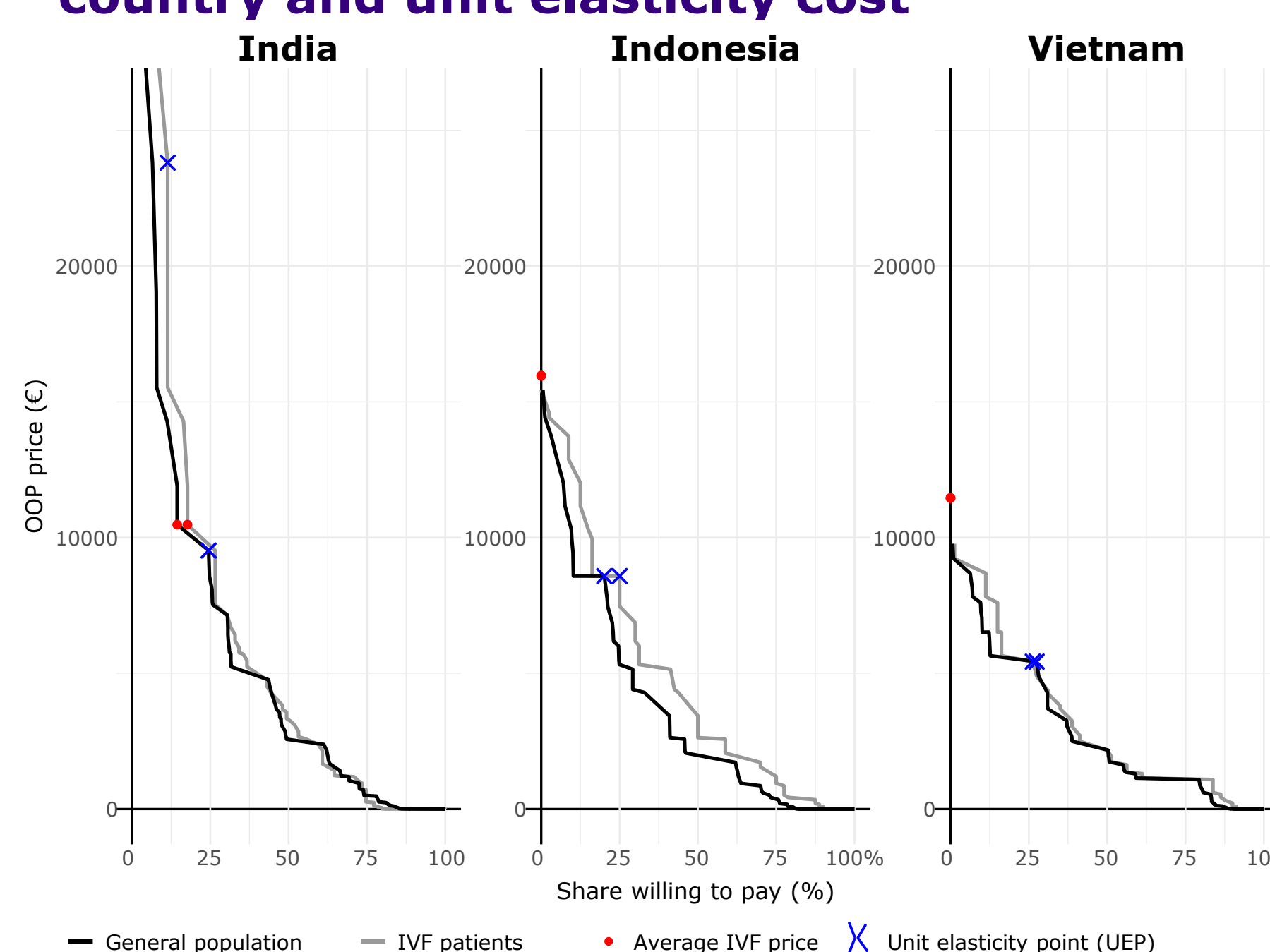
**Table 1: WTP estimates by elicitation method and WTP distribution**

| Country   | Cost per cycle (€) | CVM        |                  |                  | PSM        |         |                  | Gabor-Granger |                  |
|-----------|--------------------|------------|------------------|------------------|------------|---------|------------------|---------------|------------------|
|           |                    | Median (€) | UEP (€) (cov. %) | WTP as % of cost | Median (€) | OPP (€) | UEP (€) (cov. %) | Median (€)    | UEP (€) (cov. %) |
| India     | 10,475             | 2,381      | 9,524 (9)        | 22.7             | 2,643      | 2,403   | 9,524 (9)        | 8,095         | 6,190 (41)       |
| Indonesia | 15,963             | 1,716      | 8,582 (46)       | 10.7             | 2,575      | 1,713   | 5,149 (68)       | 12,702        | 9,612 (40)       |
| Vietnam   | 11,457             | 2,172      | 5,429 (53)       | 19.0             | 2,172      | 1,629   | 5,429 (53)       | 11,460        | 9,168 (20)       |

Entries are mean ratios obtained by exponentiating Gamma GLM coefficients; 95% confidence intervals are shown below each estimate. The sample was restricted to respondents with strictly positive WTP. In both pooled and country-specific regressions, the top 1% of WTP values were trimmed.

\*p < 0.10; \*\*p < 0.05; \*\*\*p < 0.01.

**Figure 1: CVM demand curves by each APAC country and unit elasticity cost**



### Determinants of WTP

Higher income (p<0.01), higher education (p<0.001), IVF familiarity (p<0.001) and overestimation of IVF success rate (p<0.01) were associated with greater WTP. (**Table 2**)

**Table 2: Determinants of willingness to pay for IVF**

| Variable                                                  | Pooled                  | India                | Indonesia            | Vietnam              |
|-----------------------------------------------------------|-------------------------|----------------------|----------------------|----------------------|
| Bottom income tertile (ref. Middle)                       | 0.79**<br>(0.67, 0.93)  | 0.62***<br>0.47–0.84 | 0.78**<br>0.62–0.96  | 0.90<br>0.75–1.08    |
| Top income tertile (ref. Middle)                          | 1.15<br>(1.00, 1.32)    | 1.12<br>0.83–1.49    | 1.16<br>0.93–1.45    | 0.92<br>0.77–1.09    |
| High education (ref. lower education)                     | 1.42***<br>(1.21, 1.66) | 1.38*<br>0.94–2.03   | 1.24**<br>1.02–1.52  | 1.22**<br>1.00–1.48  |
| Familiar with IVF (ref. not familiar)                     | 1.28***<br>(1.26, 1.31) | 1.17<br>0.87–1.56    | 1.09<br>0.89–1.34    | 1.31***<br>1.11–1.54 |
| IVF success overestimation (ref. accurate/underestimated) | 1.11**<br>(1.03, 1.19)  | 0.98<br>0.79–1.21    | 1.41***<br>1.18–1.68 | 1.04<br>0.93–1.17    |

**Abbreviations:** APAC, Asia-Pacific; CI, confidence interval; CVM, contingent valuation method; IVF, in-vitro fertilization; OOP, out-of-pocket; PPP, purchasing power parity; PSM, price sensitivity meter; UEP, unit-elastic price; WTP, willingness to pay

**Reference:** 1. Adamson GD, et al. Front Reprod Health. 2025;7:160548

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