



Patient Perspectives on IVF Success and Likelihood of Multiple Gestations

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Objective: To describe couples' perceptions of fertility treatment success rates and chance of multiples.

Design: Longitudinal, prospective, mixed methods study.

Methods

- **Who:** 34 couples (2 same-sex female) who presented for care with a reproductive endocrinologist and infertility specialist (REI) at an academic medical center.
- **What:** Separately completed surveys and qualitative interviews.
- **When:** Prior to initial consultation with an REI and up to 5 additional times over 12 months.
- Diagnoses and treatment plans based on interview data at ~2 months post initial consultation:
 - 24 couples with pregnancy candidate aged <35 years
 - 10 couples with pregnancy candidate aged 35-40 years
 - 6 couples with diminished ovarian reserve (DOR) who were planning IVF with donor eggs
 - 5 couples with DOR who were planning ovulation induction (OI) with intrauterine insemination (IUI)
 - 6 couples with anovulation who were planning OI with IUI

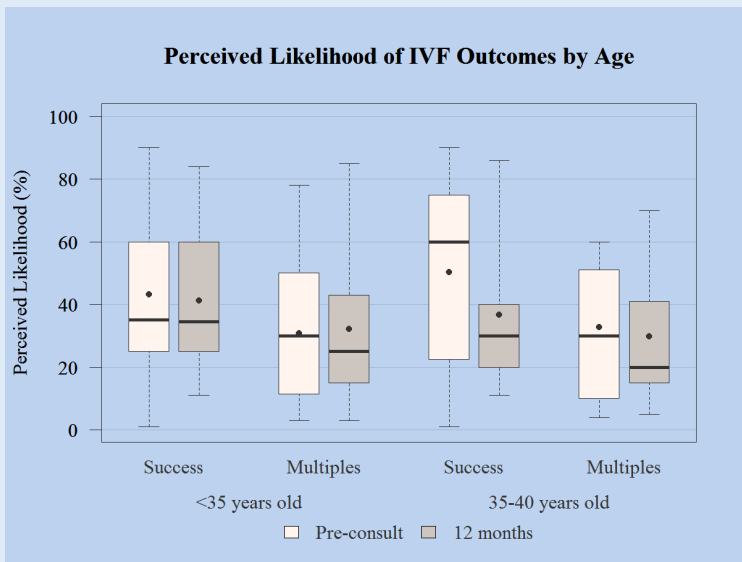
Statistical Analysis

- Descriptive summary statistics describe perceived likelihood of IVF success and of multiples (scaled 0-100%) by age and diagnosis.
- Box-and-whisker plots display mean, median, interquartile range, and overall range of likelihoods by age.
- Likelihoods by diagnosis (diminished ovarian reserve and anovulation) are summarized by mean and standard deviation.
- This study was primarily qualitative in nature and not powered to make statistical comparisons.

Results

➤ **By Age**

Box plots summarize perceived likelihood of success and multiples as a median (line), mean (point), and IQR (box). Whiskers extend to the maximum and minimum responses.



There were no statistically significant differences observed between the <35 and 35-40 age groups. The perceived likelihood of success of IVF in patients <35 years old did not differ pre-consult and 12 months later. There was little difference over time in perceived likelihood of multiples with IVF, approximately 30%.

Results

➤ **By Diagnosis & Planned Treatment**

Perceived Likelihood of IVF Success by Diagnosis and Planned Treatment

Diagnosis	Mean (SD) (%)
Diminished ovarian reserve	
Planning IVF with donor egg	72.9 (12.9)
Planning OI ± IUI	23.0 (22.8)
Anovulation	
Planning OI ± IUI	38.7 (26.2)

Conclusions

The wide ranges in perceived likelihoods as well as the generally optimistic perceived likelihood of success with treatment confirm the need for education of patients and their partners seeking these treatments. Additionally, there is a significant opportunity to counsel patients about decreasing likelihood of multiple pregnancy with fertility treatments.

There were no significant differences in perceived likelihood of success by age, though small sample sizes and substantial variability in responses limited options and power for statistical hypothesis testing.

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