

Prevalence of Anxiety and Depression Among Patients Undergoing Elective Oocyte Cryopreservation at a Single Fertility Center



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Introduction

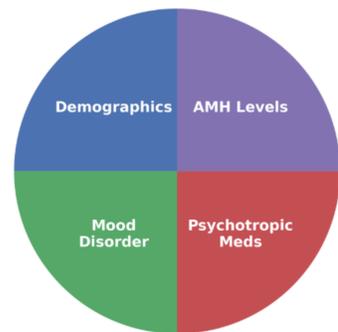
- Oocyte cryopreservation (OC) for fertility preservation, whether elective or when facing potentially gonadotoxic therapy, is increasingly pursued by patients (1).
- While psychological distress is well-documented among infertility patients, less is known about baseline mental health in patients freezing eggs for non-infertility indications (2).
- Pre-existing anxiety and depression have been associated with reduced odds of pregnancy and live birth rate after IVF (3).
- There is a paucity of data surrounding the prevalence of anxiety and depression in women undergoing elective OC for fertility preservation.
- Investigating the prevalence of mood disorders in this population may better inform pre-cycle counseling and support services.

Objectives

To assess the prevalence of anxiety and depression in women undergoing elective oocyte cryopreservation.

Methods

- Retrospective chart review at a single large fertility center, Sept 2024 - Sept 2025
 - Inclusion: patients between age 21-43 undergoing OC
 - Exclusion: medically-indicated OC (e.g. patients with a diagnosis of infertility or with anticipated future gonadotoxic therapy)
- Data elements collected from EHR:



• **Primary Outcome = prevalence of anxiety and depression**

- Observed rates were compared with U.S. population estimates for reproductive-aged women (as reported by the CDC) using standardized prevalence ratios (SPRs) with a 95% confidence interval.

Results

We identified **358 patients** undergoing OC; **268 met inclusion criteria**.

Baseline patient characteristics:

Characteristic	Value
Mean age (years)	34.85 ± 3.87
Average BMI (kg/m ²)	26.47 ± 5.49

Condition	OC Cohort (n=92)	CDC Benchmark	SPR (95% CI)	P value
Anxiety	20.1% (54/268)	21.4%	0.94 (0.72-1.23)	P=0.66
Depression	4.85% (13/268)	24.5%	0.23 (0.13-0.39)	P<0.001*
Anxiety + Depression	21.3% (57/268)	11.3%	1.88 (1.45-2.44)	P<0.001*

* = significant

- Anxiety prevalence was comparable to the CDC estimates for reproductive-aged women (20.1%, SPR 0.94, 95% CI 0.72-1.23).
- Depression prevalence was significantly lower (4.85%, SPR 0.23, 95% CI 0.13-0.39).
- Prevalence of comorbid anxiety + depression was significantly higher in patients undergoing elective OC (21.3%, SPR 1.88 1.45-2.44).**

Group	n	BMI	Other psychiatric diagnosis	Mean AMH
Anxiety, no meds	16	24.15 ± 4.35	6.25% (1/16)	3.97 ± 2.7
Anxiety + meds	38	27.69 ± 6.51	10.5% (4/38)	2.49 ± 1.76
Depression, no meds	2	22.26 ± 2.49	0	0.89 ± 0.68
Depression + meds	11	27.31 ± 6.10	18.1% (2/11)	2.16 ± 1.52
Anxiety + Depression	57	28.4 ± 5.93	19.2% (11/57)	2.41 ± 2.10

- Concomitant psychiatric disorders included ADHD (72.2%), bipolar disorder (16.7%), and OCD (11.1%).

Conclusion

• Key findings:

-At a single large fertility center, anxiety prevalence among women undergoing elective OC was comparable to CDC estimates for reproductive-aged women, while depression prevalence appeared lower, likely reflecting under documentation of mild/untreated cases.

-Comorbid anxiety + depression was significantly higher in patients undergoing elective OC.

• Findings underscore the importance of systematically screening for mood symptoms and comorbid anxiety-depression in elective OC patients.

• Clinical considerations:

-Recommend pre-cycle mental health screening

-Integrated behavioral health referral pathways

• Understanding the prevalence of mood disorders in elective OC patients can help identify associated clinical and psychosocial risk factors, enabling better psychosocial support.

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