

Women's Perspectives on Oocyte Cryopreservation: Sociocultural and Medical Factors in Saudi Arabia

Fatimah A Alzahrani,¹ Hissah Alrajih,⁸ Dania Al-Jaroudi,² Hamad Ali Alsufyan,³ Ali A Alzahrani,⁴ Saad Abdullah Alshehri,⁵ Sultana SK Jalwi,⁶ Elhadi Miskeen,⁷ Shazia Maqsoodi⁸

Department of Obstetrics and Gynaecology, HMG , Riyadh; Researcher with Global Remote Research Scholars Program, Princeton Junction, NJ, USA(1), MD, MHA, Consultant, Department of Reproductive Endocrine and Infertility Medicine Department, King Fahad Medical City, Riyadh Second Health Cluster(2), MD, FRCOG, Consultant, Thuriah Medical Center. (3), MBBS,MPH, PhD candidate, King Faisal Medical City for Southern Regions(4), MBBS, BSc, Lab Director of Thuriah Medical Center(5), Medical Student at Bisha, Aseer, Saudi Arabia(6), Department of Obstetrics and Gynaecology, College of Medicine, University of Bisha, Bisha, Saudi Arabia(7), Department of Obstetrics and Gynaecology, HMG , Riyadh(8)

Background

- Advanced maternal age decreases worldwide fertility, pushing women to postpone pregnancy.
- Oocyte cryopreservation provides a solution by preserving eggs at an early age for later use.
- There is little research on how Saudi women view or experience egg freezing, despite changing social and economic pressures.
- This study aimed to understand women's perspectives on egg freezing in Riyadh, Saudi Arabia.

Objectives

- Investigating Sociocultural and Medical Factors in Saudi Arabian Oocyte Cryopreservation.
- Understanding the motivations, challenges, and satisfaction levels of women who have undergone the procedure.

Methods

This mixed-methods study was conducted at Thuria Hospital in Riyadh, Saudi Arabia, involving women aged 18–47 who underwent oocyte cryopreservation for social or medical reasons between January 2019 and August 2022. Quantitative data were collected through a self-administered questionnaire completed by 100 participants. Qualitative data were gathered via semi-structured interviews with 15 women, conducted either face-to-face or via teleconferencing, each lasting between 11 and 25 minutes. Verbatim transcripts were analyzed using thematic content analysis.

Table 1: Knowledge of participants regarding freezing oocytes

		Frequency (n)	Percent (%)
Indications of freezing ovum	Medical	23	23.0
	Social	77	77.0
Where have you heard about freezing ovum?	Family /Friends	25	25.0
	School/university	0	0.0
	IVF treatment/doctor	44	44.0
	Media	21	21.0
	Common knowledge	6	6.0
	Scientific papers	0	0.0
	Don't know	4	4.0
	Other	0	0.0
Would you consider freezing ovum to be used in the future for all women?	Yes	66	66.0
	No	15	15.0
	Maybe	19	19.0
Would you consider freezing ovum to be used in the future for women under 40 years?	Yes	67	67.0
	No	13	13.0
	Maybe	20	20.0
Do you know about the complications of freezing the ovum?	Yes	17	17.0
	No	83	83.0
Do you have any of these complications?	Yes (Specify)	2	2.0
	No	98	98.0

Results

- A number (%77) reported that freezing their oocytes was for social reasons and were aware of the medical and non-medical reasons for freezing them.
- A significant hindrance to undergoing the procedure was the financial burden.
- Most participants (%96) favored the accreditation of the oocyte freezing bank.
- Participants ’responses to freezing oocytes were recorded, and six prominent themes emerged.
- Qualitative themes included the concept and aim of freezing , patient experience, challenges, quality of service, communications, confidentiality, and recommendations.

Table2: Number of oocytes retrieved and used by participants

Age at the time of the interview	Age at the time of oocyte cryopreservati on	Marital status	Number of retrieval s	Used of oocyte	Occupation
21 (1)	18	Single	1	None	Student
47 (2)	43	Married	2	1	Housewife
41 (3)	39	Married	1	None	Teacher
35 (4)	33	Divorced	1	None	Dentist
18 (5)	18	Single	1	None	student
38 (6)	34	Divorced	1	None	Diabetic specialist
27 (7)	26	Married	2	None	Housewife
33 (8)	30	Married	3	2	Housewife
47 (9)	43	Single	1	None	Lab tech
27 (10)	25	Married	3	2	Housewife
38 (11)	35	Divorced	2	None	Teacher
33 (12)	31	Married	2	1	Housewife
40 (13)	38	Single	2	None	Receptionist
41 (14)	40	Married	1	None	Housewife
32 (15)	29	Married	1	None	Manager

Conclusions

Women welcomed oocyte cryopreservation for age-related fertility decline. As a result of infertility fears ,women desired to freeze their ovaries to produce genetically related babies later. Participants in the study still considered their rights to freeze their ovaries beyond several barriers despite their geographical situation and cultural background. The cryopreservation of oocytes should be included in female reproductive options. Recommendation: Improve awareness, access, and affordability of oocyte cryopreservation as a reproductive choice for women.

References

