ISRCTN84083580 https://doi.org/10.1186/ISRCTN84083580

Awareness of egg freezing in Saudi Arabia

Submission date
12/04/2024

Recruitment status
No longer recruiting

Registration date
17/04/2024

Overall study status
Completed

Last Edited
24/03/2025

Condition category
Pregnancy and Childbirth

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[X] Results
[ ] Individual participant data

Plain English summary of protocol

Background and study aims
The number of women who desire fertility at an advanced age is increasing; however, the fertility rate among women has declined over the last two decades. Various assisted reproductive technologies have emerged globally in medical care to assist women of advanced maternal age seeking pregnancy. Oocyte cryopreservation enables women to freeze their eggs at an earlier age for potential future use. This study aims to collect the perspectives of women living in Riyadh, Saudi Arabia regarding egg freezing.

Who can participate?
Women aged 18–47 years who had their eggs frozen at the center between 01/01/2019 and 01 /08/2022 for social and medical reasons

What does the study involve?
A self-administered questionnaire was distributed to 100 women attending a private clinic at the Thuriah Medical Centre in Riyadh, Saudi Arabia, who underwent oocyte cryopreservation for various reasons. Semi-structured interviews were conducted face-to-face or via teleconference among 15 women who expressed interest in participating in the recorded interviews, which lasted between 11 and 25 minutes.

What are the possible benefits and risks of participating?
Not provided at time of registration

Where is the study run from?
Thuraih (Saudi Arabia)

When is the study starting and how long is it expected to run for?
January 2019 to June 2023

Who is funding the study?
King Fahad Medical City (Saudi Arabia)

Who is the main contact?
Dr Fatimah Alzahrani, Dr.fatimah2013@gmail.com

Contact information

Type(s)
Principal investigator

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Study information

Scientific Title
Knowledge and attitudes of women toward oocyte freezing at a private medical center in Saudi Arabia: a mixed-methods study

Study objectives
What are the perspectives of women living in Riyadh, Saudi Arabia regarding egg freezing?

Ethics approval required
Ethics approval required

Ethics approval(s)

Approved 02/11/2022, King Fahad Medical City (Riyadh, SA, Riyadh, 11525, Saudi Arabia; +966 (0) 112889999; hsakkijha@kfmc.med.sa), ref: FWA00018774

Primary study design
Observational

Study design
Mixed-methods study

Study type(s)
Other, Quality of life

Health condition(s) or problem(s) studied
Oocyte freezing

Interventions
This sequentially designed mixed-methods study was conducted at the Al Thuriah Medical Center in Riyadh, Saudi Arabia. The women included in this study were aged 18–47 years and had their oocytes frozen at the center between 01/01/2019 and 01/08/2022 for social and medical reasons. The participants were recruited from 01/12/2022 to 29/06/2023. Patients were contacted using their phone numbers from documents and records to obtain their permission to participate in the study. To acquire insight into the various viewpoints, deliberate sampling was performed to include participants with the greatest variance in age, location, social position, and number of cryopreserved oocytes. The primary researcher contacted the women in person, by phone, or using WhatsApp to determine their interest in the study. Women who refused to participate in the study due to time constraints, emotional issues, religious beliefs, or lack of interest or response, were excluded. Of the 15 women who participated, 10 were approached face-to-face in various locations, four were interviewed in the hospital, and one was interviewed at a coffee shop. Ethical approval for this study was obtained from the Thuriah Institutional Review Board and King Fahad Medical City before the commencement of the study (Protocol No. 22-256E). Each participant was provided information regarding the study, and informed written consent was obtained from all participants. Confidentiality of patient information was maintained.

Quantitative data processing:
The Freezing Oocyte Questionnaire was initially developed in English and later translated into Arabic. The questionnaire, comprising six questions, was constructed based on previously published research and was translated into Arabic before distribution (Lallemant et al., 2016). The first part recorded the demographic information of the participants, such as age, nationality, area of residence, occupation, and social status. The second part included six multiple-choice questions to assess their knowledge about freezing oocytes, such as indications for egg freezing, techniques used, and potential complications. Parts three, four, and five recorded the medical, social, and ethical reasons associated with egg freezing, respectively. The final section included direct questions about oocyte freezing and its future applications. A univariate analysis was performed to provide an overview of the findings. Data were analyzed using the Statistical Package for Social Sciences (SPSS) software version 21 for Windows (IBM Corp., Armonk, NY, USA).

Qualitative data processing:
Semi-structured interviews were conducted face-to-face or via teleconferencing. The interviews

lasted between 11 and 25 min each. The data obtained were analyzed using thematic analysis, which was performed in phases. The first stage of data familiarization involved the transcription of data and the writing of notes on early concepts. In the second stage, the initial codes were produced by employing open codes for important traits across the dataset. The third stage involved creating themes by categorizing the codes into groups based on similarities in meaning. Overarching patterns were also observed. The co-investigators evaluated, reviewed, and refined the themes during the fourth phase.

Intervention Type
Other

Primary outcome(s)
1. Patient satisfaction with oocyte freezing measured using the Freezing Oocyte Questionnaire at a single timepoint
2. Patient satisfaction with oocyte freezing measured using patient interviews at a single timepoint

Key secondary outcome(s)
There are no secondary outcome measures

Completion date
29/06/2023

Eligibility

Key inclusion criteria
1. Women aged 18–47 years
2. Had their oocytes frozen at the center between 01/01/2019 and 01/08/2022 for social and medical reasons

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 Years

Upper age limit
47 Years

Sex
Female

Total final enrolment
100

Key exclusion criteria
Women who refused to participate in the study due to time constraints, emotional issues, religious beliefs, or lack of interest or response

Date of first enrolment
01/12/2022

Date of final enrolment
29/06/2023

Locations

Countries of recruitment
Saudi Arabia

Study participating centre
Thuriah
Mecca Road
Riyadh
Saudi Arabia
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Sponsor information

Organisation
Thuraih

Funder(s)

Funder type
Government

Funder Name
King Fahad Medical City

Alternative Name(s)
King Fahad Medical City Research Center, KFMC

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
Saudi Arabia

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be available upon request from Dr Fatimah Alzahrani (Dr.fatimah2013@gmail.com)

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		22/03/2025	24/03/2025	Yes	No