



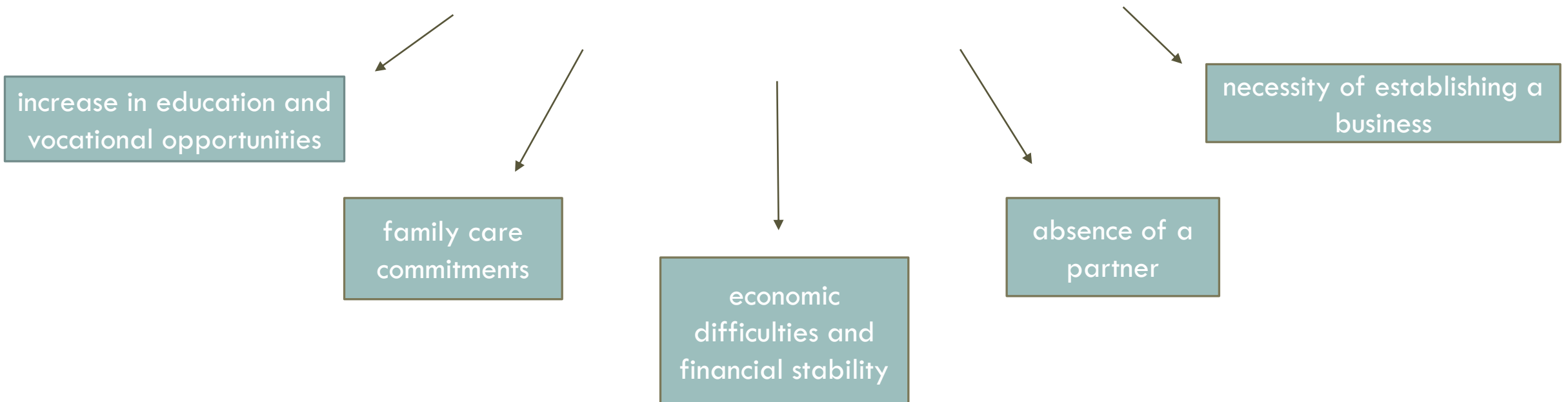
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Evaluation of Women's Awareness and Knowledge of Planned Oocyte Cryopreservation at Different Sociocultural Levels

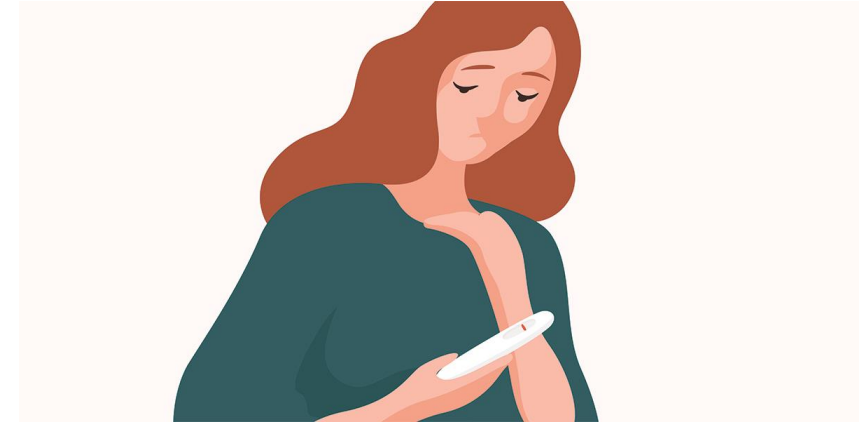
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INTRODUCTION

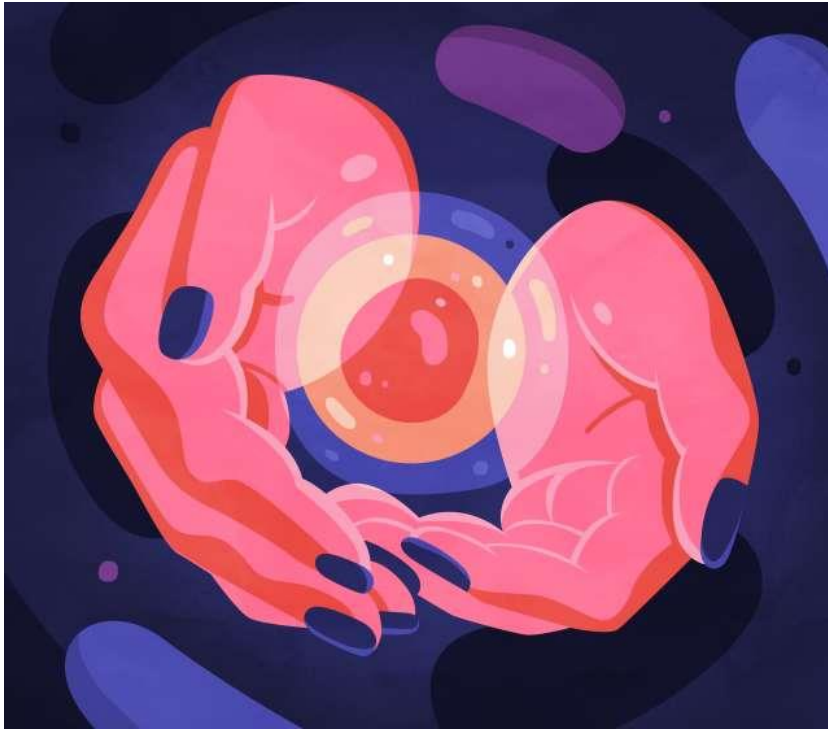
- In recent decades, society has pushed back the beginning of parenthood.



- As a result, if these women attempt to conceive further, they may experience age-related infertility.
- Assisted reproductive technologies are advancing at a rapid rate to boost the success rate of pregnancy in subfertile and infertile patients. Oocyte cryopreservation (OC) is one of the technologies that used for that purpose.
- OC was restricted to investigational protocols until 2013, when the American Society for Reproductive Medicine (ASRM) declared that oocyte freezing is not "experimental" and permitted its routine use in postmenarchal women undergoing gonadotoxic therapies.
- In 2017, the ASRM ethics committee determined that oocyte cryopreservation is morally permissible for women who wish to safeguard against future infertility caused by reproductive aging or other factors.



AIM



- The purpose of our study was to compare and evaluate the demographic characteristics and level of knowledge regarding childbearing, female fertility, and oocyte freezing between participants who were considering planned oocyte cryopreservation and those who were not, among Turkish women of reproductive age and diverse sociocultural backgrounds.

MATERIAL AND METHODS

- We conducted a cross sectional survey study containing a total of 54 questions, survey answers registered via internet.
- June-September 2022
- 915 participants between the ages of 21-45 from various sociocultural levels
- Survey evaluates;
 - Demographic information (Women's age, Educational level, Marital status, Income level)
 - Women's perspective on fertility expectations
 - Oocyte freezing knowledge levels,
 - Whether they are considering oocyte freezing or they do not



RESULTS

Variables	All females (n=915)	Non egg-freezers (n=464)	Potential egg-freezers (n=451)	P
Age (year)				0.776
21-26	595(65)	300(50.4)	295(49.6)	
27-32	193(21.1)	95(49.2)	98(50.8)	
33-38	67(7.3)	35(52.2)	32(47.8)	
39-45	60(6.6)	34(56.7)	26(43.3)	
Educational background				<u>0.044*</u>
Primary school graduate	21(2.3)	11(52.4)	10(47.6)	
High school graduate	79(8.6)	52(65.8)	27(34.2)	
University	658(71.9)	322(48.9)	336(51.1)	
Master's degree	157(17.2)	79(50.3)	78(49.7)	
Annual household income (TL)				0.214
1000-2000	281(30.7)	153(54.4)	128(45.6)	
2000-5000	149(16.3)	81(54.4)	68(45.6)	
5000-10000	283(30.9)	135(47.7)	148(52.3)	
>10000	202(22.1)	95(47)	107(53)	
Relationship status				<u>0.021*</u>
Married	234(25.6)	138(59)	96(41)	
Divorced	11(1.2)	5(45.5)	6(54.5)	
Engaged	24(2.6)	9(37.5)	15(62.5)	
Single/other	646(70.6)	312(43.8)	334(51.7)	

Table 1: Demographic characteristics of the women who participated in the survey, who were considering oocyte freezing and those who did not.

All values are given as numbers (percentage).

*Statistical significance level was accepted as $p < 0.05$.

Table 2: Comparison of the knowledge levels of women who do not and do consider having oocyte freezing.

Questions	Non egg-freezers (n=464)	Potential egg-freezers (n=451)	P
What is the spontaneous conception rate of women?	108(23.3)	81(18)	0.047*
Which age group is most suitable for oocyte freezing for non-medical reasons?	214(46.1)	239(53)	0.038*
At what age do women have a <u>slight</u> decrease in their ability to conceive?	117(25.2)	156(34.6)	0.002*
At what age do women have a <u>marked</u> decline in their ability to conceive?	89(19.2)	116(25.7)	0.018*
Freezing eggs before age 35 can significantly prolong a woman's fertility.	229(49.4)	296(65.6)	<0.001*
Similar to IVF, egg freezing requires injection of hormones and surgical removal of eggs from a woman's ovaries to stimulate egg production.	293(63.1)	314(69.6)	0.038*
The egg freezing procedure can pose risks to a woman's health and future fertility.	265(57.1)	310(68.7)	<0.001*
A woman can successfully and safely use frozen eggs while still fertile to try to get pregnant in her 40s and 50s.	324(69.8)	356(78.9)	0.002*

All values are given as numbers (percentage).

*Statistical significance level was accepted as $p < 0.05$.

Table 2: Comparison of the knowledge levels of women who do not and do consider having oocyte freezing.

Questions	Non egg-freezers (n=464)	Potential egg-freezers (n=451)	P
What is the fertility of women at different ages?	188(40.5)	197(43.7)	0.333
What is a woman's percent chance of conceiving with IVF?	121(26.1)	138(30.6)	0.129
What is a woman's percent chance of conceiving with frozen oocytes?	116(25)	110(24.4)	0.831
For women over 30, overall health and fitness is a better indicator of fertility than age.	155(33.4)	153(33.9)	0.868
Does the health system in Turkey afford social oocyte freezing except for non-medical reasons?	446(96.1)	441(97.8)	0.144
One treatment cycle is usually sufficient to get enough eggs for freezing.	225(48.5)	204(45.2)	0.323
How much does a cycle egg freezing cost in Turkey, including drugs?	136(29.3)	117(25.9)	0.255
Hormone injections required to freeze eggs do not have any side effects.	87(18.8)	105(23.3)	0.092
In achieving a healthy pregnancy, a woman's age at the time her eggs are frozen is more important than the age at which she chooses to conceive with frozen eggs.	328(70.7)	311(69)	0.568
Most frozen eggs can be used for pregnancy by fertilizing and becoming embryos without being damaged by the thawing process.	286(61.6)	302(67)	0.093
Long-term health effects for children born from using frozen eggs are currently unknown.	398(85.8)	373(82.7)	0.202

All values are given as numbers (percentage).

*Statistical significance level was accepted as $p < 0.05$.



A Survey of Women Who Cryopreserved Oocytes for Non-medical Indications (Social Fertility Preservation)

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Abstract

To evaluate the expectations, experiences, and fertility awareness status of women who underwent social oocyte cryopreservation. Cohort survey study was conducted at an academic medical center. All women who underwent social oocyte cryopreservation between January 2015 and June 2016 were recruited. One hundred thirty-three women were contacted by phone to participate in a survey. The questionnaire investigated the initial motivation towards freezing, intentions to use cryopreserved oocytes, treatment experience, awareness of fertility and knowledge about chances of having a live birth with their frozen oocytes. The mean age at the time of oocyte freezing was 38.5 ± 2.68 years. The average number of mature oocytes cryopreserved was 5.48 ± 6.6 (1–16). Two major motivations were absence of a male partner (40%) and an anticipated age-related fertility decline (42%). Almost 60% overestimated the chances of natural conception, as well as the success of IVF at the age of 40 years. Half of the oocyte bankers reported that fertility declined between ages 35 and 39, but only 28% of patients estimated the live birth rate per cryopreserved oocyte correctly. Overall 98.8% stated that they would recommend oocyte cryopreservation to a friend, and 72% felt more secure in terms of reproductive potential. Despite comprehensive personalized counseling prior to the start of ovarian stimulation, many women do not seem to have a realistic understanding of reproductive aging. Even though gamete cryopreservation provides some insurance, overestimating the effectiveness of oocyte cryopreservation can also lead to a false sense of security. Clinical Trial Registration: 2016.086.IRB1.006

Keywords Oocyte cryopreservation · Fertility preservation · Social egg freezing · Non-medical oocyte freezing

Awareness of fertility and reproductive aging in women seeking oocyte cryopreservation, reproductive aged controls, and female health care professionals: A comparative study

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Affiliations + expand

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Abstract

Objective: To compare the awareness of fertility and reproductive aging in women seeking oocyte cryopreservation (OC) with age matched controls.

Study design: In this cross-sectional comparative study, women who were candidates for OC due to impending oocyte depletion (n = 81) were compared to age matched reproductive aged women (RAW) (n = 91) and female healthcare professionals (FHP) (n = 82) in terms of awareness about fertility and reproductive aging and knowledge about OC. A study specific 18-item questionnaire was constructed on the basis of previous research on OC and fertility.

Results: Awareness of fertility and reproductive aging was similar among groups. The majority of study population was quite realistic of women's most fertile age period whereas they were fairly optimistic about the age that a woman may lose her ability to conceive, monthly fecundity rate, and estimated in vitro fertilization treatment success. OC candidates and FHP were more realistic compared to RAW regarding the age after which the chances of conception is severely diminished (p = 0.005). When the knowledge on OC and willingness to preserve fertility in the future were asked to FHP and RAW, 90% stated that they were aware of the option (93% in FHP versus 88% in RAW, p = 0.006). However, they lacked detailed information about OC and they were unlikely to consider it in the future.

Conclusions: Women seeking OC did not appear to have a better awareness of reproductive ageing compared to the general female population. The results of this study highlight the need for additional awareness campaigns and education on both personal and professional levels.

Keywords: Awareness; Cryopreservation; Fertility; Infertility; Oocyte.



RESEARCH

Open Access

Egg freezing for fertility preservation and family planning: a nationwide survey of US Obstetrics and Gynecology residents



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ASSISTED REPRODUCTION TECHNOLOGIES

Awareness, knowledge, and perceptions of infertility, fertility assessment, and assisted reproductive technologies in the era of oocyte freezing among female and male university students

C. Meissner¹ · C. Schippert¹ · Frauke von Versen-Höyneck^{1,2}

Assessing reproductive choices of women and the likelihood of oocyte cryopreservation in the era of elective oocyte freezing

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Life Sciences, Society and Policy

RESEARCH

Open Access

Understanding social oocyte freezing in Italy: a scoping survey on university female students' awareness and attitudes



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DISCUSSION AND CONCLUSION

- In our study, similar to studies conducted in other countries, it was observed that single women with higher education levels in our country had a higher level of knowledge about oocyte freezing and they wanted to use this current method.
- However, we still consider that society needs more information about oocyte freezing.

-THANK YOU FOR YOUR ATTENTION-

Feel free to ask any questions

