Freezing Eggs and Delaying Fertility: Law, Ethics and Society

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"Children are wonderful, but they can also stress you financially, physically and emotionally. I wanted to be in rock-solid marriage with a track record before I had kids. And I didn't want that process to be strained by some deadline that no one could really identify".

Sarah Elizabeth Richards, "Should You Freeze Your Eggs?", Marie Claire, May 2007, 220–224.



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"Client Testimonials", Extend Fertility, www.extendfertility.com/experts/clients.php (8 November 2007)



The Biological Clock—a worn metaphor but spot-on accurate because sometimes it ticks so loudly it makes us stay up all night feverishly Googling "fertility options"...I have seen this pressure push people into lacklustre marriages or fret their lovely, confident selves into frenzied, fearful heaps.

Sarah Elizabeth Richards, "Should You Freeze Your Eggs?" Marie Claire, May 2007, 220–224.



Egg Freeze Cycles by Age

Egg freeze cycles by pat	tient age, 2000-2019					
Year	Under 35	35-37	38-39	40-42	43-44	45-50
2019	788	738	469	304	55	23
2018	595	609	367	291	41	20
2017	474	434	319	198	43	10
2016	411	392	246	193	44	20
2015	345	296	211	183	54	18
2014	249	168	145	106	28	<5
2013	188	134	133	86	17	<5
2012	157	94	81	60	7	6
2011	121	83	64	38	9	6
2010	81	61	42	40	5	<5
2009	65	77	48	21	6	
2008	76	54	39	37	<5	<5
2007	41	26	25	12	<5	
2006	26	14	11	7		<5
2005	19	<5	6	<5	<5	<5
2004	8	<5	<5	<5		
2003	10	5	5	<5		
2002	11	<5	<5	<5		
2001	9		<5	<5		
2000	<5	<5	<5	<5		

Egg Thaw Cycles by Year

Year	Patient eggs	Donor eggs
2019	192	560
2018	195	428
2017	182	429
2016	199	370
2015	149	301
2014	132	148
2013	103	92
2012	85	74
2011	47	70
2010	54	26



Should I Freeze My Eggs?

The number of women choosing to freeze their eggs is rising year on year. But considering less than a fifth of patients ending up using their eggs to have a child, the treatment's cost and the physical and psychological toil, we've got to ask ourselves, is it really worth it?



Source: https://www.elle.com/uk/life-and-culture/a36912940/egg-freezing/

The media tends to portray egg-freezing as a life hack for ambitious women

But I wonder if the dating apps, with their illusion of endless possibility, subtly encourage us to keep shooting for the best of all worlds: someone you feel a

Source: https://www.economist.com/1843/2022/02/14/tinder-drove-me-to-freeze-my-eggs

PERSPECTIVE

Why You Need to Prepare for Anxiety and Disappointment When You Freeze Your Eggs

https://www.healthline.com/health/womens-health/egg-freezing-emotional-risks

An 'expensive lottery ticket': Freezing eggs offers women hope, but not everyone wins

Source: https://www.nbcnews.com/health/health-news/expensive-lottery-ticket-freezing-eggs-offers-women-hope-noteveryone-n975921

A controversial subject

The problem is, many women are receiving the wrong message. That they can have it all, because this form of fertility treatment buys them loads of extra time. This is a dangerous belief. There isn't enough information given about the fact that success rates are very low.



"Egg freezing is indirectly encouraging women to have children at an advanced maternal age, which carries with it significantly increased risk of medical complications in pregnancy," the authors said.

Source: https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/1471-0528.15295



Opinion Social affairs

The fertility industry may be offering women false hope

Egg freezing is expensive, invasive and comes with low odds. But it is increasingly presented as an insurance policy

Source: https://www.ft.com/content/19051176-4e5a-4d77-b717-31a7af2b98fb



HFEA on Age at Freeze

"When egg freezing takes place, it freezes the quality of the eggs at that point in time of a woman's life. This means that the age at which a woman freezes her eggs is particularly important. Our data shows that there is a pattern in success rates for women who use their frozen eggs in treatment. The success rate decreases with the increasing age of the woman when the eggs were frozen. The highest success rates are for women aged below 35."



Age-Related Fertility Decline

- gradual decline as women proceed through their late 20s and 30s and, with the decline then accelerating from the mid-30s onwards
- chances of conceiving with own eggs via IVF (unfrozen)
 - early 30s = 40-50% chance that IVF will produce a live baby
 - 38y = 27%
 - 40y = 20%
 - mid-40s = 5%.
- if she uses younger eggs supplied by a donor, her chance of a successful IVF pregnancy remains fairly stable, at around 50-60%, right up until her mid-40s



Employment and Timing of Reproduction

Upon the birth of their first child:

"a crystallization of gender roles, with women increasing time spent in housework and childcare in comparison with men only after the birth of the first child " (Melinda Mills et al)

Women who delay childbearing experience significant economic benefits:

A year of delayed motherhood is found to increase career earnings by 9%, work experience by 6%, and average wage rates by 3%. The effects are heterogeneous across women; those with college degrees and in professional and managerial occupations receive the greatest career returns to delay.



Employment and Timing of Reproduction

Motherhood timing

The point at which a woman exits the workforce to have children may account for as much as 12% of the gender wage gap because of the effect on women's work experience and the resulting depreciation in their skills.

Women are mindful of the need for financial security when they time motherhood

The three most important factors women for starting a family were being in the right relationship (82%), having financial security (77%) and owning their own home (40%)... (BPAS survey)



Education and Timing of Reproduction

Motherhood timing

It is well established that women's educational outcomes may be adversely affected by a decision to have children, and in particular, the timing of this decision.

Postponement is also correlated with greater participation in higher education, and higher rates of childlessness with the attainment of degree level qualifications.

Not surprisingly, given the relationship between education level and employment prospects, childlessness and postponement are correlated with higher income levels.



Time to Find a Partner

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Time to be Emotionally Ready

""I experienced four miscarriages after the birth of my first daughter, when I was 43. The loss was excruciating, especially as I did not have years ahead of me to try again. The upside, however, has been having a child when I was 'ready' psychologically and emotionally, and in the right relationship and time of life, to do so"



Objections to Delaying Reproduction via Egg Freezing

- better for women to have their children when they are younger
- better for children to be born to younger mothers
- risks of pregnancy at advanced maternal age
- risks from egg collection
- societal harms
- social inequality and justice
- alienation of gametes
- women will gain a false sense of security



"egg freezing is often misleadingly portrayed as an insurance policy instead of a last resort. Each frozen egg cell represents a small chance of a healthy live birth, and those chances decline fast after a woman's 35th birthday. Rather than an insurance policy, women are instead buying lottery tickets. If they buy a lot of tickets (that is, if they are able to bank a large number of good quality egg cells), they have a reasonable chance of success, but uncertainty is a fundamental feature of the system " (Heidi Mertes)



"We conclude that elective egg freezing provides women with an opportunity to take action about the drop in their fertility, but at present most women who are doing this are already in their later 30s when the success rates are limited "(RCOG)



Young women's 'optimism bias' "may make the risk of future infertility seem quite distant. Surely, they say to themselves, they will find a man and settle down in the next few years, so why undergo the intrusion and cost of egg freezing? Only the most risk averse or those with a yen for the latest technological fix, may be willing to take the hormones and pay out cash for 'egg insurance' that they may never need to cash in." (John Robertson)



Nine out of 10 women (89%) were aware that the risks of pregnancy increased with age, both for mother and foetus, and for the majority (65%) this was a factor in their decision making around when to try for a baby.

Many women were concerned they were "running out of time" to have children, including a third (32%) of women aged 25-29, and more than one in 10 (12.4%) of the youngest women (20-24) polled.

(BPAS fertility survey)



In a survey of over 3,000 women, Daniluk et al found that 91% were 'unrealistically confident about the ability of [ARTs] to assist most women to have a child using their own eggs until they reach menopause' (Daniluk)

Women were confident that, if they needed it, reproductive technology would be available to assist with conception whenever they decided to bear a child. Sheila who was older than 30 years without children stated: "Women are having babies later because of technology, fertility technology that allows us to kind of extend our fertility period, where before we couldn't, you know?" (Benzies)



"The simple conclusion here is that the option of more effective egg freezing technology does not fundamentally alter the challenges women face. Women have always had to choose between risks --- to their education, to their career, to their relationships, or to their fertility. The emergence of vitrification techniques has merely changed the risks and benefits to be weighed."



But, I suggest, you also can't control whether your frozen eggs will give you a child. Hasn't this just given her the illusion of control over something that remains as out of her hands as it ever was? "Even if it doesn't work, at least I've given it a shot," she says. "If there is some chance, I would rather do something than nothing. You're not going to regret having had a go. If you end up trying for a baby and you can't conceive - and you'd thought about freezing at 29 but decided you'd rather spend the money on a holiday - you'd never forgive yourself."

Source: https://www.theguardian.com/lifeandstyle/2015/aug/14/freezing-your-eggs-moya-sarner



Does Egg Freezing Empower Women?



Should the Law Do Anything?

- storage limit extension has resolved a serious problem
- HFEA should ensure good information provision
- egg selling??



Selling Eggs...

"What are the average compensation rates for egg donation?

Compensation can vary quite a bit, depending on where you donate your eggs. Usually, egg donors are usually paid between \$5000 and \$10,000 per cycle. At Bright Expectations, we offer our egg donors a compensation package that is a bit higher than the average, which includes:

A payment of \$8000 to \$10,000 per cycle. A portion is paid when you begin your course of fertility medications, and the remainder within about 5 days of completing the egg retrieval.

Paid expenses. If you need to travel to get to the clinic, we will also cover the cost of all your travel, including airfare, hotel, meals, and ground transportation for you and a companion if you decide to bring one with you to the egg retrieval.

Free fertility testing. As an egg donor with Bright Expectations, you will also have access to information and education about your own fertility: the results of the screening tests are available to you and can be valuable when you are planning your own reproductive future."

https://www.brightexpectationsagency.com/blog/how-much-money-egg-donors-paid/



Selling Eggs...

"What will you do with your egg donation compensation?

As an egg donor, you are making someone's lifelong dreams come true. And hey—you also have dreams of your own! You deserve to follow them. The compensation you receive for donating your eggs can be an amazing first step towards chasing down your goals and building a future you're excited about. Our donors have used their payments for all sorts of things, but some of the most popular are education, travel, and savings.

Many donors use their compensation to **help pay for further education**: tuition, textbooks, paying off student loans or even funding semesters abroad.

Travel is an amazing way to expand your horizons, and with your egg donation payment you can afford to discover the world in style, from an epic cross-country journey to a dream European vacation.

Some donors choose to **buy a car** with their egg donation payment, which can open a lot of doors for both employment and adventure. Road trip, anyone?

..

Saving for a down payment on your first apartment or house? Egg donor compensation makes a great little nest egg.

If you have an entrepreneurial spirit, the money you receive for donating your eggs can help provide startup costs to **open your own business.**

Saving for a rainy day when you're young can make everything in life seem just a little bit easier, so some donors just tuck their compensation away for the future With the security of a healthy savings account, you're free to dream big, take a few risks, and explore what's out there for you."

https://www.brightexpectationsagency.com/blog/how-much-money-egg-donors-paid/



Selling Eggs...

"Our innovative Freeze and Share programme gives you an opportunity to freeze your eggs for free and at the same time give another family the chance to have the baby they are longing for.

By taking part in our Freeze and Share programme, you'll receive an egg freezing cycle plus two years' storage free of charge. In exchange, you'll donate half the eggs collected from your treatment to London Egg Bank."

https://londoneggbank.com/freeze-and-share/



Information Sources

Human Fertilisation and Embryology Authority

https://www.hfea.gov.uk/treatments/fertility-preservation/egg-freezing/

The Liminal Space, *Timeless*

https://www.the-liminal-space.com/all-projects/timeless

Progress Educational Trust, Extend the Limit campaign

https://www.progress.org.uk/extendthelimit

Dr Kylie Baldwin's excellent research

https://www.dmu.ac.uk/about-dmu/academic-staff/health-and-life-sciences/kylie-baldwin/kylie-baldwin.aspx

