

## Supplementary material

### Codebook

Name	Description	# of articles	% of articles	# of references
<b>Age-related fertility decline</b>		<b>7</b>	<b>88%</b>	<b>29</b>
Success depends on age	More eggs retrieved and more pregnancies achieved with SEF in younger women	6	75%	14
Separation between woman and body	Ovaries/oocytes age more quickly than chronological age	3	38%	4
SEF as a medical treatment	SEF can be used to medically manage age-related fertility decline	3	38%	3
Abnormal eggs or embryos	As women age, the proportion of abnormal eggs and resulting embryos increases	2	25%	4
Lack of awareness	Women are not fully aware of age-related fertility decline	1	13%	1
<b>Alternatives to freezing eggs</b>		<b>3</b>	<b>38%</b>	<b>12</b>
Workplace change	Rather than offering SEF, workplaces should offer more supports for young parents/mothers	2	25%	2
Younger motherhood	Women should have children at a younger age rather than attempt SEF at an older age	2	25%	3
Non-biological parenthood	Such as adoption, conception with donor egg, parenting their partner's children	1	13%	3
Not having children	Not having children	1	13%	3
Policy change	More government support for mothers needed	1	13%	2
Waiting until ready	Not freezing eggs yet and simply waiting	1	13%	1
<b>Awareness of SEF</b>		<b>5</b>	<b>63%</b>	<b>15</b>
Media coverage	Increased coverage of SEF in media, such as news headlines	5	63%	11
Increased demand	More interest and demand for SEF from patients	3	38%	7
<b>Cost of SEF</b>		<b>7</b>	<b>88%</b>	<b>14</b>
Cost-effectiveness	How to optimize the age at which patient freezes eggs to make the procedure more cost-effective	3	38%	6
<b>Ethical conflict</b>		<b>8</b>	<b>100%</b>	<b>41</b>
Physician role	Responsibility of physician to provide balanced info/counselling and to ensure informed choice	6	75%	17

Barriers to access	High cost of SEF; advanced reading level needed for clinic materials	4	50%	6
Societal pressures	Women experience conflicting timelines; are "forced to choose" between parenting and career; are pressured to become mothers	4	50%	7
Conflicts of interest	Clinics advertising medical procedure; not disclosing relationships with pharmaceutical companies	2	25%	2
Corporate priorities	SEF being used to serve corporate priorities, protect corporate interests	2	25%	6
Medicalization	SEF represents the medicalization of normal aging	2	25%	2
Disempowering	SEF does not empower women and reduces reproductive autonomy	1	13%	1
<b>Extend fertility</b>		<b>7</b>	<b>88%</b>	<b>15</b>
Fertility insurance	SEF is (or is not) a fertility insurance policy	4	50%	6
Eggs frozen indefinitely	There is no "expiry date" on frozen oocytes	2	25%	2
Postmenopausal motherhood	SEF could be used for pregnancy post-menopause	1	13%	2
<b>Health risks</b>		<b>5</b>	<b>63%</b>	<b>14</b>
Risks to mother	Risks of the procedure(s); risks of pregnancy at more advanced age with frozen eggs	3	38%	8
Risk mitigation	Techniques or strategies to mitigate risks of SEF	1	13%	2
Risks to baby	Risk of genetic abnormalities; adverse birth outcomes	1	13%	1
<b>Healthy genetic child</b>		<b>5</b>	<b>63%</b>	<b>13</b>
Avoids abnormalities	SEF is a safe technology that does not result in an increase in fetal abnormalities or adverse birth outcomes	4	50%	5
Genetic/biological child	SEF preserves the option of having genetic/biological offspring	3	38%	10
<b>Medical fertility preservation</b>		<b>5</b>	<b>63%</b>	<b>7</b>
Gonadotoxic factors	Freezing oocytes before cancer treatment, surgery, or progression of other disease	5	63%	7
No sperm for IVF	Freezing oocytes when they are retrieved for an IVF cycle but sperm cannot be retrieved for immediate fertilization	3	38%	3
<b>Social need for SEF</b>		<b>5</b>	<b>63%</b>	<b>25</b>

No partner	Women undergo SEF because they have not found a partner	4	50%	5
Women's choice	Women are choosing to have children later in life; SEF can be used to preserve their ability to make choices about motherhood	4	50%	10
Demographic shift	Canadians are having children later in life; the age at which women have their first child has increased	3	38%	5
Gender equality	SEF can provide women with reproductive autonomy and longevity that are similar to what men experience	2	25%	7
Moral concerns	SEF useful when patient has moral or religious objections to the cryopreservation of embryos	2	25%	4
<b>Technological innovation</b>		<b>4</b>	<b>50%</b>	<b>24</b>
Egg freezing is difficult	Freezing oocytes has historically been very difficult due to size, water content, disruption of genetic material	3	38%	4
Frozen as good as fresh	Pregnancy rates and outcomes are similar between frozen and fresh oocytes	3	38%	6
Prediction and optimization	Algorithms and rationalizations of how many oocytes to freeze and at what age, to improve SEF outcome	3	38%	8
No longer experimental	SEF is no longer considered experimental	1	13%	1
<b>Uncertainty</b>		<b>8</b>	<b>100%</b>	<b>42</b>
False hope	Women can be given false hope about the benefits of SEF	6	75%	8
No guarantees	There is no guarantee of a pregnancy after undergoing SEF	6	75%	12
Women not using eggs	Many women have currently not returned to use cryopreserved oocytes	6	75%	12
Lack of evidence	There is not enough long-term evidence for SEF	4	50%	11
Halfway technology	SEF also requires an IVF cycle to produce a pregnancy	3	38%	5
Risk of insufficient eggs	Possibility of not retrieving enough eggs and having to undergo a second cycle	3	38%	6
Experimental	SEF is still new and experimental [ <i>n.b.</i> : code from 2012 article - before SEF was declared non-experimental]	1	13%	4