# Frozen future – ethical questions of social egg freezing<sup>1</sup>

Zamrożona przyszłość – etyczne kwestie zamrażania jajeczek z przyczyn społecznych

## Abstract

This paper aims at making a critical judgment about the practice of social egg freezing. Most papers on the ethical issues of oocyte cryopreservation for non-medical reasons seem to welcome the wide range application of the new fast freezing technology. This paper aims to challenge some of the assumptions used to justify this new practice. It does so by viewing partnership and parenthood in terms of individual biographies which need careful planning in our modern risk societies.

Papers in favour of social egg freezing argue that it could serve as a tool to expand reproductive autonomy of women, and also as a means promoting gender equality. They also reason that it promoted a responsible planning of biographies, since it enabled women to postpone important decisions concerning reproductive issues or partnership. As a response I will try to show the inadequateness of these arguments by analysing the logic behind social egg freezing, and also the desires and misconceptions the method is associated with.

# Keywords:

social egg freezing; oocyte cryopreservation; ethical questions of assisted reproductive technologies; in vitro fertilization; family planning; child-bearing; responsible parenthood.

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# Streszczenie

Celem referatu jest krytyczny osąd stosowania zamrażania jajeczek z przyczyn społecznych. Większość prac na temat kwestii etycznych związanych z zamrażaniem jajeczek z przyczyn niemedycznych wydaje się zachęcać do szerokiego zastosowania nowej technologii szybko mrożącej. Praca ta ma na celu zakwestionować pewne założenia stosowane, by uzasadnić tę nową praktykę. Dokonuje się tego poprzez przegląd partnerstwa i rodzicielstwa w kategoriach indywidualnych biografii, które wymagają uważnego planowania w naszych współczesnych ryzykownych społeczeństwach.

Prace opowiadające się za zamrożeniem jajeczek z przyczyn społecznych dowodzą, że może ono służyć jako narzędzie do rozszerzenia autonomii reprodukcyjnej kobiet, a także jako środek promujący równość genderową. Wnioskują też, że sprzyja odpowiedzialnemu planowaniu życia, gdyż umożliwia kobietom odłożenie decyzji dotyczących kwestii reprodukcji czy partnerstwa. W odpowiedzi Autor stara się pokazać nieadekwatność tych argumentów poprzez przeanalizowanie logiki ukrytej za zamrażaniem jajeczek z przyczyn społecznych, a także pragnienia i nieporozumienia, z jakimi metoda ta jest związana.

## Słowa kluczowe:

zamrażanie jajeczek z przyczyn społecznych; zamrażanie jajeczek; kwestie etyczne wspieranych technologii reprodukcyjnych; zapładnianie in vitro; planowanie rodziny; rodzenie dzieci; odpowiedzialne rodzicielstwo;

It was already in the 1980's, when medicine started creating the necessary technological conditions, which now make oocyte cryopreservation for age-related fertility loss (social egg freezing) widely available. At the beginnings only a slight efficiency of the method could be achieved – using the so called slow freezing method – due to the formation of ice crystals, which lowered the number of frozen oocytes suitable for fertilization. However, the newer one, so called fast freezing method (vitrification), can produce similar results when used in ART procedures, as fresh egg cells.<sup>2</sup> So far the slow freezing method, due to its low effectiveness, was only applied for medical reasons, e.g. when the patient had to undergo a treatment which could harm her fertility potential. At the same time the new method, showing much better results, can not only be offered to at-risk target groups, but also

<sup>&</sup>lt;sup>2</sup> M. KUWAYAMA, Highly efficient vitrification for cryopreservation of human oocytes and embryos. The Cryotop method, Theriogenology 1 (2007), 73–80.

to healthy women, in order to provide them with the possibility to prolong their fertility potential in time. The newspaper *Zeit* from Germany published an article about this phenomenon with the following snappy title – *Die biologische Uhr anhalten* – pointing at the new goals of the now widely available technology.<sup>3</sup>

Most papers dealing with the ethical questions of social egg freezing usually qualify it as an expansion of reproductive autonomy and welcome its wide-range availability.<sup>4</sup> This is underpinned by the results which show the high efficiency of the method: while only about seventy percent of egg cells remained viable after using the older slow freezing method, with the new one, the rate of survival was better than ninety percent. Also no significant difference showed itself between IVF performed with frozen and with fresh egg cells.<sup>5</sup> However, a broader approach to reproductive autonomy, with special respect to its social context, may uncover a number of ethical issues concerning the non-medical use of oocyte cryopreservation. The aim of this paper is to investigate the social background of egg cell freezing, trying to answer whether it provides an appropriate answer to the social challenges lurking behind the medical procedure.

## Trends in marriage and fertility

Offers of reproductive medicine do not just appear randomly, as new technological possibilities come out, but are also shaped by the demands arising from the given social situation: these are one of the main factors which determine the direction and set the new goals for the research; and also urge the immediate application of the newly gained knowledge. The idea of social egg freezing can be derived from social trends typical for the developed countries. These trends are relevant in Hungary too. The first social change which shaped the demand for social egg freezing was the spreading of the practice of delayed child-bearing. In Hungary "in 2011, the average age of first mothers was between 28 and 29 years, while the mean age at childbirth is presumably over 30. The age of fathers at childbearing is steadily rising, too. A 'typical' father today is 33 or 34 years old,

<sup>&</sup>lt;sup>3</sup> M. SPIEWAK, Die biologische Uhr anhalten. Zeit Online 2013.07.19. http://www.zeit.de/2013/29/kinderwunsch-social-freezing-eizellen-einfrieren, (16.12.2013).

<sup>&</sup>lt;sup>4</sup> Among others: J. SAVULESCU, I. GOOLD, Freezing Eggs for Lifestyles reasons. The American Journal of Bioethics 6 (2008), 32–35, 32; I. GOOLD, J. SAVULESCU, In Favour of Freezing Eggs for Non-Medical Reasons. Bioethics 1 (2009), 47–58; H. MERTES, G. PENNINGS, Social egg freezing: for better, not for worse. Reproductive BioMedicine Online 7 (2011), 824–829; G. PENNINGS, IS Oocyte cryopreservation for social reasons ethically defendable? in: 1st International Symposium on Social Egg Freezing, Clinica Eugin, Barcelona, 66–69; G.M. LOCKWOOD, Social egg freezing: the prospect of reproductive 'immortality' or a dangerous delusion? Reproductive BioMedicine Online 3 (2011), 334–340.

<sup>&</sup>lt;sup>5</sup> J. SAVULESCU, I. GOOLD, Freezing Eggs, 32.

while around the change of regimes about twenty years ago this figure was 28 or 29 years."<sup>6</sup> This means that most couples happen to be over the biologically ideal age when they get their first child, since women reach the peak of their fertility potential by the second half of their twenties. Although these numbers do not indicate the time, when couples actually decide to have children, a delay here is also strongly probable. The biologically optimal time of getting children and the social reality are increasingly drifting apart.

However, it is not only the age of first-time parents which rises, but also that of marrying couples. "While in 1990 the average age of women at their first marriage was 22 years and that of men was 24.7 years, in 2010 women got married at the age of 28.7 years and men at the age of 31.4 years."<sup>7</sup> At the same time marriage rates are falling: "Whereas in the 1960s almost every woman got married at least once in her lifetime (and about three quarters of them still in 1990), the present tendencies indicate that 61% of all women living in Hungary today will remain unmarried throughout their lives, should these tendencies prevail."<sup>8</sup> The rise in divorce-rates and in the number of single young adults shows well how hard it is today to build up and sustain permanent partnerships. This is even true, if Hungarians turn out to have a very high esteem of having children and of marriage in international comparison.<sup>9</sup>

Delayed child-bearing and marriage can be traced back to social changes, such as the opening of secondary and higher education to broader segments of the population. However, it also signals the difficulties which make it especially hard to turn the longing for a lasting partnership and children into reality under the current social circumstances. The promise of social egg freezing is to provide individual solutions for this difficult situation. The offer itself, however, implies a number of expectations, hopes, and also value judgments, which are worth taking a look at.

## Expanding the reproductive autonomy of women

Article 16 of the Universal Declaration of Human Rights defines reproductive autonomy in the following way: "Men and women of full age, without any limita-

<sup>&</sup>lt;sup>6</sup> B. KAPITÁNY, Z. SPÉDER, Fertility, in: P. ŐRI, Z. SPÉDER (eds.), Demographic Portrait of Hungary 2012. KSH Népességtudományi Kutatóintézet, Budapest 2012. 31–43, 35.

<sup>&</sup>lt;sup>7</sup> M. PONGRÁCZ, Characteristics of Partnership, in: P. ŐRI, Z. SPÉDER (eds.), Demographic Portrait, 11–20, 12.

<sup>&</sup>lt;sup>8</sup> M. PONGRÁCZ, Characteristics of Partnership, 12.

<sup>°</sup> G. KOVÁCS, Is there a future for the private sphere? The complex bond between the public and the private in the light of fertility trends in Hungary, Family Forum 1 (2011), 99–111.

tion due to race, nationality or religion, have the right to marry and to found a family." This statement was formulated after the Second World War, and as such declared the freedom to marry and to found a family in contrast to the cruelties of the Third Reich – such as forced marriages, abortion, childbearing, and sterilization. Reproductive autonomy was thus approached in a negative manner, in sense of freedom from coercion. However, with the development of reproductive medicine, the concept of reproductive autonomy gained new contents of meaning: the free access of new technologies became central in the new understanding of reproductive autonomy, along with the idea of the right to a (healthy) child.<sup>10</sup>

However, this only expanded reproductive autonomy of women from a theoretical, but not from a practical side. Such an understanding of reproductive autonomy makes the application of a given technology a matter of subjective choice, without taking concern of the relational character of autonomy, being socially and culturally embedded.

This is the case with the practice of social egg freezing. The method holds out the promise to expand reproductive possibilities for the future. But like every decision concerning the future, it can influence our decisions for the present and the near future. It may suggest a certain false security, which may lead to the delay of decisions, which should be made now, or the near future. If we understand reproductive autonomy as the right to get or to refuse medical treatment, we only deal with a small section of it.

The "discomfort of modernity" – as indicated by the title of the classic work of Peter Berger – comes mostly from the situation, in which earlier cultural frameworks of meaning and traditional knowledge have lost their validity.<sup>11</sup> As a result of this, every individual has to carry the burden of decisions and the making of a biography on his own shoulder, without being able to measure it to well defined, socially accepted standards. With the disappearance of the unambiguous nature of human relations, autonomous decisions have become even harder to make. If social egg freezing is understood as an insurance – as its nickname says: "eggsurance" – it makes the relevance of human relations even more obscure, thus rendering autonomous decisions even more difficult. The idea that social egg freezing may expand reproductive autonomy of women, proves only to be true in a formal and quantitative manner.

<sup>&</sup>lt;sup>10</sup> O. O'NEILL, Autonomy and Trust in Bioethics, Cambridge 2002, 66.

<sup>&</sup>lt;sup>11</sup> P. BERGER, B. BERGER, H. KELLNER, Das Unbehagen in der Modernität, Frankfurt 1975.

## Who decides later, decides better

The second argument brought up to support social egg freezing is that it takes off the burden of finding a partner on time from the shoulders of women, and helps them to avoid finding themselves in an unhappy marriage, as a single parent or unwanted childlessness. This argument is an expansion of the previous – i.e. reproductive autonomy – in direction of the choice of a partner. Autonomy here is understood as a pure motivation, independent from all secondary aspects, according to which the choice of a partner can only be a matter of the person of the other. Intentions and desires, such as becoming a parent, cannot play a role here.

However, in reality, especially when it comes to human relationships, we can never speak about pure autonomy. There are many other aspects attached to every single partnership, which first seem to be of secondary nature. This is why those partnerships tend to be lasting, where the partners are able to act in the interest of common goals.<sup>12</sup> The success of the choice of a partner does not (only) depend on the primary decision, but (also) on the success of achieving common goals in the long turn. It is to be noted that the practice of social egg freezing could contradict this idealized autonomy of the choice of partner, since it may send the message that only fertile women have the right for it, those who are not able to bear a child do not.

Social egg freezing can give women time to optimize the timing of the choice of a partner, still, it does not guarantee that one will succeed. It rather provides the opportunity for a deferring behaviour, which is by far not optimal, since the marriage market also shrinks with time. This contradicts the implication of the argument, namely that the wish for a child renders the finding of a partner more difficult.

The delay in founding a family, and the increase in divorce-rates points at the fact that delaying decisions does not necessary mean coming to a better decision. Current tendencies rather show that a large number of young people never marry or establish a long term partnership, and that a larger rate of existing marriages would break up in the future.<sup>13</sup>

Thus the argument that the possibility of the delay of child bearing could result in freeing women from the pressure of time and enabling them to make more stable partnerships proves to be false: they come under pressure, however, later in their lives, when the marriage market has already shrunk. It is still true,

<sup>&</sup>lt;sup>12</sup> P. BERGER, T. LUCKMANN, The Social Construction of Reality. A Treatise in the Sociology of Knowledge, New York 1966.

<sup>&</sup>lt;sup>13</sup> E. FÖLDHÁZI, Divorce, in: P. ŐRI, Z. SPÉDER (eds.), Demographic Portrait, 11–20, 22.

even if some of them might enter a partnership only for the reason of getting a child, since social egg freezing does not demolish the biological limits determined by age.

#### Dissolving mental stress

Similarly it does not dissolve mental pressure caused by the absence of children, which can be one of the causes of temporary infertility. The birth of a first child is a milestone in every partnership: they gain proof that they are able to procreate and bring a child to the earth. This way the social pressure also eases, since they have completed the duty of procreation. However, if the long waited heir does not arrive, couples may face a very heavy burden: the permanent absence of children. That is why artificial reproductive technologies (ART), especially in vitro fertilization (IVF), may induce mental stress not just because of the necessary interventions, such as hormonal therapies. This is joined by the uncertainty of the success of the treatments, since ARTs do not guarantee the "patient" to return home with a baby in her arms.

The "success rates per cycle of ART are 27% up to 29 years of age, 26% between 30 and 34, 19% between 35 and 39 and 6.4% between 40 and 44".<sup>14</sup> Consequently, medical help does not constitute a guarantee. Nevertheless, social egg freezing implies the need for IVF later in life. For such women, who choose to go this way, there is also no acquittance from the mental pressure of those struggling with infertility. They are liable to it, since by choosing social egg freezing, they make ART a likely option of their biography. Parallel with the delay of child-bearing, the chances of mental stress rise, which are rather sharpened by ARTs: "women may still experience significant distress associated with the uncertainties of treatment success and depressive symptoms after failure".<sup>15</sup> However, "opting for oocyte cryopreservation may simply be seen as an option for women to safeguard their fertility, but it is probable that it may implicitly contain a marked motivation for parenthood delay."<sup>16</sup> Facing the absence of children can only be deferred for a short time.

<sup>&</sup>lt;sup>14</sup> S. GAMEIRO, Is there a need for Oocyte Cryopreservation. The psychological viewpoint, in: 1st International Symposium on Social Egg Freezing, Barcelona 33–37, 34.

<sup>&</sup>lt;sup>15</sup> S. GAMEIRO, Is there a need for Oocyte Cryopreservation, 36.

<sup>&</sup>lt;sup>16</sup> S. GAMEIRO, Is there a need for Oocyte Cryopreservation, 35.

#### Are older parents better parents?

The next argument emphasizes the harmonization of biographical plans, childbearing and social reality: "Social IVF would allow couples to choose the best time to have children. Currently, they must juggle establishing a career and having a family. It may be better for both a child and parents that the family is the result of mature and well considered choice, and is financially secure so that the parents are able to spend time with their children."<sup>17</sup> This argument takes the new assumption of parental responsibility as starting point, which emerged along with ART technologies in the western world. According to this new concept of responsibility, parents have to guarantee "optimal starting conditions" concerning the genetic condition, and the social status for their children.<sup>18</sup>

The argument assumes further that this "optimal starting conditions" could only be guaranteed at an older age of the parents, after they have built up their career. This argument turns out to be false at two points. First, the risk of genetic disorders and the possibility of other risks during pregnancy may rise, and not just because of the age of the egg cells, but also because of the older age of the father.<sup>19</sup> Secondly, from a sociological perspective, delayed parenthood can mean ideal circumstances only for a thin layer of society. A decrease in work load, and the achievement of financial stability only happens under ideal cases of career development. However, the strength and capacity of parents to raise their young children, and perform at work at the same time, decreases strongly with the progress in age. Thus parents who do not experience a decrease in work load with time might face heavier challenges than if they had children at a younger age. As Elisabeth Beck-Gernsheim puts it: the illusion of optimal timing is "contrasted with the fact that this mythical optimal time almost never exists".<sup>20</sup>

#### Equality

The question of reproductive autonomy was always seen as a matter only concerning women. If we take a view at the sociobiological reality of reproduction, it becomes clear that the social reality of having children is determined by biolog-

<sup>&</sup>lt;sup>17</sup> J. SAVULESCU, I. GOOLD, Freezing Eggs, 51.

<sup>&</sup>lt;sup>18</sup> H. HAKER, Hauptsache gesund? Ethische Fragen der Pränatal- und Präimplantationsdiagnostik, München 2011.

<sup>&</sup>lt;sup>19</sup> E. LA ROCHEBROCHARD, P. THONNEAU, Paternal age and maternal age are risk factors for miscarriage. Results of a multicentre European study. Human Reproduction, 6 (2012), 1649–1656.

<sup>&</sup>lt;sup>20</sup> E. BECK-GERNSHEIM, Die Kinderfrage heute. Über Frauenleben, Kinderwunsch und Geburtenrückgang, München 2006. 117.

ical preconditions just as much. In contrast with men, the fertility of women is considerably limited in time. It is also women who carry out the baby and usually take (most of) the burden of caring for the baby at its early age. According to the argument discussed at this point, social egg freezing promotes gender equality, since it helps women to expand the fertile stage of their lives to an extent similar to those of men. With the application of this method women gain similar options in planning their biography as men do.

The logic behind this argument mirrors the logic of feminist movements from the 1960's which claimed the same opportunities for women as for men; first of all, to be able to join the labour market under the same conditions. Later it became clear that it only meant conforming the logic of the world of the public created by men.<sup>21</sup> Female difference, as biological and historical reality, was simply left out of consideration.

This is the case with the discussed argument too. First, it serves the logic of the public, without any critical thoughts, assuming the sphere of the private as something to be tolerated. Getting children contradicts the logic of the public and is a part of the responsibility of the individual. She has to deal with her biology in a way, which makes her capable of uninterrupted participation in public production (contraception), and preserves the chance to build up her private world at the later stage of her biography (social egg freezing, ART).

The logic of the public misunderstands equality at two points: it does not take consideration of the importance and particular logic of the private sphere, and ignores idiosyncratic characteristics, such as gender differences as well. No wonder, since they both compose barriers for its functioning on the short term. Thus the body, which cannot be subjected to this logic, and has its own demands, is treated as an alien reality. Equality in this sense does not mean anything else, but validity of the objective norms of the public for everyone, both men and women. However, this results in even greater differences, in our case since gender differences in reproduction are not taken into consideration. Social egg freezing can only ice this problem for a short time to result later in even greater differences and injustice.

# Further questions

A further question is whether those women, who are offered the method of social egg freezing, are aware of the barriers of ARTs. A number of surveys

<sup>&</sup>lt;sup>21</sup> CH. SCHNABL, Nach dem Patriarchat. Gesellschaftskritik und Gesellschaftskonzeptionen im Feminismus, Jahrbuch für Christliche Sozialwissenschaften (2004), 143–169.

show that this is not the case.<sup>22</sup> Such is the fact that these medical procedures are fraught with risks for the mother and children both. Among the risks we can find such as the ovarian hyperstimulation syndrome (OHSS) or age related risks: "Maternal mortality increases roughly a 4-fold over the age of 40 (to 20.6 deaths per 100 000). Women who freeze eggs to conceive later in life will also face higher rates of ectopic pregnancy, preeclampsia, chronic hypertension, cardiac disease and peri-natal diabetes."<sup>23</sup>

#### Summary

Social egg freezing, just like IVF, seemingly offers as a new way of harmonizing biographical plans and child-bearing. The method is associated with a number of desires and misconceptions, which seemingly justify the success of the procedure and the adequacy of current biographies. In reality these misbeliefs result in situations where biographical hopes reach a dead-end. The message of social egg freezing is that child-bearing (and finding the right partner) can be delayed arbitrarily. However, this myth serves a structural logic, which subordinates reproduction to the public, i.e. production and work. Biographies are not written in the celestial world of ideas, but under given social and bodily circumstances. Medically indicated egg-cell freezing can be ethically justified; a social indication rather suggests a false understanding of the limits of reproduction, and leads to an overestimation of our power to govern our biographies. It is important to see – as Joann Paley Galst puts it – that "a woman's best chance of having a child is still through timely and natural conception."<sup>24</sup>

<sup>&</sup>lt;sup>22</sup> Y. STÖBEL-RICHTER, S. GOLDSCHMIDT, A. BORKENHAGEN, U. KRAUS, K. WEIDNER, Entwicklungen in der Reproduktionsmedizin – mit welchen Konsequenzen müssen wir uns auseinandersetzen? Zeitschrift für Familienforschung 1 (2008), 34–60.

<sup>&</sup>lt;sup>23</sup> J. SAVULESCU, I. GOOLD, Freezing Eggs, 53.

<sup>&</sup>lt;sup>24</sup> J. GALST, What's a Young Woman to Do? The Pros and Cons of Social Egg Freezing, http://www. bluetoad.com/display\_article.php?id=930688 (16.12.2013).