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Reproductive ‘Choice’ and Egg Freezing

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Of course some women, for various reasons, choose to embrace motherhood later than their own mothers. But many, like me, become older mothers because there was no other choice. It’s just how my life unfolded.... To suggest that most women are choosing to delay child-bearing is to suggest that women have an incredible level of control over their lives. In the real world this is just not true.

– Sushi Das [1]

Introduction

As oocyte and ovarian tissue cryopreservation techniques continue to improve [2, 3], there is a growing need to address the moral permissibility of what has been called ‘social’ egg freezing.¹ Often used to preserve the fertility of cancer patients, egg freezing has recently gained popularity among women wishing to guard themselves against age-related infertility. Higher education, career advancement, an increased cost of living and difficulties finding a long-term partner are just some of the reasons why a number of women are having children at an older age [4, 5]. Delayed attempts at childbearing² can present obstacles for women wishing to bear their own biological children because fertility declines with age due to a reduced number and quality of oocytes [6]. Egg freezing allows a woman to freeze her own younger and healthier eggs for future use in the event that she is unable to conceive a child ‘naturally’.

Recent debates in the media and elsewhere have employed the terms ‘medical’ and ‘social’ to distinguish between two prevalent reasons for freezing eggs. Medical egg freezing describes the use of egg freezing technology by women who are diagnosed with cancer or other serious disease whose treatment and/or progression can damage reproductive organs.³ The term ‘medical’ highlights the fact that women who use this service are choosing to do so (in part) because of a medical condition or disease that threatens to destroy their genetic reproductive capacities. Social egg freezing, on the other hand, describes the use of egg freezing technology by *all other* women. The term ‘social’ has been less problematic than some other terms used in the media such as ‘lifestyle’ reasons, which risk exaggerating the level of reproductive control some women actually have. Indeed, perhaps this term may help to accentuate the fact that women’s reproductive choices are socially embedded and cannot be understood in isolation from the social context in which these choices are made. However, the same would also apply to women who use the technology for medical reasons.

¹In this chapter I shall use the term ‘egg freezing’ to refer to the initial and subsequent phases of fertility preservation methods for women. These include the initial removal and cryopreservation of oocytes, ovaries and ovarian tissue as well as the subsequent in vitro maturation of immature oocytes, in vitro fertilization and ovarian transposition.

²Although, the phrase ‘delayed attempts at childbearing’ can describe a women’s attempt to conceive and have children at an older reproductive age, it should be noted the phrase is problematic because it can imply that women who have (or attempt to have) children when they are older do so ‘voluntarily’. As I will argue in this chapter, the ‘choice’ to delay childbearing may not be fully voluntary.

³For example, bone marrow or stem cell transplantations, oophorectomy for cancer prophylaxis or benign conditions can threaten women’s fertility. Certain autoimmune and rheumatological conditions can also lead to infertility.

Calling some uses of egg freezing ‘social’ is somewhat problematic because it downplays the importance of having genuine reproductive options in one’s life. This term can also suggest that if these women have a ‘social’ problem, then it requires a ‘social’ solution rather than a ‘medical’ one such as egg freezing. Medical reasons, on the other hand, apply to both types of egg freezing if we accept that infertility is a medical condition or disease (although it is open to debate as to whether age-related infertility should be classified as a disease [7]). It follows from these considerations that the demarcation between social and medical reasons for freezing eggs becomes quite complicated once we recognize that *both* sorts of reasons will factor into *all* women’s deliberation about fertility preservation.

Rather than continue to use terms that may be problematic and value-laden, I will refer to the medical cases as *the use of egg freezing to guard against disease-related infertility* and call this practice as *disease-related* egg freezing; and I will refer to the social cases as *the use of egg freezing to guard against age-related infertility*⁴ [8] and call this practice as *age-related* egg freezing. I believe doing so will avoid many of the problems I have mentioned.

Despite recent advancements in egg freezing, a number of regulatory bodies and individuals continue to voice concern over the safety and success of this reproductive technology when used to guard against age-related infertility. For example, the American Society for Reproductive Medicine (ASRM) continues to discourage physicians from marketing egg freezing to women as a means of deferring reproductive aging [9]. The ASRM recognizes that many women have an interest in this technology, but maintains that egg freezing is still an ‘experimental’ [10] procedure that should only be used for medical reasons.⁵ Others who object to age-related egg freezing have labeled it an ‘expensive confidence trick’ [11] and a ‘contestable form of wishful medicine’, [12] while at the same time praising disease-related egg freezing for giving women with cancer hope and future reproductive options [13]. These individuals suggest that the health risks to women and/or future offspring and the risk of ‘false hope’ are reasons to restrict age-related egg freezing. They claim that instead, women ought to have children at a younger age [14] or simply ‘live with their life choices’. [12] Although some of these concerns about the risks associated with egg freezing may be legitimate, it is not clear whether a strict ban on age-related egg freezing is morally justified, given that disease-related egg freezing is permitted.

Admittedly, there are serious moral concerns about the long-term safety, efficiency and social impact of the procedure of egg freezing in general. These concerns raise the question of whether egg freezing ought to be allowed for any woman, whether her reasons are disease or age related; however, answering this question is beyond the scope of my chapter. Instead, the task of this chapter is to examine whether there are any moral grounds to restrict egg freezing for age-related reasons while allowing egg freezing for disease-related reasons. I begin my analysis by considering the similarities between women who freeze eggs for disease-related reasons and those who freeze eggs for age-related reasons. I then consider some differences between each group of women by considering Imogen Goold and Julian Savulescu’s [15] examination of the *timing* and the *cause* of women’s infertility. The authors suggest that neither of these differences is morally relevant and argue in favor of women’s access to age-related egg freezing. However, I suspect those who continue to object to age-related egg freezing will be unconvinced by Goold and Savulescu’s analysis of

⁴Karey Harwood describes social egg freezing as ‘insurance against age-related infertility’. My use of ‘age-related’ infertility thus picks up on Harwood’s description, but avoid the assumption that egg freezing is ‘insurance’ that guarantees successful pregnancies when frozen eggs are thawed and used in the future.

⁵The ASRM defines experiments as ‘a procedure for the treatment of infertility is considered experimental until there is adequate scientific evidence of safety and efficacy from appropriately designed, peer-reviewed, published studies by different investigator groups’. Until there is ‘adequate peer-reviewed scientific evidence’, egg freezing will be considered an ‘experimental’ procedure regardless of improved rates of success in clinical trials and fertility clinics.

the temporal and causal differences in infertility. I spell out these objections to Goold and Savulescu and maintain that their analysis fails to address the underlying concerns about age-related egg freezing. I argue that objectors to age-related egg freezing who think the differences in timing and/or cause *are* relevant are ultimately relying on a mistaken understanding of women's reproductive 'choices'. Using a feminist analysis of the notion of 'choice', I show that the differences between disease and age-related egg freezing continue to bear little moral relevance. I argue that if egg freezing is permitted to guard against disease related infertility, then it ought to also be permitted to guard against age-related infertility, (at least) within a patriarchal society.

Disease-Related Versus Age-Related Egg Freezing

There are a number of similarities between women who freeze eggs for disease related reasons and those who do so for age-related reasons. First, women in both groups are fertile when they have eggs or tissue removed for cryopreservation and storage. Thus the initial phase in the egg freezing procedure is guarding against a problem that has not yet occurred, namely infertility. When frozen and stored eggs or tissue is used in the future it is likely that the women in each group will be infertile whether this is because of treatment for a disease or because of their age.

Second, women in each group share common motives for undergoing the treatment. Women who face infertility because of a disease treatment or progression are using egg freezing technology with the hope of securing their future reproductive options. Likewise, women who freeze eggs to guard against age-related infertility are concerned about preserving their future reproductive options. Both groups of women want to have the option to use their own (younger, healthier) eggs to try and conceive if attempts at unassisted, natural conception are unsuccessful. Women in each group treat egg freezing as a form of insurance guarding them against future infertility, regardless of their awareness of the chance that egg freezing may not be successful in all cases. Yet, egg freezing is intended as a 'back-up plan' or 'last resort' in the event that natural conception fails.

Third, it follows that the women in each group experience similar benefits from using egg freezing technology. Cancer, among other diseases, can bring suffering to patients (and families) and egg freezing can help lessen some of this present and future suffering. Egg freezing can relieve some of the worries associated with cancer and can give women a sense of empowerment since they are making the choice to try and protect themselves from infertility. It has also been suggested that for some women, infertility can be as devastating as the cancer diagnosis [16, 17]. Likewise, many of the hardships that lead women down paths that delay motherhood can also be quite difficult in their own right. Making egg freezing options available to these women can help alleviate some of the financial pressure of trying to have a family at a young age, the emotional stress of finding 'Mr. Right' or the guilt and anxiety experienced when having to choose between a higher education and a career versus starting a family. For any young woman who finds herself unable to satisfy a desire to bear children at present, egg freezing can help lessen her anxiety about reproducing by offering her some security (or increased hope) for the future and for giving her some level of reproductive control. Infertility can be devastating for any woman who wishes to reproduce genetically but cannot.

Fourth, women in both groups are affected by the risks associated with egg freezing. These risks include ovarian hyperstimulation syndrome (OHSS) [18], low success rates [19],⁶ risk to future offspring [9]⁷ [20, 21] and also the devastation and sense of loss if the future fertility treatment is not successful. Although these risks do exist, there is evidence suggesting that the risk may be higher for women with cancer or other diseases compared to

the risk for healthy women who use the procedure to guard against age-related infertility. Women with cancer might face higher risks because egg freezing requires a delay in starting the chemotherapy or radiation necessary to treat their cancer. There is also a risk of reintroducing cancerous cells into the women's body upon future use of the oocytes or ovarian tissue [22]. Other similarities between each group include the devastation caused by infertility to those women who wish to have a biological child and the possibility of dealing with financial, legal and ethical issues surrounding storage and disposal of unused frozen eggs.

These similarities suggest that most women who freeze eggs experience the same benefits and harms associated with the reproductive technologies. In the next section, I present two major differences between disease-related and age-related egg freezing, as discussed by Goold and Savulescu, and explain why they consider neither difference to be morally relevant.

Goold and Savulescu on *Timing and Cause*

In 'In Favour of Egg Freezing for Non-medical Reasons', Goold and Savulescu present arguments based on equal concern and respect for women that suggest women should have access to ovarian tissue and oocyte cryopreservation. They claim that provided women are fully informed and prepared to deal with the 'failure of their insurance policy', women should not be restricted from freezing their eggs because they are outside medical treatment for cancer or another disease. In their analysis, Goold and Savulescu suggest that the *timing* of the infertility and the *cause* of the infertility are the two main differences between women who freeze eggs for disease-related and age-related reasons.

The authors notice that women who freeze eggs for disease-related reasons usually become infertile quickly or immediately after their cancer treatment begins, while those who freeze their eggs for age-related reasons usually experience infertility in the more distant future. Some women with cancer, for example, will face nearly certain and imminent infertility at the onset of their chemotherapy or radiation. Women who freeze their eggs for age-related reasons cannot be quite as sure about when they will experience infertility, but in most cases these women can expect to become infertile in the more distant future. Many of these women can expect, however, that their fertility will rapidly decline around 35 years of age. The authors suggest that according to the principle of temporal neutrality the timing of this harm (infertility) makes no moral difference [15, p. 43]. The principle of temporal neutrality states that the temporal location of benefits and harms within a life has no normative significance. As such, the timing of a harm (or benefit) is independent of any analysis of an agent's overall well-being. This means that the time at which a woman becomes infertile ought to be given no moral weight in the moral evaluation of her choice to use egg freezing technology. In other words, a woman who freezes her eggs in order to guard against infertility that will occur in 2 months time is no different morally speaking than a woman who freezes her eggs in order to guard against infertility that will occur in 10 years time.

⁶The success of egg freezing technology varies with respect to the specific procedure being offered (including the processes by which eggs are frozen and thawed, the method/site of re-implantation) and also the relevant features of the patient (such as age and health). Many people worry that because using egg freezing technology to reproduce is less certain than using 'natural' conception within the optimal reproductive age (20–35), women (and couples) risk being exploited by fertility clinics and risk developing 'false hope' concerning the procedure's success.

⁷Although the ASRM warns women that there is a risk to future offspring due to the effects of cryopreservation on meiotic spindle of the oocyte, there remain concerns regarding the potential for chromosomal aneuploidy or other karyotypic abnormalities in offspring; some studies have suggested that oocyte cryopreservation produces risks to offspring that are actually comparable to 'natural' conception. However, given the experimental nature of female fertility preservation techniques, the risks are largely unknown.

Goold and Savulescu also claim that the *cause* of the infertility makes no moral difference between disease-related and age-related egg freezing. In the case of women who freeze eggs for disease-related reasons, medical intervention to treat her disease is usually the cause of her infertility. In the case of women who freeze eggs for age-related reasons, the authors identify menopause as the cause of her infertility. The authors claim that it is morally irrelevant that the cause is menopause rather than chemotherapy to treat cancer [15, p. 52]. They suggest that the cause of infertility makes no moral difference because the loss experienced by women who are infertile but wish to have their own biological children is the same.

Although Goold and Savulescu have identified what are probably the two best candidates for the morally relevant differences between disease-related and age-related egg freezing, I believe that their examination of these differences and subsequent dismissal of their moral relevance are rather quick. In the next section I consider objections against age-related egg freezing that requires a broader or perhaps different understanding of timing and cause.

Objections to Goold and Savulescu

Many objections to age-related egg freezing are masked as legitimate worries about the associated risks with this reproductive technology and, surprisingly, objectors find these risks more worrisome for healthy women seeking to guard themselves against age-related fertility than for women already more vulnerable and sick with cancer or another disease. For example, the ASRM advocates egg freezing to guard against disease-related infertility, but discourages women for freezing eggs to guard against age-related infertility because the procedure is 'risky' and 'experimental', and calls women with cancer or other illness 'appropriate candidates' for egg freezing since they may have 'no viable options' [23]. Some regulating bodies, like the ASRM, have resisted policy revisions despite research suggesting the improved safety and success of egg freezing technologies. It may be the case that what seems to be a paternalistic policy against age-related egg freezing is actually masking unjustified assumptions or biases of persons serving on regulatory bodies. One such assumption may be the belief that women who use age-related egg freezing have more (or better) options than those who use disease-related egg freezing. In what follows, I consider what grounds this assumption and why it is problematic.

I suggest that those who object to age-related egg freezing, but accept disease related egg freezing understand the concepts of 'timing' and 'cause' quite differently than presented by Goold and Savulescu. As I discussed in the previous section the authors take timing to refer to the *time at which a woman becomes infertile*. They note that women who use egg freezing for disease-related reasons experience infertility in the very near future, but women who use age-related egg freezing experience infertility in the more distant future. Objectors understand this temporal difference to signify that there is a relevant difference in the 'opportunity' afforded to women in each group. One might argue that women who freeze eggs for age-related reasons still have the opportunity to 'fix' the problem of infertility. For example, a woman who decides to freeze eggs in her mid-twenties still has approximately a decade to have children before she becomes infertile because of her age. Thus, she can 'fix' the harm before it occurs. On the other hand, a woman who freezes her eggs for disease-related reasons does not usually have this same window of opportunity since her infertility happens almost immediately. A woman with a life threatening cancer diagnosis cannot delay chemotherapy or radiation for 9 months to have a child before her fertility is compromised, but objectors would argue a healthy woman can have children before she is too old to conceive naturally. A woman who freezes her eggs for age-related reasons has the opportunity to prevent the potential problem of infertility, while a woman who freezes her eggs for disease-related reasons does not.

One might also object to what Goold and Savulescu identify as the cause of infertility, despite admitting that the loss associated with infertility can be the same for women in each group. According to the authors, menopause is the cause of women's infertility.⁸ Menopause is often understood as a biological happening which is beyond a woman's control. Believing that the cause of infertility *is* morally relevant requires thinking about cause in a different way. Objectors recognize that the infertility of women in treatment for cancer is iatrogenic, i.e. physician caused. On the contrary, the infertility of women who freeze for age-related reasons is non-iatrogenic. In the first group, the physician's treatment of the woman's disease is causally responsible for the infertility. However, in the case of age-related egg freezing the woman who voluntarily waits to bear children until after menopause is the cause *herself*. According to the objectors, a woman's actions (or lack thereof) that result in her delayed attempts at bearing children makes the woman *herself* morally responsible for the infertility. Here, objectors assume that causal responsibility is linked to moral responsibility and understand women who freeze eggs for age-related reasons as voluntarily choosing to delay motherhood.

The force behind these two objections lies in the argument that women who freeze eggs for age-related reasons could choose to do otherwise. Both these objections highlight an underlying worry about the role that women's choices play in relation to the use of reproductive technologies, like egg freezing. Notably, the ASRM's policy on egg freezing mentions that disease-related egg freezing is permissible because these women have 'no other choice' [23]. This implies that women who choose to undergo age-related egg freezing do have other options. It is assumed that women who freeze eggs for age-related reasons are choosing to put motherhood on hold for selfish reasons like pursuing higher education or advancing a career.

Unlike Goold and Savulescu, these objectors assume that the choices women make ought to be included in the causal differences between disease-related and age-related infertility. Given the opportunity to fix the problem and the voluntariness of delaying childbearing, objectors hold that women outside of medical treatment are different than women undergoing treatment because they choose to delay childbearing and subject themselves to the risks associated with egg freezing. In the next section I explore this notion of 'choice' in relation to moral responsibility within the context of patriarchy.

Why the 'Problem' is Not So Easy to Fix and the 'Choice' is Not So Voluntary

The above objections rely on an arguably sexist and false conception of an agent's autonomy. The claim that women could just fix the problem and that they could simply choose to do otherwise boasts ignorance of the social structures that shape, confine and influence the choices women make. Feminist accounts of autonomy and the nature of choice pay special attention to the patriarchal context in which autonomy is exercised and choices are shaped. Carolyn McLeod and Susan Sherwin, for example [24], argue that in addition to coercion, ignorance and internal compulsion, forces of oppression can also compromise an agent's autonomy. Unlike traditional accounts of autonomy, feminists' accounts of autonomy require an explicit recognition of the fact that autonomy is both defined and pursued in a social context. Further, this social context significantly influences the opportunities that an agent has to develop or express autonomy skills. McLeod and Sherwin suggest that 'whereas traditional accounts concern themselves only with judging the ability

⁸The use of the term menopause might be slightly misleading since female fertility begins to decline many years prior to the onset of menopause despite continued regular ovulatory cycles. Although there is no strict definition of advanced reproductive age in women, infertility becomes more pronounced after the age of 35.

of the individual to act autonomously in the situation at hand, relational autonomy asks us to take into account the impact of social and political structures, especially sexism and other forms of oppression, on the lives and opportunities of individuals' [24, p. 260). Relational autonomy requires that one looks at the various and complex circumstances that surround an agent's decision-making process. In the context of age-related egg freezing, a relational approach to autonomy requires one to understand the personal, social and political factors that shape women's reproductive choices. Using a feminist analysis of choice, I shall demonstrate why these broader or different notions of timing and cause are still not morally relevant.

In the first place, there are reasons to believe that the problem women face is not really that easy to fix. Many women may like to have children before the onset of age-related infertility, but have been unable to find a suitable or willing long-term partner to have children with. Single women nearing their mid-thirties (or older) usually have a very small window of opportunity to meet someone and begin the process of becoming pregnant before they suffer from infertility. Just like women who freeze eggs for disease-related reasons, women nearing the end of their reproductive fertility may have few or no other options to secure having their own biological children in the future. Women who wish to have their own biological children currently have two options aside from age-related egg freezing to reach their goal. They can quickly settle for a partner who they might not have chosen otherwise or they can use donor sperm and choose to be a single parent. From a feminist perspective, neither of these alternatives is ideal.

Rushing into a relationship can make it difficult for women to recognize physically or emotionally abusive partners. Feminists would agree the women should not have to settle for men who reinforce sexist and oppressive family structures. Instead, women should have the opportunity to find a stable, reliable and loving partner with whom they want to build a family. However, it takes time to find a suitable partner, develop a relationship and start a family. If women rush to have biological children, they may also opt for single parenthood. Many feminists recognize that raising children is a difficult job and single parenthood can be particularly challenging for those of lower economic status. Age-related egg freezing may give women the opportunity to find a suitable partner or gain some financial independence before tackling single parenthood.

There are also couple of additional points worth making here. First, there are a number of social norms and ideals that favour the nuclear family structure and discriminate against diversions from this norm. The nuclear family requires a marriage between a man and a woman and striving for this ideal can delay when women have children. There is also a social bias towards biological parenthood. Women who internalize these social norms might refuse other reproductive options such as sperm or egg donation, surrogacy and adoption. Indeed, some studies suggest that conformity to traditional gender roles within a partnership or marriage can impact women's and couples' decisions to bear children [25]. Second, women's choices to delay motherhood have almost always been at the centre of discussions around delayed parenthood and age-related egg freezing. The reproductive and 'lifestyle' choices made by men have generally been neglected. If men are reluctant to commit to long-term partnerships or choose to have children at a younger age, this can impact the childbearing decisions made by women. It is important to consider the effect that men's reproductive choices have on the growing trend towards age-related egg freezing. Goold and Savulescu claim that 'where egg freezing could offset the problem associated with this particular trend of a difficulty in conceiving, there is good reason to allow the technology to be used' [15, p. 57). Thus, egg freezing might help address some reasons that might otherwise lead some women into unhappy marriages, single parenthood or unwanted

childlessness. Finally, since men have been able to freeze sperm for decades, one might think that egg freezing is an important tool for ensuring gender equality.

Just as the problem is not so easy to fix the choice to delay motherhood is not so voluntary. An objector who employs an expanded notion of cause to include the woman *herself* as a cause of delayed motherhood and subsequent age-related infertility. This objector might argue that if a woman delays attempts at bearing children until she is older, then she must accept responsibility for (and thus the outcome of) her actions. This suggests that it is the woman's fault that she is infertile and not merely the consequence of an external event (such as cancer). Highlighting such causal responsibility seems to also imply a belief that the woman is also morally responsible. However, causal responsibility does not necessarily involve moral responsibility. For example, a woman can be causally responsible for opening a door to enter an office without being morally responsible if the door stubs a co-worker's toe. This may be because *no one* is *morally* responsible in this example because the event does not involve a moral issue. Or, the moral responsibility/blame lies elsewhere, such as the manufacturer who constructed a faulty door hinge that causes the door to swing open uncontrollably. In the case of a woman who plays a causal role in her infertility and childlessness, it may be the case that she is not morally responsible because infertility (or childlessness) is not a moral issue. Or, it might be the case that others are morally responsible for the woman's infertility. From a feminist perspective we can recognize that social structures, ideologies and norms shape and influence the options available to women and thus impact the decisions women make. This might mean that a patriarchal and sexist society patriarchy, everyone, or some persons in the privileged group are morally responsible for delayed attempts at parenthood.

Arguably, the objectors have failed to recognize the diverse set of obstacles that can impede a woman's ability to bear children at a younger age. These obstacles include financial barriers and the structure of academic institutions and employment. The cost of living has increased from decades past, and raising children can be financially challenging even in two-income households. Women or couples may choose to save money and gain financial stability before having children. Thus, bearing children at a younger age may risk pushing women or couples into poverty or a work schedule not conducive to raising children. The structure of education makes it quite difficult to care for young children while completing a degree. Many women may have to delay bearing children until after completing their degree in order to avoid the challenges women face in post-secondary programs. Finally, and perhaps most importantly, the employment system is not structured to support parents who maintain (or pursue) a career while they have young children [8]. Notably, employer policies can seriously influence women's reproductive decisions. Women who work in establishments or professions with family-friendly policies are more likely to have their preferred family size than women whose employment hinders their ability to raise children and have a career [26]. Patriarchy sets serious barriers to childbearing, and delaying reproduction might help some women manage or avoid sexist systemic barriers. Understanding how these factors can confine reproductive options and influence family planning suggests that the choice to delay childbearing is not nearly as voluntary as some objectors think. Just as the problem is not so easy to fix, the 'choice' to delay bearing children is not fully voluntary.

Discussion and Conclusion

As I have already mentioned, objectors understand women's reproductive choices as autonomous in a way that is removed from the social context within which these decisions are ultimately embedded. However, the analysis of reproductive choice and egg freezing should begin from the social context within which it occurs. All women making

reproductive choices are socially and historically situated, which ought to be taken into account when considering the moral permissibility of them using a particular reproductive technology. In particular, the context of patriarchy is integral in shaping women's reproductive choices. A deeper understanding of how oppression operates can illuminate the ways in which women's options and ultimate decisions are shaped by patriarchal social structures and ideologies.

The reproductive technology of egg freezing, however, cannot escape the serious feminist worry about potentially reinforcing patriarchy and leaving the problematic social structures largely intact. Karey Harwood, for example, argues that egg freezing as a guard against age-related infertility is just a 'quick fix' to balancing the opportunities available to men and women and leaves the problems rooted in gender inequalities largely untouched. Egg freezing can actually do more harm than good and ultimately threaten women's reproductive freedom by ignoring the social structures (like employment) that make it difficult for women to have a family and a successful career. Goold and Savulescu suggest that despite the need to alter our social structures, egg freezing can be helpful in the short term, provided we have the proper restrictions set in place for the use of this technology [15]. At the same time we offer age-related and disease-related egg freezing, we should introduce measures to try to fix the larger problems related to gender inequalities. Relational autonomy 'seeks politically aware solutions that endeavour to change social conditions and not just expand the options offered to agents'. [24] Thus, understanding women's reproductive choices within patriarchy can help highlight the areas of society that influence women's reproductive options. Accordingly, these areas of concern can be addressed as we work towards changing the underlying social structures that make childbearing difficult.

There are also some concerns about the general social norms that egg freezing might promote or create. Indeed, egg freezing might reinforce patriarchal norms. If egg freezing reinforces pronatalism and the expectation that childbearing is women's (primary) social role, then egg freezing might promote sexist social expectations and threaten women's autonomy [27]. Egg freezing might also uphold the biases towards biological parenthood and reinforce a stigma against adoptive parenthood. These concerns, however, are not reasons to ban age-related egg freezing if we continue to allow disease-related egg freezing. Further, the impact on individual women or women as a group might suggest ways in which egg freezing ought to be regulated or marketed to promote more positive social ideals and foster reproductive autonomy.

Although my analysis relies on the problems that arise when we assume women are fully in control of their reproductive choices, individual women have varying degrees of reproductive choice and control, even within patriarchy. Some women's reproductive choices will be freer than others. However, it is reasonable to generalize the problems with women's reproductive choices under patriarchy for the sake of developing public policies on egg freezing. Also, the arguments presented in this chapter are compatible with imposing regulations on both disease-related and age related egg freezing intended to lessen some of the potential harms or broader social concerns.

In this chapter I have not taken a stance on the moral status of any woman's use of egg freezing technology. It might be the case that egg freezing is too risky for women or too harmful for the offspring born from frozen eggs. Rather, I have suggested that there are (at present) no morally relevant differences between women who freeze eggs to guard against disease-related infertility and those who freeze eggs to guard against age-related infertility. If we continue to allow disease-related egg freezing, then we ought to also allow age-related egg freezing, given the patriarchal context of women's reproductive choices. Until the sexist

social structures that shape and confine women's reproductive choices change, many women may continue to find their lives unfolding in ways that result in delayed motherhood.

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