

Chapter 12

Ovarian Tissue Cryopreservation and Bioethical Discourse

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Introduction

As the chapters in this volume demonstrate, like other nascent medical technologies ovarian tissue cryopreservation (OTC) raises no earth-shatteringly new moral questions. Rather, it poses old moral questions in new ways, thus shedding light not only on our old answers but also on our old methods of reaching them. My task here is to point out the ways in which OTC forces us to embrace important changes of emphasis in bioethics discourse around reproduction, changes that were already burgeoning and are now being reinforced by the unequivocal demands of this particular technology. All but the last of these is specifically tied to discussions that have preoccupied philosophical and religious feminism; the last, as a logical consequence of the first four, connects indirectly.

Jacci Stoyale's incisive critique of Christian moral reflection on in vitro fertilization (IVF) provides a helpful foil [1]. Why, she asks, despite the extraordinary risk and discomfort that *women* must undergo in order to receive IVF, does the literature so thoroughly elide women (except as containers), focus so heavily on the moral status of the *embryo*, and emphasize men's anxiety over infertility and embarrassment with treatment procedures? Given that the whole purpose of IVF is to create an expanded web of familial relationships, why does the literature focus on conflicts of individual rights? I argue that the ethics of OTC helpfully reframe the reproductive technologies debate, moving us out of the logical ruts in which the ethics of reproductive technology often seems to be mired, despite the presence of alternative models.

Medical Solutions to Social Problems

For feminists, the observation that medical procedures are solutions to social problems is usually pejorative. In this volume, Carolyn McLeod has raised the question of whether socially mandatory motherhood might not put inappropriate pressure on female cancer patients to undergo the expense and risk of preserving ovarian tissue, or on parents to put their young, ill daughters through additional surgery [2]; Adrienne Asch has noted that this possible technical "fix" discourages self-critical examination of our socially formed desires for mother- (and grandparent-) hood [3]. With colleagues, I have raised the same question about reproductive technologies generally in my own work: especially outside the first world, does reproductive technology solve a medical problem, or does it merely overcome the shame and resultant social and economic marginalization that result from

unquestioned, legally enforced patriarchalism [4]? And yet Angel Petropanagos shows that in important ways ovary cryopreservation is morally identical whether one undertakes it because of the likely sterilizing effects of cancer therapy or whether one simply anticipates delayed childbearing. In the absence of a partner or a steady job, the latter may be as involuntary as the former [5].

In a very real sense, Petropanagos's reasoning reminds us that *all* medical procedures solve social problems. This observation is a cornerstone of Anglo-American feminism, which makes the same argument about abortion, which it embraces, and breast augmentation, which it generally decries. But this truth extends far beyond such significant surgeries to much less controversial therapies. I am frequently conscious that the primary effect of synthetic thyroid hormone, taken by millions, is relational, familial, and social. With it I can be more productive, energetic, and generous. Certainly it addresses an organic problem, but that problem came to my attention only because of its social consequences. In keeping with feminist emphasis on relationality, we should be consistent: in fact, the overriding purpose of most medical interventions *is* to improve human relationship and interaction. Condemning the use of medicine to solve social problems is hypocritical; we should instead ask whether medical intervention is the *best* way to solve a particular social problem – in this case, the perceived disvalue of future infertility. Perhaps, one could argue, thyroid hormone replacement is defensible because it supports communal interaction, productivity, happiness, and physical health in all social circumstances, whereas OTC should be subjected to further critical analysis because it responds to a social judgment, perhaps reinforced subtly by relational or economic penalties, that non-mothers cannot be “real” women rather than to a general, universal prerequisite for an engaged life. But we must consciously make these kinds of distinctions, not breezily condemn or champion “the use of medical intervention to solve social problems.”

Making Room for a Language of Care

Feminism's political goals wed it necessarily to the language of legal rights. As reproductive justice, these rights include freedom both from coerced pregnancy and motherhood and from coerced infertility and child removal. They also include access to the resources necessary to raise children well [6, 7, p. 42]. Quite simply, women have the legal rights to decide whether to be mothers and to parent the children they have, rights that in turn produce an entitlement to basic social and economic goods.

Although legal rights comprise a necessary baseline for social justice, they are not sufficient for moral discourse. Partly because of bioethics' practical preoccupation with the legal implications of human subjects review, however, bioethicists do at times speak as if the language of legal rights exhausted the responsibilities and insights of bioethics. For example, Stoye notes that discussions of IVF tend to focus upon generic rights and conflicts of rights: the rights of the embryo, the rights of the parents over the process, the rights of the parents over gametes or embryos, and the rights to funded IVF cycles [1, p. 214]. These approaches minimize the ethical concern for care that ought to drive clinical

practice, a concern that comprehends the particulars of each patient's medical and social situation and strives for her holistic flourishing.

In the chapters in this volume, on the other hand, such reflection tends to be more conditional, interrogative, and open-ended. Will an additional invasive medical procedure be an unwelcome stress? Is the patient able to participate in the decision, and if the patient is a child, how heavily should her parents' desires be weighed in a given situation? How likely is it that the patient will be able to become a parent later? Is expense a factor in the decision whether to freeze ova or ovarian tissue, and if it is, should it be [8]? In reproductive ethics generally, once the basic demands of legal rights have been satisfied, these essential questions take center stage. They may reveal patterns that have important, broad implications (for instance, expense as a barrier to fertility preservation, or parents' strong desires for grandchildren); as Joan Tronto argued years ago, these kinds of care considerations too, not just basic rights claims, should shape the policies we create to guarantee justice [9]. But this insight should not obscure the methodological point: these considerations arise not from abstract theorizing about rights but from care for particular patients in their specific circumstances.

Beyond this observation, however, the authors in this volume also encourage us to use care considerations to refine our rights language self-critically. Certainly we must defend basic reproductive justice for all women, but this may not imply that society absolutely owes every woman the right to become a genetic, gestational, and social mother regardless of her circumstances. As part of our mandate to care, we must also protect vulnerable children's welfare, make important decisions about limited medical resources, and realize that 100% fertility is an unrealistic goal. OTC spotlights these important questions. Distinctions must be made between the legal right to exercise fertility and the moral wisdom – based in care – of doing so. For instance, Clarisa Gracia hints that some women should probably opt to forego motherhood because of precarious health, even if conception and gestation are possible [10]. Asch reminds us that not merely fertility patients, but all adults ought to consider carefully whether they are up to the task of parenting before they undertake it [3]. These are bioethical questions, even if they are not questions that clinicians should have the right to answer for their patients.

Replacing Present Operations with Future Vocations

As Stoyale shows, the ethics of assisted reproduction is too often misconstrued as the ethics of the discrete acts or operations meant to achieve conception. The gametes' origins, the methods of fertilization and implantation, and the fate of unused embryos and gametes (not only their preservation or disposal but also rights over them) crowd our moral view. Questions of vocation – self-consciously adopted life plans that shape subsequent moral decisions – tend to appear only in religious discussions of the purposes of marriage, and even here they prove Stoyale's point. For example, influential representatives of traditions like Roman Catholicism, Orthodox Judaism, Sunni Islam, and Eastern Orthodoxy tend to qualify their argument that marriage should include procreation precisely at the point where they believe that the embryo's integrity is compromised, either medically or socially [4, 11].

By contrast, oncofertility ethics is driven almost entirely by questions about future vocational options: all things being equal, should we choose treatment options that not only are more likely than others to preserve future fertility (a common consideration), but do so by actually removing the gametes from the path of radiation and chemotherapy drugs? In other words, should we choose treatment options that preserve a girl's or woman's future vocational decision whether to become a mother in what we think of as an ordinary way? Should we treat her cancer in such a way as to remove as many contingencies and roadblocks as possible from her future decision whether to become a parent?

Importantly, this is not a matter of *guaranteeing* the future possibility of motherhood through vaginal intercourse. It is not yet clear that ovarian tissue can produce live births with routine success, and of course nothing can guarantee against male infertility, fallopian tube defects, and other obstacles to fertility unrelated to ova. Even more importantly, it is also not a matter of preserving the capacity for motherhood, period. Lack of gametes does not preclude social motherhood for anyone; "other mothering" is open to all. It also does not preclude legal motherhood, as women of adequate means can certainly adopt children.¹ It does not even preclude gestational motherhood, as women (again, of adequate means) can certainly conceive with donor eggs. Lack of viable ova precludes only the possibility of genetic motherhood (now the overriding Western definition of kinship [12, 13]) and the possibility of conceiving through heterosexual intercourse (which is less invasive than assisted reproduction, more acceptable to many religious groups, but problematic for lesbians and some single heterosexual women).

Thus, highlighting the connection between OTC and future vocational choices returns to center stage moral questions that are sometimes pushed to the wings in discussions of other assisted reproductive technologies. Cancer treatment by itself is no obstacle to a future vocational decision for maternity, even when it causes sterility. Far more important are the social and economic capital that allow even women lacking ova freely to choose *how* to become mothers and allow even fully fertile women truly to choose *whether* to do so. OTC questions force us back to the larger picture: overcoming poverty, improving access to basic medical care, and eroding cultures of compulsory or unjustly forbidden motherhood where they exist. OTC turns out not to be about preserving the possibility of motherhood at all but simply about increasing the number of paths to motherhood from which a woman might later choose.

Adaptation or Transformation?

Because of its focus on women's welfare, feminism naturally produces a double emphasis: critique and long-term transformation of the social circumstances that harm women and immediate, practical adaptations and services that will allow women to flourish within the constraints of the unjust society in which they still live. This double critique necessitates self-criticism: by supporting adaptations, are we inadvertently

¹ Adoption is not a substitute for gestational motherhood in Islamic cultures or in some Hindu communities [4].

legitimizing the unjust circumstances the adaptations mitigate? By fighting for change, are we inadvertently neglecting women's current urgent needs?

As Goold and Savulescu have argued in the case of elective freezing of eggs [14], preservation of ovarian tissue need not be limited to cases of possible cancer therapy-induced infertility. Women could use it widely to hedge bets against their future declining egg quality. By playing into both a culture of compulsory motherhood and a culture of work that punishes childbearing in early adulthood, the practice could distract us from the social pressures on women's reproduction by permitting us to resolve them on a personal level (finances and technology permitting). This phenomenon distracts ethics too, focusing attention on procedures, protocols, and even access rather than on the larger social problems that are at least partly responsible for creating the perceived need for fertility therapy. Yet by making delayed childbearing possible without use of donor eggs, these practices also have the potential to transform society's double standard on "mature" genetic parenting: acceptable and even approved for "settled," wiser, older men, and monstrous and unnatural for older women [14].

Goold and Savulescu's argument points toward a both/and approach: meet current needs while reflecting morally on possible socially transformative consequences and seeking long-term justice. Commitment to the kinds of social change that remove obstacles to women's reproductive freedom should not preclude "allowing access to technological advances" that can help them plan motherhood more freely while the obstacles are still in place [14, p. 50]. We just need to be savvy about the likely results.

We also need to be savvy about the distinctions. Even if freezing eggs or tissue is in some ways morally equivalent whether it is done as insurance against future declining egg quality or against likely therapy-induced infertility, are the two procedures morally equivalent in all ways? For instance, OTC requires us to contemplate parents giving permission for their minor daughter's ovarian tissue to be surgically removed and stored before she undergoes chemotherapy. Suppose a child who is cancer-free is scheduled to undergo another procedure under general anesthesia. Should her parents be able to request that ovarian tissue be removed and stored as a safeguard against her possible future illness or infertility? Or suppose that the child is perfectly healthy, but the parents want to elect the surgery for her, much as one might (expensively, laboriously, and uncomfortably) correct a child's bite so that her molars will be likely to last longer into her adulthood? This leads us to a further set of questions.

The Patient's "Best Interest"

Narrowing the frame of reference to the patient's best interest is another favorite method of simplifying the ethical discussion of assisted reproduction. This strategy has its place in certain circumstances. In the case of OTC, adults can presumably make decisions about their own fertility and live with the consequences of these choices. Patients who stored ovarian tissue could choose to have it destroyed at a certain point; some women who elected not to store tissue would conceive anyway, and others who wished to be parents would find other ways to mother. In OTC the "best interest" of the patient comes

into play primarily for children, whose reproductive periods are farther off and whose lives may take unpredictable turns in the intervening years. Here, the calculus is harder [8, 15, 16].

From a feminist perspective, the question of the patient's best interest raises two concerns: the patient's current and future welfare (not just protection from harm, but holistic flourishing) and her agency in later life-shaping decisions. From both perspectives preserving ovarian tissue seems acceptable *if* there is a good reason to believe the child's fertility will be destroyed. If the surgery and storage are not terribly burdensome or expensive, they leave a girl the option to decide *in the future* whether she wishes to undertake further surgery or treatments to attempt genetic motherhood. That is, without jeopardizing her current or future health, they increase her options around an issue that is deeply freighted with social and psychological meaning without prejudicing her toward motherhood.² But subjecting a child to every possible preventative therapy or intrusion in order to guard against unpredictable future mishaps would not be in her best interests.

Two further worries seem overblown. The first is that parents should not make decisions of such great significance to their children's bodily and social futures alone, and the second is that the OTC discussion burdens both parents and children inappropriately. Both demand sensitivity, but neither takes on such unusual significance that it should forbid the therapy altogether.

First, parents make life-altering choices for – and by degrees, as it becomes appropriate, with – their children all the time. Some of these decisions momentarily, even permanently and irrevocably, affect their children's futures. These decisions, both medical and social, are not trivial. One controversial example is the decision whether to create more socially acceptable genitalia surgically for intersex infants. Yet this example is contentious precisely because intersex surgery *narrows* a child's future possibilities before the evidence of puberty indicates the direction the child's body might take on its own. Preserving ovarian tissue, on the other hand, *preserves* or *expands* the future possibilities open to the future cancer survivor.

Second, changing contexts will mute the moral relevance of some pressing clinical ethics concerns. For instance, the psychological impact argument is a moving target. Questions about organ donation used to be considered high-stakes, invasive, and problematic intrusions into a family's already-complex grief. Now they are so commonplace that, in some states, they are a routine part of the driver's license application process. Similarly, some current writing on OTC seems to assume that the question of fertility preservation will broadside vulnerable parents (and patients) unfairly [17, pp. e1464–1465]. However, if queries about fertility preservation were a widely accepted, routine oncological practice [16, p. 27] – so widely accepted that parents would be as ready to face this question as they are now prepared to face the question “radiation, chemotherapy, or both?” – this

² It can be argued that the existence of the ovaries could pressure a woman to use them; this is true, however, of the “biological clock” for fertile women. In both cases biology and social values combine to create pressures that exist independently of OTC.

psychological barrier would disintegrate. In both these cases, expanding the question beyond one particular child and one particular decision provides historical perspective that lessens the urgency of the question.

Feminist discourse drives us toward the languages of expansive choice and flourishing, including relational and social flourishing. Especially in the case of child cancer patients, effective therapy should preserve as broad a spectrum of possibilities for the child's own future self-realization-in-community as it can without imposing significant suffering or expense. But this dedication to preserving possibilities – in this case, of genetic motherhood – should not subtly, unquestioningly value genetic motherhood over other possibilities. Critique of cultural values and of justice priorities for medicine also comes into play.

Thus the feminist analyses that OTC encourage press us to expand our questioning about fertility therapies beyond procedures and personal health to the social, relational, and cultural contexts of fertility. In the case of OTC, which raises few new ethical or procedural questions, the new therapy, if perfected, certainly is salutary: it increases the *options* women have for mothering. But we should probably not go so far as to claim that it is a matter of *reproductive justice*, as infertility caused by cancer or menopause is not unjust unless the cancer or menopause is the direct result of unjust human influences like environmental contamination. The simple inability to be a genetic mother is not unjust, nor does it preclude mothering. The question, then, is how much effort and expense we can justly dedicate to overcoming this dimension of infertility.

Paradoxically, OTC's discourse's queries about "the particular and the concrete" [1, p. 29] open more quickly onto these important questions than do the queries about gametes and abstract patient rights in which assisted reproduction discourse generally is so often mired. What OTC may teach us above all is a way of speaking that better comprehends the lives of real patients in the settings of their real, imperfect societies. Whether or not new births result from OTC, patients and society at large will benefit from this push toward constructive discourse.

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