

# Virtual Mentor

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## STATE OF THE ART AND SCIENCE

### Disclosure of Experience with Oocyte Cryopreservation

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Oocyte cryopreservation or “freezing” has recently become available for patients with concerns about future fertility. Fertility can be preserved through oocyte cryopreservation before gonadotoxic chemotherapy, oophorectomy in young patients with BRCA mutations, or impending ovarian failure in young patients with Turner syndrome [1]. In addition, oocyte freezing has become more common as a means to “bank eggs” from oocyte donors to reduce cost and increase availability of donor eggs to women with diminished ovarian reserve [2]. Some women who wish to delay childbearing for personal or professional reasons are electively freezing their own eggs to retain their fertility potential.

The technology was, until recently, considered experimental, and its availability was limited to academic medical centers. Over the past 10 years, reassuring data about its safety has emerged, prompting the American Society for Reproductive Medicine (ASRM) and Society for Assisted Reproductive Technology (SART) to remove the “experimental” label [1]. As more institutions have begun to offer egg freezing, the success rates have varied widely with different techniques and levels of experience [3]. The question can now be raised: “Should institutions that offer oocyte cryopreservation be required to inform patients of their levels of experience with this new technology?” This article will make the ethical case that they should not be required to do so.

The implementation of new medical advancements is always plagued by tensions between the needs for completely informed patient consent and for the gaining of experience through using the new technology on patients. To respect patient autonomy, physicians are obligated to provide them with enough accurate information for them to make decisions. As is commonly seen with surgical technology developments such as laparoscopy and now robot-assisted surgery, physicians find themselves debating how much to tell a patient about their experience with a particular procedure [4]. Ultimately, the question is whether hearing certain information about an institution’s experience with oocyte cryopreservation would help patients to make informed medical decisions.

### What Information Would Patients Receive?

An institution’s “experience” with oocyte cryopreservation can encompass many different elements, such as: the number of oocyte collection and freezing cycles performed, the number of surviving thawed oocytes from those cycles, the number of pregnancies resulting from implantation of thawed oocytes, the embryologists’ levels

of oocyte cryopreservation training, and lab certifications for egg freezing. Currently there is no standardized, nationally recognized training program or certification in oocyte cryopreservation beyond the training required to perform IVF, so it is unclear how to measure experience. Even if it was determined that success rate should be used as a proxy for experience, a practice could have performed a large number of oocyte cryopreservation cycles but have no outcome data to report until their patients return to use their frozen oocytes.

### **Would That Information Be Accurate and Helpful In Decision Making?**

*Out-of-date information.* A new employee's "success rates" would not be reflected in the clinic's data until that person had been with the practice for an extended period of time. Moreover, many clinic clients delay using their frozen oocytes for several years, by which time the experience of the center would have increased, calling into question the relevance of the information disclosed.

*Lack of evidence.* There is no data to support which measures of experience result in improved outcomes for patients and, therefore, which measures are relevant for decision making. Until standardization is in place for training, certification, and data reporting, disclosure of "experience" would not give patients particularly useful information for decision making.

Furthermore, an institution's level of experience does not affect the risk to the maternal patient or the embryos. Clinics offering oocyte freezing are primarily well-established IVF centers. The procedural risks to women undergoing oocyte collection are the same as those associated with oocyte retrieval for the purposes of IVF, hence the center's specific experience with egg freezing has no impact on maternal risks. Additionally, long-term data from academic centers that experimented with this technology have shown no increased risk of malformations in embryos generated from frozen oocytes [5]. If the level of experience involved altered the risk profile, this would be important information for decision making, but it does not.

It is our opinion that there is no ethical mandate to disclose experience with egg freezing until measures of experience and validated training standards can be correlated with improved outcomes for patients. Until then, information about experience will not be useful in decision making.

### **Gaining "Experience," However That Term Is Defined**

If centers are required to disclose experience with oocyte cryopreservation, by any of the measures mentioned above, should newer centers offer patients incentives to undergo egg freezing while they are developing their programs? This question arises from the tension (mentioned at the outset of the article) between patients' right to be fully informed and the clinic's or center's need to develop its history of successful procedures. Offering incentives could imply that the quality of service is substandard, which could have the opposite of the intended effect, causing patients to go to more established centers. If pregnancy from previously frozen oocytes were to

be the standard for measuring “experience,” new centers might only accept patients with a high probability of successful pregnancy, exacerbating the problem of unequal access to medical services for patients with complex medical and fertility problems. Finally, if newer clinics and those not associated with academic health centers disclosed less experience—as measured by whatever standard is ultimately settled upon—it would become more difficult for them to gain the needed experience. This would mean that many patients seeking fertility services would have to travel long distances for care. Many examples of this outcome exist in, for example, expert cancer or organ transplantation care, but it creates unequal access to care for those outside of large urban centers.

## References

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