

ESHRE Task Force on Ethics and Law 11: Posthumous assisted reproduction

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This article analyses the different ethical aspects of posthumous assisted reproduction. Two situations are distinguished: cases in which the gametes or embryos are used by the surviving partner and cases in which the gametes or embryos are made available for third persons. The moral evaluation of the procedure depends on whether the act is restricted to the existing parental project. A major difficulty for the moral evaluation is the inconclusiveness of the empirical data on the psychosocial development of children born after this procedure. The Task Force concluded that posthumous reproduction by a partner is acceptable if the following conditions are met: written consent has been given by the deceased person, the partner received extensive counselling and a minimum waiting period of 1 year is imposed before a treatment can be started. For use by third parties, the usual conditions for gamete and embryo donation apply.

Key words: ethics/gamete cryopreservation/gamete donation/parental project/posthumous assisted reproduction/welfare of the child

Introduction

The cases of posthumous reproduction can generally be separated into three different categories: fertilization and pregnancy take place after the death of one of the partners, fertilization and cryopreservation of embryos take place before the death of the partner and fertilization and pregnancy take place before the death of one of the partners, but birth happens after the death. The third category is not discussed in this article because it is not directly relevant to medically assisted reproduction.

Scientific background

The application of this form of procreation is linked to the availability of techniques for obtaining and cryopreserving gametes, reproductive tissue and embryos. Sperm can be obtained by masturbation, surgical excision of the epididymis, aspiration of the vas deferens and electroejaculation. The technical means are adapted to the specific situation of the patient. In most cases, sperm samples are stored by cancer patients for parenthood after they have been cured (see Task Force 7). Sperm can also be retrieved from the corpse of a man after his death. Because the sperm quality diminishes with time, it is important that sperm retrieval is performed as soon as possible after death.

For the female, follicular aspiration and biopsy of ovarian tissue are available. At the moment, cryopreservation of oocytes and/or ovarian tissue is performed in some clinics, but its clinical application is still under investigation. Female

cancer patients, like their male counterparts, are offered the possibility to cryopreserve reproductive tissue before treatment.

Because cancer treatment is not always successful, there is a real chance that the patient dies before use of the preserved gametes. It should be anticipated that some of their partners will want to continue their parental project.

There is no evidence that cryopreservation of sperm or embryos has a deleterious effect on the offspring. As far as oocytes and ovarian tissue are concerned, the number of children born is too small to know with certainty. There are, however, theoretical risks that need to be followed up.

Legal and religious background

There are wide differences in national laws concerning the subject. They vary from complete prohibition to permissive rules. The latter may mean conditional acceptance (as in the Netherlands, Greece or UK) or acceptance by default (as in Belgium). When there is no national legislation, the issue may be dealt with by professional guidelines, self-regulation or jurisprudence. Permissive guidance differs on the following aspects: decisional authority, consent procedure, waiting time, inheritance rights and so on. Medical professionals must take into account the legal situation of their country when considering these requests.

There is no consensus among the different religions on posthumous reproduction. Roman Catholics will reject this application because it separates human reproduction from sexual intercourse and implies insemination of a single woman. Islam

also rejects this procedure because it takes place after the end of the marital term. Jewish law, on the contrary, permits posthumous procreation.

Ethical considerations

There are different types of interactions between the major ethical principles involved. Posthumous reproductive treatment may generate a conflict between two ethical principles, namely respect for the autonomy of persons to decide about reproduction and the principle of beneficence as expressed in the concern for the welfare of the child. However, the two principles may also converge; promoting the autonomous decision-making of the surviving partner may reduce the risk for the welfare of the future child.

Autonomy

The principle of respect for autonomy means generally that we have to respect people's decisions. However, this does not imply unconditional acceptance of the patient's wishes. Two limitations are relevant for the moral evaluation. First, real respect for autonomy implies the creation of conditions that promote well-considered decisions reflecting the person's value structure. Second, the prospective parents should take into account the effect of their wishes on the future child. The principle, as well as the limitations, is equally applicable to posthumous reproduction.

Although the number of requests for posthumous reproduction is small (and probably will remain small), the option of posthumous reproduction should be offered in the consent form for cryopreservation. Even if the clinic objects to this kind of treatment and refuses collaboration, the informed consent form should enable patients to indicate what they want to happen with their gametes and embryos in case of death (see Task Force 2). Couples who want to use the option of posthumous reproduction should always have the right to transfer their gametes or embryos to another clinic that is willing to participate in their request.

The issue should be raised with all assisted reproductive technology (ART) patients although healthy patients may find it difficult to appraise the situation clearly. Nevertheless, written consent is the best way to avoid conflicts and dilemmas regarding the disposition of gametes and embryos in case of parental death. If the possibility of posthumous reproduction has not been broached or if no written consent is available, it is possible that decisions are taken which do not conform to the deceased person's wishes. Because of the special value of autonomy in the context of reproduction, an opting-in system is preferred to an opting-out system. This means that in the absence of written consent, as in most cases of accidental persistent vegetative state or death, no action to obtain reproductive material can be performed, and no use can be made of the gametes or embryos. Moreover, the consent should explicitly cover the possibility of posthumous reproduction. The presence of cryostored gametes or embryos shows that a parental project existed, but it does not demonstrate that the deceased accepted the continuation of the project after his or her death.

Parental project and reproductive freedom

In the overwhelming majority of the cases, reproduction with the gametes or embryos of a deceased person will take place within an existing parental project. The basic idea underlying the acceptance of this type of application is that one partner can continue the parental project after the death of the other. All members of the Task Force agree that this is the least problematic form. For some members, posthumous reproduction is only acceptable within this context. For them, this framework restricts the possible situations in which the application can be performed:

(i) The gametes or embryos can only be put at the disposal of the surviving partner. Parents of the deceased or other family members have no say in this matter.

(ii) The partner can only use the gametes or embryos for his or her own reproduction. If he or she does not want to use the gametes or embryos for this purpose, they cannot be donated for the reproduction of others. The only options left are donation for scientific research and disposal.

(iii) The gametes or embryos should be destroyed (possibly preceded by research) when both partners die. Third parties cannot continue a parental project in which they had no part during the life of the intentional parents.

Other members of the Task Force, however, consider posthumous reproduction outside the initial parental project to be justified on the conditions that donors consent to this broader use and that all safety measures usually applicable to gamete or embryo donation are respected. This implies among other things that the gamete or embryo donors have been tested (and retested) for HIV, hepatitis B and hepatitis C.

Beneficence

The future child

In all cases of ART, the welfare of the child is an important consideration. Doctors should not assist in these projects when there is a high risk of serious harm to the future child. Because the applications of posthumous reproduction are of recent date, no research has been conducted to study the consequences for the child. Different factors may affect the child's well-being. Insofar as posthumous reproduction takes place in the context of the original parental project, the main factor that might influence the child's well-being is that he or she will be raised in a one-parent family. Although the effects of growing up with one parent have been investigated, the conclusions remain controversial. This is largely due to the impact of a considerable number of confounding factors such as socioeconomic status and divorce. Even if single parenthood has a negative effect on health and well-being of the child, it is unlikely that this effect is of such magnitude that it jeopardizes the reasonable welfare of the child. A second factor is that the child will feel wronged or stigmatized when he or she finds out that he or she was conceived after the death of one genetic parent. Similar concerns have been raised for many new applications in the field of assisted reproduction. Without empirical evidence about serious harmful effects, this cannot be considered as a sufficient reason to reject the application. Because the surviving partner will have a positive view of the deceased, it is

likely that the story of the child's conception will present the child as a much desired gift issuing from a loving relationship. Contrary to the use of an anonymous donor, the child will know his or her genetic origins and will be given a positive image of the deceased parent. However, it seems advisable to evaluate the parent's motives and expectations. There is a certain danger for the autonomy of the child if the parent looks at the child as a 'commemorative child' or as a symbolic replacement of the deceased. Extensive counselling is therefore recommended before the treatment.

There are additional concerns when a surrogate is used in case of maternal death. The absence of the mother may be more important for the psychological development of the child than the absence of the father. However, there are at present no data to support the view that the sex of the parent affects the risk. There may also be a significantly higher risk of role confusion in the mind of the child when, the genetic mother being dead, the only mother figure may be the surrogate.

Finally, insofar as posthumous reproduction takes place outside the initial parental project, the main risk would be that the child may suffer from the knowledge that both genetic parents are dead. Given the evolution in attitude towards anonymity regarding gamete donation, one should take into account the possibility that the future offspring may want to obtain more information about the embryo donors. Findings from research regarding gamete donation and anonymity will provide the basis for assessment of this risk.

The surviving partner

There can be no legal or moral obligation on the part of the surviving partner to effectively use the gametes or embryos for reproduction. However, when the gametes or embryos are made available for the partner, he or she should make a decision about the disposal. It is important that the decision is well considered and stable. Two complex mechanisms known from the psychology of bereavement should be taken into account when designing the decision-making procedure because they may prompt the patient to make hasty decisions:

(i) Guilt feelings. In the period immediately after the death of a partner, guilt feelings are common. The surviving partner may try to alleviate these feelings by doing something that he or she thinks the other would have wanted.

(ii) Idealization of the partner.

These feelings largely disappear with time as the bereavement process advances. The studies show that a large majority of the requests made immediately after the death of the partner to cryopreserve and use the sperm are not followed up after a few months. An obligatory minimum waiting period of a year seems necessary to prevent hasty and ill-considered decisions. The mourning process must be nearly completed before treatment can be started. Psychological evaluation is essential in the assessment of this point.

The counselling process should also stimulate the would-be parent to consider the social implications of his or her action, especially regarding the welfare of the future child. The attitude and support of family and friends for this action may have a large impact on the social network in which the child will be raised.

The deceased before his or her death

The psychological benefit for the dead partner before his or her death is a complex philosophical issue. The main question is whether the wish or acceptance of parenthood after one's death is rational. However, casuistry suggests that the knowledge that their child's wish may be realized even after their death may increase the quality of their lives. Similar considerations play a role regarding other practices (such as a donor card, a will) that are accepted to regulate matters after one's death. The philosophical problems can be largely bypassed by looking at the issue not as posthumous reproduction but as reproduction with a dead partner's gametes or embryos. The focus thus lies with the surviving partner and her interests and not with the deceased.

Possible other recipients

For those applications where the gametes or embryos are made available outside the context of the initial parental project, the recipients should be told that the genetic parent(s) is (are) deceased. This information is crucial, especially if the parents want to keep the option open for the child to meet his or her genetic ancestors.

To avoid the above-mentioned danger of a 'commemorative child', it is recommended that the gametes or embryos cannot be directed at or requested by specifically others like parents or other family members of the deceased person(s). Casuistry, especially for requests by parents of a deceased, indicates that they want to hold on to the deceased by means of the newly created grandchild. Questions can be raised about the motives underlying these applications and the ensuing consequences for the resulting child.

Principle of justice

The legal system regarding the recognition of a person as a parent differs considerably from country to country. Moreover, also the national laws on inheritance vary. Regardless of the details, it is considered unacceptable that children would be discriminated because of the method or time of their conception. It is unfair that a child conceived after a parent's death would have fewer rights than its earlier born sibling. It is therefore recommended that the child that is born after the death of a parent is (i) recognized as the child of that person, and (ii) inheritance rights are secured. To assure a practical arrangement for the inheritance while giving the surviving partner the possibility to plan a family with more than one child, a maximum period of 5 years is proposed within which the child(ren) must be conceived and born.

In case the embryos or gametes are donated to others, the general rules of donation apply. This means that no inheritance or other rights are transferred to either recipients or offspring.

Conclusions and recommendations

Posthumous reproduction is a highly controversial issue. This is partly due to the absence of empirical data on the psychosocial development of children born after this procedure and due to differences in appreciation of the parental project. After careful considerations of the ethical issues, all members

of the Task Force accept posthumous reproduction in the context of the initial parental project. If posthumous reproduction is applied in that context, they recommend the following points:

(i) Written consent should have been given by the deceased person before the use of the gametes or embryos. Consent should be obtained at the time of storage or before the start of the IVF cycle.

(ii) Thorough counselling of the surviving partner during the decision-making period is necessary.

(iii) A minimum waiting period of 1 year after the death should be imposed before treatment can be started.

There is no consensus about posthumous donation to other persons than the surviving partner. Informed consent of gamete providers is essential for these applications, but there is no need to impose a minimum waiting period and no need to use the embryos within a certain time span. The usual counselling should be provided to the accepting person or couple, stressing that little or nothing is known about the implications for the future child.

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