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NEWS AND VIEWS

REPRODUCTIVE HEALTH CARE POLICIES AROUND THE WORLD

The Current Status of Sperm Donation in Assisted Reproduction Technology: Ethical and Legal Considerations

INTRODUCTION

Sperm donation is the oldest noncoital technique of reproduction. Since the late 1960s the use of artificial insemination by donor (AID) has expanded and become a major therapeutic option for male infertility in many countries. With the advances in reproductive biology, new techniques to alleviate infertility have offered new options for conception. In many countries assisted reproduction technology (ART) has become a routine tool in the treatment of infertile couples. The introduction of AID in ART has made it an integral part of the management of infertility in many countries, while in others it is strictly forbidden or restricted.

By practicing AID, genetic material is donated and hence medical indications must be clear and based on general accepted medical criteria. In many countries these may include male-partner sterility, the presence of severe sperm abnormalities, genetic disorders, noncurable ejaculatory dysfunction, and a single woman who wishes to have her own biological child.

With the recent development of micromanipulation methods and sperm aspiration methods [testicular sperm aspiration (TESA) and microscopic epididimal sperm aspiration (MESA)], new tools for the treatment of male infertility are offered. Therefore, the medical indications for the use of donor sperm in ART in order to alleviate infertility have decreased and today donor sperm should not be used in ART before fertilization attempts with the husband's sperm have failed following application of micromanipulation methods.

Along with scientific achievements, some sectors of society, especially the very conservative and religious, strongly oppose AID treatment. The degree to which religious authorities influence communities differs from society to society, and countries have adopted different attitudes concerning AID (1). Public debate concerning genetic donation in ART also deals with moral attitudes that differ from society to society. Regulations and legislation pertaining to the various aspects of genetic material donation have not yet been established in many countries, thus limiting AID practice. Nevertheless, ART is now practiced in many countries and donated sperm for ART is used in many of them. The purpose of this study is to review the current status of AID in ART in various countries concerning its medical, ethical, and legal aspects.

MATERIALS AND METHODS

The data were collected by a questionnaire circulated to ART programs around the world. These ART centers were determined through official reports and personal communication. The ART programs were requested to complete questionnaires

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which were designed to collect information regarding ART in general and sperm donation in particular. In addition, data were collected from national reports and publications concerning regulations, legislation, ethical rules, and medical considerations. In countries composed of several states or cantons (e.g., Australia, Canada, Switzerland, and the United States), each state has its own regulations and legislation, and data were collected separately. The survey included information regarding ART registration, legislation, and supervision. AID legislation, consent of the partners involved—recipient, husband, and donor. Subjects concerning the donor such as status, age limit, screening, anonymity, and payment for donation were included. In addition, the survey asked to whom the services of ART are permitted and if ART with donated sperm is allowed for a single-woman recipient.

RESULTS AND COMMENTS

Information concerning ART and sperm donation in ART was collected from 62 countries. Our data show that sperm donation in IVF and all forms of gamete donation are prohibited in Moslem countries. These include Egypt, Iran, the Gulf countries (Kuwait, Qatar, etc.), Indonesia, Jordan, Lebanon, Morocco, Malaysia, Pakistan, and Turkey. In several countries AID is permitted and practiced at infertility clinics. However, sperm donation in ART services is prohibited. This is the case in Austria, Japan Norway, Sweden, and Taiwan.

The practice of gamete donation is opposed by the main religions and is not usually accepted by religious infertile couples or by religious physicians. Religious groups still exert influence on the civil authorities in the field of reproduction in general and AID practice in particular.

Infertility workups and treatments are strongly encouraged in Judaism. Nevertheless, sperm donation is prohibited, especially when using the semen of a Jewish donor. In certain cases, the rabbinical authorities do permit sperm donation when the donor is a non-Jew. However, the law in Israel concerning reproduction is much more liberal and permits sperm donation in ART (1).

Donation of sperm is prohibited by the three main branches of Christianity—Roman Catholic, Eastern Orthodox, and Protestant. However, in most Christian countries the medical legislation and regulations are liberated from religious influence and therefore semen donation is permitted. Even in Italy and Spain, countries which are strongly influenced by the Roman Catholic church, the practice of sperm donation in ART is not prohibited. In the Catholic countries of South America sperm donation in ART is not practiced at public ART centers, but since regulations concerning the procedure do not exist, sperm donation in ART is practiced at private ART centers.

In many Islamic countries, where the laws of Islam are the laws of the state, donation of sperm is not practiced. AID is considered adultery and leads to confusion regarding the lines of genealogy, whose purity is of prime importance in Islam (1).

We could find no religious or other explanations for why sperm donation in ART services is prohibited in Austria, Japan Norway, Sweden, and Taiwan.

Legal Aspects of ART

Throughout the world politicians and legislative authorities have recognized and reacted to challenges presented by assisted reproduction (2). Several contrasting legislative approaches have emerged which may reflect the style of particular legal system (the civil law system, the customary or common law system, or the religious law system). However, although most societies believe that ART should be established and regulated, our survey shows that state regulation of ART exists in 14 of the surveyed countries. At the present time, there are many more proposals for legislation than actual laws pertaining to the various aspects of the practice of ART. Throughout the world several contrasting legislative approaches have emerged, reflecting the society's attitude and the style of a particular legal system.

(a) American law follows the American tradition of favoring individual choice. It recognizes the right of the patient and physician to choose what best meets their needs in the conduct of affairs considered private or intimate. Therefore, the American legal approach to ART is facilitative rather than regulatory.

(b) A regulatory approach has been set in Great Britain and Canada. In these countries, authorities set specific regulations, standards, and licenses for every program performing ART. A prohibitory approach has been adopted by both Austrian and German

law. Their laws embody social values which are far more conservative than in the aforementioned countries. Certain methods of assisted reproduction are permitted only within the bounds of very explicit prohibitions. Between these two types of approaches—the liberal regulatory and the restricted regulatory—each society and each country have tried to find the most suitable approach.

(c) In some countries, especially Moslem countries, the state constitution has adopted the religious legal system. In most of these countries ART and, especially, sperm donation are prohibited.

State registry of ART exists whenever a legislative act has been passed. In addition, in several countries registries been established, although legislation for ART does not exit. Most of the surveyed countries maintain some form of supervision for ART whether or not regulations or legislation exists. In most countries, the standards of practice of ART are influenced by international committees, in some by local committees, and only in a few is there no supervision.

Legislative Approaches to AID

Sperm donation in ART is practiced only in countries that permit AID. In some countries AID is practiced under regulations and legislation, but sperm donation in ART is not permitted. Austria, Japan Norway, Sweden, and Taiwan are countries that practice AID but in which sperm donation in ART is prohibited. No explanation for this prohibition is provided. Whenever sperm donation in ART is permitted, most countries that have established legislation pertaining to the practice of ART also have set laws concerning the practice of sperm donation in assisted reproduction. Whenever there is no law regarding ART, separate laws concerning sperm donation in ART do not exist either. However, in countries where AID is not permitted, it is usually prohibited by a specific set of laws or regulations whether or not specific legislation concerning ART exists.

The Recipient

ART is allowed for married women in all countries where the procedure is practiced. In most of these countries ART is permitted to a cohabitant as well. The exceptions are Germany, Hungary, Korea, New Zealand, Singapore, Slovenia, and Thailand, which do not permit ART to cohabitants. The practice of ART in single women is more controversial. Our survey showed that different attitudes have been adopted by different countries concerning the single-woman recipient, and sperm donation to single women is practiced in only about 50% of the countries. Other contraindications for ART are medical or psychological conditions under which pregnancy is ill advised.

In countries where sperm donation for single women is permitted, each country sets its own regulations and standards. In Belgium, The Czech Republic, Denmark, England, Holland, and Israel, AID in reproduction clinics and sperm donation in ART for single women are permitted. The arguments against sperm donation to single women are that, in many countries, most parts of society believe that children raised in a family framework have an advantage over children living with a single parent. However, due to increased divorce rates and the increased number of single women wishing to establish a single-parent family in modern societies, there should be no restrictions or laws against women who wish to have children through donor insemination (3).

Consent

In most countries formal written consent to ART is mandatory and this is also the case for sperm donation.

In the case of sperm donation, the need for formal consent by the husband or cohabitant is more prominent. Sperm donation raises many dilemmas concerning the rights and obligations of the mother, the husband, and the child. Questions arise such as What are the husband's duties and rights toward a child who is not his biological offspring? and can we make sure that the child will not suffer from the special circumstances that brought him/her to life? In order to consolidate the partners' obligations and rights, the husband's consent before AID treatment is mandatory. Thereafter, the consenting husband is listed on the birth certificate as the father, he has the rights and duties for rearing the child, and the offspring becomes his legitimate child. In some states, the legal implications of sperm donation are specified and in others these legal implications are derived from the legitimate status of the offspring of the consenting husband. In many cases, the husband's status is clear only if the precise statu-

tory provisions concerning all parties involved in AID treatment are met. When these conditions are not fulfilled, many questions are not answered by clear statutory language (4).

In most countries, aspects of the donation procedure are discussed with the potential donors and informed consent is mandatory. Although this seems straightforward, in some countries the demand for donor consent is not as firm as that of the recipient and husband and the survey showed that donor consent is not required in Argentina, Brazil, Italy, Poland, and Russia. The possibility of directed sperm donation is not usually included on the informed consent form. Different groups of recipients, such as single women, lesbians, etc., are not usually discussed with the donor and consent is universal. Recently (5) a debate has arisen concerning the general rule that donors relinquish all rights and duties and the position has been taken that donors should at least be informed as to which categories of recipients are treated by the hospital or clinic. This enables the potential donors to decide whether they want to donate gametes. Moreover, the position has been taken that the donors should have the right to direct their gametes to categories accepted as relevant by the moral and religious communities in their society.

The Donor

One of the major problems for donor insemination centers is the recruitment of suitable donors. In most countries, donors can be either single or married. However, some countries have specific demands concerning marital status of the donor. In South America (Argentina, Brazil), Holland, Israel, Korea, and Thailand the donor must be single, while in Austria, India, and Poland donors must be married. A review of donor recruitment revealed several main groups of candidates—unsolicited volunteers informed through the media, volunteers such as medical students informed by physicians and managers of sperm banks, and donors responding to requests by the recipients. However, in most countries the latter type of donor will not be used for the treatment of the requesting recipient. In France and several other countries, many surgeons who perform vasectomies recommend semen cryopreservation to their patients. Currently in France one-third of all vasectomy patients will become semen donors.

In order to avoid age-related genetic disorders, donors should be young. Age-related genetic disorders are usually due to new mutations that may cause several diseases (such as achondroplasia) when the donor is older than 40 years old. However, the age limit differs from country to country. The donor's age limit in Israel, Korea, Thailand, and Uruguay is 30 years and rises to 55 in Australia and France.

It is the responsibility of the physician and the semen bank manager to be aware of proper donor selection and screening. The donors should be in good health and free of genetic abnormalities. The screening should include medical history, including familial screening for genetic disorders, physical examination, and cultures and serology for sexually transmitted diseases (STD). It is preferable that the donor should have proven fertility, or at least semen characteristics should be within normal limits. Today, the common practice for donor insemination is to use frozen–thawed semen. While the donor is retested for STD in general and human immune deficiency virus (HIV) in particular, semen should be quarantined. For frozen–thawed semen, cryosurvival of more than 50% motile sperm following the thawing procedure is required (6). Not all countries follow all these screening criteria and some countries, including Argentina, Brazil, Cyprus, India, Italy, Korea, Poland, Russia, Slovenia, Thailand, Ukraine, and Uruguay, reported that they do not even screen the donors. These are also the countries that lack legislation on assisted reproduction and gamete donation.

Anonymity of Donors

Gamete donors can be either anonymous or known to the couple. Our survey shows that in most countries anonymity of the donor is preserved and the donor cannot be a member of the recipient's family or be the recipient's friend. In Korea, New Zealand, Australia, and Argentina, in addition to the anonymous donor, the donor can be either a relative or a friend of the recipient. In Hong Kong the donor can be a member of the family and in Germany the donor can be a friend known to the recipient. Most countries disapprove of family members or friends as donors because this can cause problems to the family structure of the recipients, e.g., ambiguous emotions among the donor, the child, and the legal parents.

In other cases when the donor is not a relative or friend, donor anonymity is crucial in order to protect the family's privacy. In most cases anonymity is also in the donor's interest. This is very important for the recruitment of more donors. A donor may fear that he could be considered legally liable for the child's welfare or there might be claims to inheritance rights. However, many donors direct their gametes to a specific group of patients or demand the right to decide to whom their gametes should be given. For example, a donor may not want his sperm donated to aged, lesbian, or even single women. This approach can be adopted concerning categories accepted as relevant by the society, and not categories added by donors. Categories directed to a specific recipient are also not acceptable. In a recent study, donors were willing to inform friends and relatives that they had donated sperm and the response was mostly supportive.

There are many reasons why donor anonymity is not in the child's interest. First, each individual has the right to know his/her origin. Second, there are medical conditions for which it is vital to know important medical or genetic information concerning the parents of a patient. Such information is missing in a child conceived with donor sperm where the donor is anonymous. This obstacle was overcome in many cases by record keeping and informing the child that he was born following sperm donation.

Although Sweden does not permit sperm donation in ART, the Swedish committee for "children conceived by artificial insemination" decided that it is the child's right to obtain information about the donor. Therefore, the physician should give the AID parents detailed information about the donor without the donor's identity being disclosed. The AID parents should then be free to use the information when talking with the child about his/her origins. In England record keeping is mandatory and this includes information about the donor without disclosing his identity. It is the child's right to obtain such information from a national record-keeping center.

Sperm Bank

Today it is mandatory that all countries that use sperm for donation use cryopreserved semen from a sperm bank for two main reasons. First and most important, semen should be kept in cryopreservation and used after thawing only after donor evaluation for sexually transmitted diseases and, especially, for AIDS is completed. Second, it is more convenient to have a sperm bank and use appropriate thawed sperm when indicated.

There is a consensus among medical professionals that keeping accurate medical records is an important part of both medical practice and quality assurance. In cases of gamete donation, it is also crucial for the follow-up of the parties involved. However, not all sperm banks keep records of their donors. The increased pressure on the anonymity of the donor, combined with the shortage of semen donors, has resulted in selective record keeping. In many countries, record keeping considers the nature of the information to be maintained about the parties involved in the gamete donation program. In these countries identifying (full name, address, date of birth, etc.) and nonidentifying (physical and ethnic characteristics, medical history, social characteristics, etc.) information is stored separately. Access to nonidentifying information is easy, while identifying material may be released in extreme situations according to the legislation in a specific country. For example, the French and British centers maintain such records. However, the survey did not address this matter.

Payment for Sperm Donation

Most international ethical committees' statements stressed that semen donors should not be reimbursed for their donation. However, most studies show that donors are initially attracted by the opportunity to earn a significant amount of money. The severe shortage of semen donors has generated an increased interest in the motivations of donors and potential donors. A solution to this ethical and practical dilemma was found in countries that decided to pay only for time and expenses directly associated with the donation.

The American Fertility Society guidelines of 1994 state that the donors should be compensated for the direct and indirect expenses associated with their participation, their inconvenience and time, and to some degree, the risk and discomfort undertaken. However, commercial sperm banks still exist in the United States. As our survey shows, sperm donors were directly compensated in all countries except France (7), but the amount of money paid to donors differed significantly from country to country. This difference was the result of the eco-

nomic status of the particular country at the time of the survey.

The Child

At present, many countries have not yet established legislation pertaining to the various aspects of sperm donation. However, our survey showed that in all these countries, the legitimate status of the offspring is guaranteed. When the consenting husband is present he is listed on the birth certificate and has the rights and duties of child rearing.

There are two questions concerning the child's right to know. First, the child's legitimate father is not his/her biological father, so should the child be told of the donor insemination? Second, what is the offspring's right to trace his/her biological origin? In contrast to society's attitude to adopted children, in the case of sperm donation the procedure is protected by maximum secrecy and the children are not informed as to how they were conceived and who their natural fathers are. In Germany, Austria, New Zealand, Slovenia, England, Australia, and Canada, it is recommended that the child be informed that he/she was conceived by donor insemination usually by age 14 or 18 years. Regulations and legislation of sperm donation in ART have not yet recognized the right of the child to trace his/her biological origins.

Conclusions

Sperm donation in ART is practiced in may countries. However, with recent developments in micromanipulation techniques, indications for sperm donation in ART are fewer and the number of patients in ART who are treated with sperm donation is continuously being decreased and can be expected to continue to decrease in the future. Nevertheless, the indication for sperm donation to single women is increasing.

The idea of a third party (the physician and ART team) intervening in the natural process of procreation was the reason for the strong objection during the first years of IVF treatment in many societies. Sperm donation in ART is the intervention of another party—the donor. All the parties involved—recipient, husband, donor, physician, and child—have some interests in common but, as previously mentioned, have several opposing interests. Dealing with sperm donation in ART raises several legal and ethical dilemmas. However, society has no choice but to face these dilemmas and establish a clear set of regulations and legislation in each country. These laws will define each party involved in the procedure, especially the child's status.

REFERENCES

1. Schenker JG: Jewish and Moslem aspects of IVF and ET. Ann NY Acad Sci 1985;442:601–607
2. Dickens BM: Reproductive health care policies around the world. Legislative approaches to assisted reproduction. J Assist Reprod Genet 1994;11:327–331
3. Schenker JG: Sperm, oocyte, and pre-embryo donation. J Assist Reprod Genet 1995;12:499–508
4. Schenker JG: Ovum donation: Ethical and legal aspects. J Assist Reprod Genet 1992;9:411–418
5. Pennings G: Should donors have the right to decide who receives their gametes? Hum Reprod 1995;10:2736–2740
6. Meirow D, Schenker JG: Sperm donation—Should the use of frozen-thawed semen alter treatment modalities? Int J Fertil 1993;38:325–331
7. Lansac J, Le Lannou D: Reproductive health care policies around the world. Sperm donation and practice of AID in France. J Assist Reprod Genet 1994;11:231–236

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