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## 12.1 Introduction

Assisted reproductive technologies (ART) may raise reproductive situations that create ethical issues that result in legislative action. From the beginning, advances in these technologies used for the treatment of infertility problems have created ethical problems that may eventually emerge after a certain delay. Ethical conditions may result in legislative rules that are typically decided in democracies by politicians who pass these laws. Therefore, a compromise between politics and ethics should be attempted, meaning that the majority may impose their ethical attitude on the minority. However, the majority should do it very cautiously, respecting the different moral positions leaving certain moral liberalism to the minority [1].

What does “Liberalism” mean in sense of reproductive treatments? Letting those who wish to obtain their desired treatment outside the boundaries of their own country, as long such treatment is achievable [1]. There is no unified culture in the world, even in the Western world, and not even among the different countries of the

European Union. There is no predetermined core of substantive common values among these different cultures. This diversity is to be valued and does not represent a limitation. The wish for homogeneous ethical values denies the richness of cultural, political, and ethical differences. It also impedes progress toward better regulation [1].

Along with the principle of “Liberalism” and the rights of the minority to achieve their wish to have their child by treatment outside their own country, it should be discussed whether citizens in a democracy have the right to seek treatment abroad when it is legally forbidden in their own country? This complicated question has been argued by different ethical and professional organizations during the past several years. The European Society of Human Reproduction and Embryology (ESHRE) has summarized the issue of Cross-Border Reproductive Care (CBRC) in the “ESHRE Task Force on Ethics and Law 15” [2]. In addition to other issues, this task force has addressed whether a patient has the right to get treatment abroad when it is legally forbidden in their own country, stating “Recent developments have attributed more value to reproductive autonomy, therefore, transgression [of local legislative restrictions] is justified as long as safety, efficacy and welfare of the patient and future child is considered” [2]. This cautious principle given by one of the leading societies in the field of reproduction opens the official door for medical tourism, a topic that was unofficial for a long period previously.

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## 12.2 What Should “Reproductive Tourism” Be Called?

Since the whole idea of people traveling outside their countries to seek medical aid was and still is not well accepted by all the public, the description of the phenomenon has substantial importance. There is controversy regarding the appropriate title and description for “Reproductive Tourism.” Appropriate terminology is important in framing the semantics of public debates and policy making.

The first definition of transborder reproductive care was created by the ethicist Guido Pennings, who called it “medical tourism” [3]. Since the phenomenon of medical tourism has increased in many fields of medicine, Pennings suggested 2 years later that the term “reproductive tourism” be used to differentiate patients seeking assistance in reproduction outside the borders of their own countries from other patients seeking care for treatment in other medical field [1].

Mattoras as well as Inhorn and Patrizio were of the opinion that the description “reproductive tourism” implies fun, holidays, and leisure. It sounds like a “gimmick” that could create a mockery of the medical condition and suffering of infertile people who are seeking medical care [4, 5]. These authors have suggested the term “reproductive exile.” The term exile reflects the forced removal from your native country or voluntary absence to seek medical treatment. Where medical treatment is required because of legislative restrictions, the term “exile” described may most accurately reflect the feeling of the patient.

The definition “cross-border reproductive care” (CBRC) was suggested again by Pennings to avoid the negative connotation of tourism [6]. The title CBRC is an objective and descriptive one and does not involve feelings or connotation. Cross-Border Reproductive Care also coincides with the term “cross-border health care”, which was used by the Commission of the European Communities (2004) [7].

Although the CRBC is well respected by most sectors, some concern has been raised regarding this approach for reproduction options, including

an article by Rose and Rose (2003) in *The Guardian* newspaper [8]. They protested against the inequality of access to such treatment options. Although it is possible for patients from highly regulated countries to go to less regulated countries, access to such treatment clearly requires resources that may not be available to the average citizen. Therefore, it may be considered unjust and discriminatory.

## 12.3 Rationale for Reproductive Tourism

Reproductive tourism is most commonly accessed because of the lack of options for treatments in the country of origin of the patients. An argument for CBRC can be made when treatment is prohibited because the procedures are locally prohibited from ethical or religious limitations such as donation of gametes or surrogacy; when characteristics of the treatment unfit parenthood such as postmenopausal woman or homosexuals. If a procedure in some countries is estimated to be unsafe such as oocyte freezing or cytoplasmic transfer. Or treatment is unavailable due to lack of expertise such as preimplantation diagnosis (PGD). Long waiting lists to access reproductive treatments or excessive treatment cost in their country of origin are other reasons to access reproductive tourism. Finally, individuals may wish to access reproductive options to maintain privacy from family or friends and thereby seek care outside their country (Table 12.1).

**Table 12.1** The main reasons for reproductive tourism

Status in the country of origin	Examples
Treatment is prohibited due to ethically or religiously unacceptable procedure	Donor gametes, gendering
Characteristics unfit to parenthood	Postmenopausal, gay orientation
Procedure is considered unsafe	Oocyte freezing, cytoplasmic transfer
Unavailable treatment due to lack of expertise	PGD
Long waiting list	Egg donation
Cost too high	
Individuals who wish to keep their privacy	Donor gametes, any ART

## 12.4 Forbidden Procedures in Different Countries

Table 12.2 shows the forbidden procedures across Europe [9]. Access to ART is forbidden for single women and lesbians in France (Table 12.2). The Netherlands will not permit ART treatment to be performed in women beyond the age of 41 years. In Turkey, female patients more than 40 years of age cannot be treated with assisted reproduction. Sperm donation is not possible in Turkey and is not permitted in France for single women and lesbians. Oocyte donation is not permitted in Germany, Norway, and Turkey. Testicular biopsy and testicular aspiration were prohibited until recently in The Netherlands and are now limited to only two clinics. Since 2007, such treatments are only considered as part of a research program. Preimplantation genetic diagnosis (PGD) is only allowed in The Netherlands at one center (Maastricht) and in Germany it can only be performed on polar bodies. Surrogacy

**Table 12.2** Forbidden procedures across Europe

Forbidden procedures	Countries	Limitations
Access to ART	France	Single women, lesbians
	NL	Age > 41
	Turkey	Age > 39
Sperm donation	France	Single women, lesbians
	Turkey	
Oocyte donation	Germany	
	Italy	
	Norway	
	Turkey	
TESE/PESA	NL	Limited to only two clinics Since 2007—part of research program
PGD	Germany	Permitted only in PB Except for: one center (Maastricht)—BRCA
	NL	
Surrogacy	Germany	
	Norway	
	Spain	
	Turkey	
Embryo freezing	Italy	
	Germany	

is prohibited in Germany, Norway, Spain, and Turkey; embryo freezing is forbidden in Italy and Germany.

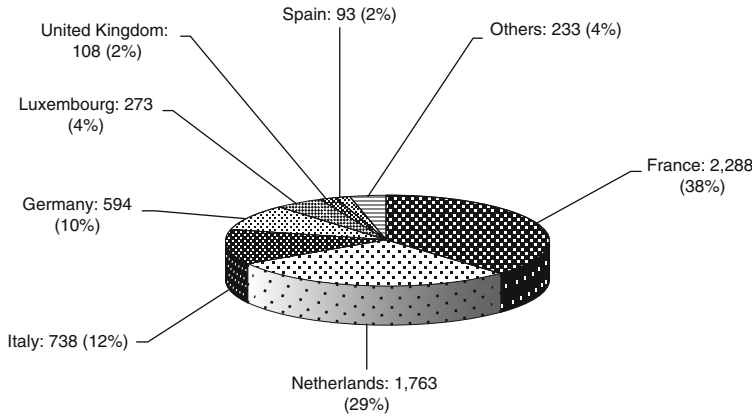
Donation of gametes and surrogacy is forbidden in most Islamic countries. In the USA, regulations vary from state to state. In some states, surrogacy is permitted, while in others it is forbidden. More recently, some countries have permitted gamete donation only when the donor is known to the recipient or can be known to the child born following the gamete donation. This option is not accepted by some gamete recipients who prefer anonymity of their donors and so they may prefer reproductive tourism over the possibility to be treated in their own country.

## 12.5 Frequency of Cross-Border Reproductive Care

No routine collection of data allow accurate quantification of the extent of medical tourism, so there is a lack of information about the type, quality, and quantity of CBRC, which is performed. Medical tourism is estimated to represent 7–10 % of all assisted reproductive treatments worldwide. This speculated estimation was provided by John Collins from Canada, in 2009, during the “First International Meeting of Cross-Border Reproductive Care” in Ottawa [10].

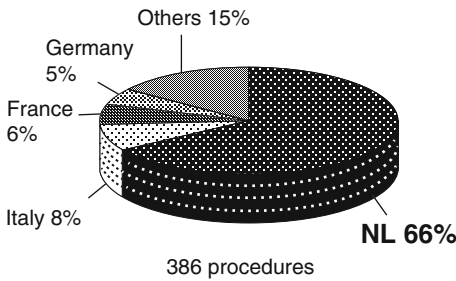
Belgium is the only country in which information about CBRC performance within its border is routinely available. During the year 1999, 30 % of the ART cycles, 60 % of the egg recipients, and 50 % of the PGD treatment cycles were done on non-Belgian patients [11].

In 2003, 20 % of 11,245 ART cycles were performed on patients outside Belgium, 15 % of 14,795 in 2004, and 18 % of 95,177 cycles during the years 2005–2007 [11]. Figure 12.1 shows the number of foreign patients per nationality coming to Belgium during the years 2005–2007 (Fig. 12.1) [9]. Figure 12.2 shows the distribution of patients seeking treatment in Belgium according to treatment and nationality (Fig. 12.2) [9].

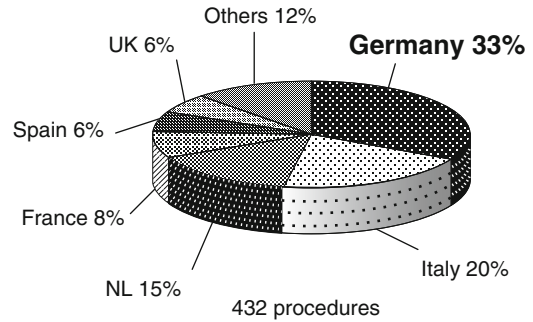


**Fig. 12.1** Number of foreign patients per nationality treated in Belgium from 2005 to 2007. The total number of foreign patients treated in that time period was 6,090 (reproduced with permission from Pennings et al. [9])

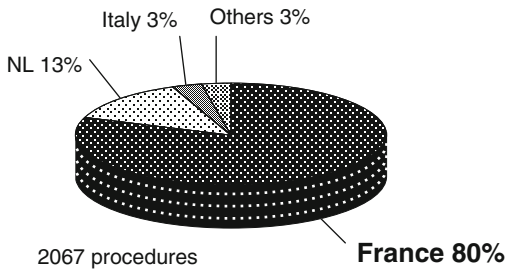
**a ICSI with non-ejaculated sperm**



**b Preimplantation Genetic Diagnosis**



**c Sperm donation**



**Fig. 12.2** Foreign patients treated in Belgium from 2005 to 2007 according to the type of treatment performed (reproduced with permission from Pennings et al. [9])

**12.6 Medical and Ethical Concerns in Reproductive Tourism**

Over years and with the increasing use of CBRC, medical and ethical concerns became more evident and have created increasing discussion in published literature and in scientific meetings.

The University College Hospital in London has reported on the impact of CBRC on maternity services [12]. The authors have demonstrated that high-order multiple pregnancies ( $\geq 3$ ) have dramatically increased during the years 1996–2006, associated with British patients being treated with IVF services outside of the UK. Out of 56 women seen with high-order pregnancies at the

University College Hospital, another 20 women with such pregnancies were seen for couples treated outside the UK. This caused a 36 % increased frequency of high-order multiple pregnancies during this period of time. In essence, the strict regulations on the number of the transferred embryos in the country of origin may frequently be circumvented if treatment is performed outside the country's borders.

The main ethical problems in the field of reproductive tourism are related to egg donation and surrogacy, which are commonly performed by CBRC. Egg donation involves two main problems, the financial—trade one and the risk of exploitation of vulnerable individuals in poor countries. The European Parliament resolution on the trade in human egg cells (sitting of 10.03.2005) stated that “Harvesting of egg cells poses a high medical risk to the life and health of women, resulting from hyperstimulation of the ovaries” [13]. The parliament “Wishes to see egg cell donation, like organ donation generally, strictly regulated in order to protect both donors and recipients and to tackle all forms of human exploitation.” Therefore, “Article 12 makes clear that payment other than compensation, for cell and tissue donations in Europe is not accepted and that cells and tissues must not as such be a subject to trade.”

They continue with their statement stating that “This provision leaves responsibility for authorizing and setting the levels of compensation within the framework of the Directives in question to the member state.” Therefore, it is understandable that compensation to the egg donor vary from country to country. For instance, the following rates of payments appear in official places like in the Web site of “Human Fertilisation Embryology Authority” (HFEA) mentions a compensation of £55 per day till a maximum of £250. The Israeli law of egg donation mentions the compensation of 10,000 NIS (equivalent to 2000 €) to the donor, which has to be paid by the recipient via the administration of the hospital [14, 15]. The expenses of the treatment itself are covered by the medical insurance. These are the only official fees mentioned written. The compensations in the different countries normally will vary between some hundreds of Euros

(mainly in the Eastern European Countries) up to couple of thousands of US Dollars in the USA.

The most concerning issue about “compensation to the egg donor” is the difference between “compensation” and “payment.” The expression “compensation” may relax our or societies’ consciousness that excess payment occurs, which may unduly influence donor’s motivation to participate in oocyte donation. On the other hand, altruism may not provide adequate potential oocyte donors to provide gametes.

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## 12.7 Recent Trends in Reproductive Tourism

The activity of oocyte donation and surrogacy has been concentrated in two geographical areas. Egg donation is commonly performed in centers across Eastern Europe with no information about the magnitude of the phenomenon. Far fewer cycles of egg donation are performed not only in Western Europe, mainly in Spain, but also in Belgium, Greece, UK, and some other countries to a small extent. Some states in the USA also permit and perform egg donation. Since the introduction of vitrification of oocytes with a high survival rate after their warming, egg banks have been created in large centers that perform egg donation. This fact enables couples to bypass synchronization of the recipient with the treatment cycle of the donor. It also permits the recipient to choose the timing for selection of a specific donor that she and/or the couple desires.

Surrogacy is rapidly increasing in frequency in India and Thailand. In India, commercial surrogacy was legalized in 2002 to promote reproductive tourism [16]. Since many countries in Europe do not permit surrogacy, and UK law dictates that surrogacy must be driven by altruism, many patients find their way to India where surrogacy is accessible and relatively cheap. The Indian Council of Medical Research tries to regulate the centers but permits the transfer of up to three embryos to the surrogate and provides limited practice guidelines. Therefore, there is little medical advice to guide to clinicians who help to produce more than 25,000 children who are now thought to be born [16]. The authorities in

Thailand see medical tourism as an opportunity for their health system, since this demands from the health services better health quality environments and integrated development as well as novel medical therapeutics [17].

On the other hand, the fact that both countries have many centers of surrogacy brings again people from the Ethics and Health Authorities to condemn the “traditional stratified world” rather than to have in this era of globalization a “flat world” [18]. The seeking by patients in high-income nations of surrogate mothers in low-income nations, particularly India, presents a set of largely unexamined ethical challenges [19].

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## 12.8 Best Practice Guidelines for Cross-Border Reproductive Care

So far, ESHRE is the only medical society that provides clear guidance for centers and physicians providing fertility treatment to foreign patients [20, 21]. This guide aims to ensure high-quality and safe-assisted reproduction treatment, taking into account the patients, their future child, and the interests of third-party collaborators such as gametes donors and surrogates. This is achieved by including considerations of equity, safety, efficiency, effectiveness (including evidence-based care), timeliness, and patient centeredness. ESHRE deals with the ethical principles of CBRC, which are mentioned in the beginning of this chapter. Likewise, it deals with the consequences of CBRC and the professional responsibilities. ESHRE mentions the risk of exploitation of vulnerable females in the population of poor countries, especially when dealing with egg donors and surrogate mothers. Another consequence can also be the increase of fees of the treatments to the moment that these treatments will become inaccessible to local patients of those countries.

Side by side, ESHRE expresses the responsibility of the physicians to supply the full information and make sure that the standard of treatment is good. ESHRE Task Force also mentions that fee splitting is unacceptable to prevent referrals for financial reasons.

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## 12.9 Summary

CBRC cannot be stopped. With the globalization and the easy accessibility, this phenomenon will only increase. There is a clear correlation between legal prohibitions in patient’s country of origin and the number of patients who travel abroad. Therefore, societies and lawmakers should meet from time to time and examine whether old restrictions in their own countries should still be in power, or new views and attitudes can implement new and more liberal legislations in order to reduce the intensity of reproductive tourism from their countries.

These issues have to be handled in full transparency and only legally, preferably following open discussions in ethical committees and parliaments. A system of certification may be introduced to guarantee safety and effectiveness of treatment. Health systems in the countries of origin and countries of the egg donors and surrogate mothers should control the CBRC and follow them in national database systems. In this manner, the patients using the CBRC and the donors and surrogates will feel safe and protected together with good standard of treatment, which will be provided by the medical centers.

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