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Cross-border reproductive care

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Case History 1: *A 43-year-old infertile woman and her 54-year-old husband would like to have a baby. In their home country, IVF treatment is covered by insurance but not reimbursed if the woman is above 40. If they decide to have IVF treatment in their home country, they have to pay out of pocket. To reduce costs, they wanted to travel abroad for a cheaper IVF treatment.*

Case History 2: *A middle-aged wife and her husband have three daughters. They want to have a son for family balancing due to cultural reasons. They are advised to do sex selection with IVF and PGT abroad because this procedure is not allowed in their home country.*

Case History 3: *A 44-year-old woman, single and now infertile because of her age, traveled abroad to get embryo donation because these procedures are not allowed for single women in her home country. After undergoing IVF abroad, she got pregnant with triplets and returned to her home country to complete her pregnancy and delivery. Unfortunately, she had preterm labor. The preterm babies needed expensive neonatal ICU service for some weeks before being discharged from the hospital.*

Case History 4: *A prepubertal girl is diagnosed with leukemia. Her hemato-oncology team recommends freezing her ovarian tissue for fertility preservation before initiation of chemotherapy to avoid risks of related gonadotoxicity and premature ovarian failure. However, the girl and her parents are advised to travel abroad because ovarian tissue freezing is not available in their home country.*

Background

As shown in the Cases Histories above, many people travel abroad to obtain fertility treatment. This growing phenomenon, defined as cross-border reproductive care (CBRC), is also known as fertility tourism, reproductive tourism, procreative tourism, transnational reproduction, reproductive travel (reprotravel) or reproductive exile. The most common forms of

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fertility treatments provided within CBRC are assisted reproductive technologies (ART), namely IVF and ICSI, for many indications. These include third-party reproduction (sperm donation, egg donation, embryo donation, and commercial gestational surrogacy); preimplantation genetic testing (PGT); sex selection through IVF and PGT; and fertility preservation (cryopreservation of gametes, embryos and gonadal tissue). Various groups may seek fertility treatments through CBRC, such as infertile couples, singles, children, lesbian, gay, bisexual, transgender, queer, intersex (LGBTQI), and men and women of advanced age. The main reasons for CBRC are legal restrictions, high costs and lack of availability of high-quality treatment in home countries. In many countries, some forms of fertility treatments are not allowed by law or not accepted ethically and religiously by the society. Also, in many countries, most fertility treatments are inadequately reimbursed or not reimbursed at all, and hence offered as out-of-pocket services with high prices. Therefore, many patients travel abroad for fertility treatments to reduce costs, protect their privacy, access higher quality care or to circumvent restrictive laws [1–8]. Due to its complex nature and implications worldwide, CBRC has become an emerging dilemma on the global healthcare agenda and yet little is known about its magnitude and scope.

Management options

Global CBRC markets

Worldwide, there are huge differences in the medical, legal, economic, and cultural conditions leading to CBRC. The major global markets or hubs for the CBRC industry are: (1) Belgium, Israel and Jordan for IVF, (2) Denmark for sperm donation, (3) Spain and Czech Republic for egg and embryo donation, (4) Russia and the US for commercial surrogacy (given that India has now removed itself from this market), (5) the US, United Arab Emirates and Jordan for PGT and sex selection and (6) Denmark, Belgium, Germany and the US for medical and elective fertility preservation [1–5].

CBRC and third-party reproduction

Third-party reproduction (sperm, egg, and embryo donation and commercial surrogacy) is one of the most common forms of CBRC because it is not allowed by law in many countries. As an industry, CBRC involves many different parties, including patients, doctors, brokers, as well as donors and surrogates (Figure 113.1). Each of those parties has its own goals and corresponding ethical and social dilemmas as well. In general, CBRC often involves relatively wealthy patients, the "fertility tourists," and relatively poor donors and surrogates through a process facilitated by brokers with treatments carried out by doctors in clinics abroad [1–5].

Patients

During their reproductive journeys abroad, infertile patients may face some ethical dilemmas concerning autonomy, dignity, justice, discrimination, patient rights, benefit and harm [1–4]. The heterogeneity of potential CBRC patients usually opens critical debates on whether a society is "liberal" in its attitudes toward LGBTQI and other groups' civil rights [10]. The Ethics Committee of the American Society for Reproductive Medicine (ASRM) encourages programs to treat all requests for assisted reproduction equally without regard to marital/partner status or sexual orientation [11]. However, the committee strongly discourages egg or embryo donation to women over age 55 [12].

Doctors

The main ethical dilemma concerning doctors in the CBRC industry are those related to informed consent, confidentiality and supplier-induced demand [1–4]

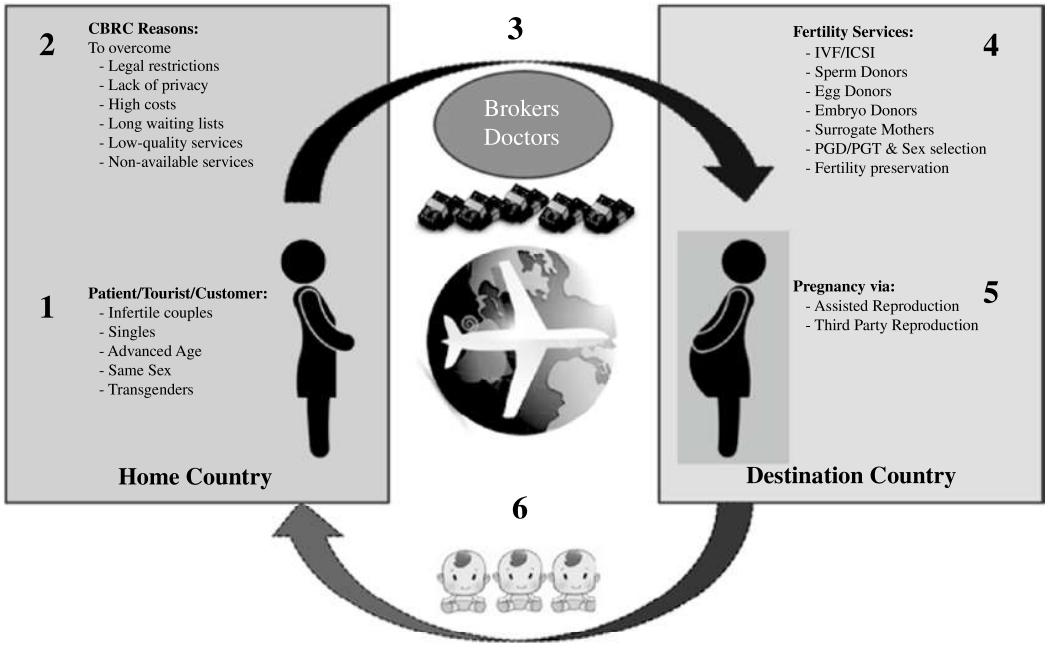

Figure 113.1 Cross-border reproductive care (CBRC) cycle as a complex global phenomenon. (1) Different groups seeking CBRC. (2) Reasons of CBRC. (3) Intermediaries of CBRC including paid brokers and doctors abroad. (4) Fertility services provided as CBRC in the destination country. (5) Pregnancies achieved in CBRC via assisted or third-party reproduction. (6) Take-home baby outcome of CBRC with increased incidence of multiple pregnancy. Adapted from Salama et al 2018 [1] with permission of Springer Nature.

Brokers

The main ethical dilemmas concerning brokers are those related to the financial exploitation of donors and surrogates as well as CBRC patients. Also, confidentiality and transparency about brokers' activities may be questionable. Being part of the CBRC industry, brokers or agencies have commercial pressures to provide the desired final product, healthy newborns to their customers, in return for profit within a certain period of time. Unfortunately, the negative effects of those commercial pressures can be transmitted directly to the patients and to the women who donate their eggs or serve as surrogates. Examples of these negative effects include limited medical and social care during treatments, after giving birth, or in cases of serious maternal or fetal complications. Also, CBRC brokers or agencies may take advantage of the financial needs of poor societies and encourage disadvantaged women to participate in commercial egg donation and surrogacy programs. In these circumstances, brokers may exploit donors and surrogates as well as infertile patients in order to make more profit [1–4]

Donors and surrogates

The main ethical dilemmas concerning donors and surrogates are exploitation, parental rights, anonymity, baby selling and child/minor abuse. It is important to mention that the legal and ethical conditions regarding donors and surrogates are still complicated in many countries around the globe [1–5].

CBRC and emerging fertility services

Sex selection for nonmedical reasons (family balancing) is an ongoing ethical debate in many societies worldwide, including the US. Recently, the ASRM Ethics Committee has published a committee opinion to outline arguments for and against the use of PGT technology for sex selection for nonmedical reasons [13].

Fertility preservation techniques (cryopreservation of gametes, embryos and gonadal tissue) for

medical reasons do not usually raise ethical debates except when combined with gamete donation or surrogacy. Other ethical concerns may be generated when experimental procedures are offered to cancer patients, especially to children, such as ovarian or testicular tissue cryopreservation [14–15]. The ASRM Ethics Committee published a comprehensive opinion on fertility preservation and reproduction in cancer patients facing gonadotoxic therapies [16]. In addition, fertility preservation for nonmedical reasons such as elective or planned egg freezing may raise new debates due to medical, social, and cultural reasons [17–18].

Prevention

CBRC is a growing reality worldwide with many benefits. Nevertheless, it carries some potential inherent risks as well, and these need to be explored, addressed and prevented. The risks include unclear information, supplier-induced demand, increased multiple pregnancy rates with increased costs incurred later in the home country, shifting of scarce medical resources from the public to private sector in the destination country and, of course, exploitation of patients, donors and surrogates. In order to increase harmonization and reduce any kind of exploitation, it is critical to evaluate the medical, legal, economic, and ethical issues surrounding CBRC. For that reason, international organizations have recently begun to collect data and set general guidelines for CBRC. Examples of such international organizations are ASRM, the European Society of Human Reproduction and Embryology (ESHRE), International Committee Monitoring Assisted Reproductive Technologies (ICMART), and International Federation of Fertility Societies (IFFS). However, standardization of data collection and establishment of reliable national and global registries are still needed in order to determine the accurate magnitude and scope of CBRC worldwide [1–9].

Key points

Challenge: Cross-border reproductive care (CBRC).

Background:

- There is a growing number of people travelling abroad to obtain fertility treatments, mainly ART.
- CBRC patients could be infertile couples, singles, couples with advanced age, same sex couples or transgenders.
- CBRC is usually done to overcome legal/cultural restrictions, lack of privacy, high costs, long waiting lists, low-quality of services or nonavailability of services in the home country.
- The fertility services required include IVF/ICSI, gamete or embryo donation, surrogacy, sex selection and fertility preservation.

Management options:

- CBRC patients may face some ethical dilemmas concerning autonomy, dignity, justice, discrimination, patient rights, benefit and harm.
- The main ethical dilemma concerning doctors in the CBRC industry are those related to informed consent, confidentiality and supplier-induced demand.
- The main ethical dilemmas concerning brokers are those related to the financial exploitation of donors and surrogates as well as CBRC patients. Also, confidentiality and transparency about brokers' activities may be questionable.
- The main ethical dilemmas concerning donors and surrogates are exploitation, parental rights, anonymity, baby selling and child/minor abuse.

Prevention:

- CBRC is a growing reality worldwide with many benefits, but carries some potential inherent risks as well, and these need to be explored, addressed and prevented.
- It is very crucial to regulate the global market of CBRC on medical, legal, economic and ethical bases in order to increase harmonization and reduce any forms of exploitation
- International organizations (such as ASRM, ESHRE, ICMART and IFFS) have recently begun to collect data and set general guidelines for CBRC.
- Establishment of accurate international statistics and a global registry will help diminish the current information gap surrounding the CBRC phenomenon.

Answers to questions patients ask

Q1 ***What should I know before travelling for CBRC?***

A1. You should not just rely on the internet as the main source of information about CBRC. You should consult your reproductive medicine doctors in your home country and get proper recommendations regarding the most suitable CBRC destination and treatment for you.

Q2 ***How can I protect myself from any risks related to CBRC?***

A2. You should keep in touch with your reproductive medicine doctors in your home country and inform them regularly about your CBRC treatment progress. Any medical complications abroad should be reported immediately.

Q3 ***What should I do when I go back to my home country after CBRC?***

A3. After CBRC treatment, you should see your reproductive medicine doctor in your home country as soon as possible. You should also provide all documents and reports related to your treatment abroad.

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