The global landscape of cross-border reproductive care: twenty key findings for the new millennium

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Purpose of review
Cross-border reproductive care (CBRC), also known as procreative tourism, fertility tourism, or reproductive tourism, is an increasing global phenomenon. This article reviews the expanding scholarly literature on CBRC, with 2010–2011 representing watershed years for CBRC scholarship and activism.

Recent findings
Terminological debates, missing data, and lack of international monitoring plague the study of CBRC. Nonetheless, it is widely acknowledged that CBRC is a growing industry, with new global hubs, new intermediaries, new media, and new spaces of interaction. Religious bans and legal restrictions have created a patchwork of ‘restrictive’ and ‘permissive’ countries, with law evasion being a primary driver of CBRC. Yet, patient motivations for CBRC are diverse and patients’ levels of satisfaction with CBRC and its outcomes are generally high. Thus, scholarly concern with CBRC as law evasion must be tempered with qualitative studies of positive patient experiences.

Summary
CBRC can be considered a form of ‘global gynecology’ in which reproductive medicine, tourism, and commerce are converging in the second decade of the new millennium.

Keywords
cross-border reproductive care, fertility tourism, reproductive tourism

INTRODUCTION
Two decades have passed since the term ‘procreative tourism’ was first coined by Knoppers and LeBris [1]. Since then, the term has evolved into ‘cross-border reproductive care’ (CBRC), and the practice itself is thought to be increasing exponentially [2,3,4,5]. The years 2010–2011 were watersheds for CBRC scholarship and activism. A major meeting of CBRC scholars was held at the University of Cambridge in December 2010, leading to the publication of a special issue of Reproductive Biomedicine Online on ‘cross-border reproductive care’ (volume 23). A comprehensive review of the existing CBRC literature (n = 51; nine published empirical studies, six emerging empirical studies, 36 scholarly commentaries) was also published in the same journal by Hudson et al. [2]. Finally, the European Society for Human Reproduction and Embryology (ESHRE) Cross-border Reproductive Care Task force published a ‘Good Practice Guide for CBRC’, designed to guide gynecologists in providing assisted reproductive technology (ART) services to incoming and outgoing travelers [6]. With this background in mind, our major goal in this review is to highlight what we believe to be the key empirical findings from this growing body of literature, now that CBRC is entering its third decade of recognized existence. What do the emerging studies on CBRC tell us? Here, we believe, are the 20 key findings.

Terminological debates
As suggested by the abstract of this article, a terminological debate has arisen over how to describe the search for ARTs across national and international borders. Most social scientists favor some version of ‘fertility tourism’ (aka procreative tourism, reproductive tourism) [2,3,4,7,8], whereas the ART
establishment, including ESHRE, now favors the more neutral term ‘cross-border reproductive care’ [9,10**,11]. Other neutral terms include ‘reproductive travel’ and ‘transnational reproduction’ [12–14]. However, critics suggest that ‘reproductive exile’ more closely mirrors ART patients’ experiences of ‘forced’ reproductive travel [15,16]. Whether reproductive travelers should be called ‘patients’ has also been questioned, as many travelers are not infertile [2**]. Single women and men wanting children, as well as gay couples hoping to become parents, are traveling abroad for ARTs and surrogacy [4**]. Furthermore, whether CBRC truly involves ‘care’ has been questioned by psychologists and feminist scholars, who point to the potential for trauma, abuse, and exploitation of both the recipients of CBRC, as well as the donors and surrogates, who are often anonymous [17–21,22**].

**Subset of medical tourism**

Proponents of the term ‘fertility tourism’ argue that the term ‘tourism’ signals the connection to the larger field of medical tourism, in which patients seek healthcare across international borders [4**,23]. In addition to CBRC, major forms of medical tourism include tourism for organ transplants, therapeutic stem cells, orthopedics (e.g., joint replacements), dentistry, cosmetic surgery, and sexual reassignment surgery. Fertility tourism exists as a subset of this larger global phenomenon [4**,24].

**Missing data**

Despite the existence of this burgeoning global industry, relatively little is known about the scope of medical tourism more generally or CBRC/fertility tourism more specifically. The largest empirical study of CBRC to date was carried out in 2008–2009 by Shenfield et al. [10**]. The study involved 46 clinics in six CBRC destination countries in Europe (Belgium, Czech Republic, Denmark, Switzerland, Slovenia, Spain) and involved 1230 completed patient questionnaires. The study estimated between 24,000–30,000 CBRC cycles in Europe each year, involving between 11,000–14,000 patients. Smaller scale qualitative studies from around the world are beginning to emerge, especially for Europe [7,13,25–28], Asia [14,29], and the Middle East [30–33,34**], most of them conducted by anthropologists. However, both quantitative and qualitative studies are still needed, given the massive global scope of this phenomenon. Hence, many commentators are calling for additional empirical research, ideally of a multisited nature [2**,4**].

**Minimal international monitoring**

To date, only one study has begun to capture the international scope of CBRC [35**]. As part of an international data collection process for the IVF World Reports, Nygren et al. [35**] collected data on ‘outgoing’ treatment cycles from 11 countries, estimating that more than 5000 CBRC cycles were performed on these patients in more than 25 countries. Of 15 ‘recipient’ countries reporting, an estimated 7000 couples traveled from nearly 40 countries to receive CBRC. However, the authors acknowledge that these data are incomplete and largely estimates. In general, the absence of any kind of global registry and the minimal international monitoring of CBRC poses problems in the collection of reliable international CBRC statistics [2**].

**Assisted reproductive technology absences**

CBRC is being fueled by the absence of ART services in some countries [36]. Parts of the globe – including Euro-America, Latin America, South, East, and Southeast Asia, and the Middle East – now have well developed ART industries and, in some cases, have become major receiving sites for CBRC [4**]. On the contrary, ART clinics are largely absent in much of sub-Saharan Africa, Central Asia, Oceania, and many former Soviet-bloc countries [36–38]. Outgoing CBRC reflects these ART absences, especially among educated elites traveling abroad in hopes of conception.

**Growth of a cross-border reproductive care industry**

Although CBRC has existed from the moment of inception of the first IVF cycles in England [39], CBRC has expanded dramatically over the ensuing
three decades. The growth of CBRC as a global phenomenon is reflected in the growth of a CBRC industry, including commercial infrastructures designed to support CBRC travelers and the clinics providing CBRC services [4**,40]. Major international congresses on CBRC have occurred in Vienna in 2010 and Spain in 2011, and London hosted its own ‘Fertility Show’ in 2010, where CBRC patients and practitioners were encouraged to meet. CBRC is part of what Debora Spar has called an international ‘baby business’ [41]. CBRC represents the convergence of commerce, medicine, and tourism, and is being promoted as such by national governments in some countries (e.g., India, Thailand) [12,24,42].

New cross-border reproductive care brokers
With the growth of a CBRC industry has come the addition of new intermediaries, who are often referred to as CBRC ‘brokers’ [27]. In the United States, companies called Planet Hospital and Global IVF advertise their assistance in placing American couples in reliable ART and surrogacy clinics overseas. In addition, individual intermediaries may be involved in smaller scale enterprises, often between specific clinics in specific countries (e.g., the USA and Czech Republic) [27]. Little is known about these CBRC brokers, their services, and their forms of remuneration, suggesting the need for further research in this commercial domain.

The internet and other novel cross-border reproductive care sites
CBRC brokers are often accessed through the internet, which has become patients’ major avenue of CBRC information collection and exchange [43]. Studies suggest that most patients seeking CBRC acquire information through the internet, although a subset of patients is referred directly by clinicians [2**]. Thus, the internet has become a major ‘virtual site’ of CBRC activity. In addition, new physical sites of CBRC interaction include hotels and hostels catering to reproductive travelers [27], as well as new maternity waiting homes in which surrogates commissioned by international couples may spend part or all of their pregnancies [44]. This is especially true in India, which has been dubbed the international ‘mother destination’ of commercial gestational surrogacy [45].

Cross-border reproductive care hubs
It is now clear that particular locations such as India are becoming global ‘hubs’ of CBRC. Four countries are widely acknowledged in this regard: Belgium, initially for intracytoplasmic sperm injection (ICSI), which was invented there, and later for its wide range of ART services [46,47*]; Spain for oocyte donation [16,25]; Denmark for sperm donation [48]; and India for commercial gestational surrogacy [44,45,49]. However, other countries, such as Thailand in Southeast Asia [12,14,29,50], and Iran and Dubai in the Middle East [8,23,31–33,34**], are also becoming known as regional hubs of CBRC activity.

New cross-border reproductive care media
The existence of these global CBRC hubs has been documented by the media, with increasing studies on CBRC since the year 2000 [2**,4**] Although much of the reporting is sensationalized, presenting caricatures based on individual cases, some mainstream media, including the New York Times, The Wall Street Journal, and the BBC, have attempted to provide accurate portrayals of CBRC and the motivations of reproductive travelers. In addition, three compelling documentary films on CBRC have appeared in recent years. Two focus on commercial gestational surrogacy in India (‘Made in India’, ‘Google Baby’), and one focuses on Costa Rica’s legal ban on IVF (‘Beautiful Sin’), leading some infertile Costa Ricans to seek ARTs across Latin America.

The power of religion
The Costa Rican case highlights the power of religion to affect ART services and thus fuel CBRC. Namely, the Costa Rican Catholic Church allied with North American pro-life activists to lobby successfully for a Supreme Court-imposed ban on IVF in the country. In Italy, Catholic lobbying led to the imposition of a restrictive ART law in 2004, which completely banned any form of gamete donation and surrogacy, fueling outgoing CBRC from that country for these reasons [28,33,51]. In the Muslim countries, Sunni religious authorities have disallowed all forms of third-party donation and surrogacy, leading some Muslim patients to less restrictive Shia-dominant Lebanon and Iran [31–33,34**].

Legal restrictions
One Sunni-dominant Muslim country, Turkey, has recently enacted the world’s first legislation banning CBRC [52]. The 2010 law prohibits Turkish citizens from using donor gametes or surrogates and from going abroad for reproductive treatment. Although the law is unenforceable and largely symbolic, it is one of many national laws aimed at ART
restriction [53,54]. Indeed, the world of CBRC is now marked by a patchwork of ‘restrictive’ and ‘permissive’ countries [54,55]. This is true even in Europe, where patients from relatively restrictive countries (e.g., France, Germany, Great Britain, Italy, Norway), travel to relatively permissive countries (e.g., Belgium, Denmark, Greece, the Netherlands, Spain) [55,56]. In North America, Canadians travel to the United States especially to obtain surrogacy [57]. The USA is also a surrogacy destination for couples from Europe and Asia, and within the USA, couples may travel for surrogacy services across state borders (e.g., from New York, where commercial surrogacy is illegal, to Connecticut, where it is permitted) [8]. To date, attempts at cross-national legal harmonization remain limited, although ESHRE convened a meeting to discuss this issue in 2007 [58].

**Law evasion and entanglements**

Law evasion is perhaps the single most important driver of CBRC worldwide [55,56]. Legal restrictions are many and varied, but may involve age limitations; compulsory heterosexuality and marriage of commissioning couples; prohibitions on gamete donation and surrogacy; maximum embryo transfer guidelines; and patients’ freedom from diseases and disabilities. Furthermore, the practice of CBRC itself is leading to a variety of new legal entanglements, particularly surrounding legal parenthood and the legal recognition of the children born through CBRC [59]. Because the legal dimensions of CBRC are many and varied, scholars are currently imploring further attention to this important domain [59].

**Patient motivations**

Law evasion is not the sole factor fueling CBRC. Four broad categories of patient motivation, encompassing 10 different reasons, have been identified in the literature: legal and religious prohibitions (laws and religious bans, denial of treatment to certain categories of persons); resource considerations (high costs, lack of expertise and equipment, resource shortages, and waiting lists); quality and safety concerns (low-quality or unsafe care, low success rates); and personal preferences (desires for cultural competency, proximity to support networks, privacy concerns) [4**

**Rigors of travel**

Despite these many reasons to undertake CBRC, patients often describe the rigors of travel, including disruptions in employment, the need for multiple forms of documentation (e.g., medical records, passports and visas, birth certificates), the expenses of long-term accommodation, and the physical and logistical stresses of hormonal treatment and monitoring while in transit [15,32,60]. Because CBRC is considered by many patients to be physically demanding, emotionally draining, and economically taxing, patients often express desires to access legal, affordable, and successful ART services ‘at home’ [30]. Many patients critique the notion of ‘tourism’ in describing their own travel [15], and some express anger at their governments for restricting the ART services they need [28].

**Return reproductive tourism**

In some cases, CBRC does, in fact, involve a ‘holiday’, especially for expatriates and labor migrants returning to their home countries [61]. The term ‘return reproductive tourism’ has been coined to capture this new phenomenon of home-country ART seeking among dispersed diasporic populations [30]. Although these ‘IVF holidays’ back home may be difficult because of the ART cycle itself, as well as the desires to maintain secrecy from family and friends, such return reproductive tourism may also be comforting for reasons of language, religion, and increased trust in home-country ART services.

**Patient satisfaction**

Although the difficulties, stresses, and negative consequences of CBRC are real, studies have nonetheless recorded relatively high levels of patient satisfaction with CBRC [2**,10**,59]. Positive attributes reported by patients include the increased availability of donors, shorter waiting times, lower costs, and cultural and linguistic competency of providers [7,8,12,25,29]. This is especially true when CBRC results in successful conception across borders [61].

**Sex-selective cross-border reproductive care**

Successful conception is a relative term. In some cases, couples are undertaking CBRC for the purposes of nonmedical sex selection, via IVF or ICSI with preimplantation genetic diagnosis (PGD). New studies of CBRC from Asia report a worrying trend of son preference/daughter discrimination through PGD [50]. Anecdotal studies from the Middle East also confirm that ‘family balancing’ is usually undertaken in the quest for male offspring [34**

These gender-selective trends accompanying CBRC must be followed as PGD becomes increasingly available around the globe.
Secrecy, anonymity, and confidentiality

One of the difficult aspects of studying CBRC is the cloak of secrecy surrounding this phenomenon in most parts of the world [24]. Because CBRC often involves law evasion and possible legal consequences for patients and practitioners, it is often carried out in an atmosphere of secrecy [56]. Furthermore, gamete donors and surrogates generally remain anonymous within CBRC [19,22**]. ARTs themselves may be stigmatized, leading to patient desires for confidentiality [34**,61]. In short, CBRC generally remains a ‘hidden world’, with real ethical and legal ramifications. Researchers must be sensitive to these issues, and develop new ways to study CBRC while still respecting the rights of all parties involved in the process [4**].

Three policy options

Because of these worrisome legal and ethical realities, three policy responses to CBRC have been recommended [2**]: abolition of CBRC, making the practice illegal, as in Turkey [52]; regulatory harmonization, thereby reducing the need for patients to move from one country to another [55]; and harm reduction, involving an international code of professional practice and an international clinic accreditation system [6*]. Of these three approaches, the third is receiving the most attention, with the ESHRE Task Force on cross border reproductive care taking the lead in this regard [11]. Shenfield outlines the development of the ESHRE Good Practice Guide, as well as ESHRE’s hopes for its implementation [6*].

CONCLUSION

Whether it is called fertility tourism or CBRC, reproduction sans frontières is here to stay in the second decade of the new millennium [39]. There is much scholarly work to be done in documenting this growing form of ‘global gynecology’. In this article, we have attempted to distill 20 key findings from the most recent CBRC literature. The literature suggests that CBRC is increasing in a variety of global sites, often resulting from home-country legal restrictions. Although scholars worry about CBRC as a form of law evasion, patients are generally satisfied with their CBRC experiences and outcomes, especially those who are able to conceive the babies of their dreams.

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Conflicts of interest

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There are no conflicts of interest.

REFERENCES AND RECOMMENDED READING

Papers of particular interest, published within the annual period of review, have been highlighted as:
- of special interest
- of outstanding interest

Additional references related to this topic can also be found in the Current World Literature section in this issue (p. 195).

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