Cross-border reproductive care in North America: a pilot study testing a prospective data collection program for in vitro fertilization clinics in Canada and the United States

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Objective: To develop and test a nonidentifying prospective data collection system for cross-border reproductive care (CBRC) in Canada and the United States (U.S.).
Design: Survey and cross-sectional study.
Setting: Fertility clinics.
Patient(s): Women traveling to and from Canada and the U.S. for reproductive care.
Intervention(s): None.
Main Outcome Measure(s): Patients' home country, reason for crossing borders, and type of care received.
Result(s): Of 32 Canadian and 440 U.S. clinics contacted, seven and 46, respectively, responded to the initial questionnaire. Three out of seven Canadian and 44 out of 46 U.S. clinics reported providing CBRC. Seventy five percent agreed that nonidentifying data on country of origin and reason for travel should be collected. However, only one of seven Canadian and none of 46 U.S. clinics that expressed initial interest actually collected data, despite multiple communications.
Conclusion(s): Although CBRC is a major component of assisted reproductive technology in North America (3%–10% of IVF cycles are provided to out-of-country patients in Canada and the U.S.), clinicians are not motivated to collect the simplest of data regarding CBRC patients. Despite this, reliable data are needed to help better understand the reasons for and impact of CBRC. (Fertil Steril® 2016;105:786–90. ©2016 by American Society for Reproductive Medicine.)
Key Words: Cross-border reproductive care, outcome data, ICMART, reproductive ethics

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Cross border reproductive care (CBRC) is a growing international phenomenon (1). It has been estimated that ~5% or more of North American and European reproductive health care involves patients from other countries (2). Although there are many reasons for CBRC, for United States (U.S.) patients, it occurs most often because medical care is less expensive abroad (3). For Canadians, as in countries such as France, Germany, and Italy, CBRC is driven largely by restrictive law, particularly the ban on payment to gamete donors. As a result, patients needing donor-egg IVF frequently seek care in the U.S. For other countries with national health plans, additional reasons might be wait times for certain elective procedures or perceived higher quality in selected elective or other services (4, 5). In many countries, religious, cultural, legal, and/or policy barriers also prevent

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access to the service (6–14). In addition to individuals seeking CBRC, there are now programs organized by some payers and others to obtain care overseas (15–18).

Recent studies of the international prevalence of infertility suggest that it affects some 9% (reported as current infertility) or 16% (reported as life-time infertility) of couples of reproductive age groups (19, 20). This means that ~80 million women worldwide, half a million Canadian, 4 million U.S., and 6 million European women suffer from the disease of infertility (21). Because this number is so large, even a small percentage seeking CBRC represents a large number of women.

Despite the importance and global scale of CBRC, relatively few data are available detailing its practice and growth. A European Society for Human Reproduction and Embryology (ESHRE)–sponsored collaborative study conducted in 2008–2009 provided some useful insight into the complex CBRC picture in Europe, but less is known about the phenomenon in North America (22). The International Committee Monitoring Assisted Reproductive Technologies (ICMART), which publishes the global data on access, effectiveness, and safety of IVF, presented on cross-border care between Canada and the U.S. at the first government-sponsored meeting on this topic and then published information on CBRC in 2009 (23, 24). However, ongoing prospective data collection remains an unmet priority. The study reported here was performed in an attempt to gather additional specific information about CBRC in North America and lay a foundation for prospective data collection on this continent.

MATERIALS AND METHODS

Ethical approval for the study was obtained from the Western Institutional Review Board. The Canadian Fertility and Andrology Society (CFAS) and Society for Assisted Reproductive Technology (SART) were sent the survey, asked to and approved, and distributed the survey by e-mail to all the clinics in their respective countries under the auspices of ICMART. The letter provided a link to a brief online survey and data collection form. Centers were asked if they would participate in prospective data collection for 3 months to identify patients who came to their clinic from across a national border. Clinics were asked to evaluate the CBRC questionnaire that they were asked to complete.

Centers that responded in the affirmative to the questionnaire were then contacted by e-mail and phone. They were asked to collect nonidentifying summary data on all patients coming to them from other countries during the months of October through December 2012. The three data fields to be collected were: patient's home country; reason for crossing borders; and type of care received. During those three months, clinics that had agreed to participate were again contacted approximately monthly to ask about their progress and to encourage participation and submission of data prospectively. After 3 months the results were analyzed.

RESULTS

Four hundred forty U.S. and 32 Canadian clinics were contacted by e-mail by SART and CFAS, respectively. Forty-six U.S. and seven Canadian clinics responded to the email: 44 of the 46 responding U.S. clinics and three of the seven responding Canadian clinics reported providing CBRC. Seventy-five percent of these clinics agreed that nonidentifying data on country of origin and reason for travel should be collected. The responses of the clinics responding to the e-mail communication are presented in Tables 1–3.

After receiving these responses, we asked the clinics to prospectively collect and report the number of cases of CBRC seen. However, despite multiple communications with all of these clinics over the 3-month course of the study, none of the U.S. clinics and only one of the seven Canadian clinics that expressed initial interest actually collected data and returned their summary form.

DISCUSSION

It was notable that only 22% of Canadian and 10% of U.S. clinics responded to the initial e-mail communication and answered the four simple questions about CBRC, despite the survey being approved by CFAS and SART and distributed by ICMART. Only three of seven responding Canadian clinics (43%) actually did CBRC, whereas almost all responding U.S. clinics (96%) did. Of those responding, an encouraging 75% agreed that nonidentifying data on country of origin and reason for travel should be collected. All of the cited reasons except "scientific interest" were considered to be important by these respondents. Twenty clinics did not respond to this question (Table 1).

Fourteen of 15 respondents who did not agree that these data should be collected were from the U.S. Of these, >90% thought that data collection was unimportant to the quality of medical care (Table 2). The majority of clinicians who thought that data collection through SART and CFAS was not necessary came from the U.S. (Table 3). Finally, the majority of clinicians (four out of five) who thought that the data requested were too detailed also came from the U.S.

Unfortunately, this low response is consistent with earlier efforts to collect data on CBRC, with the exception of one study from Europe (2, 4, 8, 22,25–27). Shenfeld et al. were able to secure prospective data from 46 ART centers in six European countries, and reported on a total of 1,230 ART

TABLE 1

Question 1: If applicable, please tell us why you agree that basic nonidentifying data should be collected. (Check all options that apply.)

Reason	n	%
It is important to improve quality of medical care	29	57
It is important to develop guidelines for the provision of CBRC	22	63
It is important to develop effective policies regarding CBRC	23	66
It is important for scientific reasons	12	34
It is useful for practitioners to understand the evolution of CBRC in terms of volume and travel	27	77
Skipped/not applicable	20	

Note: CBRC = cross-border reproductive care.

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