



Demographic Profile of Travellers Seeking Reproductive Tourism Services

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Authors' contributions

Author RD conceptualized the project and wrote initial draft. Author SD conducted data collection and analyses. Both authors reviewed the final manuscript.

Original Research Article

Received 2nd June 2014
Accepted 26th June 2014
Published 12th July 2014

ABSTRACT

Reproductive medical tourism is by some accounts a multibillion dollar industry globally. Transnationally, it involves the travel between nations of individuals seeking assisted reproductive technologies in foreign countries. Through a structured literature review, we identified the demographic characteristics of those seeking these services. Data from 14 peer-reviewed studies were synthesized. Most studies described travel within Europe, with Belgium being the destination most often cited. Key findings include that those travelling for reproductive purposes are typically over 35 years of age, likely to self-identify as homosexual, bisexual or transgendered. The most frequently mentioned reason for travel was the lack of appropriate services in the home country.

Keywords: ART; IVF; surrogacy; globalization; demographics; reproduction.

1. INTRODUCTION

Reproductive tourism (RT) is an emerging, ethically problematic phenomenon at the interface between commerce and clinical care. Defined as “the traveling of [clients] from their country of residence to another country in order to receive a specific treatment or to exercise personal reproductive choice”, [1] it typically involves the seeking of assisted reproductive technologies (ARTs), including in vitro fertilization (IVF), intracytoplasmic sperm injection (ICSI), pre-implantation genetic diagnosis (PGD), gamete donation, and maternal surrogacy.

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While this accelerating industry has loci in the USA, Eastern Europe, Latin America and Southeast Asia, India is thought to be the world's greatest provider of surrogate mothers, and is accelerating its provision of other ART services. The Indian industry is likely worth \$500 million [2] to \$2.3 billion [3].

Within Europe, travel for cross-border reproductive care is known to be vibrant, with several studies focusing solely on the European phenomenon. On the global stage, it is anecdotally known that India attracts clientele from many different countries, and may actively seek patients from higher income countries [4]. Not much is known of clients' motivations for travel for ART. But it has been suggested that a combination of legal and pricing restrictions in the source countries and the openness of services in destination countries are likely incentives [5], as well as the desire for same-sex couples to start families.

With this study, we reviewed the published literature to summarize what is known about the demographic characteristics and motivations of international ART seekers.

2. METHODS

We searched the Pub Med database for all instances, abbreviations and combinations of the following terms: reproductive tourism, tour, travel, assisted reproduction, cross border reproductive care, in vitro fertilization, pre-implantation genetic diagnosis, demographics, fertility, statistics.

Reference lists from each paper were also searched. Articles' titles and abstracts were scanned for relevance, with the entirety of the contents of resulting papers assessed by two raters for further relevance. Only papers reporting original data were included.

Descriptions of ART clientele and their motivations were extracted from each study, and the resulting data grouped according to themes: Description of traveller, Destination of travel, and Purpose of travel.

3. RESULTS

The searched terms resulted in 1038 articles, which were narrowed down to 30 based upon title and abstract review. Of these, 14 were found to be relevant by both raters.

A summary of findings according to the aforementioned themes is presented in Table 1.

Table 1. Summary of findings from review of 14 studies, grouped according to theme

Description of traveller	Reference	Cases
Middle aged (35 years+)	[6-11]	6: n = n/a, 7: n = 34.9% (aged 40 or older), 8: n = n/a 9: n = 93% (aged 30 or older), 10: n = n/a, 11: n = n/a
Single (unmarried)	[6,7,12,13,14]	6: n = n/a, 7: n = 6.1% of sample, 12: n = 6 (12% of sample), 13: n = 4 (18% of sample), 14: n = 6 (15% of sample)
Married or co-habiting	[7,8,11,12]	7: n = 93.9% of sample, 8: n = n/a, 11: n = n/a 12: n = 44 (86% of sample)
Homosexual / Bisexual / Transgendered	[6,12,13,14]	6: n = n/a, 12: n = 1 (2% of sample), 13: n = 5 (23% of sample), 14: n = 1 (2% of sample)
Heterosexual	[12,13,14]	12: n = 50 (98% of sample), 13: n = 13 (59% of sample) 14: n = 34 (83% of sample),
Educated	[7,12,14]	7: n = 87.2%, 12: n = 51 (100% of sample), 14: n = n/a
Previous failed fertility in home country	[6,9]	6: n = n/a, 9: n = 86% of sample
Destination of travel		
Within Europe, destination Belgium	[6-8,11,13,15]	6: n = 2,288 (38% of sample) from France; n = 1,763 (29%) from Netherlands; n = 738 (12%) from Italy; n = 594 (10%) from Germany; n = 273 (4%) from Luxembourg; n = 108 (2%) from UK; n = 93 (2%) from Spain; n = 233 (4%), 7: n = 29.7% of sample, 8: n = n/a 11: n = n/a, 13: n = n/a, 15: n = n/a,

Table 1 Continued.....

Description of traveller	Reference	Cases
Within Europe, destination Spain	[7, 8,11-13,15]	7: n = 15.7% of sample, 8: n = n/a, 11: n = n/a 12: n = 18 (36% of sample), 13: n = n/a, 15: n = n/a
Within Europe, destination Czech Republic	[7,11,13]	7: n = 20.5% of sample, 11: n = n/a, 13: n = n/a
Within Europe, destination Denmark	[7,8,13,15]	7: n = 12.5% of sample, 8: n = n/a, 13: n = n/a, 15: n = n/a
From Europe to North America	[8,12,16]	8: n = n/a, 12: n = 5 (10% of sample), 16: n =582 (32% of sample)
Within North America	[9,11,16]	9: n = n/a. 11: n = n/a, 16: n = 335 (50% of sample)
To India	[11,15]	11: n = n/a, 15: n = n/a
Purpose of travel		
Lack of availability of services in home country	[6,7,9-11,14, 15,17-18]	6: n =29% of sample 7: n = n/a 9: n = 12 (48% of sample) 10: n = n/a 11: n = n/a 14: n = n/a 15: n = n/a 17: n = n/a 18: n = n/a
Legal restrictions in home country	[1,6,7,8,10, 11,13,15,17]	1: n = n/a 6: n = 64% of sample 7: n = 54.8% of sample 8: n = n/a 10: n = n/a 11: n = n/a 13: n = n/a 15: n = n/a 17: n = n/a

Table 1 Continued.....

Description of traveller	Reference	Cases
Long wait times and other access issues in home country	[1,6,7,9,10, 14,17,18]	6: n =33% of sample 1: n = n/a 7: n = 7% of sample 9: n = 15 (60% of sample) 10: n = n/a 14: n = n/a 17: n = n/a 18: n = n/a
Cost too high in home country	[1,6,9,10,12, 14,17,18]	1: n = n/a 6: n =17% 9: n = 12 (48% of sample) 11: n = n/a 12: n = 13 (22% of sample) 14: n = n/a 17: n = n/a 18: n = n/a
Inability to receive services in home country due to demographic exclusions	[1,6,8,10,13,17]	6: n = 79% of sample 8: n = n/a 18: n = n/a 10: n = n/a 13: n = n/a 17: n = n/a
Perception of superior quality of care abroad	[7,9,12,14,15, 17,18]	7: n = 43.2% of sample 9: n = 12 (48% of sample) 12: n = 12 (20% of sample) 14: n = n/a 15: n = n/a 17: n = n/a 18: n = n/a
Gamete donor shortages in home country	[9,12,14]	9: n = 18 (72% of sample) 12: n = 27 (46% of sample) 14: n = n/a
Previous unsatisfactory experience in home country	[7,12,14]	7: n = 29.1% of sample 12: n = 7 (12% of sample) 14: n = n/a
Other reasons (eg, personal connection to destination country)	[8,11,14,15,17,18]	8: n = n/a 11: n = n/a 14: n = n/a 15: n = n/a 17: n = n/a 18: n = n/a

4. DISCUSSION

In terms of raw numbers of travellers profiled, a plurality were described as homosexual, bisexual or transgendered. But these findings were explored in only 3 of the examined papers. Meanwhile, a majority of studies explored travel within Europe alone, most frequently to Belgium. And a lack of suitable or acceptable services at home appears to be the prime motivator for international travel for ART.

Obviously, these results may be more indicative of the priorities of researchers, who can choose the study population upon which to focus, than necessarily of the true trends of cross-border travel for ART. But as there is no conclusive study objectively seeking to apply a degree of epidemiological surveillance to this phenomenon, a literature synthesis approach is as yet our best attempt to gauge this phenomenon. It is nonetheless curious that so few studies captured the trend of clients travelling to India, which is the focus of most international ART profiles in the lay media.

Most interesting is the sense that limitations within the home country are the driver for travel. Colloquially, it has been suggested that economic considerations were most prominent, with the reduced rates offered by India's advanced reproductive tourism industry being particularly attractive [4]. However, this is not entirely unforeseen, as our previous work has indicated that the elimination of legislative barriers may play a role in the evolution of a domestic reproductive tourism industry [19]. Similarly, Shenfield et al. [7] found that "legal reasons were predominant for patients travelling from Italy, Germany, France, Norway and Sweden". Statutes concerning ART vary widely across all nations, even those with close economic and cultural ties, [20] such as the nations of Western Europe. It should be pointed out that "legal reasons" for travel include not only a desire to seek services not legally available in the home country, but also the seeking of services deemed inaccessible for demographic reasons (e.g., patient age, sexual orientation, or civil status).

A thorough study by Culley et al. [12] found that British subjects specifically had "complex" reasons for seeking ART abroad. These reasons included timely treatment with donor gametes, reduced cost and higher success rates abroad, and interestingly the less stressful environment perceived to be associated with foreign clinics. It stands to reason that compulsions will vary depending upon both the culture and country of origin of the travellers and the nature of the destination country. Some destinations may be perceived to be less stressful than others, perhaps due to their association with vacation experiences. Thus, it would be interesting to examine the motivations of travellers from more diverse parts of the world, including low income countries, who seek services in both developing and wealthier nations.

Our exclusion of maternal surrogacy from the list of search terms employed likely reduced the number of studies found describing travel to India, which is best known for its provision of surrogate mothers. Given the rapid expansion of that country's reproductive technology services, [4] it seems likely that a future studies on this topic will see a heightened Indian presence in those results.

5. CONCLUSION

Publication activity on the nature of travellers seeking international reproductive technology services is clustered about those of a particular demographic bent seeking services within

Europe, and who are motivated by the lack of available services domestically. If these results are reflective of the true profile of travellers, then they suggest the existence of a substantial portion of individuals being excluded from appropriate reproductive services within their home countries.

CONSENT

Not applicable.

ETHICAL APPROVAL

Not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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