attached to the same region of the oocyte and remained attached during the time of the experiment. At the moment of contact the sperm intracellular Ca²⁺ raised, this increase was more noticeable in the flagellar midpiece. We demonstrated that NAADP raises sperm intracellular Ca²⁺ and that this change was sensitive to the TPC specific inhibitor (NED-19). NED-19 is a fluorescent compound, we took advantage of this property, to indirectly localize TPC channels in sperm.

**Conclusions:** We recorded for the first time, sperm calcium dynamics during the first contact between the oocyte and the sperm. We also showed the presence of TPC channels in human sperm and demonstrated that NAADP mobilize calcium in these cells.

**POSTER VIEWING SESSION**

**CROSS BORDER REPRODUCTIVE CARE**

**P-065 Infertility patients’ motivations for and experiences of cross border reproductive care (CBRC): a preliminary report**

S. Lui¹, E. Blyth¹

¹University of Huddersfield, School of Human and Health Sciences, Huddersfield, United Kingdom

**Introduction:** Cross border reproductive care (CBRC) is a growing phenomenon and attracting increasing interest in the media, among stakeholders and regulatory bodies. Shenfield et al. (2010) estimated that annually 24 to 30,000 CBRC cycles took place within Europe involving 11 to 14,000 patients. Based on international ongoing treatment cycles, Nygren et al (2010) estimated that over 5,000 CBRC cycles are performed in more than 25 countries. Many patients have raised concerns about their treatment including the quality assurance, safety requirements and treatment standards (Blyth, 2010; Infertility Network UK, 2009). Higher order multiple births from CBRC also pose an increasing challenge not only to the individual and to families, but also to health care providers (McKelvey et al., 2009).

Little is known about patients’ experience of CBRC. Empirical research into CBRC has mainly comprised surveys. Against this background this qualitative study aimed to explore the infertility patients’ motivations for and experiences of CBRC.

**Methods:** Participants were recruited from 2 Infertility Support Group websites between 1.4.2010 – 31.10.2010. 59 enquiries were received and 26 participants (22 female and 4 male) - 15 from the UK, 4 USA, 3 Ireland, 2 Canada, 1 France, 1 Hong Kong and 1 Tanzania - completed the asynchronous 8 question email interview.

**Results:**

**Demographic information**

The average age of the participants was 40.6. 24 participants were white, 1 African, and 1 mixed Asian and white. 61.5% had postgraduate qualification and 76.9% were in employment. 17 (65.4%) participants were in a heterosexual relationship and 9 (34.6%) were single women. 16 (61.5%) participants had achieved a pregnancy resulting from CBRC treatment. The most popular destinations for CBRC were Spain (30.8%), USA (26.9%) and the Czech Republic (11.5%).

**Participants’ positive experiences of CBRC:**

i. achieved pregnancy
ii. received good clinical care
iii. good patient information provision by CBRC clinics
iv. smooth transition from CBRC treatment to home obstetric care
v. enjoyed the CBRC country (e.g., short break)

**Participants’ negative experiences of CBRC:**

i. some language and cross cultural difficulties
ii. treatment expectations sometimes not met
iii. concerns regarding clinical risks
iv. legal issues in home country especially in CBRC surrogacy treatment
v. heavy emotional investment
vi. concealed treatment from family and friends
vii. unanswered questions (i.e., why donor agreed to donation or share their egg with the participants?)

Some CBRC participants had contemplated adoption as an option however they felt the process of adoption posed difficulties.

All participants felt they had made the right decision to seek CBRC.

**Conclusion:** CBRC poses an increasing challenge for patients to make well-informed decisions for their treatment. This study found patients motivated by personal and financial factors when seeking CBRC treatment. Patients experienced both positive and negative experience when seeking CBRC treatment.

**P-066 Cross-border reproductive care and psychological distress**

E. Chua¹, G. Lasheresa², N. Mallorqui³, M. Boada¹, I. Rodriguez¹, A. Veiga³

¹Institut Universitari Dexeus, Reproductive Medicine, Barcelona, Spain
²Institut Universitari Dexeus, Psychiatry and Psychology, Barcelona, Spain
³Institut Universitari Dexeus, Epidemiology and Statistics, Barcelona, Spain

**Introduction:** Cross-border (CB) reproductive care refers to the travelling of patients to foreign countries in order to obtain fertility treatment. The reasons for travelling are legal restrictions, inaccessibility to the treatments due to the characteristics of the patients, unavailability of specific techniques and economic issues.

This phenomenon has shown to be associated with a risk of psychological distress (anxiety, depression) that should be taken into consideration. The aim of this study is to determine if seeking for treatment abroad is associated with a higher risk of anxiety and/or depression in CB patients when compared with local patients and if CB patients present a specific differential personality profile.

**Material and Methods:** Transversal analytical observational study conducted between January and April 2009 and between January and September 2010. The week previous to the transfer, patients from IVF and Oocyte donation filled out a self-administered structured interview (socio-demographic characteristics, reproductive background, psychiatric history and cross-border issues and responded to validated questionnaires to determine medical anxiety (STAI-E) (0-60), depression level (BDI) and personality profile (ZKPQ) (personality dimensions: Neuroticism-Anxiety, Activity, Sociability, Impulsive Sensation Seeking, Aggression-Hostility).

**Statistical analysis:** T- test or Wilcoxon Mann-Whitney test were used to compare means between groups and Pearson Chi Square test was used to compare proportions.

ANOVA was used to compare personality profile items. All tests were bilateral with a significance level set to $\alpha = 0.05$.

**Results:** A total of 163 questionnaires was analysed (73 CB patients and 90 local patients). In the CB group, 36 patients performed IVF with their own oocytes and 37 with donated oocytes, while in the local group, 54 were treated with IVF and 36 were oocyte recipients.

Both groups were homogeneous regarding socio-demographic characteristics: age (CB patients: $39.9 \pm 5.1$ vs. local patients: $38.8 \pm 5.0$), marital status, sexual orientation and education. A higher level of unemployment was observed in the local when compared to CB patients (10% vs.1.4%; $p < 0.05$.

We observed that the CB group had a higher average of previous ART cycles, with IVF and 36 were oocyte recipients.

Both groups were homogeneous regarding socio-demographic characteristics: age (CB patients: $39.9 \pm 5.1$ vs. local patients: $38.8 \pm 5.0$), marital status, sexual orientation and education. A higher level of unemployment was observed in the local when compared to CB patients (10% vs.1.4%; $p < 0.05$).

No significant differences were found between groups when comparing personal psychiatric history.
Thirty two point nine percent (24/73) referred to psychological discomfort related to travelling and being treated abroad, problems related to financial expenses (36%, 5/73) and job related problems (11%, 8/73).

The average level of anxiety was significantly higher in CB patients (STAI-E:24.9 ± 8.6 vs. 19.9 ± 10.2; p < 0.05). Specifically, CB oocyte recipients showed a STAI-E average significantly higher than local recipients (27.1 ± 6.8 vs. 18.7 ± 10.5p < 0.05).

In the personality profile, significant differences were found only in the activity scale where this is higher in CB patients.

**Conclusions:** Our findings show that 1/3 of CB patients refer to psychological discomfort related to financial problems and absence at work. This fact together with reproductive background, as well as the need for donors’ oocytes, could explain a higher level of anxiety in CB patients. Depression is found in a considerable percentage in both groups of patients.

It seems necessary to develop psychopathological screening methods for CB patients in order to increase the safety and quality of CBRC.

Reference


**P-067 Prosecuting for cross-border reproductive care: the morality of extraterritorial legislation**

W. Van Hooft1, G. Pennings1

1. Universiteit Gent, Bioethics Institute Ghent, Gent, Belgium

**Introduction:** Turkey has recently become the first state to ban reproductive travel in pursuit of donor gametes. Several states in Australia have enacted or are considering laws that prohibit international commercial surrogacy. The only widespread extraterritorial regulation of private life concerns female genital cutting (FGC), sex with children and (largely in the past) abortion. We consider whether such regulation is morally justifiable in the case of cross-border reproductive care (CBRC). In general, extraterritoriality is only justifiable if an act causes significant harm or violates a fundamental right.

**Material and Methods:** We rely on a double consistency argument. 1) When a state issues a law to prohibit a certain act because it causes significant harm or because it violates a fundamental right, it should try to prevent and/or punish these acts when performed abroad by its citizens. 2) When the state adopts certain measures to prevent cross-border crimes, it should do the same for other acts that share the same morally relevant dimensions.

The second consistency argument is developed through analogical reasoning. There are important reasons to regulate medically assisted reproduction, including the welfare of the future offspring, the commercialisation of bodies or body material, the protection of and respect for the embryo and the moral view on family formation and reproduction. We found extraterritorial laws that are justified by similar reasons: 1) abortion laws express respect for the embryo and foetus, 2) sex with children laws intend to protect children from abuse, and 3) female genital cutting involves respect for women and their rights. If we can establish that an ART application shares some relevant characteristics with the paradigm, the rule of the paradigm (i.e., extraterritoriality) should also be applied to the ART case.

However, there are significant dissimilarities as well. Sex with children and the extensive forms of FGC are never acceptable because they always cause significant harm or violate fundamental rights. In the case of CBRC, there is a possibility for good regulation which minimizes possible harms and there are on-going disputes about whether fundamental rights are violated. Unlike FGC and sex with children, practices like commercial surrogacy, gamete donation and other instances of CBRC are not intrinsically wrong.

**Conclusions:** Our first consistency argument identifies extraterritorial legislation as a justifiable tool to regulate conduct: if an act is morally wrong, it does not matter where it takes place. However, the dissimilarity in the analogies we scrutinise for our second consistency argument shows that extraterritoriality is a radical position that is inappropriate in the case of CBRC. While the majority in a democratic society may have the political right to impose legislation on private life (e.g. no gamete donation because of religious beliefs), such restrictions may still be morally unjustifiable. Rather than turning to extraterritorial measures against CBRC, territoriality and legal diversity can ensure the presence of a safety valve for the minority. As long as CBRC does not cause unavoidable harm or violate fundamental rights, it is recommendable for a state to be tolerant.