

VESELIN MITROVIĆ

PARENTS' RELIGIOUS AND SECULAR PERSPECTIVES
ON IVF PLANNING IN SERBIA

Veselin Mitrović

University of Belgrade, Faculty of Philosophy, Serbia.

Email: vmitrovi@f.bg.ac.rs

Abstract: The social and institutional background of this research can be summarized as the relation between public and governmental policies on the one hand, and the experience of patients and IVF experts on the other. Namely, one third of all pregnancies achieved in state-funded in vitro fertilizations (IVF) obscure some ethical and health issues, especially among patients who abandon the state-funded IVF programme in Serbia. The goal of the current research is to identify, describe and understand ethical and social issues that parents encounter in attempts to fulfil their idea of a sovereign (parental) life through IVF. The method comprised a tri-level analysis based on semi-structured interviews with participants who exhibit personal experiences of basic ethical principles and social and health needs within IVF. The results obtained indicate that all three explored levels of patients' experience build a picture of Assisted Reproductive Technology (ART) as a means of a sovereign or good (parental) life. However, the cultural image of the fulfilment of expected parental social roles resulted in a denial of autonomy and led to self-abnegation through silent acceptance of unethical practices. There is an overlap of the margins of secular ideas and roles on the one hand, and religiosity on the other, making such consent socially acceptable and more easily explainable.

Finally, the conclusion reached is that apparently a decrease in sovereignty of parental decisions causes a loss of trust in state clinics and medical procedures, reduces solidarity (as both a religious and secular social value) and establishes norms and patterns of social injustice and inequality.

Key Words: reproductive rights, altruism, IVF, applied ethics, Serbia, patients, health issues.

Introduction

To a greater or lesser degree, in one organizational form or another, the contemporary state aims to base its actions on altruism rather than solidarity and seeks to have this regulated through morality and law.¹ Altruism is understood as a “motivational state with the ultimate goal of increasing another’s welfare”.² Having that in mind, solidarity as a social value could be comprehended as a degree of altruism in competitive social systems; e.g. solidary regulated social reproduction, which provides basic rights, social protection and concern throughout the main channels of social mobility in one community.

As part of the larger culture, such an operational system is that of healthcare and social protection, which at least in South-Eastern Europe, includes a guarantee to free basic medical and social protection. The history of medicine and (bio)ethics shows that solidarity is ever less included into the fundamental idea of care and protection. Solidarity as a form of care reached its peak, in a somewhat sacral form in the Middle Ages, when social life used to unfold within a given community.³ It seems that the processes of secularisation, differentiation, professionalisation of society, while advancing the methods and instruments of treatment and protection (in medicine as in law), have at the same time forgotten that care is one of the most significant elements of altruism and of solidarity. This gradual and systemic weakening of care also manifests itself on the level of our daily lives and becomes just another way of living for certain social strata, neglecting what actually health and care mean for achieving well-being.⁴

With this in mind, apart from free basic health care, the Serbian system provides the possibility of free treatment of infertility, recognized as an illness, allowing for the fulfilment of the social role of parenthood. In addition to medical treatment and prevention of potential causes of infertility (e.g. sexually transmitted infections), the system ensures medical, legal and social conditions for conception through Assisted Reproductive Technology (ART) for partners and single women with established infertility.⁵ This option (table 1)⁶ is complemented by juridical sub-acts of the National Health Insurance Fund (NHIF) that allow for two free attempts of ART for persons who fulfil certain health or physiological requirements.⁷ In case of two unsuccessful bio-medical interventions, certain local (city) governments offer the option of paying for a third free attempt at IVF. “Consequently, from this perspective, altruism refers to one organism enhancing the reproductive advantage of another, especially at cost to itself”.⁸ Which bears the question of whether the state can personify a characteristic such as reproductive or procreative altruism. Do the individuals or couples involved in these processes reproduce this behaviour or these motives, such as donating their own

material to an anonymous couple, just for treating infertility or do they have a broader view of altruism, donating this material also for purposes of scientific research?

The city of Belgrade provided 131 free of charge, so-called “third chance” IVF attempts, and the city of Pančevo provided 9. All 140 interventions were performed at public clinics.⁹ Even though until recently Serbia did not possess either a private or public bio-repository, a social context like this promotes an image of an altruistic society.

Year	2007	2008	2009	2010	2011	2012	2013	Total
Number of procedures	699	1156	1143	1380	2166	2321	2012	10877

*Table 1 Report of the free ART (IVF from stimulation to embryo transfer):
Number of the IVF procedures covered by NHIF Serbia*

The surveys on parenthood underline the importance of the parental social role in the fulfilment of the idea of the sovereign and good life.^{10 11} Although it is very difficult to define a “good life”¹² given a specific cultural context, different persons in similar situations can have the same perception of the good and sovereign life. Such a perception does not necessarily mean that the good life is sovereign or even truly good at all. Striving for parenthood sometimes requires not only a concession of autonomy, but it might also entail a denigration of the value of parenthood in the lives of other people. It is often that the result is a quiet and gradual consent to authoritarian rather than liberal eugenics: only the stronger or chosen life ought to survive. Accordingly, this research aims to identify and comprehend ethical and social issues regarding parental autonomy and quality of life during the process of IVF. Keeping in mind that the rate of success for IVF pregnancies in Serbia is about 30%,¹³ the objectives of this study are to investigate the relation between the personal expectation regarding social altruism on the one hand, and the attitude about altruism as a social value on the other, as well as the tension between the cultural idea of the sovereign life and personal autonomy.

Method

Given the difficulties of approaching patients in clinics, the research was based on snowball sampling, covering individuals with high school education and university studies aged 32 to 44. This type of sampling and further methodological analysis followed similar studies regarding other medical issues. The choice of oral consent was of crucial importance precisely in this particular sample (patients in IVF), since signing any document would practically mean their identification in the medical treatment.¹⁴ The loss of trust that occurs due to a sense of threatened

privacy presents the greatest risk towards the principle of no harm to the subject of the questionnaire in a qualitative study. The combination of snowball sampling, written consent, in-depth interview and building specific participant profiles in a relatively small group renders the confidentiality and anonymity of the participants considerably more difficult.¹⁵ The criteria at the basis of creating this sample were a diagnosis of infertility, experience with ART and acceptance of the terms of the study. Participants also needed to be able to understand the interview questions and to give free and informed consent. Accordingly, given the qualitative research principle and the sensitive research topic,^{16 17} we expected that interviewing at least 10 participants would allow us to characterize key features of parents' experience and issues in ART procedures.

Two of the participants (P4 and P7) are men, while the remaining eight are women. Almost all participants are married or live together with their partner or children. Only one participant lives with her partner and his parents. At the moment of research, seven couples had already had children in the described way, two couples were in the process of having children, and one couple was still in the IVF process. The average age of participants was 37,9. Four participants were between the ages of 33 and 35, two were aged 44 at the time, two between 40 and 41, and two were aged 37. One man was aged 34, while the other was 37. Eight participants were from Belgrade, while the remaining two come from various cities (two different regional centres) in Serbia. During the IVF process, two women faced certain medical/surgical interventions related to their reproductive health. Full-time, permanent employment is distributed as follows: seven participants have 2 to 5 incomes in their respective families, while 3 participants are self-employed (the following participants are permanently employed full-time with 2 to 5 incomes: P1, P3, P4, P6, P7, P8, P9).

Eight of the participants hold higher education degrees and two have graduated only high school (both women). The education of the participants' parents (table 2) is particularly interesting when compared with the education level of the participants themselves. The mothers of participants P3 and P9 held a higher level of education than the fathers of the participants. The remaining eight participants hold the same or higher levels of education as compared to their parents. In four cases the parents had the same level of education as their children (P1, P2, P5 and P6), while the other four cases, the fathers had a higher level of education than the participants' mothers (P4, P7, P8 and P10). We can see that among our participants there has been a self-reproduction of social status or, as is the case of two participants (P1 and P5), an advance as compared to their parents. One of the interesting aspects of the study, discussed in the final part, represents the behaviour of precisely those female participants (P1 and P5) who come from a similar social background and who currently

have a similar social and economic status, but who hold different views towards religiosity and altruism.

All the participants in the study defined their socio-economic status as “middle”. Still, the type of employment (income, expenditure, profession etc.), living arrangement (only one participant lives with her husband and his parents, P9), as well as the origin and education level of participants, call into question the subjective perception of the participants regarding their social status (table 2). This fact is particularly significant in presenting what we have called the cultural idea of the sovereign life. It can be assumed that all the participants of the research aim toward a higher social position and/or that they are not satisfied with their current socio-economic position.

This study was based on a short sociological questionnaire followed by a semi-structured qualitative interview. The social/demographic questionnaire in the study is an abridged version of the first part of a standard sociological Serbian questionnaire.¹⁸ The aim of the section in question was solely to build basic sociological and demographic profiles of the participants (table 2).

Participants	Gender	Education Level	Education level of participants' parents		Official employment and No.	Religiosity
			Mother	Father		
P1	Female	University	High School	High School	2	Yes
P2	Female	University	University	University	1	Yes
P3	Female	High School	University	High School	2	Yes
P4	Male	University	High School	University	2	Agnostic
P5	Female	University	Elem. School	Elem. School	2	No
P6	Female	University	University	University	3	No
P7	Male	University	High School	University	2	Yes
P8	Female	University	High School	University	2	No
P9	Female	High School	University	High School	5	Yes
P10	Female	University	University	University	2	No

Table 2. Demographic features of the participants

The second phase of the study, building on the questionnaire, included a semi-structured qualitative interview with the participants. The interviews were conducted in person to ensure a climate of confidence and trust, and the location and time were scheduled at the convenience of the participants. The goal of the interviews was to further characterize the challenges encountered by participants when using ART.

The interviews were conducted in Serbian. They were audio recorded, transcribed and then analysed (coded). The coding was supported by the use of QSR Nvivo 7 qualitative analysis software, partially inspired by a previously established method.¹⁹ In the study participants are identified by letter P followed by a number.

The fact that storytelling is found in interview practices has also generated interest in a detailed look at the ways in which the story and the telling of stories can have consequences for the way in which empirical materials are analysed and theorized.²⁰ The interviewer and the respondent are actively creating meaning through the interview interaction. The respondent was seen as a narrator of a diverse, multifaceted, and emerging resource rather than the reporter of a series of facts or units of knowledge.²¹ We should keep in mind that the interviews were conducted with the former infertility patients of ART, and thus our expectation was that the storytelling would be divided in specific phases.²² For example, *I was sick/infertile*, then *I had an IVF/medical treatment* and finally *I am "healthy"/have a child*. Accordingly, given the above-described structure of the interview, three phases of codes are identified: firstly, the idea of sovereign/parental life before IVF. In this initial part we followed the life experience prior to IVF – the use of “alternative” methods or beliefs in treating infertility (e.g. teas, prayers, visits to specific monasteries etc.), communication with the partner regarding the decision of IVF, child adoption, experience with abortion and miscarriages, as well as examining the ideas of the participants about the division of artificial and natural in sexual reproduction.

Secondly, the autonomy of the participants during the ART process. The middle section of the interviews was dedicated to decisions of partners during the IVF – acceptance of donated ova/semen, or early embryos. Further, the choice of the medical institution (state-run or privately run) and the decision of using the government's subsidy program for IVF. Free choice regarding the number of returned embryos into the mother's uterus (embryo transfer), the fate of rejected embryos irrespective of their health status, the range of informed consent in cases of detected anomalies on the foetus, including the possibility of abortion.

The last portion of the interview was directed towards the (technological) understanding of (the information related to) the patient and the idea of altruism, i.e. care in Serbia. More specifically, this meant the possession of information regarding the pre-implantation of genetic diagnosis (PGD), the position on possible choices of characteristics and capacities of the child (such as genetic screening for certain diseases, eye-colour, choice of sex, athletic capacities, choice of sexual “orientation” etc.) before returning the embryo into the mother's uterus. Keeping these questions in mind, we examined the parents' positions regarding genetically determined altruism by asking a simple question: if you had the opportunity, would you determine your child to be a potential

universal donor or recipient (of, for example, blood)? In accordance with this dilemma, the parents were given a similar choice, in case they were able to have more than one child. Further, we asked about their basic knowledge regarding the difference between stem cells and mature cells, as well as their knowledge, awareness and choice when it comes to the preservation of parental blood cells. Finally, the participants were asked about their readiness, that is, willingness to donate their reproductive material, starting with the ovum and/or semen to the level of an early embryo in various situations (to various ends): for scientific purposes or for helping other couples in their own artificially supported reproduction.

This study reports only the portions referring to the qualitative data of the three aspects (see Appendix 1).

Findings and interpretation

Participants		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Religiosity		+	+	+	Agnostic	-	-	+	-	+	-
Alternative methods of treating infertility		+	+	+	+	+	+	+	-	+	-
Approval of abortion/embryo reduction		+	+	+	+	+	-	+	+	+	+
Autonomy and understanding of patient regarding IVF		-	-	-	-	-	-	+	-	-	-
Willingness to receive donated genetic material		+	+	+	+	+	+	+	-	+	+
Willingness to donate genetic material	To another couple undergoing IVF	Ovum/Semen	+	-	+	+	-	+	-	-	-
		Early embryos	+	-	+	-	+	-	-	-	-

	For scientific purposes	Ovum/Semen	+	+	+	-	+	+	+	-	-	-
		Early embryo	+	-	+	-	-	+	-	-	+	-
Genetically determined altruism of offspring regardless of the number of children			+	-	+	-	-	-	-	+	-	+

Table 3. Synthesised overview of results by level of research

Experience before IVF

In seven of the couples, (partial) infertility was detected in relation to the male member of the couple. The decision about ART was in all cases made on the initiative of the woman. All female participants preferred IVF to adoption. The participants’ image of parenthood is mostly described as “spiritual” and fulfilling, and for the female participants, sometimes even more important than marriage. Only in one case (P5) we found asymmetric feelings/consequences presented, e.g. restricted freedom for quotidian personal choice and the increased cost of living.

Alternative methods in healing infertility

Five participants declared themselves as religious (P1, P2, P3, P7, P9). They described their religiosity as belonging to the Serbian Orthodox Church (SOC), as well as practicing their family saint day. On the other hand, these participants also noted that their church and liturgy attendance was irregular. The remaining four participants declared themselves non-religious (P5, P6, P8, P10). Participant P4 is agnostic.

The religious participants (P1, P2, P3, P7, and P9) pointed out that they have used one or both given alternative methods of curing infertility (Table 4). With her husband, participant P1 made several visits to monasteries that are traditionally known for curing issues of infertility. Similarly, participant P2 made several visits to the church of St. Petka (St. Paraskeva) in Kalemegdan (Belgrade's city fortress). It is important to note that as a female saint, St. Petka is perceived as a protector of women, thus there is a belief among young women that visiting this temple can have a positive effect on fertility. Participant P2 said that during these visits, apart from offering marital and parental advice, the priest also read

prayers for fertility. Asked how she decided on that specific church, she said:

“My Brother-in-law knows this priest, he is a monk to whom they confess. I see that they are not inclined towards IVF, because it is simply not natural, they made some comments to some acquaintances of ours that maybe twins are ok, but triples are not natural. The church gets angry, I mean, erm, gets angry, they disapprove of the process of selection in IVF (embryo reproduction). She became pregnant with triplets. Anyone with a grain of reason and who asks around a bit, knows what it means to have three and what to have two babies means. You know you will spend some time in the maternity ward, go see these doctors and those doctors. I mean, when you think of it, why would you not have two healthy, bouncy babies? I mean, I'm doing them a favour. Now the church gets angry that they are going for this embryo reproduction. I have also heard that we ought to fast. And that children should be made only outside of fasting periods. And so...but we didn't stick to this. My parents are both engineers, I come from a family that is not very religious. My father is an atheist and therefore I am not so involved with religion, nor did I have anyone who could inform me. Although I did hear, not at first, but after, I heard about the grapes from [monastery] Hilandar and I heard about people who tried, erm...it's called Mary's belt, but I have not, haven't tried this” (P2).

She also drank certain teas (e.g. white horehound, Marrubium vulgare) traditionally believed to help in similar situations, while her husband drank “Dragon” tea. It seems that in both female participants (P1 and P2), the conversation with a priest contributed to the lowering of anxiety caused by unsuccessful spontaneous reproductive relations.

Participant										
Alternative methods	1	2	3	4	5	6	7	8	9	10
Teas*	yes	yes	yes	yes	yes	yes	no	no	yes	no
Prayers/visits to monasteries and temples*	yes	yes	yes	no	no	no	yes	no	no	no

Table 4. Non-medical methods of curing infertility
Key: See text for further qualitative description of responses marked with *

Because participant P3 seldom visits religious institutions, her mother was the one who performed the prayers with regard to her daughter and her partner's reproductive issues. This participant says that she puts stock in such visits, but that due to fertility-related health problems, she was more oriented toward medical institutions in which she spent considerable time, not only due to the complexity of the analyses, but because of the long waiting lists. The impression that time was running out seems to have been the decisive factor in leaving the spiritual practices in the hands of her broader family. Even so, she recalls that for a while her husband drank certain teas that are considered to help curing infertility.

Prior to beginning IVF, participant P7 went with his wife to Ostrog monastery (in Montenegro), which is one of the most visited sites for those who believe that such visits aide in getting pregnant. Both temples (church of St.Petka and monastery Ostrog) are visited even by non-Christian believers, an event which is not uncommon in the region.²³ One male participant displayed a strong belief that this visit, at the very least, was crucial in reaching a strong decision to begin with IVF, if not the success of the procedures themselves. He underscores that faith overcame fear caused by certain statistical analyses of development of the foetus with ambiguous indicators. He is also of the opinion that this visit and the pregnancy itself changed his spouse's perspective on life. Namely, he noticed a greater ethical conscientiousness and greater care in taking any decision. He thinks that the anxiety present to a smaller extent before the pregnancy acquired greater proportions after the birth.

Participant P9 did not stress a visit to a religious temple, but did mention a different experience:

“after two years of marriage we visited a herbalist
and we were given a herb-based therapy.”

The data shows that only two non-religious participants used no alternative means of infertility treatment whatsoever (see Table 4).

Even though it was in opposition with religious teachings,²⁴ almost all patients considered abortion justified as a means of family planning either in choosing the timing of their pregnancy or as termination in the case of foetal anomaly. All participants put abortion and embryo reduction on the same level. One participant (P1) had at least 7 miscarriages or abortions during the IVF process. All females in the survey encountered one or more of these experiences prior to or during the IVF process.

Differentiating spontaneous (natural) from assisted reproduction, and reasons for the latter

Although not religious, participants who made a difference between natural and assisted reproduction (P4, P6 and P3) point out two main

distinctions. The expenses of the IVF are significantly higher than “natural” sexual reproduction (P4). The emotional and physical satisfactions through “natural” sexual reproduction are in opposition with the unpleasant experience of IVF interventions (P3, P6). Other patients found no major discrepancies between assisted and natural reproduction:

“No, no big difference. The IVF is a mechanical form of the natural reproduction in controlled circumstances” (P5).

Much like in the transhumanist arguments²⁵, equating spontaneous with assisted reproduction shows that the religiosity of the participants was not a factor in the decision to use biotechnology to this end. Table 5 shows a selection of statements made by participants about initiating medical procedures. We asked the participants to tell us how they reached the decision to undergo IVF.

<i>Typical responses of participants</i>
“The main reason was that I wanted to be a mother, rather than save the marriage”
“The woman must make the decision, since she is most at risk when it comes to in vitro fertilization”
“After two years of unsuccessful intercourse, we opted for IVF”
“Targeted reproductive intercourse really became difficult for both of us, so I opted for IVF”
“We took the decision after consulting an excellent endocrinologist from Belgrade, and of course because we wished to have children”
“A very strong wish of my wife to have a child, along with a very convincing story of a colleague who had a similar problem”
“Marital routine without children put our marriage in crisis. Secondly, my age, thirdly, our economic position allowed it. However, we began at my initiative, I simply said that this was the time for IVF and he agreed”
“We shared a desire for parenthood, but not before marriage. She was the initiator of the IVF, but I chose the clinic where it would take place”
“After the medical results, the doctor said: the two of you will never be able to have children in the natural way. Just like that, since my husband did not have good results on the semen analysis. Therefore, he said to me, it is your body, you should decide on IVF”
“At the moment when I became aware that we had a problem, which was seven, eight months after we got married, so I got a strong desire to have IVF. The problem was my husband's sperm. So we spoke about it, and I waited for him to give me the green light for IVF”

Table 5. Reasons for in vitro fertilization

It is interesting that nearly all participants emphasized the fact that the female partner had the final say in the decision for IVF. Still, such

statements have numerous and very different underlying reasons. After the negotiations, almost all women waited for a “green light” from their husbands in order to initiate the procedure, or in other situations the men were the ones who took the decisions regarding the clinic, upon inquiring and having consultations with other male friends who had had similar experiences (P4, P7). Although the participants initially responded negatively to the question whether the decision to undergo IVF was partially motivated to save their marriage, in the course of the conversation it turned out that during the “negotiation process”, there was a verbalisation of this problem. More precisely, at the end of this portion of the questionnaire, all female participants mention that the marriage or relationship was indeed in crisis and that “targeted reproductive” relations and “marital routine” brought the marriage without progeny into crisis. One of the characteristic responses was:

“Erm, not for the survival of the relationship, we both wanted children, even when we found out that we were dealing with sterility, which scared us and the path of IVF is terrifying, in part because of the decisions, in part because of the administration of our healthcare system, because it endangers the relationship, since there is simply no guarantee that you will ever have kids, you have to invest a lot, and to be honest, I was very close to leaving the relationship due to the pressure, because it was all on my shoulders. Simply, everything changes, the relationship between the partners changes. The partner who suffers from sterility withdraws, erm, even if we had good relations before that... Everything changes, everything changes. It is all endangered and that's that...I really don't know how we made it. I am sorry we didn't seek psychological help because that would have helped us both. A counselling service, there is no such thing in Serbia. Now you have counselling for sterility and all that, I know some of the people who work there, I consulted them about my in vitro process, or whatever, but there is no psychological help in the clinics, while abroad in every clinic it is not mandatory, but it is highly recommended. I am sorry that I had the first in vitro, even this second one, which passed in a much more “European” fashion because it was done in a city abroad, I am sorry that I did not seek psychological help at the time, but I sought it after the birth. Now I go to all kinds of counselling activities, workshops, I see a

psychologist. Yes...it is hard to have the relationship and also..." (P3).

Parental choices in IVF

Four Participants (P1, P3, P6, P9) used state-funded infertility treatment only once (all unsuccessfully) before going to private clinics. Participant P6 described one of the characteristic situations:

"First, we started with the insemination in one state clinic that was free. But on several occasions we had to pay for other things. The state clinic was deficient in a thousand ways: beginning with hormonal analyses, blood analyses etc. When they prepared the insemination at the clinic, I mean you got hormones, and when the time came for insemination they simply say 'we don't have reagent' or something like that. So, they tell you to go to a specific private clinic and pay for that. So, for things that are free, we got nothing, we only wasted our time. And at the private clinic, we met with the same doctor as in the state clinic, so we didn't get better care at all. The only difference is that now we must pay out of pocket. So, in reality we didn't save any money."

After their negative experience (either personal or heard about) in state clinics and wasted time, all participants chose to perform IVF in private clinics. Most of the couples went to private clinics in Serbia, but two went to clinics in two different EU countries (P1 and P3).

The fact that institutions in Serbia did not have a bio-repository is one of the most frequent elements that fuels dilemmas regarding the patient-physician relationship. The most frequent response shows how this situation induces potential misunderstandings in medical treatments:

"Through hyper stimulation I had 30 healthy eggs. So, I had to ask myself what happened with them, because I didn't freeze my eggs, so where are they?" (P8)

Given that egg preservation has not been possible in Serbia until recently, the patient never asked outright what really happened with her eggs.

Choice of clinic and preservation of genetic material

After (the direct or/and indirect) negative experiences in state clinics, all the participants chose to have their IVF in private clinics, mostly in Serbia. As seen, some began their treatments in state hospitals and then they decided to switch to private ones where they received treatment, in most cases, from the same doctors as in the state-run clinics. Two participants went a step further and after switching from state to private hospitals and still not having success, continued their treatment in private clinics abroad, in two different EU countries (P1 and P3).

After seven unsuccessful impregnations, participant P1 chose a foreign hospital that is very popular among Serbians for infertility treatment, offering the following explanation: “...They have a woman doctor from Serbia working there”. Participant P3 had a different kind of explanation: “their (medical) main motivation was not money, they did not want our money until they checked our chances to have children at their clinic”.

Responses	Participants	N
Lack of time and our age*	P1, P2, P4, P10, P6, P7, P8	7
Lack of trust in the state and importance of health*	P5, P9, P3	3

Table 6. Reasons for self-financing in vitro fertilisation

Key: See text for further qualitative description of responses marked with *

All the participants emphasise that they had sufficient finances for treatments in private clinics and that this was also a key factor in avoiding the free-of-charge governmental program of IVF (table 6). Participant P1 pointed out the lack of time and the long waiting lists:

“the wait for IVF at the two state-run hospitals in Belgrade was a few months. Apart from the long wait, there is a lot of paperwork; all in all it is complicated. However, the most unpleasant thing is that they work simultaneously with several patients whose cycles are not always synchronised. They are simply not able to dedicate themselves to you personally in the way they can at a private clinic, where you get personalised treatment. In state-run clinics I would have been sent to a group where your success rate is low. Of course, I can understand it, they have a lot of patients”.

Participant P2 says that she did not even apply for the free infertility treatment: “my age was problematic, and who knows when it would be my turn”. Participant P6 recalls the complicated procedures she underwent, and the lack of time: “we'd rather sell our car and try in a foreign clinic than try here again”.

After examining the rules for the free infertility program, the male participant P7 decided to bypass “the paperwork”. He also emphasised the problem of impersonal hormone therapies: “...no woman is the same. One might need less stimulation than another or the rest and who knows how many eggs a woman could even produce during such a treatment in a state-run clinic”? We received a nearly identical explanation from P8: “I saw on the internet how much paperwork we needed for free in vitro... I knew that this was impossible if one works from 9 to 6”.

The financial factor and the amount of information received plays a very important role in the choices of the participants for the preservation of their genetic material, e.g. blood stem cells, eggs and early embryos (table 7). All preserved materials are saved in foreign institutions. In addition to poor information and the lack of willingness to insist on obtaining full information on the destination of their embryos and eggs not used in the IVF process, all participants were in favour of preserving blood stem cells. Most of them did indeed preserve only that type of cell. The most frequent reason for this preservation can be seen in the response of participant P2:

“I think that preservation has some future, because it could be helpful in healing my parents or my family. We could get some benefits from this policy.”

Type of material preserved	Participants	N
Early embryos and/or ova*	P1	1
Umbilical cord stem cells*	P1, P2, P3, P6, P7, P9, P10,	7

Table 7. Preserved early embryos, ova, semen and/or umbilical cord blood cells
Key: See text for further qualitative description of responses marked with *

Only one participant preserved two early embryos in the EU (P1). Participant P8 was inclined to preserve the stem cells obtained from the baby's umbilical cord, but at the time, she and her husband did not have the financial means to preserve this biological material. Male participant P4 has an ambivalent attitude regarding this issue.

All material preserved for this purpose is kept in foreign institutions (table 7), since at the time when most participants were included in the process of fertility treatment, Serbia did not have either state-run or private institutions for preservation of biological/reproductive material. This fact seems to be the most often used argument in any dilemmas and misunderstandings the participants had in relation to their doctor.

Participant P2 did not preserve her ova or embryo because she was not informed about the fate of the remaining egg cells and embryos: "The question is where are my egg cells"? "...It is so complicated to obtain the correct information, I simply do not know what happened". After hormonal stimulation, this participant obtained 18 ova, whereas the doctors used only 7 for IVF. After fertilization, of the seven, two embryos were obtained. I described what happened to us when we asked the medical staff of the hospital about the fate of the remaining 11 egg cells: "I asked the staff of the hospital what happened to my egg cells, to which they reacted rather angry, asking me why I am questioning them about this."

In the medical documents made available to us, at her own insistence, the female participant pointed out the visible marks of the erased parts of the writing. She also tried to recall the response of the clinic staff regarding these traces:

"This says that I have had three embryos returned, but that is obviously incorrect, since I was told that only two were returned". She also stated her own scenario of what happened: "perhaps my embryos and egg cells somehow ended up in some foreign clinic... But I got healthy twins and so I decided not to insist on finding out what happened with them. I was happy with my children, so I didn't want to get involved in this".

Participants P3, P4, P7, P8 and P9 were never asked what they wished to do with the remaining ovum/semen cells or embryos in Serbian private hospitals. All participants agreed that regardless of the health or normal development of these cells or embryos, patients should be asked about their fate. Further, nearly all of them wished to preserve their own embryos, even if it meant preserving embryos with irregular cellular differentiation.

However, the hospital staff never asked them anything with regard to these decisions, nor did they give the patients any information about the state of this genetic material. As illustration, we offer one of the most common statements of the participants about the right to being informed:

"Nobody asked me anything about what I would like to do with my remaining egg cells" (P9).

In addition to scant information and lack of willingness to insist on obtaining the right information about the ova and embryos used during IVF, all participants agreed with the idea of preservation of stem cells, which some even did (table 7). Only one of the participants could correctly identify the difference between embryonic and somatic stem cells (P9). The remaining nine participants did not possess the correct information

(nor were they informed by their doctor) regarding the differences and the potential health risks and benefits for the future child or even for the other family members, should the cells be used.

Informed consent by the embryo transfer and beyond

Table 8 provides details about how patients were informed regarding the number of transferred embryos. Only two patients were informed during medical consultations about the number of returned embryos.

Participants' response
"I am not sure that I had the choice to decide how many embryos to keep, and they did not feel a moral nor a professional obligation to inform me".
"Considering my age, had they asked me, I would have chosen a twin pregnancy".
"There is no choice. I never asked, and they returned two embryos to me. Always. It's the average number I guess..."
"They think two is best, and this is what they suggested to me: two embryos"!
"Nobody asked me about it! The physician decided on the number. They said that three is the legal limit and there was no possibility of the saving extra embryos"!
"Nobody asked me, I got many, many eggs, but they said two embryos are perfect and that is all"!
"When I asked how many embryos I got from 7 eggs, they said three, all gimpy. This conversation occurs during the medical preparation for the embryo transfer, on the surgical table..."
"If you ask for information, you will be verbally insulted"!
"The first time they returned two, the second time three, but they never asked me or informed us before the interventions".
"My wife and I signed a contract with the clinic before the embryo transfer. We gave informed consent for two transferred embryos".
"Nobody asked me, and considering my constitution, I thought three were already more than enough".

Table 8. Ways in which patients were informed about the embryo transfer when it took place.

We also looked at the way participants perceived the information received from the physician about the health of the foetus. All participants agreed that the physician should inform the patient about embryo development, but that it is not mandatory for the physician to recommend any solutions in the case of abnormalities. Some situations that go beyond informed consent are visible in the following description: "I was advised by a famous Serbian professor/specialist not to terminate pregnancy, even though the foetus had Trisomy. He based his explanation on religious arguments" (P1) (table 9).

Typical responses by participants
"Nobody analyses the causes of irregular development of the foetus, this is the real information"
"A famous Serbian university professor of medicine advised me to carry to term despite foetal trisomy being detected. His explanation was based on a religious stance"
"Regardless of the information, I would follow my own course"
"I would not feel comfortable if my doctor gave his view of my future life"
"Gynaecologists should not inform patients about future life with developmental irregularities. We would prefer to personally have an objective opinion from a different specialist"
"The doctor should describe the potential consequences of a given illness, but should not do anything with the foetus"
"I think that amniocentesis is wrong in cases of twin pregnancy, so doctors in Serbia tell you that it is possible in half the cases. However, in this clinic abroad I received the suggestion of what I should do in this case"
"The decision should be the parents', but it makes sense for the mother to have the last word"
"We would always seek a second opinion"
"Information about the quality of life with deficiencies are welcome. The doctor should not be involved in the decision"
"The doctor has every right to inform me about everything, but has no right to tell me what I should do"

Table 9. Patient awareness regarding foetus anomalies

Comparing the statements in tables 8 and 9, it becomes clear that the withholding of information in embryo-transfer violates the participants' independence, and that the patients would, regardless of potential anomalies of their genetic material (table 9), still act based on their own will, and not according to the doctor's advice (occurring by withholding information and presenting the patients with a fait accompli) (table 8).

Readiness to accept donated reproductive cells

Nine participants would have consented to donate eggs or semen as the alternative in IVF, noting that the important thing is that the mother carries the child. Participant P8 was against this idea:

“...I didn’t use donated eggs or semen, and I would not, because I want to know who the father of my child is, and at the same time, I want to be the biological mother of that infant. Of course, objectively, that is not important when the child grows up.”

This type of statement will help us to further analyse the degree of acceptance of the idea of an altruistic society represented through medical-technological procedures/donations on the one hand, and personal motives to help another in a similar way, on the other.

Broader and narrower frame of altruistic idea and behaviour

In this section we will present the tension between the technological possibilities to remove reproductive deficiencies from the past and to achieve what we call “the good life”. Both the broad perspective of “social altruism” and the more narrow perspective of altruism as enlargement of the family and caring for it, burden this tension between the technological and the social. It turned out that during the medical treatment, the study participants were (made) insufficiently aware of and in general had rather poor knowledge regarding preimplantation genetic diagnostic (PGD). Only one participant knew something about these medical procedures and as she pointed out, she took advantage of them in one of the foreign IVF clinics.

Awareness regarding PGD and potential genetic engineering

The participants' responses regarding PGD were similar: “Nobody said anything about the possibilities of PGD. I didn't ask, nor did I receive any information” (P10). Participant P2 says: “no, the doctors said nothing about that”. Participant P3 goes further in her answer: “everything is hidden here, you practically do not even know what happened to your unused embryos”.

Male participant P7 believes PGD to be the same with the medical evaluation of development of early embryos created in vitro: “in the medical report there is only one sentence about the quality of the embryo”.

Participant P5 expressed the following opinion on this question:

“I think that the lack of transparency on behalf of the doctors regarding PGD and in general, was the greatest obstacle in the IVF process, and that it produces numerous negative consequences...they

treat us as amoebas, as one of the instruments in this process”.

Participant P8 and P9 also knew nothing about these procedures, and of the two, P8 in addition to her negative answer emphasises the expertise of the doctor above the right to being medically informed²⁶:

“I think that it is not necessary to know everything about these procedures, because the doctor is the specialist and he knows what he should do”.

Given the state of their knowledge regarding PGD, embryo and somatic cells etc., participants were asked about their perception on the possibilities of genetic engineering at the time of their IVF processes. We asked them whether they thought about the possibility of genetically determining certain characteristics of their children and if they would use such procedures.

In order to include both the domains of the possible and realistic activities on the one hand, and the indefatigable desire and will to shape one's progeny on the other, we formulated a framework with which the participants' demands had to comply (table 10). We began from the level where genetic manipulation avoids certain illnesses by removing the gene responsible for this deficiency or selection of a healthy embryo, to the selection of certain characteristics, such as choice of sex, eye colour, enhanced physical and mental capacities of children, genetic determination of sexual partner – avoidance or choice for homo/heterosexuality (table 10). All the participants chose to avoid illness for their children. For example, preserving umbilical blood cells believing their “omnipotence” in curing a broad spectrum of illnesses (which is debatable) confirm the desire for such a genetic intervention. Five participants would, in addition to these modifications, go further in determining the early embryos.

Typical responses	Participated	N
“Avoidance of serious illnesses”.	All	10
“If possible, avoidance of sociopathic and psychopathic behaviour”.	P4, P6	2
“For the third child, I would like to choose the sex of the baby”.	P10	1
“If possible, we would like to influence the genetic determination regarding choice of sexual partner”; (choice of homo/heterosexuality)	P4, P10	2

"If some physical characteristics became potential for social success, I would certainly enhance that physical attribute of my child".	P3	1
"If possible, I would enhance the intelligence of the children through genetic engineering; why be stupid if it can be smart".	P4, P8	2

Table 10. Range of potential genetic engineering of the embryo

Opinions regarding the genetic determination of altruism of their future child

We examined opinions about altruism by asking whether participants were ready to determine their children as altruists. To this end, we gave an example of altruism through the creation of a universal donor of blood. We examined this scenario in two variations. In the first case, this question was given to a participant planning to have only one child; in the second, we followed a potential change of opinion in the case that there are two or more children (table 11).

Genetically determined altruism	Participants	N
With one child *	P1, P3, P8, P10	4
With two or more children *	P1, P2, P3, P4, P6, P7, P8, P10	8

Table 11. Positive responses to genetically determined altruism

Key: See text for further qualitative description of responses marked with *

Four participants would always choose to have an altruistically inclined child, regardless of the number of children. The most frequent responses for this choice were:

"it is more normal that it be a donor...it is more human, besides, it is always better to be in a position of donating, rather than receiving" (P1).

This seems to be the "caring" way of thinking for a participant who is religious and who used traditional methods for pregnancy.

Participant P5 would never determine any of her children for this kind of altruism, that is, for any possible donation:

"of course universal recipient...that is just basic math, if something were to happen, it is better to be able to accept something from anyone" (P5).

Participant P9 gives one of the most commonly heard arguments from the bioconservative perspective²⁷: "it is not a good idea to play with nature" (P9). Several participants would change their position if it came to determining their second child or in case they had an even number of

children. Participant P4 would determine every other child, i.e. the child with an even number as the altruist, a position shared by P2, P6 and P7:

“in case we have several children, I would determine every other as the altruist, and every odd child as recipient, allowing them to help each other” (P4).

The idea of an altruistically determined child of an even number and the vision that this way the children in a given family could help each other ignores the objectivity of such a situation. Above all, such a genetic determination would mean that only the donors (altruists) would be in a position to help another child or other children in general. It then remains unclear what “helping one another” means, since the child of an odd number would be determined as the recipient, therefore the one who is only helped without being able to help in turn. In this sense, this seemingly rational (just) distribution should be seen from two different perspectives: as an incomplete altruism attempting to technologically justify an attribute based on emotional understanding and compassion with other members of a group, similar to what certain authors define as the empathic emotion,²⁸ or the altruistic motive based on the satisfaction engendered by helping some other. Apart from this, the parents ignore the consequences of such odd/even genetic determination. Would such a predetermined idea of who is sacrificed and who is not determine the future lives of their young children?

Aside from this seemingly sacral and more traditional idea of altruism, similar to the solidarity of a community, the responses of the otherwise religious participants leave the impression of a broader picture of altruism.²⁹ In society, parents who are not religious or those who calculate the lives of their children in a seemingly hyper-rational way fall into what is called *the withdrawal into themselves*. In this way, the feeling of saving oneself or only one's closest endangers not only the survival of society in general, but also of those individuals, looking at the trend on the medium and on the long run.

Solidarity in society and parental altruism in the representations about another's good (sovereign) life

Aware that the question of whether altruism exists is as old as time,³⁰ we attempted to analyse the willingness of participants to donate their ova or seminal cells in relation to their complete readiness to accept donated reproductive cells. Their altruism towards other couples and society was somewhat at odds with the idea about the altruism of potential donors. Only 3 or 4 participants (P1, P3, P6 and partly P9) showed a willingness to donate all of the possible options: from seminal and egg

cells to early embryos irrespective whether for purposes of helping other couples facing sterility or for scientific research of curing serious genetic disorders and illnesses. All three participants point out that the main reason for their altruism is precisely their experience with various health problems they faced in the process of IVF. Participant P1 added:

“it's only fair to define what exactly happens with egg cells or embryos, whether their life is somewhere extended”

Participant P3 defines her position as a kind of reciprocity:

“it is better to donate to scientific research, after all, I got my children thanks to this research! It would be too disappointing if someone sold their embryos”.

Participant P8 would only donate her blood cells from the umbilical cord, but never the egg cells or the embryo. Participant P10 would donate nothing:

“nothing, since I do not have any faith in our state institutions...maybe in some foreign clinic for the purposes of research, for the greater good of all, regardless of whether egg cells or embryos”.

Participant P9 would never donate egg cells or her husband's seminal cells:

“only the embryo and only for the purpose of scientific research and the creation of stem cells. Egg cells never, I would save my own egg cells for later”.

Donation options	Participants	N
Egg and/or seminal cells *	P2, P4, P5, P7	4
Early embryos *	P1, P3, P6, P9	4

Table 12. Willingness to donate reproductive cells or early embryos

Key: See text for further qualitative description of responses marked with *

Four participants were willing to donate only their ovum or semen cells (table 12). These participants shared a negative response to embryo donation. However, their readiness to donate ovum or semen cells was not altogether equal. Participant P2 would agree to the donation of both kinds of reproductive cells:

“I would never donate my embryo! But I would donate the egg cells or my husband's sperm.”

Male participant P7 had a similar response:

“Never the embryo! We would donate the egg cells of my spouse or sperm, but only for the purposes of scientific research”!

Male participant P4 would donate only one kind of reproductive cells and only for one purpose: “only egg cells and only as help to some couple to have children, rather than scientific research”. Participant P5 had the opposite opinion: “only the sperm and for research! It doesn't feel right to have my genetic material go to another couple”.

Participants clearly expressed some unease about their own eggs or semen being donated to help other couples, and expressed strong reservations about the use of their genetic material in research. In two cases were participants willing to donate their embryos, and only in one case if they were to be used for pregnancy. In the second case, (P3) would have also donated her genetic material to research had anyone asked. These two participants also reported that if this were possible, they would determine their children to be altruistic. Other two participants who would determine their infants to be altruistic declared that they themselves were not altruistic. These four couples, along with one more, all reported that they would apply genetic intervention, such as determination of sex, sexual orientation, intellectual, social and physical characteristics of the child (P3, P4, P6, P8, P10). All couples were in favour of genetically engineered infants (PGD) in order to avoid illnesses.

We found entirely contradictory facts in the statements of our participants. With their understanding of PGD rather poor, we noted at once a willingness to use genetic engineering to remove illnesses in their potential offspring, as well as a willingness to have potential progeny genetically determined.

Statements about the altruistic drive range from those which consider that it is better for the child be an altruist (i.e. it is better to help than be helped, as was the case with P1), to the seemingly completely opposite statement according to which it is not good to be altruistic for obvious reasons (i.e. it is better to receive than to give to others, as was the case with P5). Although under seemingly opposite forms, they underscored the same element – parental care for the wellbeing of their child. The difference describes precisely what altruism means in social circumstances. As opposed to P1, in the case of P5 the benefit of the offspring comes directly from another member of the community. There are at least two explanations for the contradictory positions. First, female participant P1 went through numerous spontaneous losses of foetus and faced other health problems related to reproductive processes, whereas in the case of P5 there is no such personal history. Second, given their similar

background and current social status (both have advanced on the social ladder compared to their parents, both live in economically independent marital communities), the persistence of the altruistic motive in P1 could perhaps be sought in Durkheim's idea about the connection between the sacral explanation of the religious altruistic and moral motive of life in the community³¹ and the atheism and hyper-rational individualist calculation of participant P5.

Conclusion

The current study has identified ethical, religious and social aspects of the experiences of patients involved in IVF in Serbia. What we have found is a perceived unfairness in the services offered by public medical institutions, lack of access to an adequate health care and the resulting feeling of injustice.

The users of IVF and the potential users of enhancement technologies do not recognize clear limits of their secular and religious ideas and roles in the process of creating an image of an altruistic society. However, a society that aspires to adopt a personal characteristic such as altruism cannot truly be altruistic. Such a society would in fact liberate certain social groups of the principle of solidarity. Having in mind this context and the mentality that does not necessarily distinguish between using biotechnologies and natural fertilisation, the question arises whether the stronger personal and social demands for progeny and the increased number of reproductive illnesses could possibly lead to changing the social image of reproductive cloning. The removal of the moratorium on reproductive cloning would ultimately lead to the creation of a society that is entirely free of solidarity and altruism – reproductive cloning itself being a reification of egoism. Opposed to altruism is egoism, “which is a motivational state with the ultimate goal of increasing one's own welfare”.³²

When it comes to the much-needed “faith” (trust) in the health institutions of one's country and “connection with doctors”,³³ it turns out that almost no one has complete trust in state-ran IVF clinics. Still, among religious participants there was “faith” in alternative methods of curing infertility. These participants also proved to be more persistent in attempts to achieve IVF pregnancy in state-run clinics. This finding points to the existence of a so-called imagination through faith in the phase of treatment by alternative method.³⁴

Comparing relations of the first phase with the other two, the study shows a kind of ethical contingency in characteristic religious feelings regarding abortion, or in general, seeing new medical technologies as playing God.³⁵ Such patients would like no cross-genetic intervention beyond PGD. They justify abortion and embryo-reduction as a type of euthanasia, but they are not willing to donate their genetic material for

research of illnesses. Paradoxically, because the goal of the research is the preservation/continuation of life, its conduct could potentially change the perception of abortion as euthanasia. Participants with a high school level of education have a more pronounced idea about the relation between science, genetic material and ART.

Further, the study shows the gradual acceptance of the taboo about the destiny of remaining eggs or embryos after IVF. Ethically problematic attitudes of the medical staff, as well as cultural complicity on behalf of the patients results in silent, but gradually accepted patterns of social injustice.³⁶ Legal prohibitions in some EU countries³⁷ and legally permissive,³⁸ but clinically/ethically-limited conditions in Serbia induce similar moral tensions. Such findings are at the same time an answer to the dilemmas about what happens when something goes wrong in IVF clinics.³⁹ Such ethical concerns problematise institutional, rather than health/personal conditions, responsible for defeatism in the process IVF.⁴⁰ The alternative is turning to privately funded options.⁴¹ As indicated in the third phase of the study, in privately funded clinics, patients take advantage of the commodification of the process, and tend to choose greater social/genetic competitive features.

This study is restricted to a direct approach towards patients who are in an active process of IVF in clinics. The results of the study show that the combined factors of rejection of adoption, reluctance in donating, but the readiness to accept embryos and/or eggs/semen, the idea that gestation rather than fertilization is more crucial for parenthood – all imply a narrower idea about altruism as a social and religious value, that surrogate pregnancy is still a problematic concept, and that it is contingent on the parental social role.

The research shows a sub-variation of “crypto-Christianity”⁴² manifesting as an ambivalent religiosity. When it comes to the actual person (the parents), religiosity seeks inspiration in God for the struggle against illness. However, when it comes to anomalies in a potential person (the offspring), this religious narrative of healthcare is discarded. Generally speaking, infertility as an illness is only partially treated in religious (sacral) and spiritual categories such as visits to monasteries and use of traditional methods of healing. Secondly, in the study, such inspiration is completely rejected when it comes to a detected illness of the foetus, that is, a potentially new person. Namely, excluding the medical factor – of multiple failures and health risks – when it comes to having children, even religious patients (such as P1) cite the advice given by doctors (even when they are invoking religious reasons) of carrying to term and accepting a baby with anomalies as negative and confounding. To sum up, the ambivalence in a spiritual approach to illness could result in the development of genetically determined “radical empathy and altruism”⁴³ in the participants' progeny. It is precisely these parents that

would define a healthy child as an altruist by using an exclusively religious justification (case of P1).

The study can be extended to include a discussion on the preservation of reproductive material in Serbia. Results of related studies⁴⁴ recommend increasing the free choice of patients, and the harmonization between legal and clinical/ethical conditions. This could potentially prevent the appearance of a eugenic attitude arising from being forced to choose certain genetic material for an actual child and accidentally discarding the rest. Further, it could also develop a broader sense of solidarity.

APPENDIX 1

Experience before IVF / Decision history:

1. Do you feel more fulfilled in your family life compared to when you were alone? (In what sense? In what sense do you not?)

2. When did you first terminate a pregnancy (abort) or have a miscarriage and what was/is your attitude toward this? (position and feelings regarding the right to abortion, how did the unplanned pregnancy occur)?

3. When did you first attempt using “alternative” (and assisting) methods of treating infertility (e.g. visiting Ostrog monastery)?

4. When did you first speak to your partner about child adoption?

5. When did you personally take the decision to begin with the process of IVF?

6. Describe the role of your partner in the decision to undergo the process of IVF.

7. Did the persons in your environment treat you the same way after the birth as before? Do you think that the pregnancy changed your relations with the people in your surroundings? If so, how do you explain this? If not, how do you explain this?

8. Do you make the distinction between natural/artificial in the sphere of reproduction?

Parents' “choices” in IVF:

9. In the process of IVF, would you consider using the ovum or sperm of unknown donors?

10. Which clinic did you select and why? (state run or private)

11. Did what the clinic's proposal satisfy the condition of “free of

charge attempts at fertilization”?

12. How many embryos will you demand be implanted?

13. What will you do with the remaining embryos (regardless of their “viability” – “symmetry”)?

14. If a routine check-up established that the potential fetus had certain anomalies, in your opinion, how far should the doctor go in informing future parents regarding the quality of life of such a newborn?

15. Would you yourself terminate a pregnancy if a routine check up showed an increased risk of anomaly in the newborn?

Broader and narrower frame of altruistic idea and behaviour:

16. Are you familiar with the process of obtaining the embryos – preimplanting diagnostics? (Internal comment – at present, in Serbia, only the symmetry of the embryo is checked, without looking at other anomalies, although there are indications that in some private clinics there is a more thorough analysis!)

17. If the possibility were available, how far would you go in choosing the characteristics and capacities of the future child? E.g. avoiding serious illness, the sex, eye color, height, sexual orientation, etc.

18. If you could choose, would you select for your child to be a potential universal blood donor and recipient?

19. If you were to have multiple children, would you consider this choice unimportant? (how much success will the “altruistic child” have if it is surrounded by *free riders*?)

20. Are you familiar with the possibilities of use of embryonic stem cells for the purpose of scientific research (study of serious illness etc.)?

21. Are you aware that in order to obtain stem cells it is necessary to destroy the embryo?

22. Are you familiar with the potential of the body's stem cells?

23. Will you preserve the stem cells obtained from the umbilical cord?

24. Would donate your biological and/or reproductive material and to what extent (ovum/semen cells/ blood cells that are potentially preserved / the embryo)?

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¹ On the tendency of transformation of welfare states into altruistic societies, see Veselin Mitrović, "How Klošar Became Homeless Upon the Dissolution of Yugoslavia" in *Homelessness and Home*, ed. Naomi Zack (Eugene: University of Oregon, 2015), 1-9, <http://homelessness.philosophy.uoregon.edu/narratives-of-homelessness/> (accessed 08 June 2015).

² Daniel C. Batson, *Altruism in Humans*, (New York: Oxford University Press, 2011), 20.

³ For more such examples of secularisation, see: J.S. Tham, L. C. "The Secularization of Bioethics: A Critical History" (PhD diss., Regina Apostolorum Pontifical University, Rome, Italy, 2007), 23, 31-35, 53-72.

⁴ Lauren E. Munsch and Helen Herrman, „Promoting Well-Being in Health Care,“ in *Origins of Altruism and Cooperation*, eds. Robert W. Sussman, C. Robert Cloninger (New York: Springer, 2011): 400-3.

⁵ "The Law for Healing Infertility by Assisted Biomedical Fertilization," *Official Gazette of the Republic of Serbia* nr. 72/2009 from 03.09.2009, National Health Insurance Fund National (NHIF), http://www.rfzo.rs/download/zakoni/Zakon_vto.pdf

⁶ Data presented on personal request of the author: Republic Serbia, Belgrade, Ministry of the Health, document nr. 500-01-00032/2014-16. 29, from 29.01.2014. "Report of the free ART (IVF from stimulation to embryo transfer): Number of the IVF procedures covered by NHIF Serbia," National Agency for Biomedicine.

⁷ "NHIF regulation rules for the IVF," *Official Gazette of the Republic of Serbia* nr. 72/2009 from 03.09.2009, <http://www.rfzo.rs/download/Vantelesna.pdf>

⁸ Colin Grant, *Altruism and Cristian Ethics*, (New York: Cambridge University Press, 2001), 3.

⁹ Republic Serbia, Belgrade, Ministry of the Health, document nr. 500-01-00032/2014-16. 29, from 29.01.2014

¹⁰ Tina Miller, *Making Sense of Fatherhood: Gender, Caring and Work* (New York: Cambridge University Press, 2011).

¹¹ Tina Miller, *Making Sense of Motherhood: A Narrative Approach* (New York: Cambridge University Press, 2005).

¹² Knud E. Løgstrup, *The Ethical Demand* (Notre Dame: University of Notre Dame Press, 1956/1997).

¹³ Data presented on personal request of the author. National Health Insurance Fund of the Republic Serbia, Belgrade, document nr. 07-470/13-3 from 13.12.2013.

¹⁴ Racine et al., "Perspective of Adolescents and Young Adults with Cerebral Palsy on the Ethical and Social Challenges Encountered in Healthcare Service," *Narrative Inquiry in Bioethics*, 1, no. 1 (2011): 44-6.

¹⁵ Joan Sieber, *Planning Ethically Responsible Research: A Guide for Students and Internal Review Boards* (Newbury Park: Sage, 1992).

¹⁶ Steinar Kvale, *Interviews: An introduction to qualitative research interviews* (London: Sage, 1996).

¹⁷ Norman K. Denzin and Yvonna S. Lincoln, *Handbook of Qualitative Research* (London: Sage, 1994).

¹⁸ Luka Mitrović, "The Social Mobility In A Village in Bosnian Posavina," *Sociology*, 11, no. 4 (1969): 675-77.

¹⁹ Veselin Mitrović, "Procreative Ethics of Care in the Process of IVF in Serbia: A Culture of Giving or a Crisis of Altruism?" *Teme* 1 (2014):193-211, 196.

²⁰ Lars-Crister Hyden, "Narratives in Illness: A Methodological Note," *Qualitative sociology review* 4, no. 3 (2008):50-1.

²¹ James A. Holstein, *The Active Interview* (London: Sage, 1995).

²² Arthur W. Frank, *The Wounded Storytellers: Body, Illness, and Ethics* (Chicago: The University Chicago Press 1995).

²³ Robert M. Hayden, "Antagonistic Tolerance. Competitive Sharing of religions Sites in South Asia and the Balkans," *Current Anthropology* 43, no. 2 (2002): 212-3.

²⁴ Moira Stephens et al., „Religious Perspectives on Abortion and a Secular Response“ *Journal of Religion and Health* 49 (2010): 514.

²⁵ John Harris, *Enhancing Evolution - The Ethical Case for Making Better People* (Princeton: Princeton University Press, 2007): 4.

²⁶ Carl Elliott, "The Tyranny of Expertise," in *The Ethics of Bioethics: Mapping the Moral Landscape*, edited by Eckenwiler A. Lisa and Felicia G. Cohn (Baltimore: The Johns Hopkins University Press, 2007), 44.

²⁷ Leon R. Kass, "The Troubled Dream of Nature as a Moral Guide," *The Hastings Center Report* 26, no. 6 (1996): 23

²⁸ Batson, 11.

²⁹ David Sloan Wilson, *Does Altruism Exist? Culture, Genes, and the Welfare of Others* (London: Yale University Press, 2015), 83-4.

³⁰ Wilson, 3-7.

³¹ Wilson, 78.

³² Batson, 20.

³³ Gregory L. Fricchione, „Separation, Attachment, and Altruistic Love: The Evolutionary Basis for Medical Caring,“ in *Altruism and Altruistic Love, Science, Philosophy, and Religion in Dialogue*, eds. Stephen G. Post; Lynn G. Underwood; Jeffrey P. Schloss and William B. Hurlbut (New York: Oxford University Press, 2002), 347-9.

³⁴ Sidney M. Greenfield, „Pilgrimage, Therapy, and the Relationship Between Healing and Imagination“ (paper presented at the Fortaleza, Ceará, Brazil, Universidade Estadual do Ceará, 1989).

³⁵ Veselin Mitrović, "Human Enhancement: Toward the Creation of Patterns of Injustice?," in *Theoretical and Applied Ethics*, eds. Hannes Nykänen, Ole Preben Riis, Jörg Zeller (Aalborg: Aalborg University Press, 2013), 268.

³⁶ Mitrović, "Human Enhancement", 269.

³⁷ European Court Of Human Rights, *Case of Costa and Pavan v. Italy* (Application no. 54270/10) Strasbourg, 28 August 2012.

[http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-112993#{\"itemid\":\[\"001-112993\"\]}](http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-112993#{\)

³⁸ "NHIF regulation rules for the IVF", *Official Gazette of the Republic of Serbia*.nr. 72/2009 from 03.09.2009, <http://www.rfzo.rs/download/Vantelesna.pdf>.

³⁹ Afnan Masoud, "The Complete Guide to IVF: An Inside View of Fertility Clinics and Treatment by Kate Brian," *Journal of Family Planning and Reproductive Health Care Book Review* 35 (2009): 235.

⁴⁰ G. Wu et al., "Depression and coping strategies of Chinese women undergoing in-vitro fertilization," *European Journal of Obstetrics & Gynecology and Reproductive Biology* 183 (2014): 155-158.

⁴¹ B. Choi et al., "Personalized prediction of first-cycle in vitro fertilization success." *Fertility and Sterility* 99, no.7 (2013): 1905-1911; 1909.

⁴² Karolina Bielenin-Lenczowska, „Visiting of Christian Holy Places by Muslims as a Strategy of Coping With Difference,” *Anthropological notebooks* 15, no. 3 (2009): 37.

⁴³ Joan Koss Chiono, “Spiritual transformation and Healing: Is Altruism Integral?” in *Altruism in Cross Cultural Perspective*, ed. Douglas A. Vakoch (New York: Springer, 2013), 126.

⁴⁴ Nicole M. Bellows, Ian Askew, Benjamin Bellows, “Review of Performance-Based family Planning programmes” *Journal of Family Planning and Reproductive Health Care* 10 (2014):1-6; 4.

References

Batson, Daniel C. *Altruism in Humans*. New York: Oxford University Press, 2011.

Bellows, Nicole M., Ian Askew and Benjamin Bellows. “Review of Performance-Based family Planning programmes.” *Journal of Family Planning and Reproductive Health Care* 10 (2014):1-6.

Chiono, Koss Joan. “Spiritual transformation and Healing: Is Altruism Integral?” In *Altruism in Cross Cultural Perspective*, edited by Douglas A. Vakoch, 123-139. New York: Springer, 2013.

Choi B., E. Bosh, B. M. Lannon et al. “Personalized prediction of first-cycle in vitro fertilization success.” *Fertility and Sterility* 99, no. 7 (2013): 1905-1911.

Denzin, Norman K., Yvonna S. Lincoln. *Handbook of Qualitative Research*. London: Sage, 1994.

Elliott, Carl. “The Tyranny of Expertise.” In *The Ethics of Bioethics: Mapping the Moral Landscape*, edited by Lisa A. Eckenwiler and Felicia G. Cohn, 43-47. Baltimore: The Johns Hopkins University Press, 2007.

European Court of Human Rights. *Case of Costa and Pavan v. Italy* (Application no. 54270/10) Strasbourg (28 August 2012)
[http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-112993#{\"itemid\":\[\"001-112993\"\]}](http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-112993#{\) (accessed 5 December 2014).

Frank, Arthur W. *The Wounded Storytellers: Body, Illness, and Ethics*. Chicago: The University Chicago Press, 1995.

Fricchione, Gregory L. „Separation, Attachment, and Altruistic Love: The Evolutionary Basis for Medical Caring.” In *Altruism and Altruistic Love, Science, Philosophy, and Religion in Dialogue*. Edited by Stephen G. Post, Lynn G. Underwood, Jeffrey P. Schloss, and William B. Hurlbut, 346-362. New York: Oxford University Press, 2002.

Grant, Colin. *Altruism and Cristian Ethics*. New York: Cambridge University Press 2001.

Greenfield, Sidney M. „Pilgrimage, Therapy, and the Relationship Between Healing and Imagination.“ Paper presented at the Fortaleza, Cear , Brazil, Universidade Estadual do Cear , 1989.

Harris, John. *Enhancing Evolution-The Ethical Case for Making Better People*. Princeton: Princeton University Press, 2007.

Hyden, Lars-Crister. “Narratives in Illness: A Methodological Note.” *Qualitative sociology review* vol. IV issue 3 (2008):49-59.

Hayden, Robert M. “Antagonistic Tolerance. Competitive Sharing of religions Sites in South Asia and the Balkans.” *Current Anthropology* 43, no. 2 (2002): 205-219.

Holstein, James A. *The Active Interview*. London: Sage, 1995.

Kass, Leon R. “The Troubled Dream of Nature as a Moral Guide”. *The Hastings Center Report*. 26, no. 6 (1996): 22-6

Kvale, Steinar. *Interviews: An introduction to qualitative research interviews*. London: Sage, 1996.

„The Law for Healing Infertility by Assisted Biomedical Fertilization”, *Official Gazette of the Republic of Serbia*. nr. 72/2009. (03 September 2009)

Lee, Raymond M. *Doing research on sensitive topics*. London: Sage, 1993.

Lenczowska, Karolina Bielenin. „Visiting of Christian Holy Places by Muslims as a Strategy of Coping With Difference.“ *Anthropological notebooks* 15, no. 3 (2009): 27-41.

L gstrup, Knud E. *The Ethical Demand*. Notre Dame: University of Notre Dame Press, 1956/1997.

Masoud, Afnan. „The Complete Guide to IVF: An Inside View of Fertility Clinics and Treatment by Kate Brian.” *Journal of Family Planning and Reproductive Health Care Book Review* 35 (2009): 235.

Miller, Tina. *Making Sense of Fatherhood: Gender, Caring and Work*. New York: Cambridge University Press, 2011.

Miller, Tina. *Making Sense of Motherhood: A Narrative Approach*. New York: Cambridge University Press, 2005

Mitrović, Luka. "The Social Mobility In A Village in Bosnian Posavina." *Sociology* 11, no. 4 (1969): 675-698.

Mitrović, Veselin. „The Human Enhancemnet: Toward the Creation of Pattens of Injustice?“ In *Theorethical and Applied Ethics*, edited by Hannes Nykänen, Ole Preben Riis, Jörg Zeller, 257-274. Aalborg: Aalborg University Press, 2013.

Mitrović, Veselin, "How Klošar Became Homeless Upon the Dissolution of Yugoslavia." In *Homelessness and Home*, edited by Naomi Zack, 1-9. Eugene: University of Oregon, 2015 (08 June 2015) <http://homelessness.philosophy.uoregon.edu/narratives-of-homelessness/>

Mitrović, Veselin. "Procreative Ethics of Care in the Process of IVF in Serbia: A Culture of Giving or a Crisis of Altruism?" *Teme* 1 (2014):193-211.

Munsch, Lauren E. and Herrman, Helen. „Promoting Well-Being in Health Care.“ In *Origins of Altruism and Cooperation*, edited by Robert W. Sussman, C. Robert Cloninger, 399-416. New York: Springer, 2011.

Official Gazette of the Republic of Serbia.nr. 72/2009 from 03.09.2009., "The Law for Healing Infertility by Assisted Biomedical Fertilization," National Health Insurance Fund National (NHIF), (12 March 2014) http://www.rfzo.rs/download/zakoni/Zakon_vto.pdf

Racine, Eric, Michael Shevell, Majnemer Annette and Danae Larviere-Bastien. "Perspective of Adolescents and Young Adults with Cerebral Palsy on the Ethical and Social Challenges Encountered in Healthcare Service." *Narrative Inquiry in Bioethics*. 1 no.1 (2011): 43-54.

Republic Serbia, Belgrade, Ministry of the Health, document nr. 500-01-00032/2014-16. 29, from 29.01.2014. "Report of the free ART (IVF from stimulation to embryo transfer): Number of the IVF procedures covered by NHIF Serbia," National Agency for Biomedicine. (Data presented on personal request of the author)

Sieber, Joan. *Planning Ethically Responsible Research: A Guide for Students and Internal Review Boards*, Newbury Park: Sage, 1992.

Stephens, Moira, Christopher F. C. Jordens, Ian H. Kerridge, Rachel A. Ankeny. „Religious Perspectives on Abortion and a Secular Response“. *Journal of Religion and Health* (2010): 513-535.

Tham, S., L. C. Joseph. *The Secularization of Bioethics: A Critical History*. PhD diss., Regina Apostolorum Pontifical University, Rome, Italy, 2007.

Wilson, Sloan David. *Does Altruism Exist? Culture, Genes, and the Welfare of Others*. London: Yale University Press, 2015.

Wu, G., T. Yin, J. Yang, W. Xu, J. Zou, Y. Wang, J. Wen. "Depression and coping strategies of Chinese women undergoing in-vitro fertilization." *European Journal of Obstetrics & Gynecology and Reproductive Biology* 183 (2014): 155-158.