

Islamic Reproductive Bioethics Knowledge Among University Students in the Czech Republic

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This study has aimed to evaluate the level of knowledge about Islamic reproductive bioethics among university students in the Czech Republic. The research sample consisted of 581 students of twelve universities in the Czech Republic. The majority of participants were females (72,6 %), while males were more than 2,6 times less (27,4 %). Data were obtained via online questionnaires. Out of seven questions dealing with reproductive bioethics in Islam, majority of participants managed to answer correctly three questions: on the conception of the marriage (75,6 %), on the basic precondition of the procreation (94,8 %), and on the feminine infanticide according to Muhammad's doctrine (58,7 %). The majority of incorrect answers reached questions number 5 and 7, on the permissibility of the usage of the ARTs (79,5 %), and the permissibility of the induced abortion (66,3 %). Overall, the worst results reached those answers, that were dealing with the contemporary status of the Islamic attitudes towards scientific achievements in reproductive medicine. We assume, that this outcome stems from the typically historical approach to lecturing on Islam at universities. Although lectures on Islam are properly firstly focusing on written sources, history and ritual praxis of this religion, we suggest, that their content should be enriched with the dimension of present forms of living Islam in everyday life decision-making, and effort to manage current challenges according to religious regulations.

1 Introduction

Our research conducted in the frame of the project *Bioethics of Reproductive Health in Islam: Basis, Discussion and Challenges*, VEGA No. 1/0585/18, which included quantitative and qualitative methods and took place in Slovakia, the Czech Republic, and in Bosnia and Herzegovina.

In the first phase of our quantitative research realized from October to December 2018, we have conducted an questionnaire survey on Islamic reproductive bioethics knowledge among university students of humanities and social sciences at five Slovak universities: Comenius University in Bratislava, University of Ss. Cyril and Methodius in Trnava, University of Žilina in Žilina, University of Prešov in Prešov, and The Catholic University in Ružomberok; at each university n=200, all together 1000 participants. The results were already published.

In the second phase of our quantitative research realized from January to August 2019, we have conducted a questionnaire survey on Islamic reproductive bioethics knowledge among university students at twelve Czech universities, which will be named later in the text.

Our qualitative research had three phases:

1. In-depth interviews with Muslim believers living in Bosnia and Herzegovina regarding their attitude to reproduction in medical, educational and inter-religious context (October 2018);
2. In-depth interviews with Muslim believers living in Slovakia regarding the same topic as above (May 2019);
3. Interviews with mature students of the University of the Third Age at Comenius University in Bratislava, who study the course World Religions headed by Monika Zaviš (December 2018). These interviews were focused on the knowledge of Islamic reproductive bioethics.



About the author

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When we compare our total research in Slovakia and the Czech Republic on the Islamic reproductive bioethics knowledge among students, we clearly see, that the best results by far were obtained by our mature students aged 50 and over, what we consider to be both amazing – regarding their age, health condition, and the level of knowledge; but also sad – regarding the level of knowledge among day-time university students.

Why are we interested in the knowledge of marriage, family planning, fertility awareness, usage of medically assisted reproduction and induced abortion (Zegers-Hochschild, Adamson and Dyer *et al.* 2017, 1786–1801) ergo reproductive bioethics (Vivoda 2018, 99–113) in Islam among students at all? In the context of intense clash of cultures and religions, especially Christianity (Šoltés 2017, 17–86) and Islam in Europe, we are obligated to educate our students to be theoretically prepared for inter-religious communication, which will be based on human dignity and mutual understanding (Mistrík 2011). Knowing the key values and social orders built on them (Leiba-O’Sullivan 1999, 709–725) means regarding Islam, to know the doctrine and praxis of marriage, family and reproductive health.

Sachedina argues, that the meaning of the term *bioethics* in Islam can be conveyed using several word phrases in the Arabic language: *akhlaq-i pizishki* (virtues of the medical profession), *akhlaq-i zisti* (bioethics in the sense of judicial rulings on biomedical issues rather than ethics of medical practice), *fiqh al-tabib* (jurisprudence affecting medical professionals), *qadaya fiqhiya wa tibbiya mu’asira* (modern judicial and medical issues), *ahkam* (rulings or judicial opinions), and *akhlaqiyat al-tibiya* (bioethics without substantially taking up ethical dimensions of the issues) (Sachedina 2009, 17–18). Bioethics is a discipline belonging to a broader framework of ethics, which is in Arabic *akhlaq* and *adab* (Ramadan 2017, 3). Given the period in which bioethics as a field emerged, it addresses a very broad array of moral questions and issues of existential urgency from the perspective of both the individual and society. Reproductive bioethics is concerned with delicate issues pertaining to the most intimate aspect of human life. The interconnectedness of reproductive bioethics on one hand and the religious doctrine or a set of requirements the faith imposes on the believing person on the other is amplified in Islam because of the religious duty to marry, procreate and care for their offspring. Fulfilling the obligation of marriage by having children means fulfilling the will of Allah not only in the life of an individual, but the whole *ummah*.

In this study we are focusing on the findings of our research in the Czech Republic. Since Islam is not one of majoritarian and historically connected religions to this geographical area, its conceptions, logic of thinking and the value system are largely unknown and outlandish for Czech citizens. Surely, based on information from the mass media, they could gain conviction, that their knowledge of Islam is adequate, while is the real knowledge sometimes confused with prejudices or distorted information. For these reasons, we focused on finding the state of real knowledge among Czech university students, who are supposed to be one of the representative groups regarding relevant knowledge in the country.

2 Methods

Anonymous online questionnaire survey was conducted at twelve universities in the Czech Republic, specifically at the Czech Technical University in Prague – 152 (26,2 %), Charles University in Prague – 36 (6,2 %), University of South Bohemia in České Budějovice – 45 (7,7 %), University of West Bohemia in Pilsen – 51 (8,8 %), Masaryk University in Brno – 46 (7,9 %), Jan Evangelista Purkyně University in Ústí nad Labem – 49 (8,4 %), Technical University in Liberec – 33 (5,7 %), University of Pardubice – 53 (9,1 %), University of Ostrava – 27 (4,6 %), Tomáš Baťa University in Zlín – 36 (6,2 %), Palacký University Olomouc – 47 (8,1 %), other university – 6 (1,0 %).

Total number of 581 participants have submitted online questionnaires from January to August 2019. There were 159 males (27,4 %) and 422 females (72,6 %). Age range of respondents was as follows: a) 19–20 years: 84 (14,5 %); b) 21–22 years: 172 (29,6 %); c) 23–24 years: 195 (33,6 %); d) 25–26 years: 117 (20,1 %); e) other: 13 (2,2 %). The participants were the students of the bachelor grade – 442 (76,1%), the master grade – 134 (23,1 %) and the PhD grade – 5 (0,9 %).

Our questionnaire consisted of 12 questions. First part of it consisted of five questions, which were focused on specification of respondents’ group. Second part consisted of questions related to topics of family and reproductive health in Islam. We have chosen those kinds of questions, which have the same answers or attitudes of believers in Sunni, Shi’a and secular Muslim world (Gürtin, Inhorn and Tremayne 2015, 3137–3153). Therefore, we do not focus on areas of criteria for concluding a marriage contract, because those differ according to concrete madhhab; nor on third-party donation, pre-implantation sex selection, etc.

3 Results

The results of our survey will be presented in tables and discussed in the frame of every question.

Question 1.

How does Islam define marriage?

Marriage, *nikāh*, is according to Quranic text in 49:13 an ideal, which is based on the order of Creator (*The Holy Quran* 1946). This text says, that whole human-kind was created from one couple, from man and woman. *Qur'an* permits a Muslim to have up to four wives, but only if he is able to be just to every wife and if he is able to completely take care of every wife. Marriage is a contract between man and woman, resp. women. The term sacrament does not exist in Islam and therefore marriage is not a sacrament. Every partner has exactly appointed rights and duties (Al-Sbenaty 2012, 21–22, 94–95).

Question 2.

If a Muslim would like to marry a woman, what confession she has to be?

The future Muslim's wife may be a believer who professes one of the three Abrahamic religions, or the religions of the Book: a Muslim, a Jewish, or a Christian. The future husband of an Muslimah may only be a Muslim (Zaviš 2013, 13–56).

Table 1.
Concept of marriage in Islam

Answers	Number	Percentage
(a) relationship between two loving persons with no regard to their sex	2	0,3 %
(b) sacrament that unites two persons with no regard to their sex	0	0,0 %
(c) contract between two loving persons with no regard to their sex	0	0,0 %
(d) sacrament that unites man and woman / man and women	136	23,4 %
(e) contract between man and woman / man and women)	439	75,6 %
(f) one of the forms of coexistence of man and woman	4	0,7 %

Table 2.
Confession of future wife in Islam

Answers	Number	Percentage
(a) Muslim	434	74,7 %
(b) Muslim or Jewish	76	13,1 %
(c) Muslim, Jewish or Christian	33	5,7 %
(d) whatever, just not an atheist	21	3,6 %
(e) it is not crucial, if she is or is not of any confession	17	2,9 %

Question 3.

What is the basic requirement for human procreation in Islam?

Intimate relationships between a man and a woman are not permitted in Islam unless they are bound by a marriage contract. Intimate relationships between same sex partners are not allowed under any circumstances. Human procreation is only possible within the marriage of a man and a woman, resp. women (Al-Sbenaty 2012, 21–22, 94–95).

Question 4.

What was Muhammad's attitude towards killing female newborns (infanticide)?

The pre-Islamic Arab tribes have routinely murdered newborn daughters. Muhammad told them, that Islam requires to stop this practice (Adnan 2004, 30–31). *Qur'an* 16:58–59 refers to infanticide of the daughters as to an evil decision (*The Holy Quran* 1946), because both sons and daughters are Allah's gift. That also means, that the usage of punishments in home education (Koldeová 2015, 104) should not be associated with the annihilation of the females. On the other hand, the fact, that female infanticide is in Islam forbidden, does not automatically eliminate the permission of temporary contraception usage. Al-Bar and Chamsi-Pasha mention, that even the Prophet himself allowed his companions to practice coitus interruptus (Al-Bar and Chamsi-Pasha 2015, 164).

Table 3.

The basic precondition for human procreation in Islam

Answers	Number	Percentage
(a) long-term relationship of partners	23	4,0 %
(b) marriage	551	94,8 %
(c) free relationship of partners is enough, if they are willing to raise a child	6	1,0 %
(d) short-term relationship of partners is enough, if they are willing to raise a child	1	0,2 %

Table 4.

Opinion on Muhammad's attitude towards female infanticide

Answers	Number	Percentage
(a) required	84	14,5 %
(b) forbidden	341	58,7 %
(c) recommended	52	9,0 %
(d) considered to be personal decision of every father	74	12,7 %
(e) considered to be personal decision of every mother	3	0,5 %
(f) declared for religiously neutral decision	27	4,6 %

Question 5.

Is it allowed to Muslim couples, who do have health issues with conceiving a child, to use the ARTs (assisted reproductive technologies)?

Yes, it is (Inhorn 2006, 350–352), because science and faith in Islam have to build together the individual life and the existence of all mankind. However, scientific achievements that would not respect human dignity or would be destructive to mankind, are forbidden. Therefore, human cloning, selective abortion, or the choice of the sex of the child without medical indication are all prohibited (Nordin 2012, 252–257; Sachedina 2009, 108). The longest registered history in Arab countries, particularly in Iran, has the use of the IVF (Tremayne and Akhondi 2016, 62–70).

Question 6.

Is it allowed to Muslim couples to use the advantages of genetic engineering in the case of the elimination of the chromosome, which is a carrier of genetically transmitted disease of their future child?

Yes, it is (Zaviš 2018, 8–15). The most common cases are those of X chromosome-related diseases. The elimination of this chromosome in the frame of preimplantation genetic diagnosis (PGD) or according to new glossary – preimplantation genetic testing (PGT) to prevent the onset of any severe disease (hemophilia, DMD, etc.) would significantly affect the quality of life of the affected individual and all those who will take care of him, especially parents (Daar and Al Khitamy 2001, 60–63).

Table 5.
Allowance of using ARTs in Islam

Answers	Number	Percentage
(a) yes	119	20,5 %
(b) no	462	79,5 %

Table 6.
Allowance of elimination of chromosome, which is a carrier of disease in Islam

Answers	Number	Percentage
(a) yes	82	14,1 %
(b) no	161	27,7 %
(c) it is not allowed in humans, but it is allowed in animals and plants	338	58,2 %

4 Discussion

Question 7.

What is Islam's attitude to induced abortion?

In Islam the begotten life is inviolable (Vivoda 2019, 31–43), no matter what prenatal stage it is. For a long time, there was a general ban of induced abortion. The cases of the rape of Muslim women in the war, later also under other circumstances without the war, cases of after the birth disabled individuals from incestuous marriages, cases of forced choice between mother's and child's life, etc., made Islamic lawyers and doctors improve their teachings on induced abortions and count on some permitted exceptions. Cases of acute threat to mother's life and rape are those in which Muslim doctors may incline to induced abortion. The principle of the lesser evil is chosen (Atighetchi 2009, 111–119). However, under no circumstances is the financial deficit of future parents justifying their decision to undergo abortion. Quranic text in 17:31 expressly forbids this and at the same time assures, that Allah will take care of subsistence of both descendants and their parents (*The Holy Quran* 1946).

Table 7.

Allowance of induced abortion in Islam

Answers	Number	Percentage
(a) completely forbidden	385	66,3 %
(b) forbidden in the case that a couple yet does not have any descendants	12	2,1 %
(c) forbidden in the case that a couple yet does have only daughters	46	7,9 %
(d) allowed in the cases of threat to mother's life and rape	9	1,5 %
(e) allowed in the case of financial deficiency of future parents	5	0,9 %
(f) allowed in the case of agreeing decision of future parents	124	21,3 %

Absolutely highest rate of answers in our survey was connected to question of the basic requirement for the procreation in Islam, which is marriage. This correct answer was picked by 551 participants, what makes 94,8 %. Also correctly answered question by majority of participants, i.e. 75,6 %, was on the form of the institution of the marriage, which is a contract. The third correctly answered question by majority of participants, i.e. 58,7 %, was the one on the permissibility of female infanticide according to Muhammad's doctrine. In comparison to results obtained in Slovakia at five public universities among 1000 participants, this is better outcome. Slovak students namely mostly inclined to the answer which claimed that performance of female infanticide is dependent on the decision of the father.

It is interesting, that Czech students have reached the same, by majority wrongly answered questions, as it was the case with Slovak students. Total percentage of 74,7 % of Czech participants claimed, that future wife of Muslim has to be of Muslim confession, but only 5,7 % answered correctly, that Muslim's future wife can be of the one of the three religions of the book, thus Muslim, Jewish or Christian. Answers to questions No. 5–7 have demonstrated, as same as among Slovak students, that participants are not familiar with contemporary Islam, more precisely, the information on current everyday life of Muslim believers, their challenges and struggles, which they try to respond to with all respect to sacred teachings and religious jurisprudence.

Participants of our research in the Czech Republic do know the concept of marriage and its necessity for human procreation in Islam. It has been shown, that they know the unconditional exclusivity of heterosexual marriages. These phenomena are related to Christian doctrine and thus to a culture based on Christian values. The striking difference between Islam and Christianity lies in the number of wives of a man, because Christianity recognizes as marriage only the relationship of one man and one woman (Zaviš 2017, 70). In this context it is necessary to point out, that Quranic permission of polygamy has been practically widely misused; videlicet, this permission literally relates just to extraordinary situations, e.g. as taking care of widows and their children bereaved after their husbands died in war (Hassan 2006, 248).

Thus, in the area of the theoretical knowledge of marriage and procreation in Islam, as same as Muhammad's position towards female infanticide, our respondents would be able to communicate inter-religiously. However, on issues related

to confession of Muslim's wife, and contemporary reproductive bioethics in Islam, our respondents would not be able to communicate competently inter-religiously. It follows from these facts, that Islam is presented at universities at a more historical level, by accentuating historically axiomatic individual and social principles, while the current Islam with a certain and constant shift in religious law is mostly absent at lectures. The presentation of history and phenomenology of religions at Slovak universities should not remain in the past, but it should also focus on the present and the future, not only marginally and briefly.

Growing xenophobia (Dojčár 2017, 10–11) involves not only religious and cultural aspects, but also the fear of potential infection with unknown diseases (Kováč, Krčméry, Oláh *et al.* 2018, 54–57). Also, many mass media have until recently flatly identified Muslims with Islamists in terms of terrorists and suicide bombers (Jančovič and Bencová, 2018, 5–56), etc. Religion-related reporting tactics are also covered by journalistic research. During her research, Rončáková managed to identify seven crucial news values that could be associated with religious messages: (1) conflict first and foremost, (2) scandalousness, (3) entertainment, (4) fragmentation, (5) incompleteness, (6) stereotypes, and (7) story (Rončáková 2017, 28). Analyzing our knowledge of islamophobia in the context of Rončáková's description, we can state that connected to news related to Islam come as primary these news values: conflict, scandalousness, fragmentation, incompleteness and stereotypes.

Another incorrect, but overall wide-spread image of Islam is related to conviction on its extremely growing fertility rates worldwide. Although this is the most true regarding certain African countries, which have the vast majority of Muslim population as shown in parentheses, e.g. Somalia (99,8 %), Niger (98,3 %), Mali (95 %), etc., and their populations are projected to increase at least five-fold by 2100 (United Nations 2013, xix), nevertheless, according to the UN figures by 2012, almost half of the world's top fifteen fertility declines had occurred in Muslim, a majority Arab nation (United Nations 2012). The trend of high fertility growth has radically changed over the past thirty years in the Middle East, and this corresponds to the trend in the rest of the world. Inhorn claims, that fertility rates have plummeted across the Muslim world and that this fertility decline has been profound, even revolutionary (Inhorn 2018, 147–159; Gargji and Chaudary 2019). Totally different situation is in Europe, where Muslim population makes up roughly 5 % of the whole population, and its growth was particularly in years 2010–2016 the re-

sult of migration. In comparison to non-Muslim woman who is expected to have 1,6 children, Muslim woman is expected to have 2,6 children. According to Pew Research Center projections, in the coming decades the Muslim fertility rates are expected to grow in Europe, so that they could more than double (Hackett 2017).

The fact is that ignorance inspires mistrust and prejudice that play a major role in religious conflicts around the world, and therefore we have a moral obligation at universities to prevent these humanity's evils using the objective and up-to-date content of the curriculum that our students can adequately prepare for encounter with another religion or culture. Since there is a compulsory course of non-confessional religious education in Denmark and Sweden already at primary school, we know with certainty that their pupils are able to form their perception, attitude and respect for another religion in a completely different way than it is in the Czech Republic and Slovakia, where there is still an unwritten distinction between pupils and parents of believers and non-believers according to whether their children visit a course of religious education or ethical education, which is extremely superficial and inadequate. Each person's religious belief is indisputable; however, a completely different dimension is the general knowledge of particular religions and cultures of the world, which makes the student more educated, open, flexible, cosmopolitan and consistently mature. Inter-religious communication can be built under condition of knowing the religious doctrines and practices of people of other cultures, but as long as some countries remain at today's level – confessional religious education versus ethical education, they will not avoid the future superficial division of society based on prejudices, nor the general lack of education of pupils in religions and cultures.

5 Conclusion

Our research among Czech students has sought to identify, present and evaluate the current state of knowledge of Islamic reproductive bioethics necessary for inter-religious communication. It would be also desirable to find out, how the teachers and professors themselves are involved. Future research should focus on the content of the courses, which are dealing with inter-religious and intercultural dialogue, resp. relations, too. Another question concerns the compulsory literature for students and the equipment of academic libraries with up-to-date, high-quality publications that can intrinsically address students and cause their spontaneous interest in their own inter-religious competencies. The following important dimension of inter-religious communication of students, after obtaining knowledge, is the ability of critical thinking and factual discussion. We need to find out, whether our students can think critically and also self-critically, and whether they can convert these considerations into a constructive, unaffected discussion. Findings and conclusions of our survey (n=581) at Czech universities could be perceived as a demonstration of a possible comprehensive nationwide survey of the issue.

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References

- Adnan, Gunawan. 2004. *Women and The Glorious Qur'an: An Analytical Study of Women-Related Verses of the Sūra An-Nisa'*. Göttingen: Universitätsverlag Göttingen.
- Al-Bar, Mohammed Ali, and Hassan Cham-si-Pasha. 2015. *Contemporary Bioethics: Islamic Perspective*. London: Springer Open.
- Al-Sbenaty, Abdulwahab. 2012. *Manželstvo a rozvod podľa islamského náboženstva, islamského práva a podľa ich právnych úprav v niektorých islamských krajinách*. Bratislava: Levant.
- Atighetchi, Dariusch. 2009. *Islamic Bioethics: Problems and Perspectives*. Dordrecht: Springer.
- Daar Abdallah S., and A. Binsumeit Al Khitamy. 2001. "Bioethics for Clinicians: 21. Islamic Bioethics." *Canadian Medical Association Journal* 164 (1): 60–63.
- Dojčár, Martin. 2017. "Migration, Xenophobia and Dialogical Ethos." In *Migrácia: náboženstvá bez hraníc – európska perspektíva*, edited by Martin Dojčár, 7–13. Trnava: Trnavská univerzita.
- Gargji, Inaara, and Muhammad Chaudary. 2019. "The Arab World's Silent Reproductive Revolution." An interview with Marcia C. Inhorn. *Al Jazeera News*, April 16, 2019. Accessed June 28, 2019. www.aljazeera.com.
- Gürtin Zeynep B., Marcia C. Inhorn., and Soraya Tremayne. 2015. "Islam and Assisted Reproduction in the Middle East: Comparing the Sunni Arab World, Shia Iran and Secular Turkey." In *The Changing World Religion Map*, edited by Stanley D. Brunn, 3137–3153. London: Springer.
- Hackett, Conrad. 2017. "Five Facts About the Muslim Population in Europe." *Pew Research Center*, November 29, 2017. Accessed May 7, 2019. www.pewresearch.org.
- Hassan, Riffat. 2006. "Marriage: Islamic Discourses." In *Encyclopedia of Women & Islamic Cultures*, Vol. 3, edited by Suad Joseph, 246–249. Leiden: Brill.
- Inhorn, Marcia C. 2006. "Reproduction: New Technologies." In *Encyclopedia of Women & Islamic Cultures. Family, Body, Sexuality and Health*, Vol. 3, edited by Suad Joseph et al., 350–352. Leiden: Brill.
- Inhorn, Marcia C. 2018. "The Arab World's 'Quiet' Reproductive Revolution." *Brown Journal of World Affairs* 24 (2): 147–159.
- Jančovič, Jozef, and Zuzana Bencová. 2018. "Komparácia Pánovej vojny v Starom zákone a svätej vojny v Koráne na základe vybraných textov." *Acta Facultatis Theologicae Universitatis Comenianae Bratislaviensis* 15 (2): 5–56.
- Koldeová, Lujza. 2015. *Tresty vo výchove*. Bratislava: Wolters Kluwer.
- Kováč, Robert, Vladimír Krčméry, Michael Oláh et al. "False Fear from Marginalized Groups (Homeless, Orphans, Migrants) to Our Society – No Carriers of Dangerous Microorganisms." *Clinical Social Work and Health Intervention* 9 (2): 54–57.
- Leiba-O'Sullivan, Sharon. 1999. "The Distinction Between Stable and Dynamic Cross-Cultural Competencies: Implications for Expatriate Trainability." *Journal of International Business Studies* 30 (4): 709–725.
- Mistrík, Erich. 2011. *Ciele a obsah multikultúrnej výchovy a vzdelávania pre Štátny vzdelávací program ISCED 0 a ISCED 1*. Accessed December 28, 2018. www.statpedu.sk.
- Nordin, Musa Mohd. 2012. "An Islamic Perspective of Assisted Reproductive Technologies." *Bangladesh Journal of Medical Science* 11 (4): 252–257.
- Ramadan, Tariq. 2017. "Islamic Ethics: Sources, Methodology and Application." In *Islamic Bioethics: Current Issues and Challenges*, edited by Alireza Bagheri and Khalid Alali, 1–21. London: World Scientific Publishing Europe.
- Rončáková, Terézia. 2017. "Religious Messages and the Media Code – Inherent Features of the Media Language Code and the Transmission of Religious Messages." *KOME* 5 (2): 19–37.
- Sachedina, Abdulaziz. 2009. *Islamic Bio-medical Ethics: Principles and Application*. New York: Oxford University Press.
- Šoltés, Radovan. 2017. *Politika a etika v živote kresťana*. Prešov: Prešovská univerzita.
- The Holy Quran*. 1946. Translated by Abdullah Yusuf Ali. Accessed June 5, 2019. quranyusufali.com.
- Tremayne, Soraya, and Mohammed Mehdi Akhondi. 2016. "Conceiving IVF in Iran." In *IVF-Global Histories*, edited by Sarah Franklin and Marcia Inhorn. Elsevier Reproductive Biomedicine and Society Online, Vol. 2: 62–70. Accessed March 1, 2019. doi.org.
- United Nations, Department of Economic and Social Affairs, Population Division. 2012. Accessed June 22, 2019. www.un.org.
- United Nations, Department of Economic and Social Affairs, Population Division. 2013. *World Population Prospects: The 2012 Revision, Highlights and Advance Tables. Working Paper No. ESA/P/WP.228*. Accessed July 21, 2019. population.un.org.
- Vivoda, Michal. 2018. "Rozbor vybraných bioetických výziev v súčasnosti." *Acta Facultatis Theologicae Universitatis Comenianae Bratislaviensis* 15 (2): 99–113.
- Vivoda, Michal. 2019. "Analýza etického postoja k počatému ľudskému životu v islame." *Acta Facultatis Theologicae Universitatis Comenianae Bratislaviensis* 16 (1): 31–43.
- Zaviš, Monika. 2013. "Manželstvo a rozvod vo svetových mimokresťanských náboženstvách s dôrazom na ich pozíciu v islame." In *Manželstvo a rodina v náboženskom kontexte*, edited by Martin Šarkan, 13–56. Trnava: Dobrá kniha.
- Zaviš, Monika. 2017. *Úvod do systematickej etiky*. Žilina: Žilinská univerzita.
- Zaviš, Monika. 2018. "The Issue of the Sex of a Conceived Child in Islam: From the Pre-Islamic Conceptions to the Current Methods of Genetic Selection of the Sexes." *Spirituality Studies* 4 (2): 8–15.
- Zegers-Hochschild, Fernando, David G. Adamson, Silke Dyer et al. 2017. "The International Glossary on the Infertility and Fertility Care." *Human Reproduction* 32 (9): 1786–1801.