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IMPACT OF INFERTILITY ON THE INSTITUTION OF MARRIAGE IN MODERN SOCIETY

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Impact of Infertility on the Institution of Marriage in Modern Society

Farida ASHIRBAYEVA¹, Bayan SMAGAMBET², Almash TLESPAYEVA³

Abstract

The research relevance is determined by the demographic issues and psychological studies that have recently attracted the attention of specialists and the public, which highlight various problems of families with reproductive health disorders, and the reaction of society to infertility is one of the problems bothering people diagnosed with infertility. However, the issue of the psychological and reproductive characteristics of such families requires further study and elaboration. The research aims to study the impact of infertility problems in marriages of urban and rural women in Kazakhstan and the reaction of society to infertile couples. The study examines the main factors of impact on reproductive health, the causes of female and male infertility, and society's assessment of childless couples. The experimental research was conducted in the central part of Kazakhstan: in the clinic of reproductive medicine and women's consultation of a rural hospital. A total of 198 women from among the patients diagnosed with infertility were interviewed. The research showed that due to childlessness, women face stigmatisation in society: 21% of urban women and 78% of rural women. According to the medical anamneses studied, 154 infertile women were registered with the diagnosis of primary infertility. According to examination data, 44 women were found to have congenital or hereditary infertility. Almost all the women interviewed are satisfied with their family life. The method of comparative, systemic, logical, and content analysis, as well as the method of synthesis and analogy, were used in the study of this topic. The practical value of this article lies in the fact that the main provisions and obtained conclusions of the analysed material can be used in

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conducting classes in sociology, and psychology, used by students specialising in the field of infertility, conception, and reproductive health.

Keywords: childlessness; family; conception; infertility; stigmatisation; reproductive difficulties; social problem.

Introduction

Disruption or instability of reproductive health affects different aspects of a couple's life, which often leads to destabilisation in the couple's relationship, increasing the spouses' guilt, anxiety and depression, and the diagnostic and treatment measures taken lead to increased psycho-emotional stress. The very concept of "infertility" or "barrenness" is a disease of the female or male reproductive system due to which no pregnancy occurs after a year of regular unprotected sexual intercourse. Infertile marriage is one of the major and challenging health and social problems. The increase in infertile marriages is the cause of the low birth rate. Treatment is important to consider as a reserve for the birth of desirable children, as well as the prospective growth of the reproductive potential of the population. Considering the economic, ecological, and social difficult situation of modern society, there is an attitude towards a small family, and for positive demographic growth, it is necessary to have three children per family. Thus, the main reason for the low birth rate is the increase in the number of infertile marriages. The main causes of infertility in women can be uterine structure, fallopian tube obstruction, and ovulation problems. In men, infertility is often caused by problems with ejaculation, little or no sperm at all, as well as abnormal sperm and their reduced activity. It is also worth noting that in most cases the causes of infertility are social in nature. This is due to clinical experience and the introduction of modern reproductive technologies. There is no final solution to the problem of infertility treatment.

Channa *et al.* (2023) believe that family and cultural values strongly influence the prevalence of infertility. Changes in dietary habits, lifestyle and stress are also contributing to the increase in infertility. According to Aimagambetova *et al.* (2020) the psychological impact of infertility negatively affects the quality of life of women. This impact is determined by status, in terms of culture and values, in psychophysical, social, emotional aspects, environment and tolerance to treatment. According to Inkarbek *et al.* (2021) the unstable fertility intentions throughout life make it difficult to determine to what extent childlessness may be "voluntary" or "involuntary". Nevertheless, fertility intentions tend to become more specific as life progresses. According to the considerations of Suleimenova *et al.* (2022), it is important to find fertility reserves, since few young people reach reproductive age, it is necessary to improve the reproductive and demographic behaviour of the population as much as possible. The traditional values of the family are changing at present. The problem is often related to the emotional family situation, social discomfort, the psychological state of young spouses, as well as the increasing number of divorces, unsuccessful births, abortions, and gynaecological diseases.

Referring to the arguments of scientists A. Issanov *et al.* (2022), one of the most important problems in the current market of assisted reproductive technologies is access to infertility treatment. Since infertility is a medical condition, couples with negative fertility characteristics should have equal access to medical care. Researchers believe that depending on how prevalent infertility is and how much importance society places on it, infertility as a huge public health problem varies greatly from community to community. Infertility is progressing in many countries of the world, including Kazakhstan (Every sixth couple in Kazakhstan is infertility, 2023). All of the above motivates researchers to search for new methods and ways to study psychological and medical care for infertile couples.

This study is devoted to the study of infertility and the impact of reproductive difficulties on the institution of marriage in modern society. The purpose of the study was to examine the concept of infertility, male and female infertility, as well as to examine society's reaction to infertile marriages.

Methodology

Description, questionnaire, and analytical methods of research were used. The description method was used to consider the concept of infertility and its features, types of male and female infertility, and to study the main types and causes of infertility with their characteristics.

The empirical part of this study consists of two parts. The first stage took place in the clinic of reproductive medicine at the IVF and reproductive medicine centre "Ecomed". A questionnaire survey was conducted with 175 women among the patients suffering from infertility. The main criterion for selecting women was that they should seek help only at this clinic. Patients were selected based on medical histories in medical records, consultations with medical staff, and observation of behaviour and interaction of infertile women with the clinic staff. The study subjects had no adopted children and were willing to participate in the interviews. The age of women diagnosed with infertility ranged from 26 to 44 years.

The second part of the survey was conducted in rural areas of Kazakhstan – Zhetebey rural hospital, in the antenatal clinic. The participants are 23 women. The age of women varies from 24 to 46 years old. (Table 1) The main criterion for selecting rural women was that they were native inhabitants of rural areas. A psychodiagnostic procedure was also conducted with the spouses of the studied women (180 people in total) to analyse their satisfaction with marital relations. The research was conducted from May 2023 to August 2023.

Total responder	378	
Gender	Female	198
	Male	180
Female age	20-30	32%
	30-40	65%
	40-50	3%
Male age	20-30	34%
	30-40	59%
	40-50	17%

Table 1. Demographic criteria of research participants

Source: compiled by the authors.

The questionnaire method was used to study the level of influence of infertility on the condition of women and men. With the help of the analytical method, it was possible to familiarise myself with the theoretical materials on the topic of scientific research, as well as to study the conclusions on the topic. With the help of the results, it was possible to find out the influence of infertility in percentage, the empirical method showed the percentage of the causes of infertility.

The abstraction method, which was used to abstract from some properties and concepts of the topic under study, allowed us to focus on the object of research on infertility, defining its features, as well as the method allowed us to focus on the main methods of treatment and psychological assistance provided by special institutions. The method of functional and logical analysis was used to characterise the concept of infertility and describe its main problems and solutions.

The method of comparative analysis provided an opportunity to study the experience of other countries of the world in the research of male and female infertility, as well as an opportunity to evaluate their effectiveness. Based on this, it was possible to characterise the theoretical aspect of the topic in detail. The synthesis method was used to explore the main problems that infertile couples face when such a diagnosis is made. Due to the basic methods of analysis and synthesis, it is worth noting the reliability of the conclusions obtained in the article, and the validity of the information obtained. The use of axiomatic method was used to determine the role of infertility in the example of the studied women from urban and rural areas of Kazakhstan.

Results

Infertility in marriage is a social, medical, and demographic problem. Along with the threat of overpopulation in the world, there is a problem of increasing the number of childless families. If the frequency of infertile marriages exceeds 15%, there is a social and demographic problem on a national scale. Although infertility is as much a female as a male problem, infertility is often understood as a female condition only. Thus, stigmatisation is born, where a woman who is unable to conceive and bear a child is blamed for the couple.

In most cultures of the world's peoples, a child's birth is facilitated by family, relatives, neighbours, and peers. Children who are born in a certain social structure provoke the need to create a family in the future (Bazaluk and Nezhyva, 2016). In addition to this, parental attitudes, values, and traditions are added, which, in general, influence orientations towards fertility. When couples postpone the conception of a child, all sources become a factor of social pressure, frustration, and distress (Shershova and Chaika, 2024). Opinions about infertility are expressed, there are notions of threatening infertility such as "depletion of stamina and physical strength of the childbearing woman", "ticking biological clock", "old childbearing woman" "decreased viability due to decreased ovarian and sperm reserves". In developing countries, the label of infertility is attributed to the woman, regardless of the cause of infertility. Infertility may also be perceived as a threat to society, family background, personality, and gender identity. Often, people with infertility face social stigmatisation and the reason why infertility disrupts their social relationships (Suleimenova *et al.*, 2022).

Society increases the psychological stress of infertile couples (Spytska, 2024). Infertility is perceived as one of the main serious problems that leads a woman to stigmatisation, sometimes social isolation, including the loss of a legitimate role in the family just for those who do not fall within the usual norms of family building (Pasch & Sullivan, 2017). The stigmatisation of infertility has existed for centuries. When referring to women who have not had children, many different types of metaphors have been <u>used</u>, making it clear that an infertile woman is weak and helpless. Such women were criticised by society. In the Middle Ages, infertility was attributed to the intervention of the devil, a witch, or a sorcerer. A woman who could not get pregnant was also considered a witch. Infertility was thought to be a punishment for sins or an unbearable ordeal, and it was also thought to be the fault of men who lacked the "right seed". Since then, infertility treatments have been tried. Most of the medications were only taken by women. However, some medicines were prescribed for both partners, but there were no prescriptions exclusively for men.

In today's world, women, not men, are more <u>exposed</u> to the isolation of society due to the reason of their inability to procreate, and, as a result, it is the woman's responsibility to find and apply methods to solve this problem. The social

environment often accuses those who cannot get pregnant of leading unhealthy lifestyles, and poor nutrition, or those who seek, above all, to build a career, while postponing motherhood (Prontenko *et al.*, 2019). The human reproductive function has the following purposes: social (population replenishment) and individual (fulfilment of one's own needs for children). Infertility has 7 varieties: (1) secondary – if during the first year of cohabitation the woman became pregnant without the help of additional efforts; (2) permanent – if serious pathological problems are present; (3) absolute – the presence of congenital developmental abnormalities in the body; (4) physiological – inability to conceive due to transient disturbances in hormonal malfunctions; (5) acquired – caused after the first pregnancy by pathological changes; (6) relative – if there is a chance of getting pregnant, but doctors are not sure if the baby will be carried to term; (7) congenital – the cause of infertility is congenital or hereditary.

It is also worth noting that infertility can also be voluntary. Some couples do not plan to have children of their own volition, due to life conditions, social or economic status, or unwillingness to take responsibility. Some women cannot have children for medical reasons. In any case, to determine the causes of infertility, both spouses undergo a diagnostic examination, the results of which depend on the treatment of pathological changes that provoked infertility. The main causes of infertility are presented below (Table 2).

	Endometriosis
Female factor	Ovulation problems
	Insufficient egg quality
	Polycystic ovarian disease, which prevents regular ovulation.
	Ejaculatory duct obstruction
Male factor	Sperm problems
	Allergic reaction to semen
Infertility of unclear	If the reason for the inability to conceive is not clear after the examinations.
genesis.	The term "co-infertility" (a couple has both female and male factors, or one partner has more than one infertility problem).

Source: (Every sixth couple in Kazakhstan is infertility, 2023).

Figure 1 shows that the female factor is still the cause of infertility in about 40% of cases, the malefactor in 35% of cases and unclear genesis occupies 25% of cases.

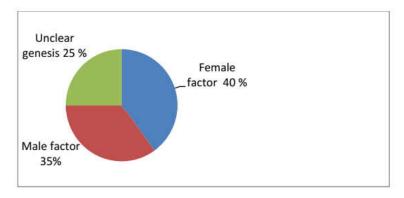


Figure 1. Infertility cause percentage

Infertility in marriage is almost always a mental, physical, and social disadvantage (Efremov, 2024). Mental ill-being is an increase in the level of nervous processes or retardation of actions, apathy, decreased interest in the world around us, development of inferiority complexes, loss of interest in work, instability in family relationships (Patel *et al.*, 2018). Such disorders hurt society as a whole, increasing the number of divorces and reducing the social activity of infertile marriages. In the treatment of infertility, healthcare providers need to adhere to extraordinary sensitivity, compassion, and patience towards infertile couples. The reproductive health of the woman in the marriage should be at an appropriate level because the effectiveness of the couple's reproductive function depends on it (Datskovsky *et al.*, 2018).

The main problem of infertile marriages is that the woman blames herself for her inability to get pregnant. The subsequent problem is that the spouses begin to blame each other, thus undermining the psychological state of the family, causing nervous breakdowns, illnesses and other factors that only aggravate the situation. All this leads to the problem of infertile marriage: constant irritability with each other, frequent quarrels, deterioration of mood, the development of various diseases, falling immunity – family crisis, in general. Unfortunately, this is not a complete list of problems of couples, which can lead to infertility in marriage. There have been cases when in the course of quarrels, one of the spouses deprived the other of life or ended up committing suicide. All this indicates the seriousness of the problem, the solution of which requires a special approach, a new understanding of the world, and the creation of new stereotypes of infertility treatment and reproductive behaviour.

The main task in the field of social and demographic policy is still the detection and treatment of female infertility, which takes place with the help of reproductive medicine. Reproductive medicine, in turn, protects the health of the population from reproduction. Kazakhstan pays considerable attention to the problems of infertility. According to statistical data from the Kazakhstan Association of Reproductive Medicine, every sixth couple faces fertility problems, where the frequency of infertility varies from 12% to 16% (Every sixth couple in Kazakhstan is infertility, 2023). According to the official data of the Institute of Reproductive Medicine today it is more than 21 thousand people. There is no exact data, as parents are obliged to register only when they decide to undergo IVF at the expense of the state. However, it should be noted that not all infertile couples apply for a quota from the state. Some go abroad for treatment; others do not apply for IVF at all.

To address the negative reproductive health consequences of planning a pregnancy, public and private clinics provide infertility treatment services using the latest reproductive technologies. For example, the first IVF clinic was established in 1995 - the Centre for IVF and Reproductive Medicine "Ecomed", whose specialists work in the field of reproductive medicine with the most complex forms of infertility using the latest diagnostic methods and modern assisted reproductive technologies. In 2008, to carry out research and training in reproductive health, the Institute of Reproductive Medicine with the Department of Modern Reproductive Technologies was founded, according to statistical data, 48 thousand people applied to it with infertility problems in 2022 (Sarria-Santamera et al., 2020). There are also centres in antenatal clinics and family planning offices. They are designed for all categories of men and women and adolescents in puberty. Obstetricians, gynaecologists, sexopathologists and psychologists provide healtheducation counselling, conduct educational work through the mass media, hold talks in schools, and give lectures at higher education institutions, specialized secondary educational establishments, enterprises, and State institutions. Medical workers take an active part in the sexuality education and training of adolescents, helping them to preserve their reproductive health and prepare them for family life. However, it is worth noting the basic principles of infertility treatment – it is to eliminate the cause itself, which caused the violation of reproductive function, as well as to correct the associated pathological processes.

Modern medicine states that changing or improving the psychological support or lifestyle of infertile couples can prevent infertility, thus helping fertile couples to improve their quality of life, optimise their chances of conception or increase their ability to conceive spontaneously. The main intervention method recommended for infertile couples is psychotherapy, especially group cognitive-behavioural programmes. Experts insist that counselling should begin before couples attempt any medical treatment for infertility. In this regard, it is desirable to base demographic policy measures on traditional and innovative reproductive behaviour, as well as to improve programmes that improve socio-demographic processes in Kazakh society, and the role of urologists and andrologists in addressing the problem of impotence requires sociological research.

Currently, the public has mixed opinions about assisted reproductive technologies. There are myths about the painfulness of procedures and the impact of assisted reproductive technologies on women's health, discrepancies in the general situation regarding the health of children born naturally and with the use of assisted reproductive technologies, stereotypes about the financial inaccessibility of pregnancy services and others. At the same time, society imposes an additional problem on infertile people – a lot of questions from relatives, friends, and colleagues, who often give unsolicited advice and recommendations of dubious effectiveness. That additionally lowers the self-esteem of infertile patients and becomes an insurmountable test for the family relationships of partners. Social activity of such people may change, and families may break up (Smagambet and Ashirbayeva, 2021; Farhan, 2023).

This study is empirical research to investigate the impact of reproductive difficulties in marriage among urban and rural women, which was conducted in the territory of Kazakhstan, in its central part. The first part of the work took place in the clinic of reproductive medicine mentioned above – it is the Centre of IVF and reproductive medicine "Ecomed". A questionnaire survey was conducted with 175 women among the patients suffering from infertility (Table 3).

Question	Yes	No	Another answer
Are you married?	159	16	
Are you officially married?	98	61	
Is the diagnosis of infertility primary?	136	-	
Is the diagnosis congenital or hereditary?	39	-	
Do you experience anxiety, stress, insecurity, or psycho-emotional instability in your marriage because you cannot have children?	132	43	
Are you employed?	152	23	
Are you satisfied with your marital relationship?	153	21	1 – There are issues of housing and communal nature that need to be solved, because of this partial dissatisfaction
Do you feel supported by your spouse?	163	12	3 – Not always, but mostly probably yes

Table 3. Survey of urban women on the effects of infertility in the context of social relationships

Have you faced stigmatisation in society due to childlessness?	37	138	
Do relatives help you and your spouse with infertility?	38	137	
Is your problem known in the workplace?	86	89	
Are you registered for a state-funded IVF programme?	165	10	10 – It is possible to go abroad

Source: compiled by the authors.

The age of the studied women diagnosed with infertility ranged from 26 to 44 years. At the time of the research, 61% of the women were officially married and 39% of the women were civilly married. The results showed that 136 infertile women were registered with the diagnosis of primary infertility. According to the medical examination, 39 women were diagnosed with congenital or hereditary infertility. Characteristically, 30 out of 39 respondents have never been pregnant, and 9 of the remaining 9 have one artificial termination of pregnancy in their medical history after the first conception. When asked if infertile women have experienced the stigma of childlessness in society, 37 said yes, while the remaining 138 do not know what it is, devoting their lives to business, education, social work, or other pursuits, creating a new space where they can thrive and ignore their childlessness.

In summary, the first part of the research involved 136 women with diagnosed infertility and 39 women with idiopathic infertility. The duration of follow-up for women with infertility was limited to two years for 22% of women, two to five years for 44% of women, and more than five years for 32% of women. One hundred and sixty-five of the study population had attempted conception through the IVF programme. 39% have had one attempt, 32% have had two IVF attempts, 26% have had three attempts at the programme, and 5% of the women studied have attempted IVF four times or more. Ten people out of 175 have an opportunity to do IVF abroad. A psychodiagnostic procedure was also conducted with the spouses of the studied women (159 people) to analyse satisfaction with marital relations (Figure 2).

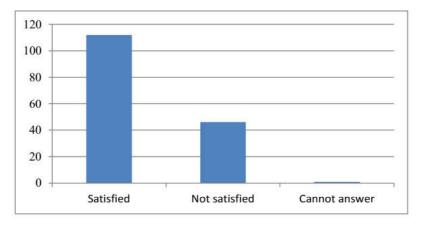


Figure 2. Men's satisfaction with marital relations

The results show that 112 people are fully satisfied with their marital relations, 46 are not satisfied or partially satisfied, and only 1 spouse answered that he/she is not ready to talk about such topics. It is important to note that as soon as the women studied were diagnosed with infertility, their husbands were fully examined together with their spouses and joined the search for specialists to treat this disease. The second part was carried out in rural areas of Kazakhstan – Zhetebey rural hospital, in the women's consultation centre, where the effects of infertility in the context of social relationships were studied by observation and questionnaires. Twenty-three women took part in the questionnaire (Table 4).

Table 4. Interviews	with rural wom	en about the	e effects of	<i>infertility in</i>	the context of
social relationships					

Question	Yes	No	Another answer
Are you married?	18	5	-
Are you officially married?	16	2	
Is the diagnosis of infertility primary?	16	-	
Is the diagnosis congenital or hereditary?	5	-	
Do you experience anxiety, stress, insecurity, or psycho-emotional instability in your marriage because you cannot have children?	12	6	
Are you employed?	19	4	-
Are you satisfied with your marital relationship?	6	12	
Do you feel supported by your spouse?	6	12	

Do you have the opportunity to receive treatment at a private pay clinic?	4	19	-
Have you faced stigmatisation in society due to childlessness?	18	5	Not often, but people judge without knowing the reasons for it
Do relatives help you and your spouse with infertility?	3	20	3 – Morally, for the most part
Is your problem known in the workplace	10	9	
Are you registered for a state? funded IVF programme?	8	15	

Source: compiled by the authors.

The ages of the women ranged from 24 to 46 years. The main criterion for selecting women was that they were indigenous people from rural areas. Women in this category have few and sometimes no opportunities to seek infertility treatment. As a result, they face a long-life struggle with stigmatisation both in the family and society. Starting treatment is a serious problem for poor rural women. Most of the time, women seek specialists and clinics on their own, without consulting their spouses and relatives, because their mobility is limited, and if their husbands or relatives are poor and hostile to childlessness in the family, they are unwilling to bear the costs of treatment. In such unequal circumstances, women seek treatment and find specialists. A psychodiagnostic procedure was also conducted with the spouses of the studied women (18 people), to analyse satisfaction with marital relations (Figure 3).

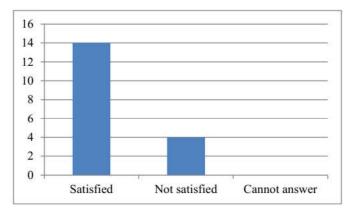


Figure 3. Men's satisfaction with marital relations

The results show that 14 people are fully satisfied with their marital relations, and 4 are not satisfied or partially satisfied. The research conducted in rural areas

showed that 16 infertile women were registered with a diagnosis of primary infertility, and 7 women were diagnosed with congenital or hereditary infertility. Childless families do not enjoy special support from society and relatives. Due to a lack of financial resources, not all women can seek help in private clinics, but they actively struggle with infertility and do not give up hope. When asked about stigmatisation in society, only five women do not have the feeling that they are uncomfortable living with the diagnosis of infertility, which is probably why not all of them share their problems in the collective. Moreover, having the opportunity to receive a quota from the state for IVF, not all women registered at the antenatal clinic are registered in the programme.

Thus, the empirical part of the research revealed that women diagnosed with infertility in urban areas of Kazakhstan are more aware of infertility issues and receive sufficient medical care due to accessibility and mobility than rural women. Almost all rural women are in official marriages, while urban women are also in civil marriages. Due to their infertility, not all rural women are satisfied with their marital relations, urban women have higher rates of answering this question. Some men are dissatisfied with family life, which is evident in the psychodiagnostic procedure carried out. Both urban and rural women have to struggle with stigmatisation in society due to childlessness. Rural women have a higher prevalence of anxiety and sadness than urban women, but according to the research, this difference was not statistically significant. Financial stability and independence, having a job, and participating in community activities give women a sense of who they are in their jobs, and the support of society can help infertile women feel less anxious and depressed in life.

Discussion

Infertility is one of the most common medical problems worldwide. Infertility can be male, female or combined. Infertility has both psychological and social consequences. Studying the problems of infertility, Murtaza *et al.* (2019) <u>indicate</u> that sexually transmitted diseases and pituitary factors contribute to the development of infertility. The main way out is IVF, which gives promising results. This position is worth agreeing to, but it should be added that having studied the problems of infertility it is possible to name genetic factors, diabetes, toxins, improper lifestyle among them. Although infertility is not considered a life-threatening disease, it is still experienced as a stressful life event for infertile couples or individuals because of the exalted value attributed to having a child by the individuals themselves or society at large. Frequent changes in the emotions, thoughts, and actions of infertile couples as one of the side effects of an infertility diagnosis.

Iranian researchers Namdar *et al.* (2017) studying the general state of health and quality of life of infertile women, concluded in their work that more than half of them have a certain degree of disorder. They are characterised by depression, risks of anxiety and social dysfunction. In addition, scientists believe that monthly income, educational status, and place of residence play an important role and are the main factors that affect the quality of life of infertile women. It is right to agree with such judgements because infertile couples often experience psychological stress and may suffer from a deterioration in health-related quality of life. In the same way, Hasanpoor-Azghdy *et al.* (2014) concluded that fertility-deprived women seeking help faced psycho-emotional problems. This in turn has a devastating effect on the mental health and harmonious relationship of infertile couples. Although infertility is often considered a biomedical problem, it should not be forgotten, that it is also a psycho-emotional, social, and cultural problem of the population.

The women and their husbands in the empirical research experienced some psychological consequences, both from medical interventions and infertility in general: fear and anxiety, depression, and psychological confusion. However, feelings such as regret, loneliness, mental involvement, and guilt were the only consequences of infertility. After undergoing courses of treatment, some had lower self-esteem, hopelessness, feelings of failure, and helplessness. As mentioned in their work by American researchers Rooney and Domar (2018), professionals need to recognise, acknowledge, and help these patients as they cope with their infertility diagnosis and treatment. The researchers concluded that a cognitivebehavioural group approach in treatment can be an effective way to achieve the goal of conception. After studying the article by the researchers, it is worth adding according to the latest developments, it can be seen that psychological help is an effective way to combat anxiety, stress, depression, and this in turn has to do with increasing the frequency of pregnancy.

According to Indian researchers Patel *et al.* (2018) infertility and its interrelationships with society, the socio-cultural construction of fertility stems from the importance that society attaches to the continuation of labour. The social learning associated with childbirth often promotes parenthood. It is reasonable to agree with the researchers. It has been pointed out repeatedly in this article. The majority of female patients do not have access to continuous cycles of fertility treatment. Sub fertile people to society are flawed, sexually incompetent and inferior individuals. Infertility imposes a psychological burden on the couple, the longer couples are infertile, the higher their level of distress (Efremov, 2025). According to the theory of Romanian scientists Iordachescu *et al.*, female patients are more vulnerable to psychological consequences than males (Iordachescu *et al.*, 2021). Problem habituation in marriage is negatively intertwined with the degree of emotional distress. Couples who have high levels of social support have a negatively correlated relationship between state anxiety and habituation to infertility in marriage (Bayer, 2024).

In infertile women, the loss of sexual desire increases as the duration of infertility treatment increases (Spytska, 2023; Romaniuk, 2021). This may be because a woman diagnosed with infertility realises that sexual intercourse will

not lead to a desired pregnancy, which makes the desire for sex disappear. The idea that sexual intercourse is a continuation of the species, not pleasure, in itself prevents the emergence of sexual desire. Thus, a study by Turkish scientists Yilmaz *et al.* (2020) who studied the relationship between marital satisfaction and sexual function in couples undergoing infertility treatment showed that 43.6% of men and 77.3% of women experience sexual dysfunction. Age, economic status, length and type of marriage, duration of treatment, and satisfaction with the union were identified as significant predictors of sexual function in infertile couples. To the findings of the researchers, it is still worth noting that infertility in marriage, although it affects the quality of marital relationships, but not the quality of life in general. In any case, most couples maintain sexual relationships that provide them with emotional intimacy and allow them to feel the necessary support from each other.

Couples also face ethical issues while undergoing infertility treatments, for example, such as surrogacy and egg donation, which also cause significant stress. As researchers Mishra and Kumar (2023), obstetric complications are the main risk of surrogacy, and multiple pregnancies are usually more common. Scientists believe that in the coming decades, humanity may witness the first offspring that will be produced using synthetic eggs and sperm "born" by ectogenesis (artificial uterus technology). Examining the researchers' article, one can agree with their opinion. After all, normative documents on surrogacy are being developed around the world, and efforts are being initiated to restrict and regulate commercial surrogacy, while also paying attention to the needs of infertile couples themselves, protecting them from unethical practices and exploitation in the surrogacy industry.

Once a woman has been diagnosed with infertility, her quality of life decreases, and a persistent sense of incompleteness and grief sets in. Such women who are unable to become pregnant after assisted reproductive technology treatment need psychological help first, as the psychological consequences are worse than for those who are successfully treated. In societies with low-income or strongly pronatalist attitudes, infertility often has concomitant social and economic consequences, with deteriorating marital discourse and negative effects on social status (Baranski *et al.*, 2021). The broader consequences of the outcomes are duration of infertility, age and inappropriate lifestyles. The opinion of researchers from Kazakhstan Suleimenova *et al.*, (2022) who believe that low economic status negatively affects the quality of life of women, it would be reasonable to agree. In their report, scientists determine that, for example, the availability of subsidies from the state for infertility treatment and the provision of free quotas, improves the quality of life of infertile couples and increases the chances of conception. The percentage of health care expenditure can affect the overall level of satisfaction of women.

In summary, it can be said that the results obtained in the course of this paper as well as the reviewed robots of researchers from different countries helped to study the impact of reproductive difficulties on the institution of marriage in modern society.

Conclusion

This research was conducted to study the impact of reproductive difficulties on the institution of marriage in modern society. As a result, it should be concluded that childlessness is a serious and difficult ordeal for most families. The experience and personal tragedy are characteristic of both single people and married couples. As indicated in the paper, the tense situation in an infertile family, which is characterised by increased anxiety, symptoms of depression, stress, and mental disorders, can lead to negative consequences that threaten the existence and functioning of the modern family.

The concept of infertility, the main factors influencing reproductive health, the causes of female and male infertility, and the assessment of society on childless couples were defined. The empirical part of the research took place in the central part of Kazakhstan. In the clinic of reproductive medicine and the antenatal clinic of a rural hospital, the impact of infertility in married life and the consequences of childlessness in the context of social relationships were studied by observation and questionnaires. The results of the questionnaire show that 152 of the 198 women interviewed were registered with a diagnosis of primary infertility, while the rest had congenital or hereditary infertility according to medical examinations. In rural areas, childless families do not receive support from society. Almost all respondents faced stigmatisation, while in urban areas this problem is less pronounced, but still exists. Due to the lack of support from others, only a small percentage of employed women share their infertility problems in the collective. Rural women have a higher prevalence of anxiety and sadness than urban women, also due to the support of spouses and relatives. Not all infertile women from rural areas are willing to enrol in an IVF programme.

Further research should focus on exploring the possibilities, and introduction of new and improved reproductive technologies for infertility treatment. More detailed consideration should be given to the issues of psychological support for couples suffering from infertility, which will allow women and men to bear infertility morally more easily in the social environment.

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