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THE PROBLEM OF FEMALE INFERTILITY

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ПРОБЛЕМА ЖЕНСКОГО БЕСПЛОДИЯ

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РЕЗЮМЕ

В медицине проблема бесплодного брака уникальна, поскольку зависит от репродуктивного здоровья одновременно двух людей, а последнее зависит от многих факторов: поведения человека, образа жизни, сопутствующих заболеваний, питания, социально-экономических факторов, выяснение которых действительно требует проведения эпидемиологических исследований. ВОЗ рекомендует проводить репрезентативные исследования для определения истинной распространенности и этиологии бесплодия в браке.

В работе представлены результаты такого исследования, на основе их анализа – стандартизация системы исследования и лечения бесплодия, а также внедрения новых методов лечения и преодоления бесплодия.

According to WHO data, the incidence of infertile marriage varies widely in different countries and manifests no trend of decreasing [4]. In addition, this problem is also important for infertile couples with a high risk of socio-medical consequences, namely, that 1/3 of couples with such problems divorce or have psychological, somatic problems, social isolation, etc. [2].

Taking into account the topicality of the problem, a number of targeted measures have been implemented in recent years, namely: introduction of new methods of infertility treatment and research, complex research of 15-year-old girls, preparation and distribution of educational programs and materials among conscripts to prevent dangerous sexual behavior and sexually transmitted infections, increase the safety of abortion and introduction of the method of medical abortion.

The prevalence of infertility in all countries, including Armenia, is obtained through representative studies. According to data of the representative research conducted in Armenia in 2022, 2315 women aged 20-45 years were involved in it. 344 (14.9%) of the interviewed women had a history of infertility, with primary infertility, i.e. a history of one or more years, in case of a regular sexual life without the use of contraceptives, 99 (4.3%) of the women had never had a pregnancy, and 245 had secondary infertility (10.6%).

Among the husbands/partners of the interviewed women, 137 men (5.9%) had a history of infertility, 52 (2.3%) had primary infertility, 85 (3.8%) had secondary infertility.

In addition to individual data collection, all 344 women with infertility underwent general clinical, routine gynecological STD and hormone examinations, and an ultrasound examination was performed in dynamics. No pathological deviations were found during examination of external genital organs and vagina.

During the internal examination, 87 (25.3%) of every fourth patient were found to have pathological deviations of the uterus and appendages: changes in the size of the uterus and ovaries. 73 (21.2%) of every fifth examined women had any pathology of the cervix: dysplasia, endocervicitis, erosion, ruptures.

As the ultrasound examination data showed, 51 (14.8%) of every 7-th examinees had a pathology of the uterus, the most common was retroflexion and anteflexion 21 (6.1%), uterine hypoplasia 13 (3.8%), uterine myoma, especially with submucosal location. 14 (4.1%), uterine polyposis in 3 (0.9%) cases. 88 (25.6%) of every 4 women examined had bilateral ovarian enlargement with small cystic transformation, 16 (4.7%) had ovarian hypoplasia, 26 (7.6%) had unilateral ovarian enlargement as a result of a cyst. Bacterial cocci 241 (70.1%), Gardnerella vaginalis 89 (25.9%), Candida 75 (21.8%), Trichomonas vaginalis 22 (6.4%), gonorrhoea and syphilis were not found in the majority of women.

The total number of sexually transmitted diseases among those examined was 499. Chlamydia and mycoplasma infections are important in the etiology of infertility [3]. Chlamydia trachomatis can lead to salpingitis and fallopian tube obstruction, and mycoplasma infection to prostatitis and reduced sperm fertility [1]. Chlamydia was found in 63 (18.3%) women suffering from infertility, Ureaplasma urealyticum in 116 (33.7%), Mycoplasma hominis in 105 (30.5%). These infections were not found in one third of the partners, and about 2/3 had more than one of the listed.

According to the analysis of 344 hysterosalpingography data, the occlusion of different parts of the fallopian tubes and adhesion process in the small pelvis caused the tympanic-abdominal form of miscarriage in 145 (42.2%) of the investigated women.

In the predominant 106 (73.1%) cases, fallopian tube diseases were associated with an inflammatory process and often had a bilateral nature. The ampullary regions of the fallopian tubes were predominantly affected. The fact that often the causative agents of infection appeared in different associations deserves special attention.

Among 344 infertile women examined, 119 (34.6%) had various disorders of menstrual function and hormonal profile, which were accompanied by menstrual cycle disorders, dysovulation and luteal phase deficiency. Every second dysovulation was due to polycystic ovary syndrome.

51 (20.1%) women suffering from infertility had a history of abortion. Based on the analysis of ultrasound examination of the uterus and ovaries, clinical data, and hysterosalpingography data, endometriosis of the uterus and ovaries was suspected in 88 (25.6%) women, which was confirmed by subsequent laparoscopic examination.

The causes of infertility remained undetected in 29 (8.4%) cases.

As for combined causes, as a result of the survey among husbands/partners, 105 (30.5%) married couples, in addition to the causes found in women, also found causes of male infertility.

Thus, the results of the study showed that currently the prevalence of female infertility in our country is 14.9%, which compared to 2009 survey data manifested decrease by about 12%, and compared to 1999, the infertility rate reduced by about 2.2 times.

References:

1. Devroey P, Fauser BC, Diedrick K. Evian Annual Reproduction (EVAR) Workshop Group. Approaches to improve the diagnosis and management of infertility. Hum Reprod Update. 2015;39:1408.
2. Lund R, Sejbaek Cs, Christensen U, Schmidt L. The impact of social relations on the incidence of severe depressive symptoms among infertile women and men. Hum Reprod 2019;24:2810-2820.
3. Matthew H. Walker, Kyle J. Tobler. Female Infertility. <https://www.ncbi.nlm.nih.gov/books/NBK556033/>, 2022, dec.19
4. World Health Organization Reproductive health indicators for global monitoring: guidelines for the generation, interpretation and analysis for global monitoring <https://www.data4impactproject.org/prh/mens-health/global/whos-short-list-of-reproductive-health-indicators-for-global-monitoring/2023>.

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SUMMARY

In medicine, the problem of infertile marriage is unique because it depends on the reproductive health of two people at the same time, and the latter depends on many factors: human behavior, lifestyle, accompanying diseases, food, socio-economic factors, the clarification of which really requires the implementation of epidemiological studies. WHO recommends conducting representative studies to determine the true prevalence and etiology of infertile marriage. The work presents the results of such a study, based on their analysis, the standardization of the infertility research and treatment system, the introduction of new methods for the treatment and overcoming of infertility.

Keywords: representative research, infertility, assisted reproductive technologies

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ქალის უნაყოფობის პრობლემა

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რეზიუმე

მედიცინაში უნაყოფო ქორწინების პრობლემა უნიკალურია, რადგან დამოკიდებულია ერთდროულად ორი ადამიანის რეპროდუქციულ ჯანმრთელობაზე, ეს უკანასკნელი კი მრავალ ფაქტორზეა დამოკიდებული: ადამიანის ქცევაზე, ცხოვრების წესზე, თანმხლებ დაავადებებზე, კვებაზე, სოციალურ-ეკონომიკურ ფაქტორებზე, რომელთა გარკვევა ნამდვილად მოითხოვს ეპიდემიოლოგიური კვლევების ჩატარებას. ჯანმო რეკომენდაციას უწევს კვლევების ჩატარებას უნაყოფო ქორწინების ტემპარტი გავრცელებისა და ეტიოლოგიის დასადგენად.

ნაშრომში წარმოდგენილია ასეთი კვლევის შედეგები, მათი ანალიზის საფუძველზე, უშვილობის კვლევისა და მკურნალობის სისტემის სტანდარტიზაცია, მკურნალობისა და დაძლევის ახალი მეთოდების დანერგვა.

