



COMPARATIVE ANALYSIS OF THE SIDE EFFECTS OF CONTRACEPTIVE METHODS IN THE CONDITIONS OF UZBEKISTAN

Mirzayeva Madinabonu Rustam kizi

The 1st year Master's degree resident of the Department of Obstetrics and Gynecology № 3

Shavazi N.N.

Scientific supervisor : DSc, docent Samarkand State Medical University Samarkand, Uzbekistan.

<https://doi.org/10.5281/zenodo.17793265>

ARTICLE INFO

Received: 27th November 2025

Accepted: 28th November 2025

Online: 29th November 2025

KEYWORDS

To compare the main side effects of hormonal and non-hormonal contraceptive methods commonly used in Uzbekistan and to evaluate their safety profiles.

ABSTRACT

The use of contraceptive methods is one of the most important aspects of maintaining reproductive health. According to the World Health Organization (WHO), modern contraceptives are among the most effective tools for family planning . In Uzbekistan, the selection of contraceptive methods is influenced not only by their effectiveness but also by their potential side effects. Misconceptions about certain contraceptive types among women can lead to reduced use . Therefore, studying and comparing the side effects of various contraceptive methods is of practical significance.

Introduction: The use of contraceptive methods is one of the most important aspects of maintaining reproductive health. According to the World Health Organization (WHO), modern contraceptives are among the most effective tools for family planning . In Uzbekistan, the selection of contraceptive methods is influenced not only by their effectiveness but also by their potential side effects. Misconceptions about certain contraceptive types among women can lead to reduced use . Therefore, studying and comparing the side effects of various contraceptive methods is of practical significance.

Objective: To compare the main side effects of hormonal and non-hormonal contraceptive methods commonly used in Uzbekistan and to evaluate their safety profiles.

Materials and Methods: This analysis is based on WHO guidelines , major international scientific sources on contraception , clinical recommendations approved by the Ministry of Health of Uzbekistan , and local scientific literature . Hormonal contraceptives analyzed included combined oral contraceptives, mini-pills, injectable preparations, and implants. Non-hormonal contraceptives included intrauterine devices (IUDs), condoms, spermicides, and natural methods.

Results

Side Effects of Hormonal Contraceptives. Hormonal contraceptives have systemic effects due to estrogen and progesterone components, which have been documented in many clinical studies . The most common side effects include: nausea and vomiting — related to estrogen level, headache and migraine exacerbation — due to hormonal fluctuations , weight gain and fluid retention, mood changes and depressive reactions — associated with progesterone,

breast tenderness and swelling, thromboembolic risk — increased due to estrogen-induced thrombogenesis. Although thromboembolism is rare, it is considered one of the most serious side effects, especially in smokers and women with high BMI. Side effects of non-hormonal contraceptives: non-hormonal contraceptives primarily affect local organs and generally do not cause systemic side effects. Intrauterine device (IUD) IUDs are the most widely used contraceptive method in Uzbekistan. Side effects include: increased or prolonged menstrual bleeding, lower abdominal pain and cramps, contact bleeding, in some cases, inflammation, device displacement or expulsion, condoms, allergic reactions to latex, discomfort during use, risk of mechanical breakage, spermicides, vaginal irritation and itching, contact dermatitis,

Natural methods

Almost no side effects, but low effectiveness increases the risk of unplanned pregnancy.

Comparative Analysis

Hormonal contraceptives are highly effective but have systemic side effects. Non-hormonal contraceptives mainly produce local effects, with mild to moderate discomfort depending on the method used. In Uzbekistan, women often prefer IUDs due to their low cost and long-term protection. However, side effects such as increased menstrual bleeding or abdominal pain may limit their use.

Conclusion

Analysis shows that hormonal contraceptives primarily cause systemic side effects, whereas non-hormonal methods mainly result in local changes. When selecting a contraceptive method, it is important to consider the woman's age, reproductive plans, existing medical conditions, and individual risk factors. Proper counseling by specialists ensures the safe and effective use of contraceptive methods..

References:

- 1.WHO. Family Planning: A Global Handbook for Providers. 2018.
- 2.WHO Medical Eligibility Criteria for Contraceptive Use. 5th ed. 2015.
- 3.Trussell J. Contraceptive efficacy. Contraceptive Technology, 21st ed., 2018.
- 4.Hatcher R.A., Trussell J., Nelson A.L. Contraceptive Technology, 21st Edition, 2018.
- 5.Curtis K.M. et al. U.S. Medical Eligibility Criteria for Contraceptive Use. MMWR Recomm Rep. 2016.
- 6.Speroff L., Darney P. A Clinical Guide for Contraception. 2019.
- 7.Ministry of Health of the Republic of Uzbekistan. Clinical guidelines on reproductive health, 2020.
- 8.Bahromov M., Ismoilova N. Women's Reproductive Health. Tashkent Medical Academy, 2021.
- 9.Glasier A., Gülmezoglu A.M. Contraception. Lancet 2006.
- 10.Mansour D. Intrauterine contraception: safety and efficacy. 2020.
- 11.Akhtamova N. A., Shavazi N. N. PREDICTION OF OBSETRIC BLOOD LOSS IN WOMEN WITH PRETERM BIRTH (LITERATURE REVIEW) // UZBEK MEDICAL JOURNAL. - 2022. - Vol. 3. - No. 5.

12. Jalilova D. M., Shavazi N. N. Prognosis of Fetoplasentar Insufficiency in Pregnant Women with Preterm Obstetric Care and Optimize Preventive Measures //International Journal of Integrative and Modern Medicine. – 2024. – T. 2. – №. 5. – C. 323-327.
13. Nasyrovich S. S. et al. PREDICTORS OF BLEEDING IN PRETERM LABOR: RETROSPECTIVE OBSERVATIONAL //Journal of Modern Educational Achievements. – 2023. – T. 5. – №. 5. – C. 185-196.
14. Nuralievna S. N., Akbarjonovna A. N., Farkhodovna R. N. Management of the Reatening Preterm Birth //Texas Journal of Medical Science. – 2023. – T. 17. – C. 25-38.
15. Nuralievna S. N., Islamovna Z. N., Rakhimovna K. D. Prediction of Premature Outflow of amniotic fluid in Preterm pregnancy //International Journal of Psychosocial Rehabilitation. – 2020. – T. 24. – №. 5. – C. 5675-5685.
16. Nuraliyevna S. N. et al. Total gisterektomiyaning subtotal gisterektomiyadan ustunvorligini tahlillash //Journal of biomedicine and practice. – 2022. – T. 7. – №. 3.
17. Nuraliyevna SN, Dilshodovna JM MORPHOFUNCTIONAL STRUCTURE OF THE PLACENTA IN PREMATURE LABOR //Galaxy International Interdisciplinary Research Journal. - 2022. - T. 10. - No. 4. - S. 381-384.
18. S. N. N. B. The Role Of Fetal Fibronectin In The Prediction Of Premature Births Shavazi Nn (Republic of Uzbekistan) Email: Shavazi451@ scientifictext. ru.
19. Sattarova N., Shavazi N. PERINATAL RISK OF PREMATURE BIRTH: NEW OBSTETRIC OPPORTUNITIES //International Journal of Medical Sciences And Clinical Research. – 2024. – T. 4. – №. 02. – C. 41-51.
20. SHAVAZI N. N. et al. TOTAL GISTEREKTOMIYANING SUBTOTAL GISTEREKTOMIYADAN USTUNVORLIGINI TAHLILLASH // JOURNAL OF BIOMEDICINE AND PRACTICE. - 2022. - Vol. 7. - No. 3.

