

UDC 618.3-06:616.379-008.64

**MODERN VIEWS ON THE PROBLEM OF GESTATIONAL
DIABETES MELLITUS*****Karimova Gulrukh Komilovna****Senior teacher, PhD in the 1st department of obstetrics and gynecology Bukhara State Medical Institute named Abu Ali ibn Sino, Bukhara, Uzbekistan***A B S T R A C T**

Object: Selection of an effective method of delivery for mother and child in pregnant women with gestational diabetes.

Purpose of the study: Selecting the optimal method of delivery by studying the outcome of labor for the mother and fetus in women with gestational diabetes.

Material and methods: The retrospective group included 67 women who passed through the regional perinatal center, city maternity complex and family clinics No. 5, No. 6 of the city of Bukhara in the periods from 2016 to 2018. The main (prospect) group consisted of 68 women whose pregnancy proceeded against the background of overt or gestational diabetes mellitus (GDM). The control group consisted of 31 women whose pregnancy proceeded physiologically.

Results and discussion: As a result of the study, the course of pregnancy and childbirth according to the history of childbirth and own observations revealed that in all (60%) pregnant women with GDM, pregnancy and childbirth proceeded with any complications, like in the mother and the fetus.

Conclusion. Thus, the optimal delivery route is selected taking into account the condition of the fetus and the level of TSH and clay hemoglobin. If pregnancy proceeded against the background of corrected diabetes with the use of the optimal insulin regimen and rational diet therapy, the absence of signs of diabetic fetopathy, then in this category of pregnant women, the delivery through the birth canal is considered the best option. The issue of delivery time is decided individually, taking into account the degree of compensation for diabetes mellitus, cervical maturity, condition and size of the fetus.

Key words: gestational diabetes mellitus, carbohydrate metabolism, delivery, preeclampsia.

The problem of pregnancy and childbirth with gestational diabetes mellitus (GDM) is very relevant and is still not completely resolved. This is due to an increase in the number of pregnant women with this pathology, associated with a sharp increase in the incidence of diabetes in the population, as well as an improvement in the quality of diagnosis. The prevalence of all forms of diabetes mellitus among pregnant women reaches from 3.5% to 7.6%. Perinatal mortality in pregnancy complicated by diabetes mellitus of any type is 30-50%. After 3 months after giving birth, 4 out of 100 women with gestational diabetes develop a typical clinical picture of type 2 diabetes mellitus, after 1 year in 32% and after 8 years in 46% [14].

According to large-scale epidemiological studies, GDM is diagnosed in approximately 4% of pregnant Caucasian races. The prevalence of GDM can vary from 1 to 14% (an average of 7%), which depends on the analyzed population of women and the frequency of use of the oral glucose tolerance test (OGTT) used to diagnose the disease. A screening and diagnostic program for GDS is also poorly organized. Moreover, according to WHO in the EU countries and the USA in 2009, 230,000 cases of GDM were recorded [2,8,11].

In most patients, gestational diabetes occurs with unexpressed, rare, and lack of clinical symptoms. These women tend to be older of reproductive age (35-49 years old) and they have found a bowl obesity [3, 11].

Distinctive features of pregnant women after the use of assisted reproductive technologies (ART) are age-related risk (more than 70% of patients over 30 years old); high incidence of multiple pregnancy; gynecological diseases and surgical intervention in the anamnesis; the presence of somatic pathology, hypertension of hypertension and hormonal disorders: obesity, polycystic ovary syndrome (PCOS). These pathological conditions significantly increase the risk of obstetric and perinatal complications [9 ,12].

The most significant risk factors for GDM according to data (T. Kovalenko 2007) are: age over 30 years (55.4%), obesity (49.2%), family history of diabetes burdened by diabetes (46.6%), glucosuria (43%) and fasting hyperglycemia (52%). It has been established that the presence of 2 or more factors increases the risk of GDM by 10 times or more.

The high frequency of multiple pregnancy with GDM may be caused almost double the concentration, and consequently, the double pin and rinsulyarnym action placental hormone, cortisol, etc. due to the functioning of several placentas [5,15].

The occurrence in pregnant women with gestational diabetes is facilitated by the high sensitivity of the fetus in the antenatal period to the action of any endogenous and exogenous damaging factors. Factors risk of developing GDM in modern obstetric diabetology can be divided into 2 groups [10].

According to the results of Gafurov M.R. (2014) the gestational age at which GDM was detected ranged from 21 to 34 weeks. An individual diet was selected for the patients, which was effective in 16 (57.1%), while 12 (42.9%) pregnant women were supplemented with insulin therapy. All patients performed glycemic self-control and kept a food diary. In addition to GDM, the course of pregnancy was complicated by preeclampsia in 4 (14.3%) women, in one case in the form of severe hepatitis , and in 50% of patients with the threat of abortion. Fetoplacental insufficiency (FPI) was observed in 4 (14.3%) patients with a single pregnancy and in all cases of multiple pregnancy [7,13,1,14].

Women who are at a constant subcutaneous infusion of insulin via insulin pump, during delivery of insulin administration is continued with the standard basal rate. After separation of the placenta, the infusion rate is reduced by 2 times and the intravenous infusion of the glucose-potassium mixture begins , complete cancellation of insulin is possible [4,10].

Women with GDM are at risk for developing type 2 diabetes after childbirth, therefore, they should be observed in the future prevention program for this disease. In

women with a history of GDM, low-dose estrogen- progestogen oral contraceptives may be used if there are no medical contraindications. Children of mothers with GDM should be observed for the development of obesity or impaired glucose tolerance [6].

Thus, the organization and implementation of a universal program for screening and diagnosis of GDS, management of pregnancy and childbirth will improve pregnancy outcomes for both mother and future offspring and can be the basis for the prevention of type 2 diabetes in the future in this category of women and their children. Timely diagnosis and rational management of pregnancy in women with GDM, the use of medical methods and diet therapy can reduce the risk of complications during pregnancy and contribute to the birth of healthy children.

Purpose of the study. Selection of the optimal method rod or permitted by the study outcome childbirth for mother and fetus in women with gestational diabetes.

Material and methods. In the retrospective group included 67 women who passed through the regional perinatal center and number 5, number 6 family polyclinics of the city of Bukhara in the periods from 2016 to 2018 y. The main group consisted of 67 women whose pregnancy proceeded against the background of obvious or gestational diabetes. The control group consisted of 31 women whose pregnancy proceeded physiologically.

The work was performed on the basis of the Department of Obstetrics and Gynecology of the Medical institute and maternity hospitals in Bukhara. Gathering a diagnostic history through a survey, we specified the following data. Clinical diagnostic methods for women in the prospective group included: questioning 68 pregnant women and assessing the risk of developing GDH, consulting an endocrinologist, measuring blood pressure, body weight, calculating body mass index (BMI) using the Kettle formula: $BMI = \text{body weight before pregnancy, kg} / (\text{growth, m})^2$, general clinical tests of blood and urine, taking into account risk factors for the development of GDM. Ultrasound of the uterus, fetus in dynamics, glycated hemoglobin level, glucose tolerance test (TT to G) and other $BMI > 25 \text{ kg} / \text{m}^2$, presence of relatives of the 1st line of relationship with GDM or other history of carbohydrate metabolism, glycosuria during this pregnancy, age, women over 30 years, the birth of a child weighing more than 4000 g or a history of stillbirth, birth of children with congenital malformations in the history of habitual miscarriage pregnancy, a history of polyhydramnios, abnormal weight gain during this b belt. Below are data on the age category of women in the examined groups.

Results and discussion. Some pregnancy complications, being characteristic, are not only for GDM, which are more often observed in women with this disease. When studying the course of pregnancy and childbirth according to the history of childbirth and own observations, it was found that in all (100%) pregnant women with GDM, pregnancy and childbirth proceeded with any complications. And in most cases, several complications were observed in combination, both in the mother and in the fetus. Hypertensive pathologies joined every second woman in a retrospective group.

Pregnancy was complicated by polyhydramnios in 21 cases in the main group, which amounted to 31%, 14 (24%) cases in the retrospective group, which was caused by infections of various nature. Basically, this complication was observed in women who underwent ARI during pregnancy.

In the control group, polyhydramnios was observed in 1 cases (9%), which was confirmed by clinical signs and ultrasound data. Observing the postpartum period in groups of women with GDM revealed that in 13 women (22.8% of cases) this period was complicated by early bleeding, which may have a mixed etiology (atonic and coagulopathy origin), postpartum hemorrhage is more often observed, which may be associated with overstretching uterus with polyhydramnios and large fetal size. Basically, bleeding was observed in the first 2 hours after separation and separation of the placenta and with a newborn's body weight of more than 4000 grams during prolonged labor. Macrosomia with a fetal weight of more than 4,500 grams, as you know, is the result of an excess supply of glucose to the fetus through the uteroplacental system.

In our cases, macrosomia occurred in 56% of cases in the main group and in 27.3% of cases in the control group (table number 1).

Table No. 1

Obstetric complications of gestational diabetes

№	Obstetric complications of GDM	Retrospective abs n = 67%		Main abs n =68%		Control abs n = 11%	
1	Preeclampsia (PE).	67	100	37	65.4	0	0
2	Urinary tract infections.	21	31.3	27	47.4	1	9
3	Premature rupture of the membranes	28	41.8	31	54.4	9	81.8
4	Macrosomia of the fetus.	67	100	32	56	2	18
5	Cesarean section	40	60	23	41	3	27.3
6	Polyhydramnios and infection.	21	31	14	24	1	9
7	Postpartum hemorrhage.	15	22	13	22.8	1	9

As you know, in newborns from mothers with diabetes, the risk of developing congenital anomalies increases by 3 times compared with 1-2% of the basic risk for all newborns. Most often, heart defects and abnormalities in the development of limbs occur. A typical, but rather rare anomaly is agenesis of the sacrum.

Complications of the postpartum period: the method of delivery and the course after in the comparative aspect are also studied. When studying the history of childbirth in women in a retrospective group, it was revealed that mainly delivery methods were operational. A caesarean section in this group of patients was performed in 68.6% of cases, childbirth flowed through the natural birth canal. A high percentage of operative births indicate that the pregnancy in these women occurred against the background of uncorrected hyperglycemia, therefore, with complications from the mother and fetus, which ultimately were indications for abdominal delivery (table number1).

In almost all cases, childbirth was complicated by various complications. These were mainly: bleeding in excess of 500 ml during childbirth per vias naturals and

more than 1000 ml during cesarean section. Hemorrhage, bearing atopic and coagulopathic character followed by 81% operational and 45.6% conservative. Given the high risk, two pairs of vessels were ligated (a. Ovaria propriety et a. Rotundum uteri). In 9 women, by examination, the operations were expanded to amputation of the uterus (5-23.8%) and extirpation (4-19%) of the uterus.

Maternal mortality was registered in 1 case, which amounted to 4.8%. the postpartum and postoperative period was also accompanied by complications, especially in women who underwent caesarean section (52.3%). These women have been observed sub involution uterus, accompanied lohiometrey and hematoma. In all likelihood, this was due to inhibition of the contractile ability of the uterus due to prolonged overstretching of its muscles and the phenomena of septic complications.

In the prospective group, 23 women had a cesarean section, they accounted for 34%. It was possible to reduce the operative birth mainly due to rational diet therapy and the choice of optimal individual insulin therapy.

Conclusions. Thus, and Learn the birth outcomes, monitor the progress of post-natal and post-operative period, revealed that pregnancy in 65.4% of women with GDM complicated by hypertensive disorders. In almost every third (31.6%) pregnant women, polyhydramnios of varying degrees joined. Delivery in (41%) cases ended with cesarean section, 45.6% of them were complicated by bleeding. Every second case from the retrospective and every 4 case from the prospective group was complicated by suture infiltration (50.5% and 25.3%, respectively).

The optimal delivery route is selected taking into account the condition of the fetus and the level of TSH and glycated hemoglobin. If pregnancy proceeded against the background of corrected diabetes with the use of the optimal insulin regimen and rational diet therapy, the absence of signs of diabetic fetopathy, then in this category of pregnant women, the delivery through the birth canal is considered the best option. The issue of delivery time is decided individually, taking into account the degree of compensation for diabetes mellitus, cervical maturity, condition and size of the fetus.

BIBLIOGRAPHY:

1. Abdullaeva, L. M. (2010). Klinicheskoe znachenie opredeleniya citokinov u bol'nykh s opukholyami yaichnikov [Clinical significance of cytokine detection in patients with ovarian tumors]. *Vrachebnoe delo*, 3-4.
2. Abdullaeva, L. M., Akhmedova, A. T., Aghabyan, L. R., & Ashurova, U. A. (2019). FORECASTING REPRODUCTIVE FUNCTION DISORDERS IN WOMEN POST-ABORTION ENDOMETRITIS. *Central Asian Journal of Medicine*, 2019(4), 5-18.
3. Gulrukh K. Karimova. Early biochemical markers and screening diagnosis of Gestional diabetes mellitus and its prevention during pandemic period / Gulrukh K. Karimova., Gulchekhra A. Ikhtiyarova., Nigora Kh. Muminova. // *Journal of Natural Remedies* -2021.- №1(1). -Volume 22, - ISSN:2320-3358, ISSN:0972-5547–P. 17-26.
4. Gulrukh K. Karimova. An individual approach to the management of gestational diabetes / Gulrukh K. Karimova., Nilufar O. Navruzova., Shahodat N. Nurilloeva. // *European Journal of Molecular & Clinical Medicine*-2020.-№02. -Volume 07, - ISSN 2515-8260–P. 6284-6291.
5. Ikhtiyarova G. A., Navruzova N. O., Karimova G. K. Modern diagnostic methods for early detection of cervical diseases // *Doctor akhborotnomasi*. – 2019. – №. 4. – С. 78-80.
6. Ikhtiyarova, G.A. Causes of fetal loss syndrome at different gestation times / Ikhtiyarova G.A., Iroda Tosheva, Nargiza Nasrullayeva // *Asian Journal of Research*. - 2017. - № 3 (3). - P.32-41.

7. Ikhtiyarova, G.A. Prenatal Rupture Of Amnion Membranes as a risk of development of obstetrics pathologies / G.A. Ikhtiyarova, I.I. Tosheva, M.J. Aslonova, N.K. Dustova // *European Journal of Molecular & Clinical Medicine*. - 2020. - ISSN 2515-8260. - Volume 07, Issue 07. - P. 530-535.
8. Karimova, G. K., Ikhtiyarova, G. A., & Muminova, N. K. (2021). EARLY BIOCHEMICAL MARKERS AND SCREENING DIAGNOSIS OF GESTIONAL DIABETES MELLITUS AND ITS PREVENTION DURING PANDEMIC PERIOD. *Journal of Natural Remedies*, 22(1 (1)), 17-26.
9. Karimova, G. K., Navruzova, N. O., & Nurilloeva Sh, N. (2020). An individual approach to the management of gestational diabetes. *European Journal of Molecular & Clinical Medicine*, 7(2), 6284-6291.
10. Navruzova N. O., Karimova G. K., Ikhtiyarova G. A. Modern approaches to the diagnosis of cervical pathology // *Medicine and sports*, (1). – 2020. – С. 74-77.
11. Navruzova N., Ikhtiyarova G., Navruzova O. Retrospective analysis of gynecological and somatic anamnesis of cervical background and precancerous diseases // *SCIENTIFIC PROGRESS» Scientific Journal ISSN*. – С. 2181-1601.
12. Navruzova N.O., Ikhtiyarova G.A., Karimova G.K. Colposcopia as a diagnostic method for early detection of cervical diseases // *Problems of Biology and Medicine* 2020. N. 1.1 (117). P. 313-314.
13. Navruzova N.O., Ikhtiyarova G.A., Karimova G.K., Navruzova U.O., Shukurov I.B., Amanova Kh.I. Modern diagnostic methods for early detection of cervical diseases // *Doctor akhborotnomasi*. 2019. N. 4. P. 77-82.
14. Navruzova N.O., Ikhtiyarova G.A., Matrizayeva G.D. Modern aspects of diagnosis and treatment of precancerous diseases of the cervix. *Journal of Natural Remedies*. 2021 May 10; 22(1(2)):65-72.
15. Navruzova N.O., Karimova G.K., Ikhtiyarova G.A. Modern approaches to the diagnosis of cervical pathology // *Medicine and sports*, 2020. N. 1. P. 74-77.
16. Navruzova N.O., Karshiyeva E.E., Ikhtiyarova G.A., Hikmatova N.I., Olimova N.I., Muminova N.Kh. Clinical and laboratory markers forecasting of cervical diseases and its prevention// *Annals of the Romanian Society for Cell Biology*, 2021. 13098-1311
17. Navruzova, N. O., & Kurbanova, Z. S. (2022). Modern Diagnostic Methods for Early Detection of Cervical Diseases. *Eurasian Journal of Media and Communications*, 8, 23-29.
18. Navruzova, N. O., Ikhtiyarova, G. A., & Karimova, G. K. (2020). Colposcopia as a diagnostic method for early detection of cervical diseases. *Problems of Biology and Medicine*, (1.1), 117.
19. Navruzova, N. O., Ikhtiyarova, G. A., & Matrizayeva, G. D. (2021). Modern aspects of diagnosis and treatment of precancerous diseases of the cervix. *Journal of Natural Remedies*, 22(1 (2)), 65-72.
20. Navruzova, N. O., Ikhtiyarova, G. A., Karimova, G. K., Navruzova, U. O., & Shukurov, I. B. (2019). AmanovaKh. I. Modern diagnostic methods for early detection of cervical diseases. *Doctor akhborotnomasi*, (4), 77-82.
21. Navruzova, N. O., Karimova, G. K., & Ikhtiyarova, G. A. (2020). Modern approaches to the diagnosis of cervical pathology. *Medicine and sports*, (1), 74-77.
22. Navruzova, N. O., Karshiyeva, E. E., Ikhtiyarova, G. A., Hikmatova, N. I., Olimova, N. I., & Muminova, N. K. (2021). CLINICAL AND LABORATORY MARKERS FORECASTING OF CERVICAL DISEASES AND ITS PREVENTION. *Annals of the Romanian Society for Cell Biology*, 13098-13110.
23. Navruzova, N., Ikhtiyarova, G., & Navruzova, O. Retrospective analysis of gynecological and somatic anamnesis of cervical background and precancerous diseases. *SCIENTIFIC PROGRESS» Scientific Journal ISSN*, 2181-1601.
24. Navruzova, Nilufar O., Gulchekhra A. Ikhtiyarova and Gulnora J. Matrizayeva. "Modern aspects of the diagnosis and treatment of precancerous diseases of the cervix". *Journal of Natural Remedies* 22.1(2) (2021): 65-72.

25. Navruzova, Nilufar O., Karshiyeva, Elnora E., Kattakhodjayeva, Makhmuda Kh., Ikhtiyarova, Gulchekhra A. «Methods for diagnosing diseases of the uterine cervix» *Frontiers in Bioscience-Landmark* 2022 27(1): 20-28
26. Абдуллаева, Л. М. (2009). Абдуллаева. ЛМ Значимость определения маркера СА-125 в предоперационной диагностике характера опухолей яичников: научное издание. *Новости дерматовенерологии и репродуктивного здоровья-Ташкент*, (2), 44.
27. Абдуллаева, Л. М. (2010). Клиническое значение определения цитокинов у больных с опухолями яичников. *Врачебное дело*, (3-4), 56.
28. Абдуллаева, Л. М., & Сафарова, Л. А. (2023). К вопросу о течении послеродового периода у женщин, инфицированных ВИЧ.
29. Абдуллаева, Л. М., & Сафарова, Л. А. (2023). *ВЛИЯНИЕ ВИЧ-ИНФЕКЦИИ НА ПЕРИНАТАЛЬНЫЕ ИСХОДЫ* (Doctoral dissertation, АКТУАЛЬНЫЕ ВОПРОСЫ ПЕРИНАТАЛЬНОЙ МЕДИЦИНЫ).
30. Абдуллаева, Л. М., Бабаджанова, Г. С., & Назарова, Д. Б. (2012). Роль гормональных нарушений в развитии бесплодия у больных с доброкачественными образованиями яичников. *Врачеб. дело*, (3-4), 104-109.
31. Абдуллаева, Л. М., Сафаров, Т. А., & Сафарова, Л. А. (2022). *Течение пуэрперального периода у ВИЧ инфицированных женщин* (Doctoral dissertation, VII съезд акушеров-гинекологов Республики Таджикистан).
32. Агабабян, Л. Р., Ибрагимов, Б. Ф., Боборахимова, У. М., & Абдуллаева, Л. М. (2020). Методы коррекции массы тела у пациенток репродуктивного возраста с ожирением. *International scientific review*, 70, 93-6.
33. Бабаджанова, Г. С., Назарова, Д. Б., & Абдуллаева, Л. М. (2009). Характер иммунологических и гормональных нарушений у больных с доброкачественными образованиями яичников и бесплодием. *Врач-аспирант*, 32(5), 344-349.
34. Бурумкулова, Ф.Ф. Гестационный сахарный диабет: вчера, сегодня, завтра / Ф.Ф.Бурумкулова, В.А.Петрухин// *Терапевтический архив*.-2014.-№10.- С. 109- 115.
35. Глушков А.Н. Взаимосвязи специфических иммунных реакций на химические канцерогены и стероидные гормоны у беременных женщин / А.Н. Глушков, К.С. Красильникова, Е.Г. Поленок, Л.А. Гордеева // *Рос. иммунол. журн.* –2015. Т. 9, № 1. – С. 63–70.
36. Ихтиярова Г.А. Дифференциальные методы прерывание беременности у женщин с антенатальной гибели плода вразличные сроки гестации/ Ихтиярова Г.А. Дис.док.мед.наук.- 2019. С- 209.
37. Ихтиярова Г.А., Каримова Г.К, Наврузова Н.О. Скрининг диагностика гестационного диабета // *Тиббиётда янги кун* – 2020. №1 (29) С. 220-223.
38. Ихтиярова Г.А., Наврузова Н.О., Каримова Г.К. Современные диагностические методы для раннего выявления заболеваний шейки матки// *Доктор ахборотномаси*, 2019. № 4. С. 78-80.
39. Каримова, Г. К. (2022). ГЕСТАЦИОН ҚАНДЛИ ДИАБЕТНИ ЭРТА ТАШХИСЛАШНИНГ БИОКИМЁВИЙ СКРИНИНГИ. *BARQARORLIK VA YETAKSHI TADQIQOTLAR ONLAYN ILMIY JURNALI*, 2(8), 199-212.
40. Каримова, Г. К., Ихтиярова, Г. А., & Наврузова, Н. О. (2020). Скрининг диагностика гестационного диабета. *Новый день в медицине*, (1), 220-222.
41. Каримова, Г. К. (2022). ГЕСТАЦИОН ҚАНДЛИ ДИАБЕТНИ ЭРТА ТАШХИСЛАШНИНГ БИОКИМЁВИЙ СКРИНИНГИ. *БАРКАРОРЛИК ВА ЕТАКЧИ ТАДКИҚТЛАР ОНЛАЙН ИЛМИЙ ЖУРНАЛИ*, 2 (8), 199-212.
42. Каримова, Г.К. Гестацион қандли диабетни эрта ташхислашнинг биокимёвийскрининг ва профилактикаси / Г.К. Каримова, Г.А. Ихтиярова // *Тиббиётда янги кун*. - 2022. - №2 (40). - С. 587-5916
43. Каримова, Г.К. Скрининг диагностика гестационного диабета / Г.К. Каримова, Г.А. Ихтиярова, Н.О. Наврузова // *Тиббиётда янги кун*. - 2020. - №1 (29). - С. 220-222.

44. Наврузова Н.О. Ихтиярова Г. А., Каримова Г.К., Наврузова У.О., Шукуров И. Б., Аманова Х. И. - Современные диагностические методы для раннего выявления заболеваний шейки матки // Доктор ахборотномаси -2019. №4 С.77-82
45. Наврузова Н. О. Бачадон бўйни патологиясини клиник-лаборатория маркерларини башоратлаш ва унинг профилактикаси //Barqarorlik va yetakchi tadqiqotlar onlayn ilmiy jurnali. – 2022. – Т. 2. – №. 8. – С. 89-99.
46. Наврузова Н. О., Ихтиярова Г. А., Матризаева Г. Д. Современные аспекты диагностики и лечения предраковых заболеваний шейки шейки матки //Журнал природных средств правовой защиты. – 2021. – Т. 10. – С. 65-72.
47. Наврузова Н., Ихтиярова Г., Наврузова У., Каримова Г., Шукуров И., Аманова Х. (2019). Современные диагностические методы раннего выявления шейки матки. Журнал вестник врача , 1 (4), 78-83.
48. Наврузова Н.О., Ихтиярова Г.А., Каримова Г.К. Кольпоскопия как диагностический метод для раннего выявления заболеваний шейки матки // Проблемы биологии и медицины, 2020. № 1.1 (117). С. 313-314.
49. Наврузова Н.О., Ихтиярова Г.А., Каримова Г.К., Наврузова У.О., Шукуров И.Б., Аманова Х.И. Современные диагностические методы для раннего выявления заболеваний шейки матки // Доктор ахборотномаси, 2019. №4. С. 77-82.
50. Наврузова Н.О., Ихтиярова Г.А., Матризаева Г.Д. Современные аспекты диагностики и лечения предраковых заболеваний шейки шейки матки. Журнал природных средств правовой защиты. 2021 10 мая; 22(1 (2)):65-72.
51. Наврузова Н.О., Каримова Г.К., Ихтиярова Г.А. Современные подходы к диагностике патологии шейки матки// Медицина и спорт. 2020 (1): С.74-77.
52. Наврузова, Н. (2018). Бачадон бўйни касалликларини ташхислаш ва даволашнинг замонавий масалалари
53. Наврузова, Н. О. (2022). Диагностика заболеваний шейки матки в современном гинекологии. Barqarorlik va yetakchi tadqiqotlar onlayn ilmiy jurnali, 2(9), 63-77.
54. Наврузова, Н. О., Ихтиярова, Г. А., & Каримова, Г. К. (2020). Кольпоскопия как диагностический метод для раннего выявления заболеваний шейки матки. Проблемы биологии и медицины, (1.1), 117.
55. Наврузова, Н. О., Ихтиярова, Г. А., Каримова, Г. К., Наврузова, У. О., Шукуров, И. Б., & Аманова, Х. И. (2019). Современные диагностические методы для раннего выявления заболеваний шейки матки. Доктор ахборотномаси, (4), 77-82.
56. Наврузова, Н. О., Каримова, Г. К., & Ихтиярова, Г. А. (2020). Современные подходы к диагностике патологии шейки матки. Тиббиёт ва спорт, (1), 74-77.
57. Наврузова, Н., Ихтиярова, Г., & Наврузова, Ў. (2020). Бачадон бўйни фон ва рак олди касалликларининг гинекологик ва соматик анамнезининг ретроспектив таҳлили. Scientific progress, 1(2), 25-32.
58. Наврузова, Н.О. Современные диагностические методы для раннего выявления заболеваний шейки матки / Н.О. Наврузова, Г.А. Ихтиярова, Г.К. Каримова, У.О. Наврузова, И.Б. Шукуров, Х.И. Аманова // Вестник врача. - 2019. - №4. - С. 77-82.
59. Наврузова, Н.О. Современные подходы к диагностике патологии шейки матки / Н.О. Наврузова, Г.К. Каримова, Г.А. Ихтиярова // Спорт и медицина. - 2020. - № 1. - С. 74-77.
60. Наврузова, Нилуфар О., Гулчехра А. Ихтиярова и Гульнора Дж. Матризаева. «Современные аспекты диагностики и лечения предраковых заболеваний шейки шейки матки». Журнал природных средств правовой защиты 22.1 (2) (2021): 65-72.
61. Сафарова, Л., & Абдуллаева, Л. (2021). Антиретровирусная терапия у вич-серопозитивных женщин во время беременности. Журнал вестник врача, 1(4), 142-145.