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THE PREGNANCY COURSE AND OUTCOME PECULIARITIES, AGAINST THE BACKGROUND OF DIABETES MELLITUS TYPE 1 & 2

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One of the stages of the public health care system reformation of the Republic of Uzbekistan is the further women's conservation and health promotion of the reproductive age works improvement [1]. The maternal and child health protection is inextricably connected with the somatic diseases prophylaxis, which may be substantially affected upon the pregnancy and the childbirth course, as well as the future child health [2,3].

So, the DM prevalence among the pregnant women is made up 0,5% during their pregnancy, wherein, as, in the general population, their number is being increased, every year. Currently, the 0,1–0,3% pregnant women are being given the birth with this pathology and the disease, and, at the same time, 2–3 pregnant women from the 100 ones have their impaired carbohydrate metabolism during their pregnancy [4].

Despite a number of the National Programs, having carried out in our country, for the purpose of the prophylaxis and the complications number reducing, the diabetes mellitus and the pregnancy challenge is practically remained valid and urgent, which has been prompted us to be carried out this study.

The Purpose of the Study:

To be evaluated the pregnancy course and the outcome, against the background of the diabetes mellitus of type 1 and 2.

The Study's Materials and Methods:

The retrospective analysis of the birth records at the pregnant women with DM of 1 and 2 type for the last 5 years or 60 months (e.g. from 2008 up to 2012 –es) has been conducted on the basis of the Republican Specialized Scientific and Practical Medical Center of the Obstetrics and Gynecology (RSSPMCO&G) of the Ministry of Public Health of the Republic of Uzbekistan (MPH Ruz) (n=63).

The Research Results and Discussion. During the period from 2008 to 2012 – es., the births number at the pregnant women with the diabetes mellitus has been made up 0,5% from the total births number in RSSPMCO&G, while in 77,8% – at the pregnant women with the DM of type 1, 22,2% – with the DM of type 2. The average age of the pregnant women with the DM of

type 1 has been made up $26,43 \pm 3,98$ years (e.g. the average length of the disease has been $8,55 \pm 4,47$ years), **the pregnant women with** the DM of type 2 – $35,07 \pm 4,07$ years (e.g. the average length of the disease – $3,36 \pm 1,94$ year).

So, the menarche age has been ranged from 10 (120 months) up to 18 (e.g. 206 months), and it, at the average, has been made up $13,5 \pm 1,2$ year. The average length of the menstrual cycle, having preceded the current pregnancy, at the average, has been made up $29,3 \pm 1,8$ days; with the average length of the menstrual bleeding – $4,7 \pm 0,8$ days. The age of the sexual activity onset has been varied from 15 (e.g. 180) up to 29 years (e.g. 348 months), and it has been averaged of $21,4 \pm 2,8$ years. So, as the registered and the married couple, 88,9% pregnant women have been, of the pregnant women – 11,1% patients have not been officially married.

So, the gynecological diseases in the anamnesis history have been occurred and also observed at 48 (e.g. 76,2%) pregnant women. In the structure of the gynecological diseases, the illnesses have been predominated, such as the menstrual cycle disorders and their irregularities at 21 ones (e.g. 33,8%), the pelvic inflammatory disease (PID) – at 18 ones (e.g. 28,6%), the ectopic cervical (or cervix uteri) – at 6 ones (e.g. 9,5%), the uterine fibroids (or uterine cancer) – at 1 (e.g. 1,6%), the genital candidiasis – at 26 (e.g. 41,3%), CMV – at 8 (e.g. 12,7%), the HSV – 6 ones (e.g. 9,6%), the mycoplasmosis – 1 (e.g. 1,6%).

Thus, the fertile function analysis has been revealed: at 47 (e.g. 74,60%) the pregnant women in the anamnesis history 1–3 of the pregnancy, at 13 ones (e.g. 20,63%) – 4–6, at 3 ones (e.g. 4,76 %) – 7 or more pregnancies. Only at 6 pregnant women (e.g. 9,52%) in the anamnesis history, it has been marked the infertility: at 2 ones (e.g. 3,2%) – the primary one, at 4 ones (6,4%) – the secondary one. At 1 (e.g. 1,6%) pregnant woman, with the secondary infertility, the pregnancy has been occurred through in the extracorporeal (or vitro) fertilization. The **intergravidary** period has been made up, in the average, $3,72 \pm 2,81$ years, wherein, the interval is less a year (**e.g. 12 months**) – 5 (e.g. 4,7%) ones, from 1 up to 2 years (**e.g. from 12 up to 24 months**) – 61 (e.g. 57,6%) cases, from 3 up to 4 years (e.g. from 36 up to 48 months) – 19 ones (e.g. 17,9%), from 5 up to more years (e.g. from 60 months up to more months) – 21 ones (e.g. 19,8%).

So, it should be noted the high incidence of the adverse pregnancy outcome in the anamnesis history: at 21 (e.g. 33,3%) pregnant women have had the miscarriages or the spontaneous abortions, at 25 (e.g. 39,7%) ones – the medical **еДИЦИНСКИЕ** abortions; at 9 (e.g. 14,3%) pregnant women the previous pregnancies have been ended in antenatal, at 2 (e.g. 3,8%) – neonatal, in 5 (e.g. 7,9%) cases – the fetus perinatal death.

These or other contraception methods in the anamnesis history periodically have been used 22 (e.g. 34,9%) women. Of these – the barrier contraception methods (e.g. condom) – 19

(e.g. 30,2%), the natural methods (e.g. the coitus interruptus, the rhythm method) – 22 ones (e.g. 34,9%). However, the contraception modern methods have been used only 3 (e.g. 4,8%) women: the oral contraceptives – 1 one (e.g. 1,6%), IUDs – 2 ones (e.g. 3,2%).

They have not been protected from the pregnancy – 41 (e.g. 65,1%) pregnant women.

It, moreover, can be noted, at the comparative analysis of this current pregnancy course conducting at the women with the diabetes mellitus, that in the structure of the disease course severity, the high stability in the predominance of the moderate degree of severity is being remained – in 47 (e.g. 74,6%) cases, from which – 33 (e.g. 67,3%) ones with the DM type 1, and 14 (e.g. 100%) ones with the DM type 2. However, at 16 (e.g. 25,4%) pregnant women, the disease severe course has been indicated at them (e.g. all the pregnant women with the DM type 1 – 32,7%).

The basic disease compensation has been observed only in 15,9% cases, in 44,4% the pregnancy has been proceeded, against the sub-compensation background, and in 39,7% – de-compensations of the underlying disease. Of these, 7 (e.g. 14,3%) the pregnant women with the DM type 1, at the pregnancy time have already been offset by the diabetes, at 21 (e.g. 42,9%) ones – the sub-compensation, and at 21 (e.g. 42,9%) pregnant women their pregnancy has been proceeded, against the diabetes mellitus de-compensation background. At the DM type 2, 3 (e.g. 21,4%) pregnant women – have been in the compensated one, 7 (e.g. 50%) ones – in the sub-compensated one, and 4 (e.g. 28,6%) – in the de-compensated stage.

Thus, having considered this factor, it can be explained the high rate per cent of the pregnancy course complications, such as: the toxicosis or toxemia of the pregnancy – at 20 (e.g. 31,7%) pregnant women, the threat of the spontaneous abortion – at 17 (e.g. 27%) ones, the threat of the premature birth or their delivery – at 15 (e.g. 23,8%) ones, the anemia – at 32 (e.g. 50,8 %) ones, the pre-eclampsia – at 25 (e.g. 39,7%) ones, the gestational pyelonephritis – at 30 (47,6%) ones. Such kind of the complications, as the polyhydramnios have already been noted and observed at 18 (e.g. 28,6%) ones, the prenatal rupture of the fetal membranes – in 18 (e.g. 28,6%) ones, the cord entanglement – in 11 (e.g. 17,5%) ones, the breech presentation of the fetus – in 8 (e.g. 12,7%) cases. The pregnancy outcome analysis, against the diabetes mellitus background has been revealed: in 30 (e.g. 47,6%) cases – are the premature births or their deliveries, in 33 (e.g. 52,4%) ones – the term deliveries, while only in 16 (e.g. 25,4%) ones the birth delivery has been occurred through the natural maternal generative passages, and the abdominal birth delivery has been fixed in 47 (e.g. 74,6%) cases. Having analyzed the pregnancy outcome for the infants, it should be noted and observed the high pathologies frequency, such as: the diabetic fetopathy has been diagnosed in 45 (e.g. 71,4%) infants, the preterm newborn infants large for the gestational age – 21 (e.g. 33,3%) ones, the cerebral ischemia – 23 (e.g. 36,5%) ones, the diabetic encephalopathy with the neuro – reflex excitability – 16 (e.g. 25,4%) ones. The fetus

antenatal death has been recorded in 4 (e.g. 6,4%), the neonatal one – 1 (e.g. 1,6%) one, and the perinatal one – 1 (e.g. 1,6%) case. In 23 (e.g. 36,5%) cases – the newborn babies have been transferred to the 2-nd stage of the nursing in the specialized institutions. The congenital malformations of the fetus development have already been detected in 3 (e.g. 4,8%) ones, of which I would like to be highlighted such pathology, as the Dandy-Walker syndrome, having diagnosed at 1 (e.g. 1,6%) newborn infant, which is occurred about in 1 case per 30,000 births and deliveries, and it, moreover, is found in 4–12% cases of all the children at their hydrocephalus.

The Conclusions: Due to the high stability in the prevalence of the moderate and the low percentage rate of the pregnancies with the satisfactory compensation of the carbohydrate metabolism rate of the pregnancy complications, and its adverse outcome is being remained the high one for the both, as for the mother, well as for the fetus.

So, it should be noted also, as the low awareness of the women's this group on the safe use possibilities of the contraception modern methods, which is dictated the need for the further researches on their optimal selection and the allowing, with due regard for the reproductive health peculiarities and their specific features at the women with the diabetes mellitus type 1 and 2 in the Republic of Uzbekistan.

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The Abstract:

The diabetes mellitus (DM) prevalence, among the pregnant women, is being increased with every year, having amounted up to 0,5%, today.

In order to be studied the primary disease effect upon the pregnancy course and outcome, the retrospective analysis of the women delivery and labor histories with DM 1 type (e.g. 77,8%) and type 2 (e.g. 22,2%), on the basis of RSSPMC O&G from 2008 up to 2012 –es has been conducted. As a result of the carried out studies, it can be concluded, that the given high stability in the prevalence of the moderate rate stability (e.g. 74,6%) and the pregnancies low

percentage with the satisfactory compensation of the carbohydrate metabolism (e.g. 15,9%), the pregnancy complications frequency and its adverse outcome is practically being remained rather high for both, as for the mother, well as for the fetus. The modern contraceptive methods use percentage is practically made up only 4,8%.

The Key Words: diabetes mellitus, pregnancy outcome, modern methods of contraception.

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