

PREVALENCE AND DYNAMICS OF FACTORS CAUSING PHYSICAL INACTIVITY IN PREGNANT WOMEN BY AGE (RESULTS OF 3-YEAR EPIDEMIOLOGICAL MONITORING)

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Relevance

Hypertensive disorders in pregnant women are among the most common and significant cardiovascular diseases and syndromes. The significance of this problem is determined by the fact that pregnancy in women with hypertensive conditions is often accompanied by severe health problems and even death of the mother (up to 40% in some countries), high rates of childhood and perinatal morbidity and mortality, and a number of obstetric complications [2]. Hypertensive conditions in pregnant women is a concept encompassing various clinical and pathogenetic variants of hypertensive disorders [5].

In some cases, women have a history of chronic kidney disease before pregnancy, which is the etiological factor for increased blood pressure; in others, it is essential hypertension; in others, in normotensive women before pregnancy, the increase in blood pressure is caused by the pregnancy itself, the so-called gestational forms - gestational hypertension and preeclampsia [1].

Moreover, in the structure of the causes of arterial hypertension during pregnancy, the greatest role is played by the latter, which, according to MABrown and MLBuddle [4], constitute the predominant part of all hypertensive disorders in pregnant women: gestational hypertension - 43%, preeclampsia - 27%, essential hypertension - 19%, preeclampsia against the background of previous hypertension - 7%, secondary (symptomatic) hypertension - 4% [6].

The purpose of the study based on the results of a clinical and epidemiological study, to substantiate innovative strategic directions for the prevention of hypertensive and vegetative crises in pregnant women in the Fergana Valley of Uzbekistan.

Materials and methods

Object of study. During the period 2019–2021, 1,500 pregnant women from women's outpatient clinics at maternity hospitals in Andijan were examined.

Subjects of research there was venous blood and its serum for biochemical analysis.

Research methods. General clinical, epidemiological, instrumental (EchoCG, ECG, ultrasound examination of internal organs), biochemical (cholesterol, triglycerides, sugar) and statistical methods were used.

Results and discussion. In different age groups of the population of pregnant women, the prevalence rate of physical inactivity, according to the first (2019) and second (2020) epidemiological monitoring (i.e. a 3-year prospective epidemiological study), is, respectively: at the age of up to 20 years - 32.4% and 22.1%, with a decrease in dynamics by 10.3% [RR = 0.42%; DU = 0.50 - 0.34; Chi2 = 28.57; P < 0.05]; in the age group of 21 - 24 years - 44.3% and 25.95%, with a decrease by 18.4% [RR = 0.60%; DU = 0.68 - 0.52; Chi2 = 81.9; P < 0.05]; at the age of 25–29 36.5% and 17.93%, with a decrease of 18.4% [RR = 0.44%; DU = 0.53–0.37; Chi2 = 14.65; P < 0.05]; in the age range of those examined 30–34 years 44.4% and 20.63%, with a decrease of 23.8% [RR = 0.56%; DU = 0.64–0.48; Chi2 = 52.58; P < 0.05]; at 35–39 years 46.6% and 17.24%, a decrease of 29.4% [RR = 0.56%; DU = 0.64–0.49; Chi2 = 16.64; P < 0.05]; At the age of 40–44 years, 60.0% and 20.0%, with a decrease of 40.0% [RR = 0.75%; DU = 0.82–0.68; P < 0.05]; at ≥ 45 years, 0.0% and 0.0%.

At the end of the prospective study (2021), physical inactivity in the population of pregnant women was observed with a prevalence rate of the following levels: at the age of up to 20 years 22.1%, at 21–24 years – 26.0%, at 25–29 years – 17.9%, at 30–34 years – 20.6%, at 35–39 years – 17.2%, 40–44 years – 20.0%, and at ≥ 45 years – not determined.

Comparatively high rates of physical inactivity are observed at the age of up to 20 years and 21–24 years; in the examined group of pregnant women, under the influence of age, the detection rate of physical inactivity varies by 1.5 times (P < 0.05).

Conclusion

In the population of pregnant women, a higher frequency of the following risk factors for hypertensive and vegetative crises with characteristic dynamic changes is observed: stress 40.4% (with an increase of 0.5%), dyslipoproteinemia 13.2% (with an increase of 2.1%), excess body weight 33.0% (with an increase of 5.1%), hyperglycemia 21.3% (with an increase of 8.8%), physical inactivity 32.8% (with an increase of 6.1%) and low consumption of vegetables and fruits 38.0% (with a decrease of 0.1%). With age, the frequency of detection of risk factors increases by 3-4 times. The risk of an increase in risk factors begins from the first

trimester of pregnancy, reaching the highest values in the third trimester. The presence of risk factors and comorbid pathologies in the population of pregnant women increases the likelihood of developing crises to 78.0%.

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