be used for predicting the prognosis of diseases, are of undoubted practical interest.

The aim of this study was to research the associations between the structural and functional state of the myocardium and the levels of serum NT-proBNP and ST2 in hypertensive patients with / without chronic coronary disease.

Materials and methods. 118 patients with stage II hypertension with / without chronic coronary disease were included in the study. For all patients, both the main indicators of the structural and functional state of the myocardium according to echocardiography and serum levels of NT-proBNP and ST2 were additionally measured on the 2-3rd day of hospital stay when optimal therapy was being selected.

Results. The obtained data indicate that a relatively low level of NT-proBNP is associated with a significant increase in the size of the right atrium and the right atrial index and the frequency of cases with concentric hypertrophy of the left ventricle compared to intermediate and relatively high levels of the neurohormone. The patients with relatively low neurohormone level demonstrate a significant increase in end-diastolic size and left atrial size compared with only intermediate levels. The results of the analysis of changes in echocardiogram indicators depending on the level of ST2 in plasma demonstrate the complete absence of any reliable changes between the selected groups.

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Kamilova Nigar M., Gulieva Lamia A.

ANALYSIS OF THE COURSE OF PREGNANCY, CHILDBIRTH AND THE STATUS OF NEWBORNS BORN BY DISPLACED WOMEN

Azerbaijan Medical University, Department of Obstetrics and Gynecology, Baku, Azerbaijan

Aim of the study: to analyse the effect of involuntary migration on the course of pregnancy, labour and delivery, and neonatal outcomes in pregnant women in the third generation. Materials and methods. This paper presents an analysis of a prospective study of the course of pregnancy, childbirth, and the condition of new-born infants born by displaced Azerbaijani women. A prospective analysis was made in the course of puberty and the state of reproductive health in 54 refugee women of early reproductive age, who were divided into two groups, aged 18-25 and 26-35 years. Results. A study conducted among third generation women revealed pronounced negative trends in both somatic and reproductive health among refugee women in this group. Their average age ranged from 18 to 35. Most of the patients, 37 (68.5%), were born with a birth weight of less than 3000g. The mean age of parents at the time of girl's birth was 25.4±2.26 years for mothers, 26.9±5.29 years for fathers, i.e., in the immediate post-stress period. The subjects are characterized by menstrual cycle dysfunction (63%-29.5%). Hypermenorrhoea occurs in 46% of the subjects, primary amenorrhoea in 8.2%, and secondary amenorrhoea in 3.3%. There is also a high percentage of inflammatory diseases of the female genital organs (93.4%). A high percentage of somatic pathologies is found in the female patients: iron deficiency anaemia - 77.8%, gastrointestinal diseases - 48.1%, thyroid diseases - 9.3%, urinary diseases - 22.5%, helminthiasis - 16.7%, etc. Sexually transmitted infections were diagnosed in chronic form in 14 patients. The rate of placental insufficiency of grade 1a and 1b was diagnosed in 29%-16%, and delayed foetal development of grade 1 and 2 in 12%-8% respectively. Asphyxia (27%), newborn hypotrophy (7.5%), prematurity (18%) is characteristic of the newborns of this group of patients. Conclusion. Analysis of the results of a comprehensive study of the health of pregnant refugee women has shown that even in the third generation the stress associated with forced migration of the older generation and adverse socio-medical problems are reflected in the formation and functioning of the reproductive age of the younger generation.

Key words: women, refugees, forced migrants, reproductive health, pregnancy, childbirth, newborns.

Introduction

According to UNHCR, the most recent data for 2020 showed that there are over 79,5 million refugees worldwide, more than at any time in history [1]. Various socio-economic models (SEMs) that have been developed show that a multi-level approach is the key to prevent and manage adverse health outcomes ensuring that the right conditions are in place for people who have been exposed to these risks [2]. Migration history, age, level of education, knowledge about one's own health all shape a person's susceptibility and resilience to the health during migration and after resettlement [1, 3, 4, 5, 6, 7, 8, 9]. The main health and social problem for refugees is maladaptation. Maladaptation is a psychological traumatisation that can lead to the development of post-traumatic stress disorder. It is caused by two main factors [10]:

1) pre-morbid characteristics of the displaced people;

2) medical and social environment of displaced people.

Among migrants, a significant proportion are women of reproductive age. A systematic review by Hadgkiss E.J., Renzaho A.M. [11], which studied asylum seekers living in a community in high-income countries, showed that they were more

likely to use tertiary health care services, but less likely to use preventive health care services than the host population. Consequently, reproductive health is affected by disadvantages and limitations in the availability of medical and obstetric and gynaecological care and, consequently, gynaecological pathology has a negative impact on pregnancy, childbirth and the quality of offspring. Analysis of the literature has shown that most authors consider it necessary to include pregnant refugee women in the group of increased risk of obstetric complications and prenatal pathology [12].

Aim of the study is to analyse the effect of involuntary migration on the course of pregnancy, labour and delivery, and neonatal outcomes in pregnant women in the third generation.

Materials and methods

A prospective analysis was made in the course of puberty and the state of reproductive health in 54 refugee women of early reproductive age, who were divided into two groups, aged 18-25 and 26-35 years.

Results and discussion

A study conducted among third generation women revealed pronounced negative trends in both somatic and reproductive health among refugee women in this group. The average age ranged from 18 to 35. Most of the patients, 37 (68.5%), were born with a birth weight of less than 3000 g. The mean age of parents at the time of girl's birth was 25.4±2.26 years for mothers, 26.9±5.29 years for fathers, i.e., in the immediate post-stress period.

In the retrospective observation, 42 menstruating women (77,8%) had timely onset of their first menstruation. Early menarche was observed in 7 subjects (13%). 3 patients (5.6%) indicated the onset of their first menstruation at the age of 15 years and above. The mean age of menarche in the female refugees (n=54) was 13.7+1.16 years, which is considered normal. However, there were sufficient deviations in the development of the menstrual cycle: menstruations began immediately in 16 women (29,6%), in 20 (37%) they did it within a year. The long-term establishment of menstrual function (2 years and more) was observed in 7 examinees (13%), and in 11 (20.4%) menstrual cycle was irregular at the moment of survey. Thus, deviations from the normal menstrual cycle were observed in 18 refugee women (33.3%). The majority of the women (43-79.6%) had menstrual cycle duration ranging for 25-30 days. The average duration of the menstrual cycle was 27.5+1.94 days. In 3 (5.6%) there was a tendency to proiomenorrhoea. Opsomenorrhoea was detected in five cases. The average duration of menstruation was 5.0+1.38 days. Most women (25 to 49%) had moderate menstrual bleeding; 14 (27,5%) women had heavy bleeding. Poor menstruation was observed in 12 (23.5%) of all patients. 30 (55.6%) women reported painful menstruation, accompanied by poor general health and loss or impaired ability to work. Six (11.1%) women reported hypermenorrhoea. Secondary amenorrhoea was diagnosed in 8 (14.8%). The main risk factors for menstrual disorders were unfavourable psychological and social conditions, especially lifestyle changes. Inflammatory diseases of the pelvic organs were diagnosed in the majority of subjects (72.2%). In almost every second case, dysmenorrhoea was the reason for visiting a doctor (55.6%). Nineteen (35.2%) of those examined had menstrual disorders. There was found high incidence of cervical diseases, in 17 women (31.4%), and sexually transmitted infections, in 14 women (25.9%).

An analysis of somatic health has revealed a high incidence of acute respiratory diseases (83.3%) and ENT-organ diseases (27.8%). Gastrointestinal diseases were reported in 48.1%, urinary diseases in 12 (22.2%), and thyroid disorders in 9.3%. Iron deficiency anaemia was treated for the majority of the women examined, 77.8%. Arterial hypertension was diagnosed in 5.6% of those examined.

The mean age at first pregnancy in group I was 18.2±0.24 years, in group II - 22.6±0.3 years, $p<0.05$. There were also significant differences in the mean age at first birth, 18.4±0.23 years and 23.4±0.28 years, respectively ($p<0.05$).

A higher incidence of varicose veins of the lower extremities was found in group I compared to group II, 37.7% more frequently ($p<0.05$), while moderate to high myopia was 6.8% more frequent in group II ($p<0.05$). The groups were identical for the other nosological forms. Among pregnancy complications, group I the most frequent anaemia in pregnancy, swelling in the second, and threatened premature births, whilst group II had the most frequent anaemia, swelling in pregnancy, and threatened miscarriage in the first trimester. There was a significant difference within the groups ($p<0.05$): the incidence of threatened pregnancies in the first trimester was higher in group II that is probably due to the later registration of group I women. Group I had the highest incidence of placental insufficiency (PI) of grade 1a-1b and FGD-1-2 grade, being nearly 20.0% and 40.0% more common than in Group II, respectively ($p<0.05$).

In the analysis, we found significant differences within the groups for 'large foetus', which was 1.4% more frequent in group II compared to group I ($p<0.05$). Placenta previa was observed in 5.6% of all the cases (2/54), with a 20% higher rate in group I ($p<0.05$). The amount of amniotic fluid did not differ significantly between groups I and II ($p>0.05$). We have studied the course of puberty and reproductive health in 54 refugee women of early reproductive age. In group I, chronic intrauterine foetal hypoxia (IUFH) was 13.7% more common

than in group II, and umbilical cord entanglement was 13.6% less common (p>0.05).

Deliveries in group I occurred between 31 and 41 weeks of gestation, whereas in group II they occurred between 35 and 43 weeks. The mean duration of the waterless interval was significantly shorter in group I (p<0.001), possibly due to the greater parity of refugee women. Placenta previa as an indication for elective caesarean section was significantly more common in group I - 50% and not observed in the control group, while emergency caesarean section for poor labour activity without oxytocin stimulation was significantly more common in group II - 20% versus 16.0% in group I (p<0.05). Dense placental attachment and placenta defects required additional manipulations during the third period of labour: instrumental removal of membranes and manual examination of the uterine cavity (as reported by the subjects).

It was noteworthy that group I women gave birth prematurely through the unexpectedly left the maternity hospital prematurely and spontaneously in 50% (2/4) of cases, while in group II this parameter did not exceed 3.8% (1/26). It should be noted that the course of childbirth in most of the subjects proceeded without pathology (as reported by the patients themselves).

As a consequence of an unfavourable course of pregnancy and labour, the Apgar scores of group I babies were 24.2% lower than those of group II (p<0.01). The birth weights of group I and II mothers ranged from 2160 to 4950 g, which was in the normal range. It was found that during the early neonatal period new-borns were most often found to have hypotrophy - in 27.0% and signs of prematurity - in 18% of observations. Aspiration syndrome was observed in 1 case out of 10 and respiratory distress syndrome in 1case.

Thus, analysis of the results of a comprehensive study of the health of pregnant refugee women has shown that even in the third generation, the stress associated with forced migration of the older generation and adverse socio-medical problems are reflected in the formation of the reproductive age of the younger generation. An analysis of the medical and social problems of pregnant refugee women makes it possible to develop proposals for managing their health by improving medical and social care, which will include a range of organizational, social and medical measures [11, 12]. The most important organizational and clinical measures in the medical care of this category of pregnant women are supplementary examinations by specialists and clinical, diagnostic, functional and laboratory tests, given the high level of extragenital and genital pathology. The implementation of the proposed measures will contribute to improving the level of early medical follow-up of pregnant women and reduce considerably the complications of pregnancy, childbirth, postnatal period and prenatal losses [2, 7, 8].

Conclusions

1. The subjects are characterized by menstrual cycle dysfunction (63%-29.5%). Hypermenorrhoea occurs in 46% of the subjects, primary amenorrhoea in 8.2%, and secondary amenorrhoea in 3.3%. There is also a high percentage of inflammatory diseases of the female genital organs (93.4%).

2. A high percentage of somatic pathologies is noted among the examined female patients: iron deficiency anaemia - 77.8%, gastrointestinal diseases - 48.1%, thyroid diseases - 9.3%, urinary diseases - 22.5%, helminthiasis - 16.7%, etc. Sexually transmitted infections were detected in chronic form in 14 patients.

3. The rate of placental insufficiency of grade 1a and 1b was diagnosed in 29%-16%, and delayed foetal development of grade 1 and 2 in 12%-8% respectively.

4. Asphyxia (27%), newborn hypotrophy (7.5%), prematurity (18%) is characteristic of the newborns of this group of patients.

Prospects for further research.

The offered measures can serve as the basis for a health care program for women from refugee families in the next generation as a component of the regional programs of public health.

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Реферат

АНАЛІЗ ПЕРЕБІГУ ВАГІТНОСТІ, ПОЛОГІВ І СТАН НОВОРОДЖЕНИХ СЕРЕД ЖІНОК-ВИМУШЕНИХ ПЕРЕСЕЛЕНЦІВ
Камілова Н.М., Гулієва Л.А.
Ключові слова: жінки, біженці, вимушені переселенці, репродуктивне здоров'я, вагітність, пологи, новонароджені.

Мета – вивчити вплив вимушеної міграції протягом вагітності, пологів та стан новонароджених у вагітних жінок–азербайджанок у третьому поколінні. Матеріал та методи дослідження. Проведено аналіз перебігу періоду статевого дозрівання та стану репродуктивного здоров'я у 54 жінок – біженців раннього репродуктивного віку, які були поділені на дві групи віком 18-25 та 26-35 років. Робота містить аналіз проспективного дослідження перебігу вагітності, пологів та стану новонароджених серед жінок–азербайджанок. Результати. Проведене дослідження серед жінок третього покоління виявило виражені негативні тенденції в стані як соматичного, так і репродуктивного здоров'я жінок – біженок цієї групи. Середній вік коливався від 18 до 35 років. Більшість пацієнток 37 (68,5%) народилися із масою тіла менше 3000 г. Середній вік батьків на момент народження дівчинки становив у матерів 25,4±2,26, в батьків – 26,9±5,29 років, тобто у найближчий період після стресової ситуації. Для обстежуваних характерне порушення у настанні та становленні менструального циклу (63%-29,5%). У 46% спостерігаються гіперменорея, у 8,2% – первинна, у 3,3% – вторинна аменорея. Також високий відсоток запальних захворювань жіночих статевих органів – 93,4%. Серед обстежуваних пацієнток відзначається високий відсоток захворювань соматичної патології: залізодефіцитна анемія – 77,8%, захворювання шлунково-кишкового тракту – 48,1%, захворювання щитоподібної залози – 9,3%, захворювання сечовидільної системи – 22.5%, гельмінтози – 16,7% та інш. У 14 пацієнток були виявлені у хронічній формі інфекції, що передаються статевим шляхом. Серед вагітних діагностована плацентарна недостатність 1а і 1б ступеня в 29% та16% відповідно, а затримка внутрішньоутробного розвитку плода 1 і 2 ступеня – в 12% та 8% відповідно. Для новонароджених цієї групи пацієнток характерні асфіксія (27%), гіпотрофія новонароджених (7,5%), недоношеність (18%).

Висновки. Аналіз результатів комплексного дослідження здоров'я вагітних біженок показав, що навіть у третьому поколінні перенесений стрес, пов'язаний із вимушеною міграцією старшого покоління, та несприятливі соціально-медичні проблеми знаходять своє відображення на становленні та функціонуванні репродуктивного віку молодого покоління.