

tologists. Each region has two-three 2nd level perinatal centres. In these centres there are rooms for intensive care of newborns [6].

In the Grodno Province perinatal care on the 1st level is performed:

- a) in stationary care in obstetric wards with 400 births yearly and paediatric wards -14 regional hospitals;
- b) in outpatients care – outpatients departments for women;

The functions of 1st level:

- ⇒ Performing primary health care for women with not complicated pregnancy, maternal care of women and newborns.
- ⇒ Evaluation of pregnancy risks and possible transfer of women to the centres of 2nd and 3rd level.

Perinatal care on the 2nd level is performed:

- a) in stationary care in obstetric wards within the system “mother with child”, with 2000 births a year; newborns pathology wards, paediatric wards.

Such conditions are met by 3 central regional hospitals (Lida, Wołkowysk, Oszmiany) and Emergency Hospital (uro-gynaecological ward) in Grodno.

The functions of 2nd level:

- ⇒ Admitting of patients from primary health care and supervision of pregnancies and deliveries of medium risk. Moreover, newborns’ treatment of diseases with medium intensity.
- ⇒ Consulting with the 1st level centres.

The perinatal care of the 3rd level is performed:

- a) in stationary care by regional centres of perinatal care: Grodno District Clinical Hospital No. 3 “Delivery House” and Provincial Children’s University Hospital.

The functions of 3rd level include:

- ⇒ Realisation of tasks of 1st and 2nd level.
- ⇒ Provision of care to mothers and newborns of all risk levels.
- ⇒ Introducing of new treatment methods, carrying out research, training of staff.

On each of the mentioned stages the health care depends mainly on the availability of staff, apparatus and diagnostic equipment as well as specialized laboratories; also the housing and transportation facilities. All of this influences the scope of the served care and the requirements placed onto health care workers [8].

A group of researchers, Siewkowskaja Z., Kot T., and co., from the medical-social department of the Research Institute of Mother and Child Protection in Mińsk, carried out a comparative analysis of the results of work of perinatal centres of 2nd and 3rd level in 2000 by using the indices of the WHO programme Eurooffice for the evaluation of the quality of perinatal care OBSQID [7,10]. The data from the forms no.32 “Report on medical care of pregnant women and obstetric women” from every province was the material for analysis.

The reports of Siewkowskaja Z. and co., [10] indicate that in 2000 in Belarusian hospitals there were 94042 deliveries. In perinatal centres of 2nd level the percentage of deliveries was 44%, and in the 3rd level centres – 22%. The same year in Belarus there were 4496 live births with low birth weight and the percent contribution in the general number of births was 4,8%. In Belarus in 3rd level centres the proportion of newborns with birth weight <2500 g accounted for 33,2%, in 2nd level centres – 38,3%, in 1st level centres – 28,5%. In Grodno district the percentage of newborns’ births with low birth weight was the following: 3rd level- 41,5%, 2nd level- 28,0%, 1st level – 30,5%. Premature newborns and full term newborns with low birth weight in majority of cases require instantaneous intensive care from the first minute and hour after the birth [10]. The hypotrophic and premature newborns considerably influence formation of basic health indices of children population both in perinatal period and in postnatal period [1,4,6]. Among the postnatal deaths about 66,0% concern newborns with birth weight below 2500 g, and in this number the percentage of neonates with birth weight below 2000 g is 84,3% [10].

The stillbirths’ coefficient recently has a decreasing tendency. In spite of that its high values account for potential reserve of the prenatal and neonatal care quality. In 2000 both in the country and in the district the number of stillbirths was 5,0 per 1000 deliveries. It included a bigger percentage of stillbirths in 3rd level centres (country -36,1%, Grodno district -65,5%). Neonatal mortality in Grodno District was 0,5 per 1000 deliveries [10]. The coefficient of postnatal mortality has also a decreasing tendency and in 2000 it was 3,0 per 1000 deliveries.

In 3rd level perinatal centres the proportion of early postnatal deaths was in the country 40,8%, and in the Grodno District – 51,5% [10].

According to some authors [3] the principal reason for stillbirths are the diseases during neonatal period in which the leading role is played by intrauterine anoxia and postnatal asphyxia. The second reason is congenital developmental anomalies, and still the next reason is neonatal infections.

The most numerous proportional group of post natal deaths in Grodno Province were the deaths connected with the neonatal conditions. The leading cause of deaths was the respiratory insufficiency syndrome, the inborn developmental anomalies were the next cause, and still the third reason was congenital pneumonia [3]. Not all hospitals in Belarus, particularly the 1st level centres, have possibilities of intensive care. Therefore it is necessary to have adequate organization and co-operation between the centres, adequate education and upgrading of professional skills of the staff [3,10]. The important role in efficient realization of regionalization principle is played by adequate transportation. The most recommended form of transportation to the higher level centres should be "in utero" transportation [2,3,5].

The neonatal mortality coefficient in Grodno Province with considering newborns with birth weight 500 – 900 g in the selected years was as follows: 1994 – 17,3‰, 1996 – 11,6‰, 1998 – 8,8‰, 2003- 5,8‰. Due to the existing economic situation, present environmental factors, lowering of the standard of living of the society and a poor quality of prenatal care, there is a negative increasing tendency of pregnant women morbidity [3,10].

According to Czasnoit and co., [3] a coexisting pathology of internal diseases and gynaecological diseases is found in 50% of pregnant women. Czasnoit and co., [3] stated that a considerable proportion of pathology is present for the first time in the course of pregnancy. The authors explain this by a bigger load of the body of a pregnant woman as well as by inadequate quality of prenatal care. The most frequent coexisting diseases with pregnancy in 1999 were: anaemia 31%, thyroid pathology 18,2%, infections of urinary-sexual system 13,5% [3,8]. The data of Czasnoit and co., [3] indicate a considerable contribution of abortion-risk pregnancy in the structure of morbidity of the pregnant women in Grodno Province. During 1996-2000 the proportion of abortion-risk pregnancy was 21,7%. However a general contribution in the same time frames was higher – 32,18 % with a marked increasing tendency [3].

Abortion is one of the most frequent methods of family planning. On request of the women abortion is performed until 12th week of gestation, later during 13-22nd week- due to indications (medical, social, genetic) according with the Resolutions of the Republic of Belarus No. 902 of July 5, 2002, No. 60 of August 1, 2002. In the country the number of abortions per 100 live births in 1995 was 184, in 1999- 146; in 2001 – 111. In the Grodno District the situation was as follows: in 1995 -119,8 abortions per 100 live births, in 1999 – 106,9; in 2001 – 78,4. According to statistical data the above mentioned method of family planning is applied by a majority of women up to 30 years of age. In spite of a decreasing tendency a still high level of abortions in Belarus and Grodno Province confirms a poor knowledge of the society about modern contraception methods, no access to contraceptives because of their high cost and a poor quality of health care. The main directions of activities focused on the upgrading of perinatal care should include the improvement of women's health during pre-conception period, the improvement of prenatal care and provision of optimal conditions of work of the obstetric and neonatology staff [3]. The data of researchers [Żukowa] prove that among the main causes that influence the deterioration of women's health the following should be mentioned:

- ⇒ the increase of incidence of gynaecological diseases, internal diseases and the number of complications in pregnancy course, delivery and postnatal period with relation to the internal diseases.
- ⇒ inadequate reproduction behaviour connected with the increase of sexually transferred diseases and the increase of addictions among the teenagers;
- ⇒ not adapting of pregnant women to recommendations, low level of women in realization of reproduction functions;
- ⇒ increase of anthropogenic factors influencing the foetus and neonate;
- ⇒ decrease of immunological and non-specific immunity of the pregnant women with the effect of a growing number of incidence;
- ⇒ insufficient level of society's sanitary culture;
- ⇒ underestimated role of male gender in the realization of reproduction function [11].

According to Postojalko [9] the priority activities of gynaecological-obstetric branch are:

- ⇒ the improvement of care quality on the primary level and directing it to prophylactics of reproductive health disorders and earlier detection and elimination of risk factors;
- ⇒ development of appropriate programmes that improve the care of medical-genetic services and family planning services;
- ⇒ the improvement of the prenatal diagnostics level of the congenital developmental defects with facilitating of surgical correction of congenital heart diseases;

- ⇒ the improvement of prenatal care quality on the basic level and prophylactics of reproductive health disorders , directed towards earlier detection and elimination of risk factors;
- ⇒ rearranging of perinatal care system, providing perinatal hospitalization of risk-group women in a due time in perinatal centres;
- ⇒ developing of procedural standards in emergency situations [9].

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STRESZCZENIE

Ochrona życia i zdrowia matki oraz nowonarodzonego dziecka stanowi istotny problem i wyzwanie dla lekarzy różnych specjalizacji, administracji państwowej, organizacji samorządowych. Umieralność okołoporodowa jest ważnym wskaźnikiem poziomu zdrowotności populacji oraz czułym miernikiem stanu opieki położniczej i neonatologicznej. Podstawowym celem polityki społecznej każdego państwa jest dbanie o zdrowe społeczeństwo, zaś zmniejszenie wskaźników umieralności i zachorowalności wiąże się z wdrożeniem adekwatnej opieki perinatalnej

SUMMARY

Life and health protection of mother and newborn is an important task and challenge for physicians of various specializations, for authorities and local government. Perinatal mortality rate is an important indicator of population health level and sensitive determinant of obstetric and neonatal medical care. The basic aim of social policy in each country is to take care of people's health. Decreasing of morbidity and mortality rate depends on proper perinatal care.