

# The organization of medical aid to patients with inflammatory diseases of the generative organs – living in rural settlements the Grodno area between 1944-1994

## Organizacja pomocy medycznej dla pacjentek z chorobami zapalnymi narządów rozrodczych – żyjących w osiedlach wiejskich obszaru Grodno w latach 1944-1994

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Pomimo rozwoju sieci usług położniczych i poprawy opieki położniczo-ginekologicznej w rejonach wiejskich, nie można osiągnąć poprawy stanu klinicznego narządów rozrodczych u pacjentów z chorobami zapalnymi narządów rozrodczych, którzy mieszkają na obszarach wiejskich – z powodu niedostatecznych standardów bezpieczeństwa zabiegów oraz niedostatków w wyposażeniu technicznym oraz organizacji systemu opieki zdrowotnej.

**Słowa kluczowe:** zdrowie rozrodcze, narządy rozrodcze, choroby zapalne narządów rozrodczych

Despite the development of a network of establishments of obstetric-gynaecologic service and organizational technologies in rural regions it has not been possible to solve a problem of improvement of reproductive health in patients with inflammatory diseases of generative organs, living in rural settlements, in connection with default of specifications of security and insufficient technical equipment of the organisations of public health services.

**Keywords:** reproductive health, inflammatory diseases of generative organs

© Hygeia Public Health 2011, 46(3): 390-395

www.h-ph.pl

Nadesłano: 30.05.2011

Zakwalifikowano do druku: 22.06.2011

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### Introduction

In modern social and economic conditions the state of reproductive health (further – RH) in patients with inflammatory diseases of generative organs (further – IDGO) remains one of the most important medico-social problems [1, 2, 3].

Despite a considerable quantity of the scientific works devoted to IDGO [4, 5, 6], there is a wide spectrum of yet unsolved problems. Medical aid for patients takes into account the improvement of prenatal care technologies, a network, personnel potential and standard base of obstetric-gynaecologic service (further – OGS) on a modern demonstrative base in a historical retrospective show. Until now it has not allowed the generating of a corresponding medico-organizational model, to estimate its medical, economic and social efficiency to solve the problem on strengthening RH of women with IDGO.

### Aim

To study the system of the organisation of medical aid to patients with IDGO, living in rural settlements of the Grodno area in 1944-1994, within the limits of a network of OGS establishments.

### Materials and methods

The study used the system approach, and historical methods were applied.

The research covered the female population of the Grodno area in 1944-1994 (614320 in a year), who received medical aid in gynaecologic and obstetric hospitals, and also in out-patient conditions –in female consultations (further – FC) and medical assistant's obstetric points (further – MAOP).

Retrospective of the standard base and of resource maintenance of OGS establishments in administrative districts of the area in 1944-1994 were studied.

Statistical data processing was made with the use of Statistica 6.0 program.

**Results**

During the years of the World War II and occupation the public health services of the Grodno area including OGS, had suffered huge material and personnel losses.

In 1950-1960s the agricultural population (fig. 1) considerably prevailed in the area.

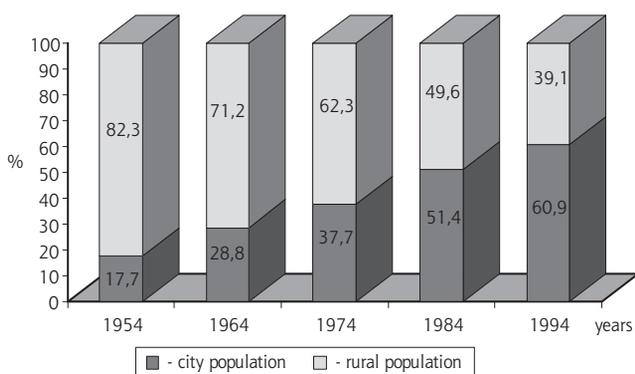


Fig. 1. Structure of the female population (urban and rural) in 1954-1994

Therefore the major direction of activity of controls of public health services of the Grodno area during the post-war period was the prompt renewal of activity of the organisations of public health services in administrative districts and their material support.

Restoration of a network of OGS establishments had begun practically right after the expulsion of fascist aggressors. On the basis of the Sovnarcom BSSR order of 06.07.1944 the work of Novogrudsky hospital, a structure of which included maternity home of 15 cots, was reactivated.

Considering that the majority of hospitals existing in the pre-war period had been destroyed, Sovnarcom BSSR of 17.07.1944 accepted the Decision «About renewal of work of design-technical office of the National commissariat of public health services of the Republic» for the purpose of the organisation of capital construction of the organisations of public health services.

However the process of restoration of activity of OGS establishments faced considerable objective difficulties, had inconsistent character and demanded mobilisation of all available organizational, personnel and material resources. From the means directed in 1944 on capital construction in volume of 14.4 million of rbl., in the absence of technicians, building materials and transport there were only 702 thousand rbl used. Between 1944-1945 it was not possible to develop the planned quantity of the maternity and

gynaecologic cots, the general number of which had not reached the level of 1940 and made, accordingly, 86.3% and 43.3%.

In the first post-war years the majority of maternity cots (84.5%) were in non-profile branches of hospitals, and, in the adapted premises with mismatching sanitary-and-hygienic norms, that was a rough infringement of existing requirements.

Despite the acceptance of the Decision of Ministerial council BSSR of 14.07.1949 No 813 «About actions for expansion of a network of child care centres and maternity hospitals and to improvement of their work», material equipment of OGS establishments remained insufficient. However, financial assets allocated for development of public health services were not fully used. In 1950, on acquisition of the 76% of the planned means in medical equipment – only 93% had been spent, and the quantity of the means directed on capital construction in comparison with 1945 had decreased twice.

All it led to a high level of perinatal death rate, exceeding 35‰ (in 1949 mortality made 22.0‰, early neonatal death rate – 15.0‰) and considerable mortality women in childbirth from the pyoinflammatory complications, making 0.22%.

In these difficult conditions by the order of Ministry of Health of the USSR of 16.02.1948 No 431 «About actions for improvement of treatment-and-prophylactic service of the population» for maintenance of rendering of medical aid to the population «the uniform midwife-gynaecologist» FC, had been entered into structure of maternity hospitals or polyclinics.

To the beginning of 1950s the order of Ministry of Health of the USSR of 21.11.1949 No 870 «About the nomenclature of establishments of public health services and the statement of the instruction on its application» appoints a network of OGS establishments. According to this statutory act the rendering of gynaecologic help to patients with IDGO was provided in establishments of various types which have not essentially changed in structure throughout all subsequent periods and are presented in figure 2.

Unlike gynaecologic aid, the organisation system of the obstetric help to patients with IDGO in 1954-1994 had undergone essential changes. If it was an out-patient component corresponding with OGS establishments presented on figure 2, in stationary conditions in 1950-1960s, it appeared mainly on obstetric cots of local hospitals, in collective-farm and city maternity homes (branches), and from the middle of 1960s - according to the order of Ministry of Health of the USSR of 31.07.1963 No 395 «About a condition and measures on the further improvement

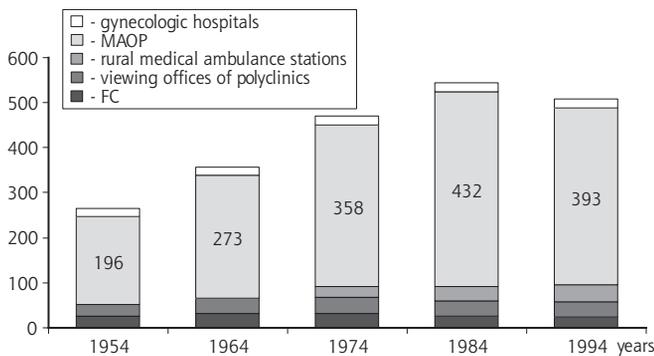


Fig. 2. Structure of OGS establishments for the rendering of gynaecologic help to patients with IDGO in 1954-1994

of stationary service of the population of the USSR» - in the maternity homes (branches) developed in the central regional hospitals (further - CRH), later - also in obstetric-gynaecologic branches of hospitals (the order of Ministry of Health of the USSR of 23.10.1978 No 1000 «About the statement of the nomenclature of establishments of public health services»).

Basic OGS establishments of out-patient type to which personnel duties on diagnosis and treatment of an obstetric-gynaecologic pathology were assigned were FCs, the activities of which in 1940-1950s were regulated «by the Instruction about work of a female-nursery and female consultation» (further – the Instruction), confirmed in 23.08.1937 by Narcomzdrav of the USSR.

In out-patient conditions the IDGO diagnosis was carried out also in viewing offices of the polyclinics, the quantity of which in 1954-1964 increased by 37.5% (figure 2). However only in polyclinics of the regional centre and two CRH they functioned in 1.5-2 shifts which limited availability of medical aid to inhabitants of both urban and rural settlements.

In rural settlements in 1950th the diagnosis and treatment of IDGO was carried out mainly by the MAOP midwives, whose activity, including on interaction with FCs, was regulated by «Position about rural MAOP», confirmed Ministry of Health of the USSR of 31.12.1954 No 481, and during the subsequent period – the similar position confirmed by the order of Ministry of Health of the USSR of 27.07.1973 No 566 «About a condition and measures on the further improvement of work of the country MAOP». However, as it is noted in this standard document, up to the middle of 1970s the continuity in work of FC and MAOP was insufficient, and «departures of doctors often have formal character, specific proposals on improvement of work MAOP are not given, there is no check of performance of the offers given earlier».

It is necessary to also notice that in 1954-1994 the principle of primary health services of the working

was realised in the area. Thus polyclinics and viewing offices of the industrial enterprises (first of which had been created in 1958) played a certain role in diagnosing IDGO. In decisions taken up in 1965 in Minsk during the inter-republican meeting the importance of the problem had been underlined. However to the middle of 1990s in the region there were only 2 polyclinics of the closed type, diagnosing and treating IDGO by obstetricians-gynaecologists, and 24 viewing offices conducted by midwives. In spite of the fact that the preventive orientation of service was regulated by orders of Ministry of Health of the USSR of 30.05.1969 No 400 and of 19.06.1984 No 700 «About the organisation of preventive medical inspections», ability to diagnose IDGO in the OGS establishments was almost 10 times lower than in FCs, and prophylactic medical examination of the given pathology was practically not carried out due to the insufficient departmental control.

Until the middle of 1950s 145 gynaecologic cots, mainly as a part of surgical branches CRH (gynaecologic branches had been developed only in two maternity homes) functioned in the area.

In 1954-1994 the indicator of securing the number of gynaecologic cots for the population of the region increased 3.7 times: with 2,4 to 8,8 in 10000 of the population (figure 3).

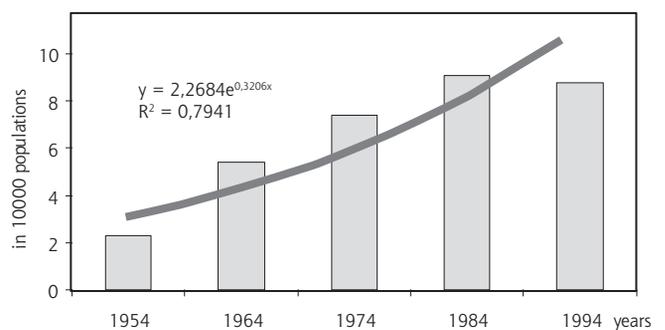


Fig. 3. Dynamics of securing gynaecologic beds for the population in 1954-1994

The greatest rates of the indicator increased in 1954-1964: the gain rate reached 135.0%. From the middle of 1980s the security began to decrease with the rate of a decrease of 33.0%.

In spite of the fact that in the order of Ministry of Health of the USSR of 31.07.1963 No 395 «About a condition and measures on the further improvement of stationary service of the population of the USSR» it was noticed, that «a serious restraint in business of the further development of specialised medical aid and improvement of quality of service of the population by the stationary help are the presence of considerable number of small specialised branches, which inevitably leads to dispersion of medical shots and irrational

use of the medical equipment», till the end of the considered period such branches existed not only in the majority of CRH of the area, but also some other OGS establishments (table I).

Despite the improvement of organizational structure of OGS establishments, there were also other essential lacks in their activity. In obstetric-gynaecologic hospitals and FCs in 1954-1964 often there were no necessary medicines (glucose, analginum, chloride calcium, brome sodium) and dressing means (bandages, cotton wool). As it was marked in the order of Ministry of Health of the USSR of 27.07.1973 No 566 «About a condition and measures on the further improvement of MAOP work of the country», «bodies of public health services do not accept due measures for maintenance of timely and full allocation with the Village Soviets of means, assignments of MAOP for acquisition of the medical equipment, stock, medicines». However, as it was ascertained in the order of Ministry of Health of the USSR of 09.01.1986 No 55 «About the organisation of work of maternity hospitals (branches)», in maternity homes «the available expensive equipment is not always fully used».

Practice of planning without a network only by quantity of cots, without the organisation of medical aid, type of establishment and its capacity led to the situation that until the end of the considered period the security indicator of gynaecologic cots of the rural population exceeded, and urban – did not reach the

standard. Also there were considerable disproportions in security cots in the urban and rural populations (tab. II).

Table II. Indicators of security of the population of gynaecologic cots in 1954-1994 (in 10000 populations)

Coverage	Years									
	1954		1964		1974		1984		1994	
	city	country	city	country	city	country	city	country	city	country
The standard	8.0	8.0	8.0	7.0	10.0	6.0	10.0	6.0	10.0	6.0
The actual	2.4	5.4	7.8	7.4	9.6	6.8	9.0	7.2	9.0	7.2

With constant increase in the state assignments for public health services (1960 – 134.4, 1970 – 293.4, 1980 – 498.2, 1990 – 1075.8 million rbl. at a steady course) there existed the residual principles of financing, means were allocated at the rate on one cot (visiting), administrative character of the statement and an expenditure of estimates was applied. Besides, throughout all considered periods, the means, especially on capital construction of OGS establishments, were not fully used: in 1954 13.5% of the allocated financial resources (1956 - 93%, 1966 - 72%, 1986 - 93%, 1988 - to 40%) had been used only, and some objects turned to „long-term construction” that was characteristic for all country public health services.

In consequence only 42.4% of OGS establishments were within the range of sanitary-and-hygienic norms. In the order of Ministry of Health of the USSR of

Table I. Mid-annual number of gynaecologic cots in establishments of public health services of the Grodno area in 1984-1994

Establishment	M±m		p	Rate of a gain	Mid-annual rate of a gain	
	1984-1989	1990-1994			1984-1989	1990-1994
Berestovickaya CRH	5.0±0.0	8.0±0.0	<0.05	60.0	0.0	0.0
Volkovysskaya CRH	39.6±0.4	39.8±0.2	-	0.5	-1.3	0.0
Voronovskaya CRH	10.0±0.0	13.0±1.4	-	30.0	0.0	10.7
Dyatlovskaya CRH	20.8±0.9	18.8±0.4	-	-9.6	0.0	-2.6
Zel'venskaya CRH	15.0±0.0	14.8±0.2	-	-1.3	0.0	0.0
Iv'evskaya CRH	7.0±1.4	5.0±0.0	-	-28.6	0.0	0.0
Korelichskaya CRH	19.0±1.1	15.0±0.0	<0.05	-21.1	-6.9	0.0
Lidskaya CRH	59.2±0.9	58.0±1.4	-	-2.0	0.0	-2.7
Mostovskaya CRH	20.0±0.0	20.0±0.0	-	0.0	0.0	0.0
Novogrudskaya CRH	40.0±0.0	46.0±2.7	-	15.0	0.0	5.7
Ostroveckaya CRH	19.8±0.2	18.0±1.4	-	-9.1	0.0	-6.9
Oshmyanskaya CRH	20.0±0.0	20.0±0.0	-	0.0	0.0	0.0
Svislochskaya CRH	11.4±1.6	9.6±0.3	-	-15.8	-12.4	2.7
Skidel'skaya hospital	16.6±0.9	12.6±1.4	-	-24.1	-1.6	11.7
Slonimskaya CRH	30.0±0.0	30.0±0.0	-	0.0	0.0	0.0
Smorgonskaya CRH	38.0±0.0	38.8±0.5	-	2.1	0.0	1.3
Sopockinskaya hospital	16.6±0.9	12.6±1.4	-	-24.1	-1.6	11.7
Schuchinskaya CRH	43.6±3.8	30.0±0.0	<0.05	-31.2	-11.2	0.0
Grodnenskii maternity hospital	72.0±8.9	100.0±0.0	<0.05	38.9	18.9	0.0
Grodno hospital of the first help	-	100.0±0.0	-	-	-	-
Medsanchast' «Azot»	-	50.0±0.0	-	-	-	-
In total	515.0±0.7	563.0±0.8	<0.05	48.2	2.3	16.7

31.07.1963 No 395 «About a condition and measures on the further improvement of stationary service of the population of the USSR» it was ascertained, that «building of hospitals is carried out extremely slowly: the plan of their input in operation is not carried out from year to year. A principal cause of it is dispersion of capital investments on hospital building on numerous objects and absence of the due control over a building course ... Quality of building of treatment-and-prophylactic establishments the lowest. One of the reasons of it is building under the projects made by the local design organisations, without modern medico-technology requirements». And, this situation had remained as such till the end of the considered period. As it was marked in the order of Ministry of Health of the USSR of 09.01.1986 No 55 «About the organisation of work of maternity hospitals (branches)», «new building goes at the slowest rates, means of the state capital investments and communistic Saturday» were badly accustomed.

For the purpose of execution of the Decision of the Central Committee of the CPSU and Ministerial council of the USSR of 14.01.1960 No 58 «About measures on the further improvement of health services and public health care of the USSR» to which were recommended «to expand considerably throughput of polyclinic establishments», of 20.07.1960 No 321 and Ministries of Health BSSR of 25.11.1960 No 205 in FC had been entered by orders of Ministry of Health of the USSR the sliding schedule and a brigade method of work. However, despite undertaken controls of public health services, the availability of medical assistance, especially to inhabitants of rural settlements, remained limited: number of FCs of a countryside was reduced almost to 10% (fig. 2), and in the existing ones, as it was marked in the Decision of the Central Committee of the CPSU and Ministerial Council of the USSR of 05.07.1968 No 517 «About measures on the further improvement of public health services and development of a medical science in the country», the serious problem «was made by turns on reception in connection with personnel deficiency».

Besides, despite the increase in the quantity of MAOP (fig. 2), the introduction of the stage principles and the declared in the early sixties priorities on prime development of medical aid in a village (decisions of VII session of Supreme body BSSR of 26-27.06.1962), there existed serious difficulties in its maintenance to patients with IDGO. In the order of Ministry of Health of the USSR of 27.07.1973 No 566 «About a condition and measures on the further improvement of work MAOP of the country» it is ascertained, that «the material condition of MAOP continues to remain unsatisfactory. Considerable number of MAOP is still unsatisfactorily equipped with medical and economic

equipment; especially badly they are provided ... with gynaecologic armchairs. Maintenance of MAOP with the confirmed medical documentation in many areas is carried out with faults in this connection, any documentation conducted appreciably complicated also registration of the IDGO diagnosis».

Despite the controls of public health services, in the Decision of the Central Committee of the CPSU and Ministerial council of the USSR of 22.09.1977 No 870 «About measures on the further improvement of national public health services» mentioned that «development of a network of treatment-and-prophylactic establishments, especially in villages, lags behind growing requirements. There are lacks of the organisation of work of polyclinics, obstetrical ... and other establishments of public health services. The facts of the wrong organisation of an operating mode of the medical personnel in a number of treatment-and-prophylactic establishments» are marked.

The situation got complicated in the mid-seventies according to the orders of Ministry of Health of the USSR of 07.09.1982 No 900 «About regular specifications of the medical personnel and workers of kitchens of regional hospitals at an establishment of states of city hospitals and the polyclinics (ambulance stations) located in cities, settlements of city type and working settlements with a population to 25 thousand inclusive» and Ministries of Health BSSR of 16.02.1983 No 36 «About measures on the further improvement of medico-sanitary maintenance and agricultural population health protection» reduction of number of the local hospitals, a quantity of which by 1984 had decreased to 21.0%.

For the purpose of the increase of availability and quality of medical aid to the female population according to the order of Ministry of Health of the USSR of 31.10.1977 No 972 «About measures on the further improvement of national public health services» in FC obstetric-gynaecologic sites had been broken up into smaller units, the list of staff was established: posts of therapists, dentists were entered. However to the middle of 1990s the personnel level of the FC doctors-therapists did not exceed 50%, and dentists made only 24.6%. Besides the majority of posts the FC therapists were occupied by doctors who had not passed special retraining on rendering of medical aid to pregnant women, which did not allow to organise a timely diagnosis and treatment of extra-genital pathologies in patients with IDGO and defined a high level of reproductive and perinatal losses.

For the purpose of the further perfection of the organisation of rendering medical aid by the order of Ministry of Health of the USSR of 27.10.1982 No 1059 «About the further improvement of the organisation of the obstetric-gynaecologic help to the

women living in a countryside» a number of its stages was defined: I – MAOP, II – local hospital, III – CRH, IV – in out-patient conditions: FC city maternity home, hospital branch, medico-sanitary parts; in stationary conditions: city and regional maternity homes or obstetric-gynaecologic branches of regional and city hospitals, V – specialised obstetric-gynaecologic establishments, scientific research institutes and chairs of obstetrics and gynaecology of medical institutes. Thus according to the order of Ministry of Health of the USSR of 08.04.1980 No 360, specialised receptions on a pathology of a neck of a uterus, and according to «Instructive-methodological instructions on the organisation of work FC», confirmed by the order of Ministry of Health of the USSR of 22.04.1981 No 430 were created, there begun work on formation of group supervision, including patients with IDGO with focus on their stationary improvement.

However, the increase of bed fund of gynaecologic hospitals was not given appropriate attention due to a scientific substantiation of questions of construction of a network of OGS establishments, their typification and placing. The controls of public health services

of the Grodno area had not been considered in the differentiated specifications of requirement of the population in the stationary help till 1990, as Ministries of Health of the USSR established in Methodical recommendations of 04.01.1983 No 01-14/2-24. Throughout 50 years the regional level of rendering of the gynaecologic help has not been organised and indications for a direction of patients with IDGO to a higher level of rendering medical aid has not been defined.

### Conclusion

Despite the development of a network of OGS establishments in 1944-1994 in the Grodno area, the improvement of the organizational technologies regulating their activity, including the stages of medical aid rendering, it was not possible to provide the strengthening of RH in patients with IDGO, living in rural settlements, in connection with default in the area of specifications of security gynaecologic cots and insufficient technical equipment of the organisations of public health services.

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