

*Materials of Conferences***GENERAL MEDICAL PRACTICE  
IN THE RURAL AREAS**

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Indicators of practice of a general practice doctor in rural areas are presented in the article: applications to DGP (treatment, preventive, dispensary, and at home) considering age and profile (therapeutic, surgery, specialized). Work strain of DGP depending on a number of bonded first-aid-obstetric points.

In 2010 625,7 thousand doctors worked in Russia, provision of medical care equaled 43,8 doctors per 10 thousand people. A number of doctors of general practice (DGP) equaled 9,7 thousand, and the provision was 0,7–10 thousand people. DGP's part equaled 1,6% of the total number of doctors.

Almost one third of population of the Russian Federation lives in the country. DGP becomes a center figure in providing medical care in a village. At the same time, general medical practice (GMP)

is introduced slowly in the country (I.N. Denisov, E.I. Cherniyenko, Y.A. Korotkov, 2008; Y.M. Komarov, 2008).

During the research we have carried out passport systematization of general medical practices that work in the countryside of Penza region. 1379,8 thousand of people lived in Penza region (1<sup>st</sup> of January 2009), among them 461,9 were villagers (33,5%). An analysis has shown that 30,2% of DGP work without any bonded first-aid-obstetric points (FOP), 20% of DGP serve the population of one bonded FOP, 15,6% – two bonded FOPs, 7,3% – three, 21,8% – four and more FOPs. Besides, 51,0% of DGP who work in village districts of Penza region serve the mature and children, and 49,0% of DGP – only for the mature.

GMP were selected as bases for the research according to the following criterions: presence of good material-technical basis, road-transport accessibility, distance from central regional hospital (CRH) of no more than 15 km, DGP serves the mature and children, length of service in the field of DGP is no less than 5 years.

An analysis has shown that for all four local GMP age structure of the population was identical and corresponded to age indicators of all village districts of Penza region (Table 1).

**Table 1**

Age structure of population, bonded to DGP in basic practices and village districts of Penza region (% of the total)

Age	Pilot practice	1 <sup>st</sup> practice	2 <sup>nd</sup> practice	3 <sup>rd</sup> practice	Village districts of Penza region
Under 1 year	0,97	1,3	0,7	1,1	1,1
1-14	11,6	13,6	9,9	8,3	12,7
15-17	3,8	4,6	3,2	2,5	3,8
<b>0-17 total:</b>	<b>16,4</b>	<b>19,5</b>	<b>13,8</b>	<b>12,0</b>	<b>17,6</b>
18-59	58,4	56,3	55,2	67,6	58,9
60 and over	25,2	24,2	31,0	20,4	24,7
Total:	100,	100,0	100,0	100,0	100,0

As tables 2 and 3 show, structure of applications to DGP is identical in all basic practices depending on type and purpose of an application.

**Table 2**

Applications to DGP in basic practices and all practices where DGP serve the mature and children, depending on the application purpose (% of the total)

Application purpose	Pilot practice	1 <sup>st</sup> practice	2 <sup>nd</sup> practice	3 <sup>rd</sup> practice	All practices
Treatment	66,7	64,8	67,3	68,1	66,4
Preventive	23,8	22,3	25,4	24,2	22,7
Dispensary	9,5	12,9	7,3	7,7	10,8
Total:	100,0	100,0	100,0	100,0	100,0

**Table 3**

Applications to DGP in basic practices and all practices where DGP serve the mature and children, depending on the application type (% of the total)

Application type	Pilot practice	1 <sup>st</sup> practice	2 <sup>nd</sup> practice	3 <sup>rd</sup> practice	All practices
Ambulatory	82,3	81,3	83,2	81,8	81,6
At home	15,6	16,3	14,2	16,2	15,9
Emergency	2,1	2,4	2,6	2,0	2,5
Total:	100,0	100,0	100,0	100,0	100,0

GMP of Belinskiy village district was selected as a pilot base of the research. Staff of the GMP included: 1 DGP, 2 nurses of GP, 1 dentist, 2 junior nurses, 1 driver. DGP's length of service equals 15 years (including 10 years in pediatrics and 5 years in general practice).

GMP of the pilot village district serves 1542 villagers, of which 82,6% are the mature, 16,4% are children of ages 0-17, of them 0,97% – under 1 year. Age structure of the population of pilot GMP was identical to that of GMP of village districts of Penza region in general that allows us to define this GMP as a basic model for Penza district. We have selected GMD of Belinskiy village district without bonded FOP as the research base. However, we

should outline that a number of FOPs, bonded to a GMP in the country must serve as a foundation in corrections of indicators of demand for DGPs.

During the research we studied the volume and character of applications to DGP in the pilot village district. A DGP carries out reception of patients in 11 specialities. An application frequency equaled 5070,0 per 1000 of the corresponding population, 3863‰ of applications were made due to diseases. Table 4 contains frequency of applications to DGP of the population of pilot village district with a treatment purpose depending on age.

The received work strains of DGP must be considered while planning their activity and differential wage of a DGP.

**Table 4**

Number of applications to DGP among the population of pilot village district in specialities with a treatment purpose (per 1000 of the corresponding population)

Speciality	Total	Children (0-14 years)	Teenagers (children from 15 to 17 years)	The mature
<b>Therapeutic profile, including:</b>	<b>2804,8</b>	<b>2598,0</b>	<b>5913,8</b>	<b>2696,2</b>
Therapy	1143,3	-	-	1366,7
Pediatrics	548,0	2592,8	5896,6	-
Cardiology	1035,0	5,2	17,2	1235,7
Endocrinology	78,5	-	-	93,8
<b>Surgery profile</b>	<b>55,1</b>	<b>36,1</b>	<b>155,2</b>	<b>53,5</b>
Surgery	28,5	10,3	17,2	31,8
Traumatology	26,6	25,8	138,0	21,7
<b>Special profile, including:</b>	<b>1003,1</b>	<b>237,2</b>	<b>555,5</b>	<b>1138</b>
Otorhinolaryngology	137,4	128,9	310,3	131,0
Ophthalmology	197,8	82,5	172,4	216,3
Neurology	483,1	5,2	21,1	575,2
Gynaecology	52,5	-	-	62,8
Dermatology	132,3	20,6	51,7	152,7
Total:	<b>3863,0</b>	<b>2871,3</b>	<b>6624,5</b>	<b>3887,7</b>

To analyze a structure of patients' flows to GMP we have outlined 4 types of applications:

1) applications to DGP by residents of the point village (in the area of a rural outpatient clinic (ROC));

2) applications to DGP by residents of a bonded FOP in ROC;

3) applications to DGP by residents of the bonded FOP with a doctors trip to the FOP;

4) applications to a medical assistant by patients of a bonded FOP within the FOP.

For each application type we have calculated the corresponding intensive indexes that allowed us to carry out a comparative analysis and reveal definite legislations.

Table 5

Applications of villagers to DGP and medical assistants (per 1 resident per year)

Number of bonded FOPs	FOP	Applications to a DGP by residents of bonded FOP in a ROC	Applications to a DGP by residents of bonded FOP with a doctor's trip to a FOP	All application to aDGP	Applications to a medical assistant by residents of a bonded FOP at the FOP	General applications (DGP + medical assistant)
1 FOP	2,92	2,01	0,94	2,93	5,78	4,27
2 FOPs	4,51	5,02	1,35	5,69	1,96	6,92
3 FOPs	7,3	3,09	0,7	5,3	4,07	7,61
4 FOPs and more	3,23	3,06	1,38	4,04	5,22	7,53

The analysis has shown that a number of applications to DGP in a ROC by residents of a point settlements oscillated from 2,92 to 7,3 applications per a resident per year; by residents of a bonded FOP – from 2,01 to 5,02. With a doctor's trip to a FOP, a number of applications by villagers who live in the FOP service area oscillated from 0,94 to 1,38 per a resident per year.

Per one villager who lives in a FOP service area number of applications to a medical assistant within the FOP reaches 5,78 applications in a number of practices. All applications to a DGP (within ROC and with trips to a FOP) oscillated from 2,93 to 5,69 per a resident per year.

Total number of applications (to a DGP and medical assistant), that considers applications to DGPs and medical assistants reaches 7,61 applications per a resident per year (table 5).

Analyzing applications of villagers who live in a FOP service area, we can speak of a reason to preserve aid of medical assistants, even in presence of DGP, as applications to a medical assistant form more than a half of total applications of villagers.

#### References

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#### THE PROBLEM OF INCREASING KNOWLEDGE FOR INFECTIOUS DISEASES A FAMILY DOCTOR

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Postgraduate training of physicians in the specialty «General medical practice (family medicine)»

should provide mandatory training for family physicians mastering scientific principles of infectious disease, clinical manifestations of infectious diseases and their diagnosis, epidemiological characteristics, skills, organization and implementation of anti-epidemic measures in the foci of infection preventive work among the population served.

The leading role in organizing and implementing the educational process in this direction should be given to the departments of general practice post-graduate education departments medical schools with mandatory separate organization of thematic improvement on the cycle of doctors «Questions Epidemic prevention work in general practice». The program theme this cycle should be designed to meet the requirements of the educational standard (general practitioner intended to provide benefits in various medical specialties only in the first volume of medical care) and in amounts not less than 80 hours. Lectures and seminars must include a review of the epidemiological characteristics, main clinical manifestations, current diagnostic and treatment methods, modern complexes prevention programs and special events in infectious diseases, provided educational standards: airborne, children, intestine, particularly dangerous (quarantine) and wound infections, intestinal infestations, viral hepatitis, tuberculosis and AIDS. Particular emphasis in the curriculum of the cycle should be given the mastery of learner knowledge and skills to the organization of the family doctor to prevent mass infection in identifying the source of infection. Particular attention should be paid to addressing the issues of organizing and conducting immunization of adults and children on the basis of the national immunization calendar.

In the implementation of the curriculum should be involved in the thematic cycle leading specialists of the faculty medical school and institutions of practical public health (tuberculosis dispensary, infectious clinical departments of hospitals and clinics). Therefore, students will have the opportunity to learn skills directly to the training facilities in clinics and hospitals, organized by the Department in conjunction with health authorities. This form of learning approach maximizes the learning process to practice family physician and, therefore, can im-