

Analysis of Current Models of the Palliative Medical Care at the level of Separate Subjects of the Russian Federation

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ABSTRACT

Background. The palliative medical care is a set of medical and social measures for patients suffering from cancer or other chronic progressive diseases in medical organizations and at home. In the Russian Federation this type of assistance is regulated, by both federal and regional legislation, as well as territorial health programmes. However, there are problems of legal, organizational and medical nature, problems of providing care in paediatrics, which are not still fully resolved in this area. Providing the quality palliative medical care requires its comprehensive development with a thorough study of the current situation in each region, its real needs and the development of both general and specific recommendations.

Objective. The objective of the study is to analyse the current models of the palliative medical care at the level of separate subjects of the Russian Federation on the example of the Krasnodar and Stavropol Territories.

Methods. We used methods of analytical observation, documentary study of current legal acts on the PMC in the Russian Federation and regions of the South of Russia (the Krasnodar and Stavropol Territories), regional programs for the development of the palliative medical care and reporting documentation of health care of the studied subjects; content analysis of scientific and statistical sources.

Findings. Analysis of the organization of palliative care in the studied regions showed that it is successfully developing in various directions. However, it was found that in the Krasnodar Territory there is no center for palliative care, which would be entrusted with all the monitoring and methodological functions - this requires correction of the organizational structure in order to comply with the developed model for regions with a population of more than 2 million people.

Conclusions. Palliative care activities carried out in the studied regions are effectively implemented in practice. At the same time, attention is paid to the algorithms of actions in the provision of palliative care to patients. However, mechanisms are required for continuous monitoring, analysis and development of tools to further improve models of palliative care, which will solve the main problem - improving the "quality of life" of incurable patients.

Keywords: Incurable patients, palliative medical care, regional models of palliative medical care

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INTRODUCTION

The goal of the palliative medical care (the PMC) is to improve patients' "quality of life" regardless of the stage of the disease. In world practice the PMC is provided in hospices, inpatient departments of multidisciplinary hospitals in the form of patronage, home care, or through various combinations of them. In most countries of the world, the first palliative medical care service was not regulated by the state at all and was carried out exclusively at the level of volunteering. Since the late 90s of the last century, it has become an integral part of health systems in almost all countries. [1].

The PMC in the Russian Federation (RF) depending on the nature of services provided is carried out by primary and specialized medical care organizations, voluntary public organizations, social services and protection bodies. This type of assistance is financed from the federal (partially), regional or local budgets. At the same time, at the state level, a list of free or subsidized medicinal products (MPs) and nursing care products is necessarily agreed upon.

Nowadays in Russia, the PMC is regulated by a number of existing legal acts, and several more are at the stage of approval or development. The main legal act that enshrines the PMC concept and the conditions for the provision of this assistance is the Federal Law RF of 21.11.2011 No 323-FL "The basis for health protection in the Russian Federation", and one of its editions (dated 06.03.2019, No. 18-FZ) clarifies the procedure for providing assistance to incurable patients and expands the rights of patients. For example, upon receipt of primary care, the right to pain relief associated with an illness or medical intervention with the use of drugs related to narcotic substances (NS) and psychotropic drugs (PD) is granted [2, 3]. In addition, as a part of the state program implementation for the health care development, the departmental target program "Development of the palliative medical care system" was adopted with terms of implementation from 2018 to 2024 [4]. This approach fully complies with the pharmaceutical safety system formed in the Russian Federation [5].

A new experience of interagency interaction started in Russia in 2019 after approval of the Regulation on the PMC provision, which not only expanded the very concept of the PMC (now it is medical and social assistance to incurable patients' families) but also indicated the need for an integrated and interdisciplinary approach [6].

LITERATURE REVIEW

The scientific literature review did not reveal any works devoted to the analysis of the PMC delivery models in the studied regions, which confirms the relevance of this study.

METHODS

Methods of analytical observation, documentary analysis, content analysis of scientific and statistical sources were used in the work. The materials of the study were the current regulations on the PMC in the Russian Federation and regions of the South of Russia (the Krasnodar (KT) and Stavropol Territories (ST)), regional development programs and reporting documentation of public health services of the studied subjects. The studies were carried out in the period 2018-2020.

RESULTS AND DISCUSSION

Epidemiological and sociological studies conducted for the first time in Russia have shown that from 0.29 to 0.61% of the country's population may need the PMC, not less than 0.15% of the adult population may need the specialized PMC [7, 8]. Nowadays the PMC system continues to actively develop in the Russian Federation, however, the existing risks associated with different geographic, demographic and economic indicators of the regions do not make it possible for it to function according to a single model. In the scientific literature available today there are descriptions of various PMC models, however, they require adaptation for each particular region. Therefore, taking into account the above factors in 2019 professor G.A. Novikov with his co-authors proposed an individual approach to organizing a regional PMC model. The authors have developed two types of models for all subjects of the Russian Federation: the first type is for the regions with a population of up to 2 million (58 subjects) and the second type is for those with more than 2 million people (27 subjects) (Figures 1 and 2) [9].

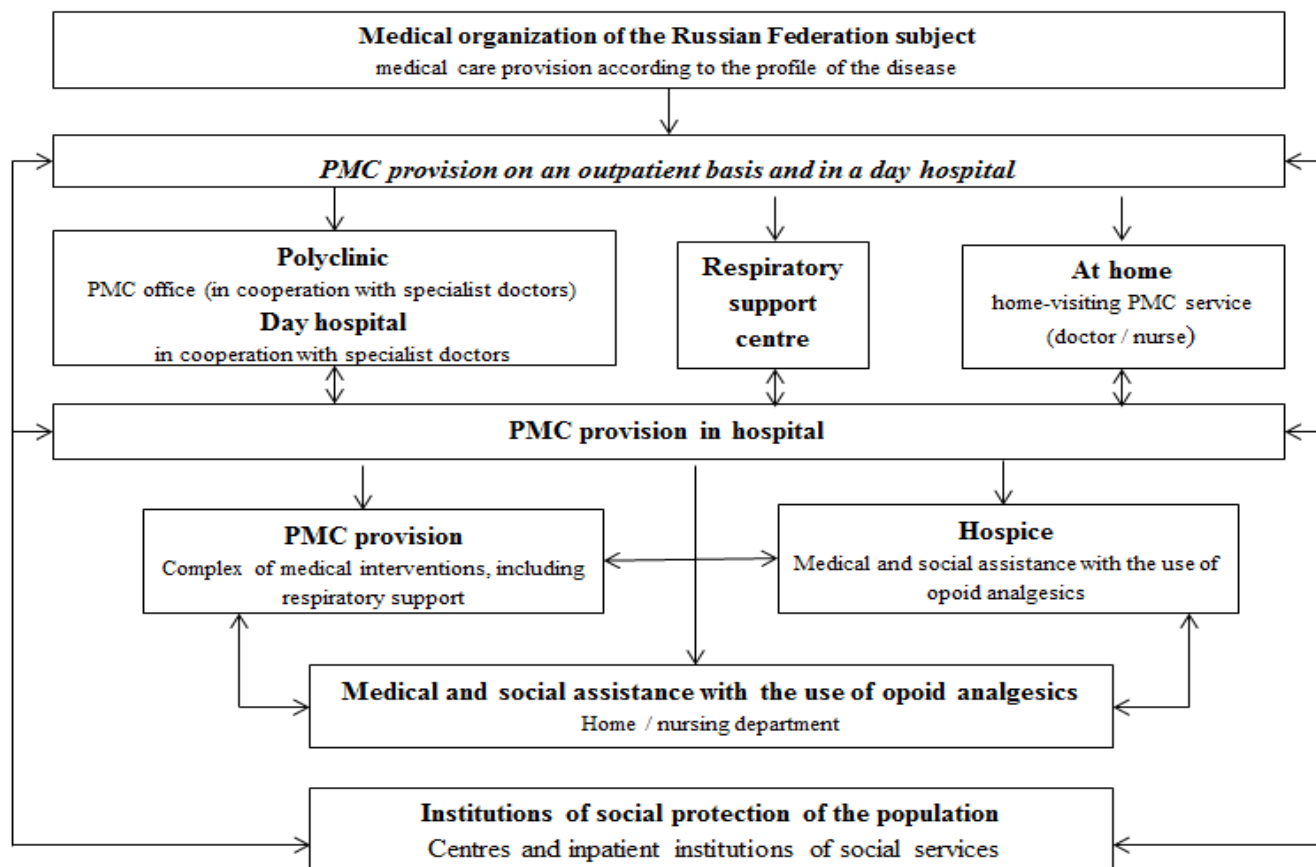


Figure 1. Regional model of the palliative care system for the constituent entities of the Russian Federation with a population of up to 2 million people

According to the first model (Figure 1) of the PMC provision, it is supposed to assign the functional responsibilities of the organizational and methodological centre to one of the structural units of the system with a mandatory analysis of the state of assistance, the

effectiveness and quality of therapeutic measures, dispensary observation of patients on the territory of a separate subject of the Russian Federation. This centre should have functional interaction with the health authorities of the subject.

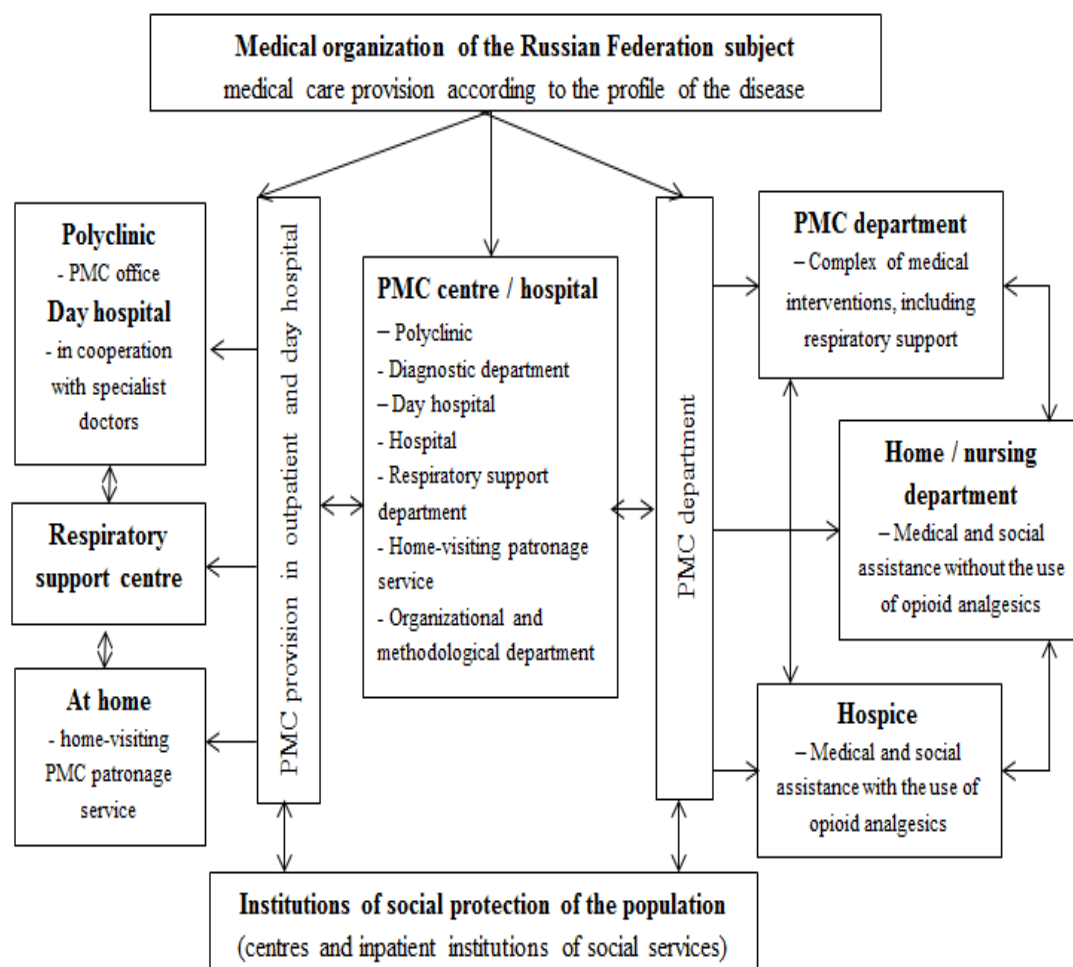


Figure 2. Regional model of the palliative care system for the constituent entities of the Russian Federation with a population of more than 2 million people

The second model (Figure 2) is based on a hospital (center), which is also responsible for organizational and methodological functions for the provision of primary care.

A hospital (centre) must have all the necessary facilities to provide outpatient, inpatient, home-visiting patronage and consulting assistance with functional interaction with the units of the PMC in this subject. This approach will allow to provide effective care for seriously ill patients on conditions of equal accessibility, regardless of place of residence and economic situation in the region in each subject.

However, despite the active development of the PMC system, a lot of problems still remain unresolved in certain regions, some of them were identified at a meeting of the Council under the Government of the Russian Federation [10]. Thus, the problems related to palliative beds, for example, their unreasonable provision; widespread redistribution of bed capacity; lack of a license for the activities related to the circulation of NS and PD; insufficient number of beds for quality work (only 1 – 6 beds) were identified among the main problems. Other problems include the personnel which is not qualified for specific activities; frequent hospitalization of non-core patients; the use of budget funds to solve other problems of medical organizations or

their irrational distribution; opening a home help service with one employee and the lack of transport; formal execution of orders; the lack of interagency cooperation.

Taking this into account, the study of the state of the PMC development for the period of 2017-2019 in two Russian Federation subjects, belonging to the first group of the regional model with a population of more than 2 million people: the KT (the population at 01.01.2020 amounted to 5677786 people) and the ST (2803021 people) was of interest. These two subjects are united by the fact that they have formed a wide regional regulatory field for the PMC to date.

In the KT a regional program was approved by the order of the head of the administration and 13 targets were identified for the effectiveness of its implementation until 2024 [11]. Then, three regional laws were amended, the list of services for the PMC provision to terminally ill patients were expanded, an opportunity to receive this assistance not only in inpatient conditions, but also at home was given. Some results of the program implementation are presented below. Thus, by the end of 2018, in addition to the already existing 40 nursing care units with 849 beds, 23 departments and 654 licensed palliative beds (including 626 beds for adults) of a 24-hour hospital had been additionally provided in the region. There are 45 home-visiting palliative crews for

adults in the region to provide special care at home. Incurable adult patients also receive such care in a State budgetary institution of health care "Hospice of Krasnodar" of the Ministry of Health of the Krasnodar Territory, which opened in 2015 on the basis of the city hospital №3 in the Pashkovsky micro district. The hospice is designed for 70 hospital beds, 40 of which are assigned to two palliative departments and 30 of them are nursing care beds. The hospice provides anaesthetic therapy to patients with cancer, serious injuries, cardiopulmonary diseases and acute disorders of cerebral circulation. The outpatient clinic has 64 PMC rooms equipped with tablets for video consultations. In addition, social and psychological support is provided to seriously ill patients and their relatives even at home.

The provision with palliative beds in the region averaged 14.1 per 100 thousand of the adult population, and the occupancy of the bed is 335 days; the duration of the patient's stay on 1 bed – 16 days; bed turnover – 21.2%; mortality – 18.1%. In the structure of the treated, the main share belongs to oncological patients (44.7%); further in descending order: to therapeutic patients (26.1%), neurological (19.3%), psychiatric profiles (0.2%), HIV-infected patients (0.2%) and others (9.5%).

The region has 28 licensed palliative beds for a 24-hour hospital for children and a state hospice on the basis of the children's department of the State budgetary institution of health care City Clinical Hospital №3 which is designed for 20 beds to help children from 3 months to 18 years old from all municipalities of the region. 13 children mobile crews and 10 PMC rooms in children's polyclinics were created. The provision with palliative beds averaged 2.4 per 100 thousand of the child population; bed occupancy in 2018 was 325 days; the average length of a child's stay on a bed is 30.4 days; bed turnover – 10.7%; lethality – 5.88%. In the structure of children treated with the PMC, the main share was occupied by patients with a neurological profile (68.6%), children with cancer (7.7%), with other diseases (23.5%). The analysis of the current PMC provision in the KT showed the following: at the initial stage the patient receives anaesthetic therapy prescribed by a primary care physician on an outpatient basis (in the PMC office or oncologic dispensary) or with the help of a home-visiting nursing service at home. If the patient's condition worsens after calling the ambulance crew, he is placed in hospital (nursing departments or beds). At the terminal stage of the disease the patient is admitted to a hospice.

To manage the process the KT organized a monthly monitoring of the PMC development in municipalities, which includes information on the number of specialized offices, visiting nursing services, and the number of consultations provided. Currently, there is no coordination center in the region, and organizational and methodological assistance to medical organizations is provided by the main freelance specialists in palliative care. After making a decision on the need to provide this type of assistance, the patient is informed about the procedure for obtaining medications, rehabilitation means, social support and the establishment of disability. All data is transmitted with the help of information systems of various levels. The state health care institution "Hospice of Krasnodar" of the Ministry of Healthcare of the KK maintains close cooperation with social service organizations – integrated centres. These centres conclude agreements on interdepartmental cooperation between medical, pharmacy organizations and social

protection institutions. In addition, medical organizations carry out their activities in cooperation with charitable, volunteer, volunteer and religious organizations. Information about medical organizations the PMC is provided to citizens according to the profile of the underlying disease by the attending physicians or by posting on the organization's websites on the Internet.

To control the functioning of the regional PMC program the following target indicators are used: regulatory and staffing; improving infrastructure; improving the quality of care; nomenclature and availability of drugs for the treatment of pain syndrome; equipment of medical organizations; internal quality control; patient registration and monitoring system; the degree of interaction of medical organizations with other organizations; nutritional support; the ability to provide telemedicine consultations for medical organizations.

The provision of PMP on the territory of the ST is also regulated by a special regional order [12]. The study of the degree of development of PMC in the region showed that in 2018, 41 medical organizations operated 181 palliative beds, and in 2019 another 40 beds were opened in seven medical organizations, and their total number was 226. In 2020, specialized places it is planned to open in 6 more territories of the region.

The national project "Fighting Cancer Diseases" [13] was launched in the ST, along with prevention, early detection, diagnosis, treatment, and rehabilitation, it also provides the PMC. Within the framework of this project, an outpatient oncological care center (OCCC) was created on the basis of the Kislovodsk central regional hospital, and it is planned to create four more of the same centers in various cities (Stavropol, Essentuki, Nevinnomyssk and Budennovsk). However, the OCCC does not replace the work of dispensaries located in the cities of Stavropol and Pyatigorsk, the purpose of which is conducting antineoplastic and analgesic therapy, prescribing NS and PD, dynamic observation of cancer patients, medical rehabilitation, referring to the PMC.

The largest departments are opened for adult patients in the Izobilny regional hospital (40 beds), the regional centre of specialized medical care in Budennovsk (30 beds), and the regional hospital in Arzgir (20 beds). There are 10 departments with 166 beds to help critically ill patients in the region today. A hospice has been opened in Izobilnensky district, which provides psychological and medical assistance, consumer services and measures to improve incurable patients' quality of life.

To provide the PMC to children, there is a single inpatient department as well as a home-visiting service in the North Caucasian Federal District (NCFD) with 20 beds in a regional hospital in Mineralnye Vody. At the same time, the need for the PMC is growing every year. Thus, the number of young patients in the children's palliative department of this hospital increased 20 times, from 12 to 237 people in the period of 2014-2018.

Overall, in the region this assistance is received by patients suffering from respiratory failure, cancer, patients of neurological, pulmonological and other profiles with the participation of primary care physicians, general practitioners or other specialties, psychologists with qualification in this field. Home-visiting PMC forms are actively developing in the territory. In the absence of palliative beds in a particular area, the patient receives a referral to the nearest medical organization, thereby eliminating the need to travel to the regional center for help.

In the ST the leading organization providing the PMC for the adult population is the "Stavropol Regional Clinical Oncology Dispensary" (Centre), which corresponds to the above model in Figure 2. The main goals of the Centre are to create an efficiently functioning palliative service and provide adequate pain relief.

The functions of the PMC Centre include implementing modern technologies and treatment methods into practice; carrying out organizational and methodological work on the functioning of departments; organization of advanced training for doctors and nurses; formation of lists of MPs required for the PMC; examination of the palliative medical care quality; analysis of the state of medical care in the region; conducting seminars with medical specialists on the principles of the PMC provision; organization of scientific and practical seminars on pain therapy; control of activities for the implementation of the tasks of the subprogram "Provision of palliative care, including children" of the ST state programme "Health care development" [14].

Thus, the analysis of the PMC in the studied regions showed that it is successfully developing in the following directions:

- patient care in round-the-clock and day hospitals, polyclinics or at home.
- provision of primary and specialized medical services.
- medical personnel's contact with the patient's family.
- maximum satisfaction of the patient's needs for painkillers, including receiving them at home.
- patient care, including at home.
- psychological and nutritional patient support.

However, it has been established that at the moment there is no officially approved PMC centre in the KT, which would be entrusted with all the controlling and methodological functions, therefore, a correction of the organizational structure is required in order to comply with the developed model for regions with a population of more than 2 million people.

CONCLUSION

Based on our research, it should be indicated that the ongoing PMC activities in the studied regions are effective, all legislative changes are being implemented with adaptation in regional regulatory documents. Attention is paid to the algorithms of the PMC provision based on the principle "Getting drugs as close to the patient as possible". Nevertheless, for more effective functioning of regional PMC models at the level of Russian Federation subjects, a mechanism of constant monitoring, analysis with the development of tools for the further improving the proposed models is required.

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