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On the issue of improving the organization of medical and social support for the elderly and senile people

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Abstract

Background. In the context of a pronounced aging of the population, one of the priority areas of social policy in the country is the improvement of the organization and provision of medical and social assistance to people of elderly and senile age.

Aim. Substantiation and development of a structural and functional model of a regional (provincial or interregional) geriatric center for further improvement of medical and social care for the elderly and senile.

Material and methods. Using a specially designed questionnaire, we analyzed the opinion about the medical and social assistance received by 456 residents of the Moscow Region of elderly and senile age, who were patients of the Moscow Regional Hospital for War Veterans at the time of the survey.

Results. Only 47.5% of the respondents of elderly and senile age gave a positive assessment of the received medical care and 50.4% — of social assistance. In 83.7% of cases, respondents reported that some social infrastructure facilities are difficult or inaccessible to them, including medical organizations in 16.3% of cases. The survey also made it possible to identify problem areas in the medical and social support of the elderly and senile people associated with the implementation of individual rehabilitation programs, obtaining legal and psychological assistance. The organization of regional geriatric centers is proposed to solve the problems identified in the course of the study and to improve the medical and social support of the elderly and senile. The article describes the tasks of each structural and functional unit of these centers. The available information resources, including those using an interactive mode of communication, are considered to increase the level of information support for the elderly and senile population.

Conclusion. The proposed structural and functional model of the regional geriatric center in conditions of implementation of the three-level system for providing geriatric care makes it possible to most effectively use the existing resources of the healthcare system and the social sphere of the region (province), to set and improve organizational, methodological and interdepartmental interaction aimed at increasing the availability and quality of medical and social care for the elderly and senile population.

Keywords: elderly population, medical and social support, organization, improvement.

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Background

Medical and social assistance to elderly and senile people is a priority area of the government's social policies [1, 2]. Modern forms of medical and social support for older age groups include inpatient and semi-inpatient care, social and medical care at home, and social advisory assistance [3–5]. The listed types of assistance primarily aim to maintain health and improve the quality of life of elderly and senile people and their adaptation in society [6–10].

The procedure for providing geriatric care follows a three-level system. Accordingly, the geriatric department was created in polyclinics, with the number of registered elderly and senile age people exceeding 20,000. The geriatric office was created when this number was less than 20,000 people [11].

The main functions of these structural units consist in performing comprehensive geriatric assessment, including the following steps:

– assessment of the patient's physical condition, functional status, mental health, and socio-economic conditions;

– detection of geriatric syndromes; and

– creation of a long-term individual plan for the implementation of preventive, therapeutic, and

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rehabilitation measures and a plan for social and psychological adaptation.

The key link in this is the geriatrician who interacts with several other specialists to diagnose and assess the risk of complications associated with underlying and concomitant diseases in a timely manner. With regard to the qualitative assessment and correction of the psycho-emotional state, communicative skills disorders, limitation of physical activity, correction of impaired every day and professional skills of patients, and the need for interaction between a geriatrician and workers with higher non-medical education (e.g., speech therapists, medical psychologists, instructors-methodologists in physiotherapy exercises) was determined.

In accordance with the order of the Russian Ministry of Health of the Russian Federation No. 869n dated October 26, 2017 "On approval of the procedure for prophylactic medical examination of certain groups of the adult population," a special approach was developed for examining the older adults, including preventive counseling when age-related diseases (geriatric syndromes) are detected and the implementation of an individual approach in performing preventive and rehabilitation measures.

Presently, the provision of organizational and methodological guidance and coordination of the activities of medical organizations and social services on medical and social assistance to people of the elderly and senile age group is an urgent issue.

Aim

This study aimed to substantiate and develop a structural and functional model of a regional (district or inter-district) geriatric center to further improve medical and social care for elderly and senile people.

Materials and methods of research

This study was conducted in the Moscow region, a constituent entity of the Russian Federation located in the Central Federal District, in 2020–2021. The population of the Moscow region, according to Rosstat, as of January 1, 2020, was 7.599.6 thousand people. The population density was 171.4 people per 1 km^2. The majority of the population lives in cities or urban-type settlements (80.8%). For the period of 2013–2019, the population over working age in the Moscow region increased by 13%, from 1686.1 to 1905.0 thousand people.

Using a specially designed questionnaire, we studied the opinion of elderly and senile people about the medical and social assistance received. The questionnaire consisted of 53 questions and their 217 gradations, including a passport part, medical and social characteristics of the respondent, and a block of questions concerning respondents' opinion about satisfaction with the quality of medical and social assistance provided.

A survey was conducted among 456 elderly and senile residents of the Moscow region. All respondents at the time of the survey were patients of the Moscow Regional War Veterans Hospital.

The data obtained were analyzed through descriptive statistics (calculation of relative values), the method of comparing generalized values (estimation of significance of the difference in relative values), and the method of assessing the influence of factors and conditions for their application (correlation analysis) using Microsoft Excel 2010 and Statistica 10 software (StatSoft).

Results and discussion

According to the results of a sociological survey of elderly and senile residents of the Moscow region, there are a number of unresolved problems in the region in terms of providing residents medical and social assistance. Thus, when answering the question "Are you satisfied with the quality of medical care?," only 47.5% of respondents answered positively; meanwhile, 23.3% of them answered that they were completely satisfied with it; 24.2% of respondents answered that they were rather satisfied with it than not. A slightly smaller section of the respondents (41.6%) gave a negative answer; 21.4% of the respondents were definitely not satisfied with the quality of medical care, and 20.2% were rather dissatisfied. Of the respondents, 10.9% found it difficult to answer this question.

A study of respondents' opinions on the quality of social assistance provided to them showed that only half (50.4%) of elderly and senile people evaluated this type of care positively (15.4% as good and 35% as satisfactory). The rest of the respondents gave a negative answer, and not a single respondent found it difficult to answer this question. Notably, the number of negative answers correlated with the increase in age, and the correlation coefficient was–0.52.

In 83.7% of cases, respondents reported that some social infrastructure facilities are hardly accessible or inaccessible to them, including medical organizations (indicated by 16.3% of respondents), sports facilities (14.3%), state and municipal institutions (12.7%), cultural and leisure facilities (10.8%), public and charitable organizations providing assistance to the disabled (8.8%), and individual shops and pharmacies (4.4%).

The implementation of individual rehabilitation programs also causes significant difficulties for elderly and senile people. The need to apply for each

event on individual rehabilitation programs to different organizations and departments was a serious problem; therefore, they were not performed in full. These circumstances emphasize the importance of organizing legal support in the provision of medical and social assistance.

To the question "Are you aware of the regulatory legal documents that protect your rights?," more than half of the respondents (56.7%) answered that such knowledge is insufficient in them, 35.3% found it difficult to answer, and only 8.0% believed that they knew them to the full extent.

All the above indicate the need to determine new ways of improving the medical and social assistance provided at the regional level to the elderly and senile population. With the availability of certain social infrastructure facilities including medical organizations, especially those providing specialized medical care; individual rehabilitation programs; and legal and psychological assistance and counseling, we believe that the problems identified in this study can be tackled by the reorganization of medical and social support available for elderly and senile people based on the created regional geriatric centers.

The model of a regional geriatric center presented in the article can be used as the basis for organizing the interdepartmental interaction at the regional level and serve as an addition to the existing system of geriatric sites and centers for providing inpatient medical care to elderly and senile people.

The main aim of the regional geriatric center is to provide organizational and methodological guidance for the activities of medical organizations and social services on the provision of medical and social assistance to elderly and senile people. Territorial bodies and institutions of social protection of the population, and public and religious organizations may be involved in solving other issues related to the fulfillment of the tasks assigned to the center.

The main structural and functional units of the regional geriatric center are represented by the following blocks:

– organization and provision of medical care;
– organization and provision of social assistance;
– provision of legal assistance and advice;
– organization of psychological consultations;
– monitoring and organizational and methodological work; and
– blocks of information and scientific interaction.

The priority tasks of the center are as follows:

1. Monitoring the health status of elderly and senile people and their need for medical and social assistance based on the modeling and prognosis of the level of morbidity and the need for medical care

2. A comprehensive analysis of the activities of medical organizations to provide medical, diagnostic, and rehabilitation assistance to the population of older age groups and persons with signs of premature aging

3. Monitoring of the implementation of state guarantees in the healthcare system, including benefits for medical and drug provision, and certain types of prosthetics

4. Provision of advisory, preventive, and rehabilitation assistance to the population of older age groups and persons with signs of premature aging, the implementation into practice of contemporary methods of diagnosis, treatment, and rehabilitation, adapted for use in elderly patients and persons with signs of premature aging; provision of organizational, methodological, and practical assistance to medical organizations and specialists of the general medical network on geriatrics

5. Interaction with other medical organizations, insurance medical organizations, territorial bodies of the Federal Service for Surveillance in Healthcare, and the Federal Service for Surveillance in the Field of Consumer Rights Protection and Human Welfare; ensuring interaction with the bodies and institutions of social protection of the Moscow region in solving medical and social issues

6. Performing sanitary and educational work, assisting in the social and psychological adaptation of the elderly, training on caring for the elderly, organizing and managing schools for patients and the people who provide them care

Structural and functional model of the regional geriatric center is presented in Table 1.

7. Introduction of modern information technologies to monitor the health status of elderly and senile citizens into the activities of medical organizations providing geriatric care.

8. It seems appropriate to consider the regional geriatric center as the head organization that provides methodological support, maintaining control over geriatric centers organized on a functional basis at medical organizations such as city polyclinics, city, district, and central district hospitals. Geriatric centers should exercise their functions in the territory assigned to them without organizing a scientific, organizational, and methodological block, as these functions are fully assigned to the regional geriatric center.

Reducing the factor load on the body of elderly and senile people is possible only with the active mutual cooperation of the patient and medical organization. It is advisable to organize such interactions using not only traditional contacts in the form of visits to medical organizations but also using modern information technologies. Thus, the almost

Table 1. Scheme of the structural and functional model of the regional geriatric center.

Regional geriatric center	
Functional units	Functional unit tasks
Block of organization and provision of medical care	Providing medical care; conducting regular medical checkups; organizing remote and long-term monitoring of elderly and senile patients
Block of organization and provision of social assistance	Organizing in-person and remote consultations; interacting with social protection authorities through the "one window" system
Legal assistance and advice block	Organizing in-person and remote consultations on legal issues; representing the interests of elderly and senile people on the protection of their rights to medical care, registration of disability, and the implementation of individual rehabilitation programs; monitoring the implementation of state guarantees in the healthcare system, including benefits for medical and drug provision, and certain types of prosthetics.
Block of organization of psychological consultations	Organizing in-person and remote psychological consultations
Block of monitoring and organizational and methodological work	Maintaining a database of people in need of remote counseling; organizing schools for patients with chronic noncommunicable diseases and their families and monitoring their activities; maintaining a population register with the definition of a risk group; quality control of regular medical checkups; monitoring the health status of elderly and senile people and their needs for medical and social assistance; conducting a comprehensive analysis of the activities of medical organizations on the provision of care to elderly and senile people
Science block	Developing new technologies for providing medical and social assistance to the older age groups; conducting and analyzing the results of sociological research; and monitoring medical activity and the factors influencing it
Block of information interaction	Collecting and storing monitoring data on the health of the population of older age groups and the factors affecting it; information on interaction with other organizations (e.g., medical, social, legal, public authorities, etc.) on the organization of medical and social assistance to people of the elderly and senile age group

complete coverage of the population by telephone enables making contacts at the required frequency through the contact center with the registration of the information obtained, which is considered in the process of calculating individual risk and transmitting generalized information to the doctor directly performing the medical supervision. It is advisable to use elements of artificial intelligence in the analysis of incoming information.

The reverse direction of the flow of information should be the formation of individual recommendations. The format of communication between the patient and medical professionals should be chosen according to the patient's request. If the patient is unwilling or it is technically impossible to use electronic communication channels, the patient should be provided with the opportunity to use traditional and convenient communication options. The use of this technology is crucial in the implementation of medical monitoring of patients with limited mobility. Part of the diagnostic information can be obtained automatically when using mobile diagnostic devices with the ability to transfer information directly to a medical organization.

Successful introduction of modern health saving technologies is possible only with a positive attitude toward them from the elderly and senile population. According to the survey data, 53.5% of the respondents had higher and vocational secondary education. Considering the rather high level of education of the surveyed cohort, it is promising that they perceive the principles of maintaining health and understand the paramount importance of lifestyle as a health factor. For this purpose, it is necessary to increase the level of information support for the elderly and senile population by creating accessible information resources, including the use of an interactive mode of communication. As a technological solution, the use of two traditional in-person consultations can be proposed: using telephone communication and targeted mailing of recommendations based on the results of remote monitoring.

Conclusions

1. A possible direction to improve medical and social support for elderly and senile people and solve the problems identified during the study with the availability of medical organizations, the implementation of individual rehabilitation programs, and the receipt of legal and psychological assistance is the organization of regional (district and inter-district) geriatric centers.

2. The main structural and functional units of the regional geriatric center are represented by

blocks of organization and provision of medical care; organization and provision of social assistance; providing legal assistance and advice; organization of psychological consultations; monitoring and organizational and methodological work; and blocks of information and scientific interaction.

3. From the standpoint of improving medical and social support for the elderly and senile population, the main task of the regional geriatric center is to provide organizational and methodological guidance for the activities of medical organizations and social services in the region of its provision.

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