

Ways To Improve Geriatric Care In Institutions Of Different Property Forms

¹ Khalyastov I.N. , ^{2*} Zlatkina N.E. , ^{2**} Polonskaya L.S. , ^{2***} Stasevich N.Yu. , ³ Latynin O.E. , Igor Nikolaevich Halastov⁴ , Nana Elizarovna Zlatkina⁵ , Lusine Surenovna Polonskaya⁶ , Natalya Yurievna Stasevich⁷ , Evgeniy Olegovich Latynin⁸

¹ Russian Medical Academy of Continuous Professional Education of the Ministry of Health of the Russian Federation, 2/1-Barrikadnaya street, Building 1, Moscow, Russia.

² FSBSI National Research Institute of Public Health named after N.A. Semashko, 12-Vorontsovo pole street, Moscow, Russia.

^{2*} ORCID: <https://orcid.org/0000-0001-9587-2335>

^{2**} ORCID: <https://orcid.org/0000-0002-4332-5521>

^{2***} ORCID: <http://orcid.org/0000-0002-2965-4986>

³ FSUE "All-Russian Research Institute of Transport Hygiene of the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing (VNIIZhG)", 1/1-Pakgauznoye shosse, Moscow, Russia. ORCID: <https://orcid.org/0000-0002-6822-5210>

⁴ Doctor of Medical Sciences, Professor of the Department of Public Health of the Frequent Institution of Higher Education "Reaviz", Address: 127006, Krasnobogatyrskaya str., 2, p. 2, Moscow, Russia, ORCID: <https://orcid.org/0000-0002-0230-2948>

⁵ candidate of medical Sciences, Researcher of FSSBI "N.A. Semashko National Research Institute of Public Health"; Address: 105064, 12-1 Vorontsovo Pole str., Moscow, Russian Federation, ORCID: <https://orcid.org/0000-0001-9587-2335>

⁶ candidate of medical Sciences, Researcher of FSSBI "N.A. Semashko National Research Institute of Public Health"; Address: 105064, 12-1 Vorontsovo Pole str., Moscow, Russian Federation, ORCID: <https://orcid.org/0000-0002-4332-5521>

⁷ Doctor of Medical Sciences, Professor, Senior Researcher of FSSBI "N.A. Semashko National Research Institute of Public Health"; Address: 105064, 12-1 Vorontsovo Pole str., Moscow, Russian Federation, ORCID: <http://orcid.org/0000-0002-2965-4986>

⁸ Deputy Director for development of All-Russian Research Institute of Transport Hygiene of the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing. Address: 1, K. 1, Warehouse highway, Moscow, 125438. ORCID: <https://orcid.org/0000-0002-6822-5210>

Abstract

Significance. The economic changes observed in recent decades in the Russian Federation have significantly affected state support for the social sphere and the health care system. In the context of overcoming the economic crisis, the state is making every possible effort to preserve the system's stability of providing medical and social assistance to elderly and senile people. At the same time, society is witnessing the steady development of private (commercial) healthcare. A relatively significant proportion of people, including those older than working age, are ready and able to receive medical services in these institutions. At the same time, ensuring the quality of medical care should remain unchanged.

Purpose: to assess the current state of geriatric care in medical institutions of various ownership forms and suggest ways to improve it.

Material and methods. For the study randomly selected 1829 middle-aged adults (ages 40 to 59 years, mean age of 47.2+2.3 years, men – 882 people, women – 947 pers.), and 2362 people elderly (aged 60 to 74 years, mean age of 68.6+2.2 years, men – 997 people, women – 1365 people). The observation period was four years. This study was multi-stage; at each stage, different statistical analysis methods were used, such as: analytical, monographic, comparative analysis, sociological (using a test survey), mathematical analysis.

Results. There were no significant differences between public and private companies' indirect relationships ($p>0.05$). When studying the nature of relationships in the hierarchy, it was revealed that in public institutions, vertical ties were rated by experts at 7.0+0.2 points (strong), in private ones 9.0+0.3 (very strong); horizontal ties in public institutions were rated by experts at 7.6+0.1 points (strong), in private, 7.8+0.2 points (strong). Vertical connections were significantly stronger in private institutions than in public ones ($p<0.05$). The nature of the horizontal links has no significant differences ($p>0.05$).

Conclusion. The ways of developing and integrating public and private health care institutions to provide medical care to the elderly and senile age consist of forming a unified system of medical and rehabilitation measures.

Keywords: older age, geriatric care, medical institutions with different forms of ownership, ways of improvement.

Introduction

Population ageing is the most critical medical, social and economic problem of our time. The main reason is an increase in average life expectancy and a decrease in the birth rate. As a result, the percentage of young people decreases accordingly. The problem of population ageing requires the solution of important issues related to health care and the social sphere, namely: the development of geriatric services, health care for the elderly, prevention of disability, the creation of a rehabilitation system, employment, social security [1, 2, 3,4].

Due to the increase in the proportion of elderly and senile people in the population, a natural process of "geriatrics" of medicine is observed [5]. It is characterized by the fact that there is an accumulation of scientific information and practical experience within certain clinical specialities regarding the features of diagnosis, treatment, and rehabilitation of diseases in elderly and senile people [6]. In this regard, in

international practice, geriatric syndromes are widely studied, which accompany various diseases of the elderly and senile age and are the subject of priority attention of specialists in geriatrics [7].

The economic changes observed in the last decades in the Russian Federation have significantly affected the degree of state support for the social sphere and the healthcare system. In the context of overcoming the economic crisis, the state is making every possible effort to maintain the system's stability of providing medical and social assistance to people of the elderly and senile age [8, 9, 10]. At the same time, processes are observed in society for the steady development of private (commercial) health care.

Material and methods

For the study, 1829 middle-aged people (age from 40 to 59 years old, average age 47.2 + 2.3 years, men - 882 people, women - 947 people) and 2362 elderly people (age from 60 to 74 years old, average age 68.6 + 2.2 years, men - 997 people, women - 1365 people).

The follow-up period was four years. This study was multi-stage; at each stage, various statistical analysis methods were used, such as: analytical, monographic, comparative analysis, sociological (using a test survey), mathematical analysis.

Results

During the study, we studied the main properties of the gerontological care system: emergence, additivity, synergy, multiplicativity, stability, adaptability, centralization, isolation, compatibility.

When studying emergence, it was found that in public institutions, this property of the system was rated by experts at 5.6 + 0.3 points (medium level), in private institutions - at 9.0 + 0.2 points (high level). Emergence in private institutions was significantly higher than in public institutions ($p < 0.05$).

We found that in public institutions, the property of additivity was estimated by experts at 6.7 + 0.2 points (high level), in private institutions, 8.8 + 0.1 points (very high level). Additivity in private institutions was significantly higher than in public institutions ($p < 0.05$).

Experts assessed the property of synergy in public institutions at 6.3 + 0.3 points (high level) in private institutions at 6.6 + 0.2 points (high level). No significant differences were found ($p > 0.05$).

When studying multiplicity, it was revealed that this property was rated by experts in public institutions at 5.8 + 0.2 points (average level), in private institutions 8.7 + 0.1 points (very high level). Multiplicativity in private institutions was significantly higher than in public institutions ($p < 0.05$).

The property of sustainability in public institutions was rated by experts at 6.1 + 0.2 points (high level), in private institutions 6.6 + 0.4 (high level). There were no significant differences between state and commercial institutions ($p > 0.05$).

When studying adaptability, it was revealed that this property was rated by experts in public institutions at 7.3 + 0.3 points (high level), in private institutions at 5.1 + 0.2 points (medium level). Adaptability in public institutions was significantly higher than in private institutions ($p < 0.05$).

The state of centralization in public institutions was assessed by experts at 5.8 + 0.2 points (medium level), in private institutions, 8.8 + 0.1 points (very high level). Centralization in private institutions was significantly higher than in public institutions ($p < 0.05$).

Isolation was assessed by experts at 3.2 + 0.2 points (low level), in private at 9.1 + 0.2 (very high level). Isolation in private institutions is significantly higher than in public institutions ($p < 0.005$).

When studying the compatibility property, it was found that in public institutions, this property of the system was rated by experts at 5.8 + 0.2 points (medium level), in private institutions at 6.1 + 0.2 points (high level). No significant differences were found ($p > 0.05$).

Discussion

During the study, we studied the main links in providing geriatric care.

When studying the nature of connections in the direction, it was revealed that in state institutions, direct connections were estimated by experts at $9.3 + 0.1$ points (very strong), in private institutions $9.7 + 0.2$ (very strong); feedback in public institutions were assessed by experts at $5.4 + 0.2$ (medium), in private institutions at $7.3 + 0.1$ (strong). Feedbacks were significantly higher in private institutions than in public ones ($p < 0.05$).

No significant differences between public and private were found ($p > 0.05$). When studying the nature of ties in the hierarchy, it was revealed that in state institutions, vertical ties were rated by experts at $7.0 + 0.2$ points (strong), in private institutions $9.0 + 0.3$ (very strong); horizontal connections in public institutions were rated by experts at $7.6 + 0.1$ points (strong), in private institutions at $7.8 + 0.2$ points (strong). Vertical links were significantly stronger in private institutions than in public ones ($p < 0.05$). The character of horizontal connections has no significant differences ($p > 0.05$).

When studying the nature of connections concerning the system under consideration, it was revealed that in state institutions, internal communications were assessed by experts at $7.9 + 0.2$ points (strong), in private institutions $8.1 + 0.7$ points (solid); external relations in public institutions were rated by experts at $6.8 + 0.3$ (strong), in private institutions at $4.0 + 0.1$ points (medium).

External relations in private institutions were significantly more robust than public ones ($p < 0.05$).

There were no significant differences between internal communications in public and private institutions ($p > 0.05$). When studying the nature of ties by reciprocity, it was revealed that unilateral ties in public institutions were rated by experts at $6.6 + 0.4$ points (strong), in private institutions at $6.5 + 0.3$ points (strong); Bilateral ties in public institutions were assessed by experts at $6.2 + 0.4$ points (strong), in private institutions at $6.6 + 1.0$ points (strong). There were no significant differences in the nature of unilateral and bilateral relations in public and private institutions ($p > 0.05$).

We have found that the ways of development and integration of public and private health care institutions for the provision of medical care to elderly and senile people are to form a unified system of treatment and rehabilitation measures that integrates the methods of treatment, prevention, and rehabilitation carried out in institutions of different forms of ownership into single medical technology with high population efficiency.

Conclusion

The ways of developing interaction between public and private health care institutions in geriatric care are to form a unified system of treatment and rehabilitation measures that ensures the formation of unified medical technologies. At the same time, the dominant role should be played by the ideology of the combination of personally oriented and preventive values of health care institutions of different forms of ownership.

The introduction of an integrated model for the provision of geriatric care at the regional level makes it possible to optimize geriatric care by regulating patient flows.

References:

1. Artamonova V. G., Mukhin N. A. Occupational diseases. Moscow: Meditsina; 2004. 432 p.
2. Babanov S. A., Vorobyova E. V. Features of the diagnosis and course of vibration disease in the conditions of modern production. *Difficult Patient* 2010;(5):28-30.
3. Vorobyova E. V., Babanov S. A. Features of neurological manifestations in vibration disease from the action of local and general vibration. *New Medical Technologies* 2010;(7):43-49.

4. Ganshin I. B., Quality control system of specialized medical care. Natural and Technical Sciences 2013;(1):126-128.

5. Gabrielyan A. R. Health care in a market economy. Demand, supply, and market structures in healthcare. Social aspects of public health [electronic scientific journal] 2013; 34 (6). URL: <http://vestnik.mednet.ru/content/view/522/30/lang,ru/> (Accessed 26.04.2014)

6. Ganshin I. B., Schelenbergl. V. The study of dominance in the doctor-patient relationship. Medical Sciences 2013;(6):19-20.

7. Kiryakov V. A., Sukhova A.V., Saarkoppel L. M. Bone and joint changes under the influence of local vibration. Occupational medicine and industrial ecology 2011;(8):36-43.

8. Kosarev V. V., Babanov S. A. Vibration disease. Reference book of a polyclinic doctor. 2008;(11):6-22.

9. Starodubov V. I. Preserving the health of the working population is one of the most important tasks of public health. Occupational Medicine and Industrial Ecology 2005;(1): 1-8.

10. Shavlovskaya O. A. Plasticity of cortical structures in the conditions of neurological deficit accompanied by movement disorder in hand. Modern approaches to rehabilitation. Human Physiology 2006;(6):119–126.