

Problems of medical education in the context of a healthy lifestyle and rehabilitation of elderly patients

Gulmira Musaevna Baitova^{1,1}, *Rakhat Zhenishovna Kulzhygachov*¹, *Meerim Murzaibragimovna Murzaibragimovna*¹, *Salima Jumanovna Nayzabekova*¹

¹ International University of Kyrgyzstan, 720007, st. Turusbekova 88/1, Bishkek, Kyrgyz Republic

Abstract. This article analyzes pre- and postgraduate education by surveying 765 family doctors, local internists and hospital doctors from various regions of the Kyrgyz Republic (KR) with a total medical experience of 2 to 34 years on healthy lifestyles and rehabilitation of elderly patients. An analysis of the current State educational standard for higher professional education in the specialty “General Medicine” of medical universities of the Kyrgyz Republic is also presented in the context of teaching issues of healthy lifestyle and rehabilitation in gerontology and geriatrics. The importance of studying the principles of a healthy lifestyle and rehabilitation in geriatrics for the training of medical specialists and postgraduate education of doctors is considered, taking into account demographic trends and the needs of the aging population. The purpose of this analysis is to stimulate debate and develop strategies to improve the training of health workers in the field of geriatric rehabilitation in Kyrgyzstan.

Key words: healthy lifestyle, rehabilitation, gerontology, geriatrics, pre- and postgraduate education, advanced training.

1 Introduction

The relevance of studying issues of a healthy lifestyle, including physical activity and rehabilitation in gerontology and geriatrics in medical universities and in advanced training of doctors is due to the demographic aging of the population and the increase in the number of elderly people, which, as a consequence, creates specific challenges for the medical system. requiring special knowledge in the field of gerontology to provide adequate medical care. This can significantly improve the quality of life of older people and reduce the burden on the healthcare system. The UN Principles on Older Persons, adopted by the General Assembly of this organization back in 1991, express modern views on the place and role of older people in society. UN Decade of Healthy Aging 2021–2030 will represent 10 years of coordinated, complementary and sustainable cooperation [1]. Older people themselves will be at the center of this plan, which will bring together governments, civil society, international agencies, professionals, academia, the media and the private sector to

¹ baitovagm@mail.ru

improve the lives of older people, their families and the communities in which they live. belong. An important aspect is given to the educational sphere and scientific research in the field of gerontology and geriatrics, since understanding the molecular, cellular and genetic mechanisms of aging can lead to the development and implementation of new methods of treatment, rehabilitation and prevention programs. age-related diseases and their management, which is important for maintaining the health and well-being of older patients. Incorporating gerontological training into undergraduate and graduate curricula helps improve the quality of health care by producing qualified professionals who can effectively respond to the challenges associated with an aging population.

Geriatrics, like all medicine, begins in primary care. It is general practitioners and therapists who bear the brunt of people's health problems, and it is by their qualifications and attitude towards patients that health care as a whole is judged. This is one of the most important areas of medicine, determining the quality of life of most citizens of the country [2]. The practical significance lies in the application of the results of scientific research, new developments and approaches in the diagnosis, treatment and rehabilitation of age-related diseases.

2 Materials and methods

We conducted a survey of 765 family doctors, local therapists and hospital doctors from various regions of the Kyrgyz Republic, presented below in Fig. 1. The total medical experience of the surveyed doctors ranged from 2 to 34 years, with an average of 16.5+ 3.2 years.

The first type of survey concerned organizational problems in providing assistance to elderly and senile people. The second is to study the level of knowledge, recommendations, diagnosis, treatment and rehabilitation of diseases of the elderly and senile.

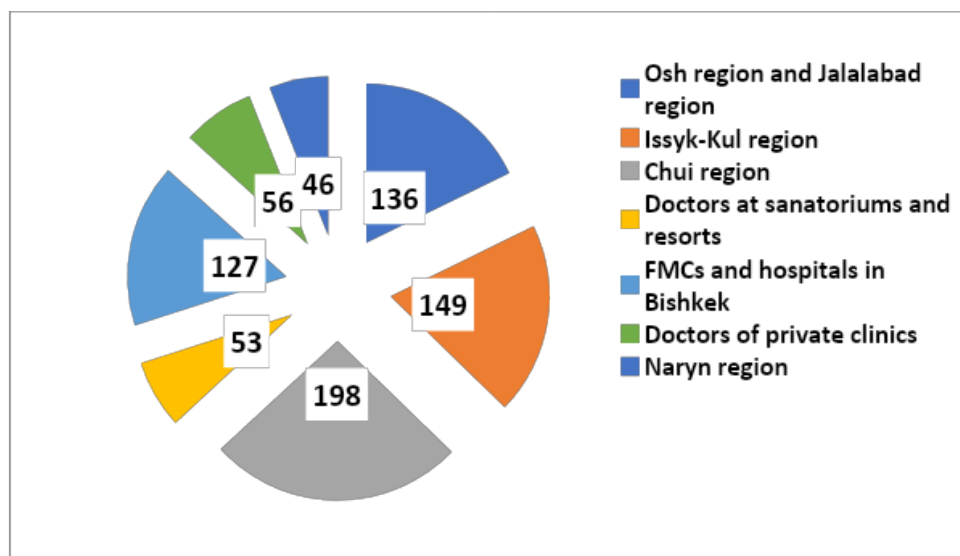


Fig 1. Doctors who have passed the questionnaire.

An analysis of the discipline “Gerontology and Geriatrics” was also carried out within the framework of the current State educational standard for higher professional education in

the specialty “General Medicine” of medical universities of the Kyrgyz Republic in order to assess its inclusion in the educational program of the university and determine the number of hours allocated for its study.

3 Results and discussion

Gerontological care is recognized throughout the world as a problem that combines medical and social aspects. In the 1950s, an active process of studying the problems of aging and creating gerontological services began in the countries of Europe and America. This period became the time of the formation of large gerontological centers and Associations of gerontologists. The gerontological service in the USSR dates back to the organization in Leningrad of the first city scientific society of gerontologists and geriatricians (1957) and the creation of a network of regional scientific societies of gerontology, the Research Institute of Gerontology of the USSR Academy of Medical Sciences in Kiev (1958) and the organization on its basis of scientific councils of the Academy of Medical Sciences and USSR Academy of Sciences on gerontology, convening the 1st All-Union Conference (Congress) on gerontology and geriatrics (Kyiv, 1963) with the release of the first issue of the domestic gerontological journal “Problems of Aging and Longevity” [3]. However, with the collapse of the USSR, the disintegration of all-Union structures of gerontology occurred, which led to significant changes in the organization of gerontological activities.

Understanding the aging process of the body and analyzing its complexity requires consideration of many predictor variables and their interactions. These are inherently interdisciplinary fields of study. In society as a whole and the healthcare system in particular, there is an urgent need to search for and implement a new effective tool for cross-cutting education in the field of gerontology and geriatrics, taking into account new clinical and biological data on human aging processes in conjunction with the social component [4].

The ongoing reforms in the higher education system in our country in recent years have significantly influenced the structure and functioning of the pedagogical system of medical universities, revealing many problems in the field of medical education, including the restructuring of postgraduate specialization and advanced training of medical personnel. The departure from the traditional system of primary specialization - subordination followed by a one-year internship or two-year residency, reorientation towards the training of general practitioners (analogous to a foreign “family doctor”?) combined with the transition to the procedure for independent employment of university graduates created additional problems for the teaching staff and administration medical institutes are looking for ways to optimize postgraduate education of doctors, bringing it to the level of international standards of the Bologna Agreement [5].

The results of a survey of doctors showed the following: according to the majority of doctors, the share of elderly people at appointments is 41-60% or more than 60% of all requests for primary health care. More than half of the doctors (62.4%) recognize the importance of the problem of providing medical care in rehabilitation to the elderly, and also note the need for a gerontologist to work in outpatient clinics. At the same time, the interviewed doctors noted the lack of continuity with specialized medical institutions that control the provision of medical and social care to elderly people, regardless of the territorial location of the medical institution, as the main problems of medical care for the elderly.

The results of the survey made it possible to assess the level of knowledge on the issues of diagnosis, treatment and rehabilitation of elderly and senile patients. The test results showed low awareness of doctors on issues of gerontology and geriatrics. As follows from the doctors' answers, most of them did not know the specifics of diagnosis and treatment of

the elderly (68.9%). Difficulties in treating the elderly were indicated by 76% of doctors, most often due to the choice of the optimal dosage of the drug (72%) and the presence of concomitant diseases (48%). Difficulties in serving elderly and senile patients are associated to a greater extent with their care at home for the purpose of rehabilitation, especially in the treatment of chronic diseases, as well as with the examination of these patients.

Also, the results of the survey made it possible to evaluate the pre- and postgraduate training of doctors on the rehabilitation of elderly patients. During the study, it was found that most doctors did not study rehabilitation issues at the pre- and postgraduate level, which determines the low level of knowledge of doctors on the problems of not only diagnosis and treatment, but also the rehabilitation of elderly and senile patients. 88% of doctors believe that universities devote insufficient time to rehabilitation issues in gerontology and geriatrics, 35% of doctors believe that it is necessary to pay attention to the organization of medical and social care for elderly and senile people, 29% to prevention, rehabilitation and care issues in geriatrics .

According to experts from the World Health Organization presented in the 2015 Technical Report on Aging, the development of a system of continuing medical education in the field of geriatrics is critical. This system should integrate best practices in the field of telemedicine and e-learning, and also contribute to the formation of a geriatric approach to healthcare (WHO, Technical Report on Ageing, 2015) [6]. Experts in the field of gerontology and geriatrics believe that it is the development of this direction that will lead to the longest possible maintenance of active life and refutation of the fact that old age is the worst period of our existence.

We analyzed the current State educational standard for higher professional education in the specialty “General Medicine” of medical universities of the Kyrgyz Republic. The survey was conducted among 6th year students (296) and clinical residents (142). An analysis of pre-graduate training in “Gerontology and Geriatrics” at medical universities of the Kyrgyz Republic showed that despite the large proportion of elderly and senile patients among patients, there are no departments in this important section of medicine, they are not distinguished as independent disciplines, the study of geriatric issues is carried out “internally” » individual items, i.e. are considered as part of other disciplines (therapy, neurology, etc.). There are universities where minimal credits are allocated to gerontology and geriatrics courses, most are allocated for independent study or as an additional subject of students' choice, and there are no textbooks.

In their proposals for improving the training of gerontology and geriatrics, students noted practical classes and visits to nursing homes to provide medical and psychological assistance, including rehabilitation and care for the elderly.

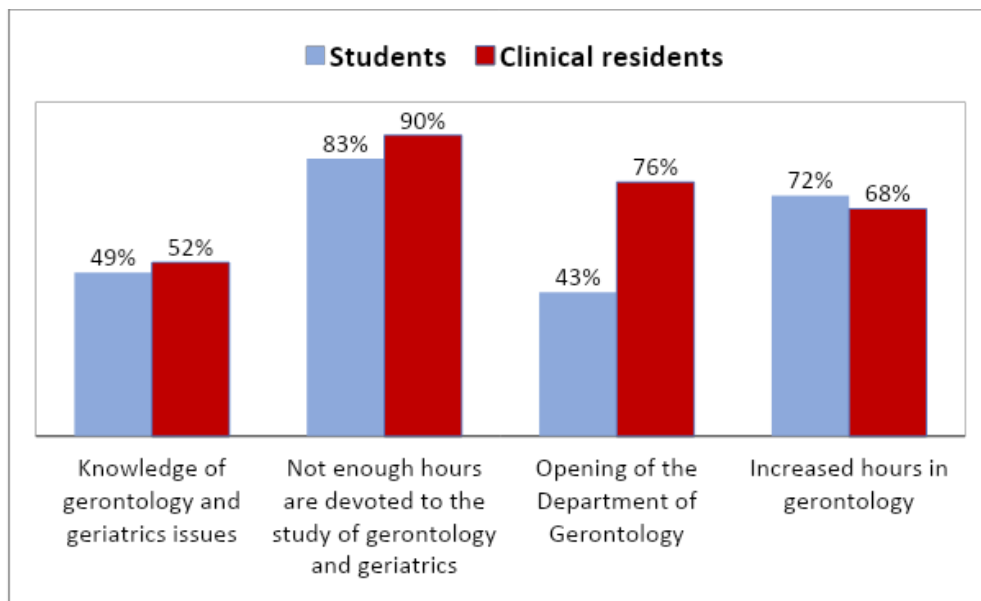


Fig. 2. Results of some survey questions among students and residents.

The results of the study are intended to attract the attention of society/state to the quality of life of the elderly and senile population, to develop and implement a comprehensive model for organizing geriatric care in local communities, based on improving educational programs in the specialty of geriatrics at various levels of training of medical specialists [7]. Providing patient-oriented medical care to elderly and senile people, especially in sparsely populated cities and rural areas, requires the rapid and successful integration of young medical specialists, a change in the professional motivation of primary care specialists, as well as a change in the teaching paradigm, the introduction of geriatric approaches into related specialties and increasing the prestige of the geriatrician profession in developing the professional motivation of young primary care specialists [8].

Conclusion

According to World Health Organization experts presented in the 2015 Technical Report on Aging, the development of continuing medical education in geriatrics is critical. This system should integrate best practices in telemedicine and e-learning, and promote a geriatric approach to healthcare (WHO, Technical Report on Aging, 2015) [6]. Experts in the field of gerontology and geriatrics believe that it is the development of this direction that will lead to the longest possible preservation of active life and refutation of the fact that old age is the worst period of our existence. The current State educational standard of higher professional education in the specialty “General Medicine” of medical universities of the Kyrgyz Republic is analyzed. The survey was conducted among 6th year students (296) and clinical residents (142). An analysis of pre-graduate training in the specialty “Gerontology and Geriatrics” in medical universities of the Kyrgyz Republic showed that, despite the large proportion of elderly and senile patients among patients, there are no departments in this important section of medicine, they are not distinguished as independent disciplines, the study of geriatric issues is carried out “inside” individual objects, i.e. are considered as part of other disciplines (therapy, neurology, etc.). There are universities

where a minimum of credits are allocated for gerontology and geriatrics courses, most of them are allocated for independent study or as an additional subject of the students' choice, and there are no textbooks. In proposals for improving the training of specialists in gerontology and geriatrics, it is necessary to pay great attention to teaching a healthy lifestyle, sports, psychological assistance, including rehabilitation and care for the elderly.

References

1. Decade of Healthy Aging (2021–2030). <https://www.who.int/ru/initiatives/decade-of-healthy-ageing>.
2. A.V. Alekhina, M.V. Silyutina, A.V. Chernov, S.G. Testova, O.N. Ram. Current issues in the development of gerontology and geriatrics in Russia and the world. "Modern science: current problems of theory and practice." Series: natural and technical sciences, **No. 5**, 126-130, (2020), DOI 10.37882/2223–2966.
3. L.E. Gorelova, Pages of the history of gerontology. RMJ. **No. 28**, 2199, (2007) https://www.rmj.ru/articles/istoriya_meditliny/Stranicy_istorii_gerontologii/.
4. The National Institute on Aging: Strategic Directions for Research, 2020-2025. <https://www.nia.nih.gov/about/aging-strategic-directions-research>.
5. A.V. Alekhina, M.V. Silyutina, D.A. Povalyukhina, Current issues in the development of geriatrics: the experience of Russia and Germany, International Journal of Humanities and Natural Sciences, **No. 7-3**, 27-32, (2020), DOI:10.24411/2500-1000-2020-10803.
6. WHO, Technical Report on Ageing, 2015, DOI:10.13140/RG.2.1.5058.8245.
7. O.N. Tkacheva, A.V. Rozanov, O.V. Abroskina et al. Mentoring model for young primary care professionals / etc. - Kostroma: Avantitul, 44, (2020). –p., ISBN 978-5-98342-215-5.
8. L.P. Peshev, N.A. Lyalichkina. Problems and ways to optimize postgraduate education of doctors in Russia // Fundamental Research. **No. 2-24**, 5508-5511, (2015), URL:<https://fundamental-research.ru/ru/article/view?id=38378>.
9. On approval of the Action Plan to improve the quality of life of older citizens in the Kyrgyz Republic for 2019-2025. <https://cbd.minjust.gov.kg/157057/edition/970702/ruyu>.