



The Need for Change: Policy of Medical Care for the Elderly in Kazakhstan

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Abstract: The entry of Kazakhstan into the group of “aging” countries with the predicted trend of increasing share of the population 60 years and older from 11.2% in 2014 up to 25% by mid-century, identifies the need to improve approaches to providing health care to this population group. The study formulated tactics of conducting practical activities for primary (outpatient) stage assistance and basic ways to the shaping of the gerontological scientific-organizational environment. Kazakhstan’s joining the group of “aging” of the world with projected trends of increasing the proportion of people 60 years and older with 11.2% in 2014 to 25% by mid-century determines the need for improved approaches to health care for this population group. The study included a strategy of practical activities in the primary (outpatient) care and basic step towards the establishment of the development strategy of gerontological research and organizational environment.

INTRODUCTION

Demographic challenges of the third millennium are significant for the socio-economic development of Kazakhstan at the prospect of its entry into the tier of advanced countries of the world rankings.

Changes in the present demographic situation associated primarily with the expression of the aging of the population. Currently, the proportion of people 65 and older in the country has exceeded 7%, thus, defining its entry into the group “aging” of the world. Percentage of population 60 years and older has reached to the top in 2014 with 11.2% of the projected trend of further increase by mid-century, up to 25% while the percentage of people 80 years and older will increase by >3-fold^[1]. However, in the next decade the projected increase in the average male life expectancy (64.8-65.8 years) and women

(from 74.3-75 years, 2 years) will be significantly lower than in the European Union^[2, 3]. Therefore, one of the main tasks of socio-economic development of the country is the development of programs aimed at improving the quality of life and health care organizations. Particular takes place with development of Gerontology, as for the elderly population of morbidity and mortality, respectively 2-8 times higher than in other age groups^[4, 5]. Thus, the demographic aging in itself defines the increase in the number of people who for health reasons need to be active medical and social support from the society and therefore, the need to create a stable environment for the adoption of such a call.

In considering the issues of improving medical care for the elderly is very important and little illuminated the fact that human life is a deterministic evolutionary category and the natural course of aging with the

progression of chronic disease decompensation ends with the inevitable death. In Kazakhstan, each year 30,000 cancer patients registered is about 130 thousand patients, among whom 75% are elderly people. An overwhelming number of people with myocardial infarction and stroke with steady loss of the ability to self-service and over 60 years. However, multidisciplinary approaches to modern forms of long-term care and home care for such patients is not methodologically developed. Despite the fact that the cultural characteristics of the population of Kazakhstan, on the whole focused on an elderly person living in a family of children, however, Kazakhstan is a multinational country, consisting of 100 nationalities and 17 religious denominations and in nursing homes and geriatric boarding live to the end of life more 20 thousand people which are also in need of improvement assistance, care and rehabilitation and these institutions in modern methodological support and geriatric training.

Thus, there is an urgent need to change the approach to health care of the elderly population and the formation of modern gerontological research and organizational environment.

MATERIALS AND METHODS

We used methods of sociological research and the principles of the SWOT-analysis^[6, 7] which includes the results of correlation and factor analysis^[8, 9]. The study used a specially designed "Questionnaire on the state of health and quality of life of older people of Kazakhstan" which includes the questions of general and special blocks (165 questions) on the basis of interviews with respondents and the analysis of their medical records at sampling depth survey. The object of investigation was selected city (Almaty) and rural (Almaty region) the population of people aged 45 years and older (total 3.51 thousand people). For the selection of respondents used a multi-stage cluster sampling. In the first phase were randomly selected clusters medical district clinics. In selected clusters as a sampling frame were used lists of residents from the Register attached population. From these lists, using a random number generator have been selected for potential research participants satisfying sex and age criteria. Additionally conducted interviews with 36 primary care physicians. The research program has passed the examination of the Regional Ethics Committee.

RESULTS AND DISCUSSION

In developing ways to improve the organization of medical care elderly were studied basic characteristics of morbidity and needs of the elderly population in various

forms of assistance. The studies identified the main factors that characterize the current state of the institutional environment of primary health care in Almaty and Almaty region, the position of geriatric component of the healthcare industry as a whole, these factors are evaluated in terms of patients and physicians and are classified by weight and likely to occur. As a result, formulated tactics of practical activities in the primary (outpatient) care and basic step approach to policy development Gerontology Research and organizational environment.

So, on the first stage of the study, the average data of studying the health status of the surveyed persons 60 years and older is determined that all older people need a mandatory annual medical examinations at the level of primary health care, 80% of them in the passage 1-2 times year course of rehabilitation treatment, 15.3% intensive inpatient treatment with follow-up medical and social rehabilitation on an outpatient basis, 4.7% the organization of hospitals at home, constant daily medical and welfare assistance in full (palliative care). Moreover, the need for long-term home care forms significantly increases with age (from 2% at age 60-69 years and 28% after 80 years). In the future, the study of patterns of disease of the elderly population has shown that the priority are diseases of the circulatory system, followed by respiratory diseases, nervous system, digestive and musculoskeletal system. The overall prevalence of disease is for the urban and rural population, respectively 5081,34 and 4856,11%. Moreover, these indicators on the rise with increasing age of the population. Therefore, special attention of health and social services require people over 80 years including one in three in need of daily social and domestic help, 60% in the psychological and psychotherapeutic support, >80% regularly take medications and they require periodic adjustment and control. In this context it should be noted that during the study, there was a large number of elderly people appointed during treatment with drugs which is quite natural and is due to age polymorbidity. However, according to pharmacists, not all drugs can be identified as vital and about 20% of them all are unidirectional and duplicative. Such prescriptions, regardless of their complexity, the pharmacokinetics and pharmacodynamics of the opposite effect of treatment complications and adverse reactions. It is the maximum coverage in the treatment of elderly patients from one doctor, a General Practitioner (GP) can prevent this negative phenomenon, formed in the traditional outpatient services for the elderly. It is extremely important is the geriatric training of primary care physicians to the study of the characteristics and principles gerofarmacology.

Currently, Kazakhstan is reforming the health care system, a gradual transition to modern European

insurance forms of health care while maintaining free and accessible health care for the elderly which is provided in the structure of total public health care institutions, special homes for veterans and geriatric boarding houses as well as private institutions. The main actors in primary outpatient care for older people is a doctor and a nurse of general practice (family medicine). Older people make up the bulk of patients in their workload and if the reception every second patient older than 60 years, the organization of hospitals at home geriatric patients constitute the overwhelming majority. However, despite the fact that primary care physicians, in fact are directly geriatrics, in their special training program does not include sufficient units on topical issues in gerontology and geriatrics. It should be noted that the country is actively developing the practice of the treatment of older people in hospital replacement structures: day care centers and hospitals at home but it requires improving the methodological basis of these forms of geriatric care. Thus, one of the most important questions of the organization effective geriatric care is its rehabilitation orientation. Currently the country is increasing the number of rehabilitation centers in the general medical network but not sufficiently spread of modern techniques for the physical and cognitive function in age-related pathologies.

It should be noted that the strong points of the organization of medical care for elderly people is, first of all, the ability to obtain it free, especially in those with a lack of financial resources for prevention, diagnosis and treatment ($r = 0.99$) and those who are on a weekly basis ($r = 0.9$) and monthly ($r = 0.8$) for the treatment of accesses to the clinic in the community. These respondents were 22.3% of the total sample of respondents elderly. Also, the respondents of pre-retirement and retirement age with secondary and higher education is dominated by a high level of competency assessment, empathy and responsibility of medical staff (61.0%). From the answers themselves physicians should emphasize their commitment to professional development in the field of geriatrics and palliative care (81.2%), sympathy and tolerance of elderly patients (76.3%).

Weaknesses include the organization of geriatric care, according to the patients, medical staff dissatisfaction with the service (13%) and the remoteness of a clinic or hospital from the residence (mainly, according to villagers in 34.2% of cases) as well as a small possibility of obtaining free long-term rehabilitation and palliative care at home. According to doctor's estimates, the major drawbacks is the lack of knowledge of the treatment and rehabilitation in the elderly (67.2%), lack of tactical instructions for the differentiation of approaches to different groups of patients (63.2%), poor relationship with the social services in the treatment of patients living

alone (54.2%), lack of material and technical base of medical institutions (38.9%), lack of co-pay for geriatric component in dealing with patients with decreased cognitive functions (37.3%). It should also be noted that the post-Soviet economists estimate the medical field, the elderly are the most consuming health care group of the population and the least ability to pay.

The main opportunities for improving the gerontological and geriatric care to the population is based on the results of assessments and rank factors (principal components with an index >0.7) conducting reforming activities with increasing geriatric component (the adoption of the state program of development of geriatric care to the population) including a qualitative improvement in the preparation and training of medical staff; the creation of innovative structures providing home-based services for short and long-term basis; introduction of new forms of information including internet technologies to improve literacy geriatric medical personnel and the population itself; development of material technical base of medical institutions; financial incentives for medical staff working with the elderly and palliative patients.

However, the main threats include dramatic demographic aging of the population with an increase in the proportion of people 80 years and older. Along with reduced ability to self-service and polymorbidity pathology; the absence of a legitimate arrangement recalculation workload health institutions in connection with the demographic "aging" of individual regions; stigma geriatric and palliative care; low salaries of health workers in geriatric and palliative sphere in combination with a high emotional impact which leads to the understaffing of geriatric institutions and dissatisfaction with the profession; psychophysical reduction and psychosomatic health of medical personnel in the absence of special mandatory prevention programs "burnout syndrome" in the practical work of medical institutions of primary and hospital care; deterioration in the quality control of medical and social care home staff to care for patients who have lost the ability to self-service, due to the appearance of natural forms of private services.

Based on a combination of factors in the logical analysis were formulated development strategies gerontological organizational environment with a priority on the system before and poslevuzovskoy training of health professionals and differentiation flows geriatric patients in primary care medical and preventive and rehabilitative medicine. It should be noted that the development strategy based on the trend previously absolutely not typical for our country, the accumulation in the population living alone and elderly childless couples on average every 20th pensioner, it is expected that their number will increase by the middle of this century half.

Sense of social insecurity, isolation from others increases in singles risk of developing a number of diseases and depression, they are twice as likely those who have a family, call a doctor at home, use the services of ambulance often hospitalized (sometimes the so-called “social testimony” with twice the duration of treatment^[10]. This unnecessarily expensive way health care talks about the need to take measures to change the organizational approaches to service lonely elderly people in primary medical district. Moreover, the organization of care for people with senile requires an integrated approach involving social workers and psychologists, as the lonely elderly people often fear the possibility of helplessness, the elderly less believe in the favorable outcome of the disease and the need to observe professionals trained in psychology, gerontology and geriatrics^[11, 12].

All of the above has been taken into account when developing approaches to strategies aimed at improving the health and social care for older people and provide them with a high quality of life. In this context, the two major components: the first (covering the greatest mass of elderly people) a practical model of improvement of rehabilitation outpatient geriatric care orientation with an increased focus on priority forms of home-based care and the role of families in caring for older patients ; and the second to guide the scientific development environment future plans of geriatric care, training and appropriate information to support the population.

In the practical implementation of the model improve rehabilitation outpatient geriatric care orientation main place will occupy three major “players” of the process: the doctor, geriatric patients and a nurse. Only in close relationship “of compliance” can be effectively operationalize the system. Role functions of a general practice to conduct a common system of preventive, curative and rehabilitative action on his property with the mandatory annual professional examinations persons who have attained 60 years of age, the incidence of age-related analysis to identify risk groups, organizing day care centers, hospitals at home and palliative care home, using and organizing the command form of the work. Nurse, participating in all these areas, conducts patronage seriously ill, actively attends patients older than 80 years, holds informational support and training elements of the families caring for seriously ill geriatric patients, organizes and trains volunteer asset teaches elderly healthy lifestyle. In this case, a doctor and a nurse carried out the necessary work to coordinate with relevant nosocomial, social and community organizations, make proposals to the management to improve the regulatory framework of geriatric care. As part of the plot of the observation group for the elderly it is advisable to distribute as follows. The first group, it is working

pensioners. They should be required to undergo an annual medical examination of a general practitioner, to receive a course of rehabilitation treatment on an outpatient basis and the recommendations of experts. The second group is non-working pensioners under the age of 80 years, potentially active, while maintaining the ability to look after themselves and rate their health as good or satisfactory. These patients should also be required to undergo an annual medical examination, 1-2 times per year directed to rehabilitation treatment in the medical, health establishments or territorial rehabilitation centers. Of these older people it is advisable to form groups of healthy lifestyles and to connect them to the work of the volunteer ambulance asset. The third group is comprised of people of retirement age to 80 years old with chronic diseases compensated in the form which is largely preserved motor activity and the ability to self-service, well oriented in everyday life but cannot for health reasons to carry significant physical and emotional stress. Such patients require active monitoring by the medical staff of outpatient clinics, counseling specialists with mandatory periodic restorative treatment in hospital or hospital replacement structures to prevent exacerbations or complications of pathological processes, as well as individual learning self-help techniques. The fourth group are persons of retirement age to 80 years with a sub-compensative or forms of chronic diseases with limited mobility and the ability to self-service, permanently or temporarily in need of outside assistance from relatives or social workers. They need to provide long-term care at home as well as the courses of medical, physical and psychological rehabilitation at home as well as the help of volunteers. For the relatives of these patients are organized individual lessons on long-term care and psychological adaptation. The fifth group is patients aged 80 years and older including single elderly with limited or lost the ability to self-service, single, childless, infirm couples and seriously ill, bedridden.

They need to provide long-term (palliative) care at home with conducting courses of medical, physical and psychological rehabilitation at home as well as the help of social workers, the Sisters of Charity of the Red Cross volunteers. For persons in this group, doctors together with a social worker and a psychologist will be able to decide on the relocation of the house of veterans, Geriatric pension, hospitalization in geriatric inpatient unit, the center of palliative care or hospice. These patients are under constant daily supervision of a family physician and a nurse which necessarily must have graduate geriatric training through courses thematic improvement. Help volunteers and other helpers involved are very appropriate. The presented model of organizational differentiated approach to serving the

elderly population in the area will improve the quality of care and as close as possible to the individual needs of its patients.

To further examine the issues related to the aging of the population and the development of approaches to improve the organization of quality geriatric care to the population of Kazakhstan, there was a need to create a modern scientific environment in gerontology and geriatrics, geriatric coordination structures and a clear account of the supply and demand for certain types of services. In this context, for the first time on the basis of the Kazakh National Medical University im. S. Asfendiyarova open module Gerontology and Geriatrics at the undergraduate level education and performed the research project Foresight Project for Gerontology on the scientific school of gerontology as a constant, stable research environment for development effective links with other organizations in the field of gerontology and join forces holding system, forecasting research and development of new gerontology. One of the key tasks of the school is to work on the formation of the methodological framework of the state program in geriatric care to the population, including current and future plans for the development of geriatric services, improving the methodology and interaction geriatric structures of different forms of financing and subordination. An important place in the School takes to create a methodological framework geriatric training and improving the scientific potential of personnel, summarizing the activities and coordination of all areas of the implementation of the main provisions of the WHO and the UN^[2,3], aimed at improving the quality of care of older people in the understanding of the formation of the general public priority areas of basic and applied research in the field of gerontology and geriatrics.

CONCLUSION

Progressive trends in the demographic structure of the population and new social and economic realities of the country determine the need to improve the existing health care system and change organizational and methodological approaches with maximum emphasis on primary health care level.

The basic principle of the organization of primary health care for older people is based on the team targeted approach with a clear differentiation of patients on social and age groups observation and appropriate medical, rehabilitation and training activities.

Formation of a stable environment gerontological research will develop a state program for geriatric care to the population, defining new approaches to the creation of

gerontological structures methodological basis of training cadres, promising areas of research ways to achieve active aging, giving older people themselves to ensure the confidence of constitutional guarantees in old age.

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