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The Culture of Active Aging

Tamara M. Abdirova,
Kazakhstan's medical university "KSPH", 050060, Republic of Kazakhstan, Almaty, Utepov st., 19 a

Irina M. Ualiyeva,
Al-Farabi Kazakh National University,050040, Republic of Kazakhstan, Almaty, al-Farabi Ave., 71

Renat S. Ismailov,
Central District Hospital, Republic of Kazakhstan, Almaty, Zhandosova street 6

Anastassiya A. Fateyeva,
I.M. Sechenov First Moscow State Medical University, 119991, Russia, Moscow, Trubetskaya str, 8

Gulnara Zh. Tokmurzieva
Kazakhstan's medical university "KSPH", 050060, Republic of Kazakhstan, Almaty, Utepov st., 19 a

Abstract:
Studying the aging problems is helpful to develop and implement programs on improving the life quality of the aging population in the society, improving the culture of aging, developing strategies on maintaining a sufficient level of activity in older people, as well as to differentiate normal cognitive aging from pathological aging. For the state, it is important also to reduce the maintenance costs of the aging population, as well as to provide them medical care. To address these issues, important are not only efforts of the state, but also of older people themselves, their attitude to own health, their desire to lead a healthy lifestyle despite difficulties and possible financial problems. In particular, the article examines methods of improving the aging culture in the Republic of Kazakhstan for the youngest-old population aged from 60 to 74, as well as puts forward a rationale why it is important in the young aging population group to carry out preventive measures.
Key Words: aging, active longevity, third age, culture of aging.

INTRODUCTION

The rapid aging of population in advanced countries caused by the increasing life expectancy of people, forces governments and the scientific community more deeply studying the issues of aging. As long ago as in 2000, 420 million people in the world were older than 65 years, accounting for almost 7% of the global population. It is expected that by 2030 this figure will reach 974 million (12%), and even rise beyond 1.5 billion (16.6%) by 2050 [1]. Japanese researchers note that the population over 85 years old is already the fastest growing segment of the population in Japan and other industrialized countries [2].

The issue of fast aging population in Kazakhstan is also hotly debated [3, 4]. The UN experts attributed Kazakhstan to states with accelerated rates of aging. According to their expectations, 20.4% of the population will become elderly people by 2050. As of January 1, 2003 the number of people aged 65 years and older amounted to 7.14% of the total population of the country. For comparison, in 2003 the number of people aged 65 years and above in Russia was 12.5%, in Uzbekistan – 4.6%, in the USA – 12.4%, in European countries – from 16 to 18%. The population of elderly people, as expected, will increase to 28.3% in Russia, to 12.1% – in Uzbekistan, to 25% – in the USA by 2050, and from 26 to 34% – in European countries. The leader of aging is Japan, where 20.1% are aged 65 and over (2016) [2].

According to the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, the population of Kazakhstan will exceed 21 million people by 2030, at that, the proportion of elderly people will increase to 11.1-11.3%. Such rapid demographic change will lead to the increase in number of elderly people with chronic diseases that will affect the demand for medical services. The cost of treatment of chronic non-communicable diseases already exceeds 50% of the hospital care budget.

Because of this, the issues of prolonging active longevity, reducing costs for the health care of elderly people, increasing their demand in the labor market, and ensuring security in old age are among the challenges that are faced by the Kazakh society.

There are two types of aging defined by medical science – natural (physiological) aging and pathological aging. Physiological aging is characterized by a gradual beginning and slow harmonic attenuation of all vital processes, smooth development of atrophic changes that is accompanied by almost complete preservation of the performance capability, sanguinity, vitality, and interest to the world around.

Pathological aging is characterized by the premature onset of senile changes that lead to early weakening of physical strength and mental activity. As a rule, age-related changes are overburdened by various chronic diseases, which accelerate senile decline.

At present, both globally and in Kazakhstan, there are variety of programs to extend longevity. Though, they are general and advisory in nature. There are no scientific articles devoted to the study of problems related to people in the third age.

The government has identified the issues of improving medical care provided to elderly people, as well as comprehensive solution of their medical, biological, social, and psychological aspects as priority issues. However to address these issues, important are not only efforts of the state, but also elderly people themselves, their attitude to own health, their desire to lead a healthy lifestyle, despite various difficulties, including possible financial problems.

ACTIVE OLD AGE (THIRD AGE) AND FOURTH AGE

In recent years, experts in the field of aging have shaped a new direction, which concerns issues of longevity and improvement of the quality of life in the course of aging for people of the so-called active old age or the third age. This direction encourages scientific and social optimism, due to the fact that the general recommendations that were previously developed for all ages from 60 years and above were based on not quite correct assumptions. Now it is proved that the optimization process for the people of the fourth age is more complicated than that for the people of the third age [5, 6, 7, 8, 9, 10, 11].

Two types of human aging can be traced in the following stories. The first story concerns the world famous cello player Pablo Casals, who, being at the age of 80 years, answered the question posed by his student, who asked him why he continues to practice music so persistently. Casals replied, "It's simple, because

I continue developing to achieve the best results". This story illustrates the prospects of old age: in particular, the idea that old age has latent potential, which can be activated through the use of the best material, medical, social and psychological culture of constructive old age.

The second story instructively describes risks associated with an increase in life expectancy. This is the Greek legend of Eos, the Greek goddess of the dawn, who fell in love with a mortal Tithonos, Prince of Troy. Believing in her own immortality, Eos wanted to live together with the Prince and love him forever. For this, Eos asked Zeus to make her beloved immortal. Zeus granted her wish and gave Titan eternal life, not fulfilling one important condition - did not grant Titan with eternal youth and energy, possessed by the Greek gods.

Despite immortality, Tithonos was gradually aging as a human: he was becoming more and more ailing and sickly. In spite of the fact that his body still lived, his brain has died. According to the Greek legend, with great pain in the heart, Eos decided to put her beloved in a secret room, where Titan continued his senseless life.

Based on the foregoing, we can conclude that probably it is possible to increase the life expectancy, though this may lead to change in person's self-esteem.

Another conclusion is that the social policy of aging must be replaced by a more complete framework of public interests and the life course in general. Continuation of gerontological policy as a challenge for better coverage of public resources in the interests of the aging population may reduce all the economic, physical, social, and psychological health of the future society, including the amount of resources available for taking care of the elderly people.

It is important to focus on earlier stages of aging. Early life stages are the resources needed for successful aging in general. Perhaps, now it is time to think that improving the quality of life in oldest-old age should be started at a younger age.

Neugarten (1974) proposed to divide the aging population into groups of the third and fourth age (young-old, and old-old) to better understand the future scenario of population aging [12].

What is the difference between the third and fourth age? In fact, the number of years, corresponding to the beginning of the fourth age and ending of the third age differs in advanced and emerging countries. One of the criteria to determine the transition from the third age to the fourth age is the age, at which 50% of the people are dying. In advanced countries, this age is 80-85 years, while in emerging countries this figure is lower.

PHYSICAL AND SOCIAL ACTIVITY, A LIFESTYLE TO IMPROVE THE QUALITY OF LIFE OF THE AGING POPULATION

To really detect the difference between the population of the third and fourth age, we intend to conduct a study with respect to their physical activity, vital interests (such as travel, reading books, watching TV, etc.), social activity (time spent with the younger generation, visits of friends, socializing with the neighbors) in order to identify the indices of physical activity, vital interests (nonphysical activity), and social activities. We will also conduct a physical examination to measure height, weight, body mass index (BMI), arterial tension (AT), and heart rate (HR). We will also conduct clinical laboratory and instrumental studies, including: (1) complete blood count (CBC) and clinical urine analysis (CUA); (2) biochemical blood test, including count of common block, creatinine, urea, fasting blood glucose, postprandial blood glucose, alanine transaminase (ALT), aspartate transaminase (AST), total bilirubin, lipid profile (total cholesterol, high-density lipoproteins (HDL), low density lipoproteins (LDL); (3) ultrasound examination of abdominal cavity; and (4) electrocardiogram (ECG). Health condition will be also included in the questionnaires. The study will be conducted according to the methodology used in advanced countries [2, 13, 14]. In particular, the Japanese experts conducted such a study to detect differences between the third and fourth age in terms of physical activity, hobby, and social activity.

Given the general state of health, comorbid diseases, laboratory and instrumental indicators, emotional state, and physical condition of the youngest-old population, we expect to divide the population of the third age group into health groups depending on their condition to develop preventive and therapeutic measures to maintain active longevity.

The review of Kazakhstan articles on gerontology [15, 16, 17] revealed no previous studies on aging in the third and fourth age. Moreover, the available statistical data do not allow using the technology of grouping elderly people into the third and fourth age groups based on the above proposed method. Therefore, it is supposed that the group of the third age will include an aging population of 60 to 74 years.

Each of the groups will be offered simple and clear program to maintain active longevity, which will include meetings with friends, trips to the theater, available exercise, work in the garden, visiting a mosque or a church, and reading. The criteria for evaluation of life quality improvement (or degradation) will include satisfaction with life and level of happiness of each participant. We will develop recommendations for each of the health groups of people in the third age, and conduct comparative analysis of health indicators after the implementation of our recommendations.

The study will be conducted in Almaty. Elderly population aged 60 years and beyond will be involved in the study.

CONCLUSIONS

Aging people can become more productive and effective members of society. Using the proper scientific and administrative approach with regard to different fields of aging, we can improve the culture of aging. Due to the fact that the fourth age is characterized by prevailing dysfunctions and reduced capacity to restore the functioning of an organism, it is better to implement the intended measures to improve the culture of aging in the people of the third age.

It is proved that more and more people reach their fourth age thanks to the improvement of quality of life, including the implementation of new technologies, improvement of the economic situation, advanced medical care, availability of a large amount of information, such as educational information, computer literacy, as well as many other factors that enable an aging population to be more energetic and healthy. When the body is gradually aging, the surrounding environment, supporting and caring for aging, becomes particularly important. Without any doubt, a favorable policy in aging includes both social care and the availability of intelligent support systems, whether it's special software, including expert systems, better home care, or specially selected programs to maintain physical and psychological health.

Thus, we propose to develop kind of expert system to assess the quality of life for the youngest-old population aged from 60 to 74, and to divide them into health groups, as well as to develop guidelines for extending the active and healthy aging. Our recommendations will concern the modification of lifestyle, nutrition, preventive and therapeutic measures against diseases, as well as the correction of the psycho-emotional sphere. This will allow improving the quality of life of older people in the future, reducing rate of mortality and disability, as well as reducing costs of health care of youngest-old age people.

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