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POPULATION AGING IN THE DEMOCRATIC REPUBLIC OF THE CONGO: RESULTS OF A REGIONAL SURVEY ON FUNCTIONAL ABILITY

Kiryl PRASHCHAYEU^{1,3}, Patient BULAMBO², Andrei ILNITSKI^{1,3},
Christophe MBILIZI², Santos Songa KIBONDE²

¹Research Medical Center "Gerontology" (Russian Federation)

²Elders Assistance ASBL (Democratic Republic of the Congo)

³Open Institute of Age and Aging (Serbia)

Summary

K.Prashchayeu, P.Bulambo, A.Ilnitski, Ch.Mbilizi, S.Songa Kibonde

Population Aging in the Democratic Republic of the Congo: Results of a Regional Survey on Functional Ability

This article presents the results of the first study on the functional capacity of older people in the Democratic Republic of the Congo using the ICOPE system. The study involved 486 participants. The ICOPE questionnaire, recommended by the World Health Organization and modified to suit local conditions, was used. We included questions about the frequency of falls, dental status, access to food, medical care, social status, and ageism. The study was conducted in the South Kivu region. Population ageing in the focus region of the Democratic Republic of the Congo can be described as occurring with a significant decline in functional ability in all domains of intrinsic capacity. In addition to health problems, it is also related to low availability of medical care, poor nutrition, and cultural factors. The data obtained allow us to propose specific measures to improve the functional capacity, independence and quality of life of older people. It is important to note that many of these measures can be implemented by local communities in conditions of shortage of medical resources.

Keywords: gerontological care, elderly people, functional ability, intrinsic capacity, quality of life.

Резюме

К. Проццаев, П. Баламбо, А. Ильницкий, К. Мбилизи, С. Сонга Кибонде

Старение населения в Демократической Республике Конго: результаты регионального исследования функциональной способности

В настоящей статье представлены результаты первого в истории Демократической Республики Конго исследования функциональной способности пожилых людей с применением системы ICOPE. В исследовании приняло участие 486 человек. был применен опросник ICOPE, рекомендованный Всемирной Организацией здравоохранения и модифицированный применимо к местным условиям. Мы включили вопросы о частоте падений, состоянии зубов, доступе к еде, медицинскому обслуживанию, социальном статусе и эйджизме. Исследование проводилось в регионе Южное Киву. Исследование показало, что у пожилых людей наблюдается снижение функциональной способности во всех доменах индивидуальной жизнеспособности. При этом значительное оказывает низкая доступность медицинской помощи, недостаток питания и культурные особенности. Полученные данные позволяют предложить конкретные мероприятия по повышению функциональной способности, повышению независимости и качества жизни пожилых людей. Важно, что многие из этих мероприятий могут быть реализованы в условиях медицинских ресурсов силами местных сообществ.

Ключевые слова: геронтологическая помощь, пожилые люди, функциональная способность, индивидуальная жизнеспособность, качество жизни.

Introduction

The development of integrative care for older people occurs according to the World Health Organization's concept of healthy aging [1]. This concept assumes that healthy aging is not the simply the absence of diseases, but a good state of functional ability that allows a person to realize himself in the community. Functional ability is objectified on the basis of domains of intrinsic capacity (cognitive, motor, psychological, vital (nutritive), sensory). In addition, it depends on the environment in which a person lives [2,3]. Even in the case of a decrease in health status, interventions in the environment (ramps, smart home, Breuil alphabet, etc.) provide opportunities to maintain functional ability. A feature of geriatric medicine is a focus on a functional ability, early detection of age-related functional disorders and the involvement of social support methods in integrated care for elderly person and the active participation of local communities in treatment, rehabilitation and long-term care [4]. For proper planning of integral care for elderly, are needed studies of the prevalence of functional disorders in the population, the perception of which can be quite different in different geographical, climatic and cultural environments. In this context, we initiated the regional survey on functional ability in Sud-Kivu (South Kivu) Province of the Democratic Republic of Congo.

Materials and Methods

This survey was conducted in the following areas: Bukavu (urban), cabaret (semi-rural), Walungu (rural) and Mwenga (remote rural).

A survey of elderly people was based on a screening questionnaire ICOPE (Integrated Care for Older People), recommended by the World Health Organization. This questionnaire has been modified and supplemented to apply to the local conditions. We included questions about the frequency of falls, dental status, access to food, medical care, social status, and ageism.

Survey conducted between September 25 and October 15, 2025. It was conducted by 20 trained volunteers. All volunteers participated in two training webinars, which were devoted to an introduction to the principles of modern gerontology and the health of older people; the practical use of the ICOPE screening questionnaire, adapted to the Congolese context.

In the survey was included 443 individuals aged over 60 years. There were 178 males (40.2%) and 265 females – (59.8%); 60 – 64 years – 15.8%, 65 – 69 years – 14.4%, 70 – 74 years – 14.2%, 75 – 79 years – 17.2%, 80 – 84 years – 18.1%, 85 – 89 years – 10.6%, 90 years and older – 9.7%.

The representation of different regions was next: Bukavu, urban population – 23.0%; Kabare, agricultural and semi-urban area – 30.7%; Walungu, transport-accessible rural area with intensive agricultural activity – 18.7%; Mwenga, remote rural area with difficult access – 27.8%.

In this the areas, the population is mainly dependent on food agriculture and small-scale trade, the average income of the population is low and access to health services in rural areas remains limited. At the same time, aging in the local community is accompanied by problems related to poverty, social exclusion and the lack of social care structures. Based on official statistics, the regions selected for the pilot project have a high prevalence of arterial hypertension, post-traumatic stress disorders due to repeated wars, joint diseases that reduce movement and social inclusion of older people. In this case, there is limited access to health care, drugs and preventive health services, as well as a clearly insufficient number of structured initiatives for gerontological care.

Results

Functional ability in the cognitive domain of intrinsic capacity. Memory impairment over the past 6 months was noted in 84.9% of respondents, 15.1% of them had stored memory. Orientation disorders were noted by 87.1% of respondents, 12.9% of them did not have such problems. 11.4% of respondents were unable to answer the questions on their own due to severe cognitive decline; relatives helped them during the examination.

Functional ability in the locomotore domain of intrinsic capacity. Over the past 4 weeks, 92.8% of respondents indicated the presence of joint pain, which limited their movement; 7.2% of respondents did not experience such pain. During the last year, 16.9% of respondents no falls, 19.2% of them had 1 fall, 24.4% - 2 falls, 39.5% - 3 falls or more. According to the subjective feelings, 54.5% of respondents were partially or completely immobile.

Functional ability in the nutritional (vital) domain of intrinsic capacity. Over the past 3 months, 89.8% of respondents lost at least 3 kg of weight. Loss (decreased) of appetite occurred in 67.0% of cases. Lack of food was noted by 23.7% of respondents, sufficient food was indicated by 76.3% of respondents. Characteristics of dental status: in 8.1% of cases, 28 – 32 teeth were intact, in 29.8% - 21 – 27 teeth, in 28.4% - 11 – 20 teeth, in 23.3% - 6 – 10 teeth, in 6.6% - 1 – 5 teeth, in 4.1% of cases the teeth were completely absent. Among those who had more than 5 teeth lost, 74.9% of respondents did not have dental prostheses or implants, 25.1% had them. It should be noted that 94.1% of respondents currently did not have access to dental care.

Functional ability in the sensory domain of intrinsic capacity. Over the past 12 months, 6.8% of those examined received consultation with an ophthalmologist, but 93.2% did not receive it –. The presence of diseases of the organ of vision, identified with earlier treatment, or difficulties with vision and reading even with glasses was noted by 63.7% of those examined, 36.3% did not have such problems. The presence of poor hearing was indicated by 89.8% of those examined, and

10.2% believed that they had good hearing. During the last 6 months, 74.3% of those examined received instructions from other people that they had hearing loss.

Functional ability in the psychological domain of intrinsic capacity. In the domain. Over the past 2 weeks, 72.2% of those examined had a feeling of depression and hopelessness, 27.8% of those examined had an unchanged mood profile. During the same period, 74.9% noted a decrease in interest in conventional activities, in 25.1% no such changes were noted. 42.7% of those surveyed faced discrimination due to age or accusations of witchcraft.

Social problems. By type of residence: living with families – 70.0%; living alone – 27.8%; living in special social institutions – 2.2%. 41.6% of people did not have a permanent place of residence.

In relation to the availability of health care, the following data were identified. In 99.1% of cases, there was a lack of access to consultation with a general practitioner, only 0.9% had this opportunity. If there was a disease, 96.8% of those examined did not have the transport opportunity to get to a medical institution, 98.2% did not have the opportunity to receive help from a medical institution due to a combination of factors.

81.9% respondents did not have a permanent source of income to live on.

In general, 14.9% participants of study noted the safety of self-service; in 85.1% of cases, difficulties were noted during self-service. In the case of a pronounced decrease in self-care, including in acute illness, assistance was provided by family members (in 74.3% of cases) and/or neighbors (in 22.3% of cases). In 15.3% of cases, no one provided any care or assistance.

Conclusion

Based on the results of screening to determine the level of functional ability, we can come to the following conclusions and give the following recommendations.

1. Population ageing in the focus region of the Democratic Republic of the Congo can be described as occurring with a significant decline in functional capacity that encompasses all domains of intrinsic capacity. Moreover, this phenomenon is explained not only by reduced of medical supervision and behavior throughout the life cycle, but also by the low availability of medical and social care in older age groups. As a positive side, it is necessary to note the high level of socialization and mutual assistance in local communities. In this regard, we can conclude that working with representatives of the local community in terms of their education and knowledge about old age can, in conditions of insufficient availability of medical and social care as public institutions, help to improve the quality of life of older people.

2. We reveal the significant number of people with cognitive impairment. In the condition of low availability of health and social care, it is advisable to rely on local communities,

informing them that cognitive decline — is not normal manifestation of aging, but the symptoms of the disease. In this regard, people with memory and orientation impairments should be examined and treated whenever possible, and until then, family or community members should be given unobtrusive control over the behavior of older people with cognitive impairments, prioritizing respect for the individual and dignity of the person.

3. Due to the fact that a significant number of respondents were diagnosed with falls due to joint pain, measures to prevent them are necessary: the use of supporting objects (sticks, canes, etc.), sufficient lighting of the home if possible, elimination of thresholds and other obstacles in places of residence, sharp and piercing objects, choosing glasses, wearing shoes with a heel if possible, avoiding dehydration. Educational programmes within local communities are advisable on these issues. It is also possible to hold charity events to provide elderly people with sticks and canes.

4. We observed the poor dental health with the high prevalence of malnutrition syndrome (malnutrition). This is evidenced by a decrease in body weight against the backdrop of information about a lack of nutrition. In this case, a realistic approach would be to identify groups at special social risk for the development of malnutrition syndrome and provide them with all possible nutritional assistance high proteins.

5. In the survey was revealed a high level of changes in the psychological domain of intrinsic capacity in the form of depression, a feeling of hopelessness, and loss of interests in ordinary activities. To improve the situation, such options are possible: creation of mobile medical teams on the base of existing resources, volunteers, and charitable organizations for medical examination of older people; organizing online consultations for older people by volunteer doctors.

6. Noteworthy is the high level of ageism and age discrimination (including witchcraft), but this may be due to deep cultural characteristics and can be corrected through long-term educational and educational activities on issues of age and aging.

We are considered to be unique for the following reasons: the sample population formed reflects different socio-geographical regions of the country, which is important in terms of taking into account the influence of the environment on functional status; the pilot project is the first in the Democratic Republic of the Congo to address the problem of healthy aging; The World Health Organization approach has been applied ICOPE its modification and complementation, for example, with aspects of dental health, has been applied, taking into account the number of falls, social issues; for the first time in the Democratic Republic of the Congo, a cross-section of data on the functional status of the older population was obtained, which is fully consistent with modern principles of gerontology and geriatrics; the dominant role of local communities in the Democratic

Republic of the Congo as the main realistic way to improve the situation of older people is substantiated. In this regard, the results of the pilot project need to be widely publicized in the media, social networks, scientific publications and conferences, and volunteers, funds and grants must be involved to disseminate the project to other regions of the Democratic Republic of the Congo.

Information about the study. The study is an initiative study. The study was conducted as a result of cooperation between Elders Assistance ASBL (Democratic Republic of Congo), Open Institute of Age and Aging (Serbia) and Research Medical Center “Gerontology” (Russian Federation). All study participants or their legal representatives gave their consent to participate in the study. The study design was approved by the ethics committee. No sponsor money was used. There is no conflict of interest.

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