



The impact of oral health on geriatric syndromes and clinical outcomes in elderly people in the Kyrgyz Republic

Zhilbera Romankulova*

Postgraduate Student

I.K. Akhunbaev Kyrgyz State Medical Academy
720020, 92, Akhunbaev Str., Bishkek, Kyrgyz Republic
<https://orcid.org/0000-0002-0379-880X>

Murat Garipov

Postgraduate Student

I.K. Akhunbaev Kyrgyz State Medical Academy
720020, 92, Akhunbaev Str., Bishkek, Kyrgyz Republic
<https://orcid.org/0009-0000-5930-2810>

Symbat Kaipova

Postgraduate Student

I.K. Akhunbaev Kyrgyz State Medical Academy
720020, 92, Akhunbaev Str., Bishkek, Kyrgyz Republic
<https://orcid.org/0009-0000-1961-9119>

Arzykan Alisherova

PhD in Medical Sciences, Head of the Department

I.K. Akhunbaev Kyrgyz State Medical Academy
720020, 92, Akhunbaev Str., Bishkek, Kyrgyz Republic
<https://orcid.org/0000-0001-6467-4205>

Sagynaly Mamatov

Doctor of Medical Sciences, Professor, Head of the Department

I.K. Akhunbaev Kyrgyz State Medical Academy
720020, 92, Akhunbaev Str., Bishkek, Kyrgyz Republic
<https://orcid.org/0000-0001-8540-3252>

Abstract. Oral health is substantial for everyday life and overall health and well-being. The study aimed to assess the impact of self-rated oral health on geriatric conditions in elderly patients aged 65 years and older. This prospective study included 330 patients aged 65 years and older. The mean age was 76.3 ± 7.4 years, with more women than men (58.2% versus 41.8%). Three items from the General Oral Health Assessment Index scale were used to assess oral health status, with scores ranging from 1 to 5, with higher scores indicating poorer health. Based on their total scores, patients were divided into three groups: good (3 points), satisfactory (4-7 points) and poor (8-15 points). Upon examination of the oral cavity, good health was observed in 83 (25.2%) patients, satisfactory health in 134 (40.6%) patients, and poor oral health in the remaining 113 (34.2%) patients. The deterioration in oral health was associated with the frequency of various geriatric syndromes during follow-up. Increased awareness of oral health for appropriate therapeutic approaches may improve clinical outcomes in the care of frail elderly people

Keywords: oral health; geriatric syndromes; clinical outcomes; elderly people

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*Corresponding author



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Introduction

Oral health is inseparable from overall health, but maintaining oral health is definitely challenging and different in older age. The oral health needs of older adults are significant and can greatly impact their overall well-being. Poor oral health, including tooth decay and periodontal disease, can significantly affect daily activities such as eating, speaking and even smiling [1]. In addition, the link between oral health and systemic inflammation is clear, as chronic inflammation in the mouth is associated with various systemic conditions, including cardiovascular disease and diabetes. Frailty syndrome is common among older adults, and its prevalence increases with age. Frail individuals may experience decreased physical function, reduced muscle strength, and increased vulnerability to illness or injury [2].

Senile asthenia syndrome and oral health have become an innovative concept that provides a basis for determination of gradual loss of oral function with age. This decline is caused by disorders such as tooth loss, poor oral hygiene, inadequate dentures, and age-related changes in swallowing. In addition, this condition is associated with geriatric syndromes such as sarcopenia and physical frailty, which affect nutritional status and overall health. In the context of these issues, routine screening for oral frailty in older adults remains essential [3].

Population ageing due to declining birth and death rates is a serious problem worldwide, especially in developing countries. Due to increased life expectancy, there has been a noticeable increase in the proportion of elderly patients requiring dental care. The old-age index (demographic age) is the proportion of older people (usually 60/65 years and older) in the total population, measured as a percentage; it shows the degree of demographic ageing, with a proportion above 7% indicating an ageing population and 12% or more indicating “demographic ageing” [4].

The population of the Kyrgyz Republic is gradually approaching the threshold of old age: at the beginning of 2024, 301,000 people, or 5.7% of Kyrgyzstanis, were aged 65 and older. However, this share is significantly lower than in other countries of the Eurasian Economic Union: at the beginning of 2025, the figure for Kazakhstan was 9-10%, Armenia – 11.9%, Russia – 16.6% and Belarus – approximately 18%, which is significantly higher than in the Kyrgyz Republic. Following UN forecasts, this trend will become apparent in Kyrgyzstan around 2030, when the proportion of people aged 65 and over will approach 7% [5].

In the Kyrgyz Republic, the issue of older people attracts the attention not only of international organisations and society, but also of state structures, including the country’s government [5]. This approach contributes to the gradual development of gerontological and geriatric services and has made it possible to conduct scientific research in many areas of

medicine [6]. Oral diseases are still widespread, and the decline in oral function in older people is ignored. Prevention across the entire population must be accessible, inexpensive and affordable for older people. Universal coverage of oral hygiene services is crucial for integrating oral hygiene into the overall health-care system. The study aimed to assess the impact of self-rated oral health on geriatric conditions in elderly patients aged 65 years and older.

Materials and Methods

A prospective study involved 330 patients aged 65 years and older. The average age of the study population was 76.3 ± 7.4 years, with more women than men (58.2% versus 41.8%). Inclusion criteria: individuals aged 65 years and older who were hospitalised at Clinical Multi-disciplinary Hospital No. 2 in Bishkek, with or without geriatric syndromes, between 1 October 2024 and 31 March 2025. Initially, 400 participants were included in the study. Participants were excluded if they were completely physically dependent before admission, had an incurable disease with a life expectancy of less than 6 months, or were unable to undergo a comprehensive geriatric assessment.

Three items from the General Oral Health Assessment Index scale were used to assess oral health status, covering:

1. “How often do you have problems with clear speech due to the condition of your teeth or dentures” (assessment of physical function);
2. “How often do you limit the types or amount of food you eat because of problems with your teeth or dentures?”
3. “How often do you limit contact with people because of the condition of your teeth or dentures?” [7].

These items were scored from 1 to 5 points, with higher scores indicating worse condition. Based on the total score ranging from 3 to 15, three groups of oral health status were identified, where 1-3 points were considered good, 4-7 points were considered satisfactory, and 8-15 points were considered poor. In addition, the use of removable dentures by the study participants and their location in the upper, lower or both jaws, as well as their functionality, were assessed. To identify the main geriatric syndromes, a comprehensive geriatric assessment was conducted by a medical team of assistants from the Department of Hospital Therapy with a course in haematology at the Kyrgyz State Medical Academy named after I.K. Akhunbaev (KSMA named after I.K. Akhunbaev) [8]. In addition, the research team studied multimorbidity (two or more chronic diseases) and polypharmacy (use of more than five medications).

Depression was assessed using the GDS-15 geriatric scale [8]. To identify senile asthenia syndrome, the “Age is no obstacle” questionnaire was used, with the following abbreviations: W – weight, ZR – vision,

H – hearing, T – trauma, N – mood, P – memory, M – urine, X – walking (Table 1) [8]. Each positive “yes” answer is scored as 1 point. If there are no points, there is

no senile asthenia syndrome; 2 points indicate probable pre-asthenic syndrome, and 3 points indicate highly probable senile asthenia syndrome [8].

Table 1. Key questions from the questionnaire “Age is no barrier”

No.	Questions	Answer
1	Have you lost 5 kg or more in the last 6 months? *	yes/no
2	Do you experience any limitations in your daily life due to impaired vision or hearing?	yes/no
3	Have you had any injuries related to falls or falls without injuries in the last year?	yes/no
4	Have you been feeling depressed, sad or anxious over the past few weeks?	yes/no
5	Do you have problems with memory, understanding, orientation or the ability to plan?	yes/no
6	Do you suffer from urinary incontinence?	yes/no
7	Do you have difficulty moving around the home or outdoors? (walking up to 100 metres or climbing one flight of stairs)	yes/no

Note: * – refers to unintentional weight loss

Source: compiled by the authors based on [8]

The Mini-Mental State Examination (MMSE) questionnaire was used to assess the cognitive abilities of long-lived individuals [9]. This questionnaire was used in the informed consent process to assess orientation in time and space. Patients were asked to write their surname, first name, patronymic, date of birth and address, as well as read and sign the informed consent form. Next, the patient had to read and follow the instruction “turn the page” and sign the consent form. The patient had to read and rewrite the phrase “I have no complaints”. The ability to follow the commands suggested in the MMSE questionnaire was assessed during the Romberg test. All questionnaires were translated into Kyrgyz and tested. The questions were asked and evaluated by a group of assistants from the Department of Hospital Therapy at the Kyrgyz State Medical Academy named after I.K. Akhunbaev (KSMA named after I.K. Akhunbaev).

Nonparametric tests were chosen because the data did not follow a normal distribution. Continuous variables were described using mean \pm standard deviation (SD), while categorical data were presented as numbers and percentages. The analysis of oral health severity was stratified into three groups, with

the Kruskal-Wallis test used to compare differences in severity across these groups. The chi-square test was used to examine associations between two categorical variables, appropriate for large sample sizes, while Fisher’s exact test was used instead when sample sizes were small or when expected frequencies were less than 5. Independent variables included a range of factors such as socio-demographic data, health-related issues, as well as behavioural, anthropometric, and other clinical variables. Statistical analysis was performed using SPSS version 22.0 (SPSS Inc., Chicago, Illinois, USA), with a two-tailed p-value < 0.05 considered statistically significant.

Results

A total of 330 patients aged 65 years and older underwent the examination. The average age was 76.3 ± 7.4 years, with women accounting for 58.2% (192 out of 330). The baseline characteristics of the patients are shown in Table 2. Upon examination of the oral cavity, 83 (25.2%) patients were found to be in good health, 134 (40.6%) were found to be in satisfactory health, and the remaining 113 (34.2%) patients were found to be in poor oral health.

Table 2. Initial characteristics based on self-assessment of oral health

Variables	Good condition (n = 83)	Satisfactory condition (n = 134)	Poor condition (n = 113)	p – value
Gender (females)	59 (71.1%)	84 (62.7%)	53 (46.9%)	< 0.001
Age (years)	68.2 ± 5.4	74.6 ± 6.3	79.5 ± 7.1	< 0.001
Solitude	16 (19.3%)	41 (30.6%)	46 (40.7%)	< 0.001
Level of education: higher/secondary/primary	49/24/10	41/76/17	33/51/29	< 0.001
BMI (kg/m ²)	25.1 ± 3.7	23.8 ± 3.0	24.0 ± 3.3	$= 0.217$
Multimorbidity	30 (36.1%)	64 (47.7%)	71 (62.8%)	< 0.001
Hypertension	49 (59.0%)	85 (63.4%)	70 (61.9%)	$= 0.302$
Arthralgia	36 (43.4%)	69 (51.4%)	73 (64.6%)	< 0.001
Diabetes	17 (20.5%)	26 (19.4%)	32 (28.3%)	< 0.001
Heart failure	6 (7.2%)	10 (7.4%)	9 (8.0%)	
Polypharmacy	14 (16.9%)	27 (20.1%)	29 (25.7%)	< 0.001
Cognitive disorders	23 (27.7%)	51 (38.0%)	62 (54.8%)	< 0.001

Table 2. Continued

Variables	Good condition (n = 83)	Satisfactory condition (n = 134)	Poor condition (n = 113)	p - value
Depression	29 (34.9%)	58 (43.3%)	66 (58.4%)	<0.001
Malnutrition syndrome	21 (25.3%)	51 (38.1%)	56 (49.5%)	<0.001
Preasthenia	39 (47.0%)	66 (49.3%)	57 (50.4%)	
Senile asthenia syndrome	15 (18.1%)	31 (23.1%)	36 (31.9%)	<0.001
Basic limitations in everyday life	9 (10.8%)	21 (15.7%)	25 (22.1%)	<0.001
Instrumental dependence in everyday life	13 (15.6%)	34 (25.4%)	42 (37.2%)	<0.001
Falls over the past year	22 (26.5%)	46 (34.3%)	53 (46.9%)	<0.001

Note: * - p < 0.001, statistically significant when comparing values

Source: compiled by the authors

Following Table 2, poor oral health was characteristic of older people who lived in low socioeconomic conditions, had multiple chronic non-communicable diseases and polypharmacy. In addition, a comprehensive geriatric assessment revealed varying degrees of cognitive impairment, mobility impairment, impairment of activities of daily living and instrumental activities of daily living, malnutrition, and falls during the past year in these patients.

Physical difficulties in speaking were reported by 98 (29.7%) patients, while 212 (64.2%) experienced discomfort while eating, and 20 reported psychosocial stress when interacting with other people (6.1%). The mean value and standard deviation of the total score for the three items were 6.3 ± 2.7.

A total of 59.4% (196 out of 330) of participants used removable dentures, of which 60.2% (118/196) used bilateral dentures. Among participants who did not currently use dentures, 31.1% (61/196) needed dentures, while 8.7% (17/196) of denture users

believed that dentures were unnecessary. Participants who used bilateral dentures had the highest overall questionnaire scores, followed by users of unilateral dentures and users without dentures (5.9 ± 2.3 vs. 4.1 ± 2.1 vs. 3.8 ± 2.0, p < 0.001). To assess oral health, the authors used three questions from the general oral health assessment index scale [5], which yielded the following responses (Table 3). Following the table, in response to the question “How often do you have problems with clear speech?”, 70% of patients answered “never”, 10% – “sometimes”, 7.9% – “often” and 15.1% – “always”. To the second question, concerning restrictions on the types and amount of food consumed, 57% of patients answered “never”, 7.6% answered “sometimes”, 5.8% answered “often”, and almost 30% of study participants answered “always”. On the third question, related to limiting contact with people, the majority (76.4%) of respondents did not limit contact, 5.2% sometimes limited it, 7% often limited it, and 11.5% tried to avoid contact.

Table 3. Indicators of the overall index for assessing oral health

Answers/ questions	How often do you have problems with clear speech?	How often do you limit the types or amount of food you consume?	How often do you limit your contact with people?
Never	221 (70.0%)	188 (57.0%)	252 (76.4%)
Sometimes	33 (10.0%)	25 (7.6%)	17 (5.2%)
Often	26 (7.9%)	19 (5.8%)	23 (7.0%)
Always	50 (15.1%)	98 (29.7%)	38 (11.5%)

Source: compiled by the authors

When assessing the impact of self-assessment of oral health on common geriatric diseases over a 2-year observation period, the study demonstrated that oral health deteriorated with the progression of geriatric conditions and frailty syndrome. The two-year follow-up showed that the emergence of a new geriatric syndrome among patients who did not have this syndrome at baseline was associated with an increased risk of cognitive impairment, depression, low physical functioning, insufficient independence in daily or instrumental activities, and senile asthenia syndrome.

During the median follow-up period of 24 months, 43 patients were hospitalised in medical facilities, 17 of whom died. Patients with good oral health showed the

best overall results compared to those with satisfactory or poor oral health (good versus satisfactory and poor: 92.8% vs. 90.5% vs. 91.7% at 1 year and 70.3% vs. 73.8% vs. 63.3% at 2 years, p < 0.001). Deterioration in self-rated oral perception was significantly associated with the frequency of comprehensive outcomes.

Discussion

Studies have shown that inflammation is the biological basis of ageing and the onset of age-related diseases. Multiple comorbidities and polypharmacy, along with changes in pharmacokinetics and pharmacodynamics, make older people vulnerable to adverse drug reactions. New opportunities for providing general medical

care to older adults living in the community include the use of mobility aids and assistive devices, home care, respite care services, and telemedicine.

While most studies assessed oral health as a factor predicting the development of malnutrition syndrome in older adults over time [1,3], this study thoroughly evaluated the relationship between baseline oral health and future geriatric syndromes. In the presented study, patients with poor oral health were more likely to suffer from malnutrition and had a higher risk of developing malnutrition syndrome, which is consistent with the literature confirming the importance of oral health parameters related to the number of teeth, salivation, and the ability to eat, for maintaining oral health necessary for daily nutrition [10,11].

Since multiple comorbidities are common among older people, the overall medical picture is often complex. Symptoms of one disease may mask or alter the manifestations of another disease, a disease may manifest itself with atypical symptoms, one disease may exacerbate the symptoms of another, and treatment for one disease may need to be modified due to the presence of another. In the author's study, patients with poor oral health had higher levels of baseline multiple comorbidities, which is consistent with previous studies confirming the link between poor oral health and systemic diseases, including diabetes, cardiovascular disease, lung infections, kidney disease, and even dementia [12].

As a rule, the interrelationship between diseases leads to progressive deterioration, and older people may experience a cascade of diseases as well as physical and psychosocial problems. To provide individualised and effective dental care, oral health professionals must carefully study the medical condition of each elderly person. Therefore, they must have sufficient knowledge and determination of geriatrics and pharmacology, as well as the ability to communicate effectively with family doctors, geriatricians and pharmacologists [13].

Significant changes in pharmacokinetics and pharmacodynamics occur with age. These changes, along with multiple comorbidities and polypharmacy, make older adults particularly vulnerable to adverse drug reactions, as mentioned earlier [14]. Consequently, oral health care professionals should develop appropriate treatment plans that take into account the impact of medications on oral health, apply a restrictive policy for prescribing medications to patients taking multiple medications, and prescribe medications only after consulting with the attending physician, specialist, and/or pharmacologist. During this consultation, four questions should be discussed: (1) What diseases require medication, (2) how do these diseases affect oral health (medical care), (3) what are the (oral) side effects of the drugs, and (4) how will the current medications affect the doctor's proposed medication prescription [15].

Anyone who provides formal or informal care to older people should be aware that when older people become frail or disabled, their oral health is at significant risk, and therefore, they have a responsibility to arrange for consultation with an oral health care professional. Conversely, for oral health professionals, a "sudden" deterioration in the oral health of an older person whose oral health has been satisfactory for a long period of time may be the (first) sign of frailty and an indication of the need to arrange a consultation with a doctor or geriatrician.

Recommendations for improving dental care include the following: more effective integration of dental care into the overall health care system, implementation of public programmes to promote healthy lifestyles and improve access to preventive dental care, and assessment of the possibility of providing a social protection system covering preventive and basic restorative dental care [16]. An appropriate basic strategy is to develop and implement oral care guidelines for older people living in the community, for example, based on the experience of implementing the Oral Care Guidelines for Older People in Long-Term Care Settings (OGOLI) [17].

Given the trend for older people to live in homes for as long as possible, new options for providing dental care, similar to modern developments in general healthcare, could also be considered. These options include: individually tailored oral hygiene products, home-based dental care, visits from dental hygienists and/or nurses, and telemedicine for oral hygiene. In many countries, home-based dental care is considered a specialised service from an economic perspective. Healthcare funding organisations should urgently review the provision of such care to ensure timely access to appropriate medical care [18].

Although many older people can receive dental care at local dental clinics, not all dental surgeries and facilities are easily accessible to frail, disabled and older people in need of care, such as those with limited mobility, who use wheelchairs and/or have cognitive impairments [19]. General dental practices are responsible for designing their premises in such a way that there are no physical barriers and that the premises and rooms are easily and safely accessible. General dental practices should be able to provide dental care to older people with physical and cognitive impairments. Accepting this responsibility is necessary to transform dentistry into medical dental care and to upgrade the qualifications of dentists to the level of dental surgeons.

Conclusions

Oral health and function influence healthy ageing. Health policies can reduce global inequalities in oral health and make oral care more accessible to older people. Policymakers, national dental associations, researchers and all health professionals need to determine their role in improving oral health of older people. Best clinical

outcomes in caring for older patients at risk and with frailty syndrome can be achieved through careful care and appropriate therapeutic approaches to oral health. This will help older people live longer, healthier lives.

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Conflict of Interest

None.

References

- [1] Gil-Montoya JA, de Mello AL, Barrios R, Gonzalez-Moles MA, Bravo M. Oral health in the elderly patient and its impact on general well-being: A nonsystematic review. *Clin Interv Aging*. 2015;10:461–7. DOI: [10.2147/CIA.S54630](https://doi.org/10.2147/CIA.S54630)
- [2] GBD 2017 Disease and Injury Incidence and Prevalence Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018;392(10159):1789–858. DOI: [10.1016/S0140-6736\(18\)32279-7](https://doi.org/10.1016/S0140-6736(18)32279-7)
- [3] Razak PA, Richard KM, Thankachan RP, Hafiz KA, Kumar KN, Sameer KM. *Geriatric oral health: A review article*. *J Int Oral Health*. 2014;6(6):110–6.
- [4] Tôrres LH, Tellez M, Hilgert JB, Hugo FN, de Sousa MD, Ismail AI. Frailty, frailty components, and oral health: A systematic review. *J Am Geriatr Soc*. 2015;63(12):2555–62. DOI: [10.1111/jgs.13826](https://doi.org/10.1111/jgs.13826)
- [5] Mamatov SM, Arstanbekova MA, Imanalieva FE, Bazira KK. Status and prospects of gerontology and geriatrics in the Kyrgyz Republic. *Adv Gerontol*. 2020;33(2):391–6. DOI: [10.34922/AE.2020.33.2.025](https://doi.org/10.34922/AE.2020.33.2.025)
- [6] Arstanbekova MA, Musakeev AO, Mamatov SM. Prevalence of geriatric syndromes in elderly patients in social hospitals in the southern regions of the Kyrgyz Republic. *Russ J Geriatr Med*. 2025;3(23):428–30. DOI: [10.37586/2686-8636-3-2025-428-430](https://doi.org/10.37586/2686-8636-3-2025-428-430)
- [7] Campos JADB, Zucoloto ML, Bonafé FSS, Maroco J. General oral health assessment index: A new evaluation proposal. *Gerodontology*. 2017;34(3):334–42. DOI: [10.1111/ger.12270](https://doi.org/10.1111/ger.12270)
- [8] Tkacheva ON, Kotovskaya YuV, Runikhina NK, Frolova AV, Naumov AV, Vorobyeva NM, et al. Clinical guidelines on frailty. *Russ J Geriatr Med*. 2020;(1):11–46. DOI: [10.37586/2686-8636-1-2020-11-46](https://doi.org/10.37586/2686-8636-1-2020-11-46)
- [9] Pinto TCC, Machado L, Bulgacov TM, Rodrigues-Junior AL, Costa MLG, Ximenes RCC, et al. Is the Montreal Cognitive Assessment (MoCA) screening superior to the Mini-Mental State Examination (MMSE) in the detection of mild cognitive impairment (MCI) and Alzheimer’s Disease (AD) in the elderly? *Int Psychogeriatr*. 2019;31(4):491–504. DOI: [10.1017/S1041610218001370](https://doi.org/10.1017/S1041610218001370)
- [10] Rubenstein LZ, Harker JO, Salvà A, Guigoz Y, Vellas B. Screening for undernutrition in geriatric practice: Developing the short-form mini-nutritional assessment (MNA-SF). *J Gerontol A Biol Sci Med Sci*. 2001;56(6):366–72. DOI: [10.1093/gerona/56.6.m366](https://doi.org/10.1093/gerona/56.6.m366)
- [11] Guralnik JM, Simonsick EM, Ferrucci L, Glynn RJ, Berkman LF, Blazer DG, et al. A short physical performance battery assessing lower extremity function: Association with self-reported disability and prediction of mortality and nursing home admission. *J Gerontol*. 1994;49(2):85–94. DOI: [10.1093/geronj/49.2.m85](https://doi.org/10.1093/geronj/49.2.m85)
- [12] Toniazzo MP, Amorim PS, Muniz FWMG, Weidlich P. Relationship of nutritional status and oral health in elderly: Systematic review with meta-analysis. *Clin Nutr*. 2018;37(3):824–30. DOI: [10.1016/j.clnu.2017.03.014](https://doi.org/10.1016/j.clnu.2017.03.014)
- [13] Dibello V, Zupo R, Sardone R, Lozupone M, Castellana F, Dibello A, et al. Oral frailty and its determinants in older age: A systematic review. *Lancet Healthy Longev*. 2021;2(8):507–20. DOI: [10.1016/S2666-7568\(21\)00143-4](https://doi.org/10.1016/S2666-7568(21)00143-4)
- [14] Tanaka T, Hirano H, Ikebe K, Ueda T, Iwasaki M, Shirobe M, Minakuchi S, et al. Oral frailty five-item checklist to predict adverse health outcomes in community-dwelling older adults: A Kashiwa cohort study. *Geriatr Gerontol Int*. 2023;23(9):651–9. DOI: [10.1111/ggi.14634](https://doi.org/10.1111/ggi.14634)
- [15] van Munster BC, Boot GG, Festen S, de Rooij SE. Goals and outcomes of hospitalised older people: Does the current hospital care match the needs of older people? *Intern Med J*. 2022;52(5):770–5. DOI: [10.1111/imj.15508](https://doi.org/10.1111/imj.15508)
- [16] Chew J, Chia JQ, Kyaw KK, Fu JK, Ang J, Lim YP, et al. Association of oral health with frailty, malnutrition risk and functional decline in hospitalized older adults: A cross-sectional study. *J Frailty Aging*. 2023;12(4):277–83. DOI: [10.14283/jfa.2023.33](https://doi.org/10.14283/jfa.2023.33)
- [17] Miyahara S, Maeda K, Kawamura K, Matsui Y, Satake S, Arai H, et al. Association between intrinsic capacity and oral health in older patients in a frailty clinic. *Eur Geriatr Med*. 2024;15(4):1119–27. DOI: [10.1007/s41999-024-00956-5](https://doi.org/10.1007/s41999-024-00956-5)

- [18] Yang Y, Liang L, Cai J, You J, Liao X. Improving oral hygiene for better cognitive health: Interrelationships of oral hygiene habits, oral health status, and cognitive function in older adults. J Adv Nurs. 2024;80(1):275–86. DOI: [10.1111/jan.15769](https://doi.org/10.1111/jan.15769)
- [19] Park CM, Oh G, Lee H, Jung HW, Lee E, Jang IY, et al. Multicomponent intervention and long-term disability in older adults: A nonrandomized prospective study. J Am Geriatr Soc. 2021;69(3):669–77. DOI: [10.1111/jgs.16926](https://doi.org/10.1111/jgs.16926)

Кыргыз Республикасында улуу адамдардын гериатриялык синдромдуруна жана клиникалык кыйынчылыктарына ооз колунун саламаттыгынын таасири

Жильбера Романкулова

Аспирант

И. К. Ахунбаев атындагы Кыргыз мамлекеттик медициналык академиясы
720020, Ахунбаев көч., 92, Бишкек ш., Кыргыз Республикасы
<https://orcid.org/0000-0002-0379-880X>

Мурат Гарипов

Аспирант

И. К. Ахунбаев атындагы Кыргыз мамлекеттик медициналык академиясы
720020, Ахунбаев көч., 92, Бишкек ш., Кыргыз Республикасы
<https://orcid.org/0009-0000-5930-2810>

Сымбат Каипова

Аспирант

И. К. Ахунбаев атындагы Кыргыз мамлекеттик медициналык академиясы
720020, Ахунбаев көч., 92, Бишкек ш., Кыргыз Республикасы
<https://orcid.org/0009-0000-1961-9119>

Арзыкан Алишеров

Медицина илимдеринин кандидаты, кафедра башчысы

И. К. Ахунбаев атындагы Кыргыз мамлекеттик медициналык академиясы
720020, Ахунбаев көч., 92, Бишкек ш., Кыргыз Республикасы
<https://orcid.org/0000-0001-6467-4205>

Сагынали Маматов

Медицина илимдеринин доктору, профессор, кафедра башчысы

И. К. Ахунбаев атындагы Кыргыз мамлекеттик медициналык академиясы
720020, Ахунбаев көч., 92, Бишкек ш., Кыргыз Республикасы
<https://orcid.org/0000-0001-8540-3252>

Аннотация. Ооз көңдөйүнүн ден соолугу күнүмдүк жашоодо маанилүү орунду ээлейт жана жалпы ден соолук менен жыргалчылыктын абалында негизги ролду ойнойт. Изилдөөнүн максаты 65 жаш жана андан жогору курактагы улгайган бейтаптарда ооз көңдөйүнүн ден соолугун өз алдынча баалоонун гериатриялык абалдарга тийгизген таасирин баалоо болду. Бул проспективдүү изилдөөгө 65 жаш жана андан жогору курактагы 330 бейтап катышкан. Орточо жаш курак $76,3 \pm 7,4$ жылды түзгөн, аялдар эркектерге караганда көбүрөөк болгон (58,2 % каршы 41,8 %). Ооз көңдөйүнүн ден соолугун баалоо үчүн Ооз көңдөйүнүн ден соолугунун жалпы индекси шкаласынан үч суроо колдонулган, бул суроолор 1ден 5ке чейинки упай менен бааланган, мында жогору упайлар начарыраак абалды көрсөткөн. Жалпы упайдын негизинде бейтаптар үч топко бөлүнгөн: жакшы (3 упай), канааттандырарлык (4-7 упай) жана начар абал (8-15 упай). Ооз көңдөйүн кароодо шкала боюнча жакшы абал 83 (25,2 %) бейтапта, канааттандырарлык – 134 (40,6 %) бейтапта, ал эми калган 113 (34,2 %) бейтапта ооз көңдөйүнүн ден соолугу начар деп бааланган. Ооз көңдөйүнүн ден соолугунун начарлашы кийинки байкоодо ар кандай гериатриялык синдромдордун пайда болуу жыштыгы менен байланыштуу болгон. Ооз көңдөйүнүн ден соолугуна көбүрөөк көңүл буруу жана ылайыктуу дарылоочу ыкмаларды колдонуу алсыздык коркунучу бар улгайган адамдарды кароодо жакшыраак клиникалык жыйынтыктарга алып келиши мүмкүн

Негизги сөздөр: ооз көңдөйүнүн ден соолугу; гериатриялык синдром; клиникалык натыйжа; улгайган адамдар