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ORALNO ZDRAVLJE STARIH INSTITUCIONALIZOVANIH OSOBA U BEOGRADU

ORAL HEALTH OF INSTITUTIONALIZED ELDERLY IN BELGRADE

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Sažetak

Uvod. *Povećanje broja starih institucionalizovanih osoba u svetu iziskuje dobru opštu zdravstvenu i stomatološku zaštitu ove grupe ljudi.*
Cilj *rada bio je ispitati nivo oralne higijene, zatim dentalni, parodontalni i protetski status institucionalizovanih osoba starosti preko 65 godina, u tri staračka doma u Beogradu.*
Materijal i metod. *Anketirana je i pregledana 301 osoba. Anketa je obuhvatala sociodemografske podatke, navike u održavanju oralne higijene, subjektivnu procenu opšteg zdravstvenog stanja i stomatoprotetskog statusa. Kliničkim pregledom utvrđen je status zuba i parodontalnih tkiva korištenjem DFMT i CPITN indeksa. Evidentirano je i zdravlje mekih tkiva usta. Postojeće proteze ocenjene su u pogledu retencije, stabilizacije, abradiranosti, higijene i neophodnosti reparature.*
Rezultati. *Od ukupnog broja pregledanih, 16,6% nije održavalo oralnu higijenu. Pomoć u održavanju oralne higijene dobijalo je 2,3% ispitanika, iako je 36,5% bilo zavisno od tuđe nege. Prosečan DMFT iznosio je 26,36. CPITN indeks prosečno je iznosio 2,23. Protetski nije bilo zbrinuto 45,1% pregledanih osoba koje su imale potrebu za protezom. Reparaturu je zahtevalo 55,2% proteza, a higijena proteze bila je loša u 50,0% slučajeva. Od ukupnog broja pregledanih osoba, 11,9% bilo je bezubo i nije imalo totalne proteze.*
Zaključak. *Može se zaključiti da stare institucionalizovane osobe ne dobijaju pomoć u održavanju oralne higijene, iako su u velikom broju zavisne od tuđe nege. Takođe, prisutan je veliki broj nedostajućih zuba i potreba za kompletnom parodontološkom i protetskom terapijom većine osoba. Neophodno je poboljšati stomatološku zdravstvenu zaštitu pacijenata u staračkim domovima.*
Ključne reči: *oralno zdravlje, stare osobe, institucionalizovani*

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Abstract

Introduction. *As the number of institutionalized elderly in the world increases, so does the need for good medical and dental care for this group of people.*
The aim *of this research was to determine the oral hygiene level, dental, periodontal and prosthetic status of intitutionalized elderly persons of over 65 years, in three residental homes for elderly in Belgrade.*
Materijal and Method. *Three hundred and one persons were interviewed and clinically examined. The questionaire included sociodemographic data, habits concerning oral hygiene, subjective assessment of one's own health and prosthetic status. Clinical examination determined dental and parodontal status by using DFMT and CPITN index. Condition of oral soft tissues was also estimated. Existing dentures were evaluated in terms of retention, stabilization, attrition, hygiene, and need for repairment.*
Results*. Of all examined people, 16.6% did not maintain oral hygiene; 2.3% received help with maintaing oral hygiene, although 36.5% was dependant on other people's care. Average DFMT was 26.36. CPITN was 2.23 on average. No denture and a need for one was observed in 41.1% examined institutionalized persons. Fifty-five point two percent of dentures needed repairment, and denture hygiene was poor in 50.0% of cases. Among all examined, 11.9% were edentulous and had no denture.*
Conclusion. *To conclude, institutionalized elderly do not receive help in maintaining oral hygiene, alhough the majority is dependent on other people's care. Also, there is a large number of missing teeth and a need for complete parodontal and prosthetic treatment of most examined persons. It is essential to improve dental health care in residential homes for elderly.*

Key words: *oral health, elderly, institutionalized*

Uvod

Kao posledica demografske transformacije poslednjih nekoliko decenija, došlo je do povećanja zastupljenosti starih ljudi, što podrazumeva velike promene i izazove za zdravstvene sisteme i socijalnu politiku. U tom kontekstu, produženje životnog veka nije uvek praćeno boljim kvalitetom života, već je kao posledica starenja nekim ljudima potrebna pomoć za obavljanje aktivnosti koje su nekad izgledale jednostavno. Kako se broj institucionalizovanih starih ljudi uvećava, povećavaju se i zahtevi za njihovom zdravstvenom zaštitom, a u okviru nje i oralnom negom, jer starije osobe žive duže sa prirodnim zubima ili koristeći proteze.[1]

Očigledno je da postoji jasna veza između oralnog zdravlja i sistemskih oboljenja koja ugrožavaju kvalitet života kao i sam život.[2,3] Oralno zdravlje je odraz opšteg zdravstvenog stanja osobe, lekova koje prima, navika, ponašanja, te načina i kvaliteta ishrane. Oboljenja usta i zuba negativno utiču na ishranu i ometaju spavanje[4,5]. Takođe, dokazana je veza između lošeg oralnog zdravlja i aspiracione pneumonije kod ležećih pacijenata.[6]

Generalno, loše oralno zdravlje starijih osoba posebno se ogleda u visokom procentu gubitka zuba, velikom broju karijesnih zuba, velikom procentu parodontopatije, kserostomiji i oralnim prekancerozama. Negativan uticaj lošeg oralnog stanja na svakodnevni život posebno je značajan kod bezubih osoba. Gubitak većeg broja zuba smanjuje mogućnost adekvatnog žvakanja, a kao posledica toga, osobe biraju mekšu hranu, obično bogatu zasićenim masnim kiselinama i holesterolom, dok izbegavaju hranu bogatu dijetetskim vlaknima. Bezubost takođe predstavlja faktor rizika za gubitak telesne težine, a pored problema sa žvakanjem, stariji ljudi mogu imati i socijalnih hendikep, u smislu poremećaja komunikacije sa drugim ljudima[1].

Cilj rada bio je ispitati nivo oralne higijene, zatim dentalni, parodontalni i protetski status institucionalizovanih osoba starosti preko 65 godina, u tri staračka doma u Beogradu.

Materijali i metode

U sprovedenoj studiji pregledan je 301 korisnik tri velika staračka doma u Beogradu

Introduction

Due to demographic transformation during last decades, there has been an increase in the number of elderly people, which implies great changes and challenges for health systems and social policy. Therefore, longer lifespan is not always followed by a better life quality. Instead, some elderly need help with activities that used to be simple for them. As the number of institutionalised elderly increases, so do requirements for their general and dental health care, because elderly people live longer if they have natural teeth or dentures.[1]

It is obvious that there is a link between oral health and systemic disorders that endanger life quality, as well as life itself.[2,3] Oral health is a reflection of general health, medications, habits, behaviour and diet. Oral and dental diseases have a negative impact on nutrition and sleep.[4,5] Furthermore, a connection has been proved between poor oral health and aspiratory pneumonia in patents in nursing homes.[6]

Generally, poor oral health of the elderly reflects in a large number of lost and decayed teeth, periodontal disease, xerostomia and oral precancerous lesions. Poor oral health decreases the ability to chew properly, and as a result, people choose softer food, usually rich in fatty acids and cholesterol and poor in fibres. Edentulousness is also a risk factor for weight loss, and a social handicap, due to difficult communication.[1]

The aim of this research was to determine the oral hygiene level, dental, periodontal and prosthetic status of intitutionalized elderly persons of over 65 years of age, in three residental homes for elderly in Belgrade.

Materials and methods

This study involved 301 residents of three large residential homes for elderly in Belgrade (>102 beds each). The research had been approved by Ethic Committee (Approval No.: 36/31). All interviewed persons gave written

(>102 kreveta svaki). Istraživanje je prethodno odobreno od strane Etičkog komiteta (br. odobrenja: 36/31). Anketirani su svojevoljno potpisali pristanak za učešće. Kriterijumi za uključenje ispitanika u studiju bili su: starost 65 godina ili više,stanovanje u staračkom domu, odsustvo kognitivnih i psihičkih poremećaja. Pregled su izvodili stomatolozi, uz upotrebu stomatološkog ogledalca, stomatološke sonde i parodontalne sonde graduisane u milimetrima. Ispitanici su pregledani u svojim sobama, bilo u ležećem položaju u krevetu ili sedećem položaju, u zavisnosti od njihovog zdravstvenog stanja i pod adekvatnim prirodnim ili veštačkim osvetljenjem.

Za potrebe istraživanja korišćeni su posebni anketni upitnici. U okviru socio-epidemioloških karakteristika zabeležen je nivo obrazovanja korisnika doma, vreme provedeno u domu, zavisnost od tuđe nege i trajanje te zavisnosti. Zatim, evidentiran je iskaz o učestalosti održavanja oralne higijene, pomoći od strane druge osobe tokom pranja zuba, korišćenju dodatnih sredstava za održavanje oralne higijene, pere proteze, kao i učestalost odlaska kod stomatologa. Dalje, zabeležena je subjektivna percepcija sopstvenog zdravlja učesnika, kako opšteg tako i oralnog (veoma dobro, dobro, loše, veoma loše). Korisnici domova su takođe pitani da li misle da imaju potrebe za stomatološkom intervencijom. Osim toga, bilo je neophodno ispitati da li su anketirani primetili postojanje nekog od najčešćih stomatoloških problema, kao što su zubobolja, bol u/oko viličnog zgloba, zadah, osetljivost na vruće/hladno, krvarenje desni u toku pranja zuba, nemogućnost da se hrana sažvaće, jak bol zuba/usta tokom noći ili suva usta.

U sklopu kliničkog pregleda beleženo je da li je postojala bilo kakva promena sluznice usne duplje. Takođe, evidentiran je i status zuba, kao i parodontalni status.

Status zuba je registrovan prema DMFT indeksu. DMFT indeks (Decayed-destruirani, Missing-nedostajući, Filled-plombiran) se primenjuje na stalnim zubima i izražava se kao ukupan broj površina koje su destruirane, nedostaju ili su plombirane kod pojedinca. Rezultati za pojedinca su vrednovani od 0 do do 32, jer su i treći molari uključeni u bodovanje. Prilikom izračunavanja DMFT indeksa nisu se ubrajali neiznikli zubi, urođeni nedostatak ili prekobrojni zubi, zubi izvađeni iz nekih drugih razloga a da to nije posledica

consent to participate in the study. Criteria for inclusion in the research were: 65 or more years of age, residency in a residential home for the elderly, and lack of cognitive and psychiatric disorders.

Clinical examination was performed by using dental probe, dental mirror and periodontal probe graduated in millimetres. Participants were examined in their rooms, either lying or sitting in beds, depending on their health condition, with an adequate natural or artificial lighting.

Special questionnaires were used in the research. Sociodemographic data included: education, residency duration, dependence on other people's care and its duration. Also, frequency of oral hygiene maintenance was recorded, as well as denture maintenance and incidence of dental checkups. Furthermore, a subjective assessment of a participant's health, general and oral, was recorded, and graded as very good, good, bad, and very bad. Users of residential homes were also asked whether they thought they needed dental treatment. Moreover, it was important to investigate whether the institutionalized elderly noticed any of common dental symptoms, such as: toothache, pain in/around jaw joint, bad breath, toothache after hot/cold beverage, bleeding gums, inability to chew, toothache during night, or dry mouth.

Within clinical examination any oral soft tissue lesion was recorded. Also, dental and periodontal statuses were noted.

Dental status was recorded in accordance with DMFT index. DMFT index (Decayed, Missing, Filled Teeth) is applied on permanent dentition and is noted as the number of decayed, missing or filled tooth surfaces. Results are graded from 0 to 32, because third molars are also included in the score. Unerrupted teeth, hypo-or hyperodontia, retained deciduous teeth or teeth extracted for reasons other than decay,were excluded from the final score. In case of primary or secondary caries lesions, tooth was marked as decayed.[7]

Periodontal status was estimated by using CPITN (Community Periodontal Index

karijesne destrukcije zuba i mlečni zubi zaostali u stalnoj denticiji. U slučaju postojanja primarne ili sekudarne karijesne lezije, zub se ubrajao u destruirane.[7]

Parodontalni status je procenjen korišćenjem CPITN(Community Periodontal Index of Treatment Needs) indeksa. CPITN indeks korišćen je za procenu stanja parodoncijuma, kao i potreba lečenja oboljenja parodoncijuma. Uz pomoć graduisane sonde, dubina parodontalnog džepa merena je u tri tačke na oralnoj i tri tačke na vestibularnoj površini zuba. Prema CPITN indeksu periodontalni status je preveden u numeričke vrednosti, pri čemu je: 0-zdrav parodoncijum; 1-krvarenje nakon sondir-anja; 2-supra- ili subgingivalni konrementi, neadekvatni ispuni i krunice kao jatrogeni faktor; 3-parodontalni džep dubine 4-5 mm; 4-džep dubine 6 ili više mm; x-isključen sekstant (ako su manje od dva zuba prisutna u sekstantu).[8-10]

Pregledom je uočeno da li pacijent ima proteze, koju vrstu proteze, kao i starost tih zubnih nadoknada. Uzimajući u obzir kvalitet proteze (udobnost, stabilnost, mogućnost da sažvaću hranu, mogućnost da osete ukus hrane, estetiku, govor), ispitanici su imali zadatak da subjektivno ocene svoju protezu od 0 (veoma loša) do 10 (odlična). Nakon toga, stomatolog je vršio objektivnu i stručnu procenu retencije, stabilizacije, vertikalne dimenzije, zagrižaja, abrazije veštačkih zuba i higijene proteza, i na osnovu toga zaključivao da li je neophodna reparatura proteze ili ne.

Statistička analiza izvršena je pomoću kompjuterskog programa SPSS 22.0 (Čikago, Ilinois, SAD). Korišćene su deskriptivne analize, tj. frekvencija, srednje i unakrsne vrednosti rezultata dobijenih istraživanjem, kao i T-test nezavisnih uzoraka.

Rezultati

Socioepidemiološke karakteristike ispitanika prikazane su u Tabeli 1, a njihova najzastupljenija opšta oboljenja na Grafikonu 1.

Nivo oralne higijene

Primećeno je da je manje od polovine anketiranih imalo naviku pranja zuba dva ili više puta dnevno. Pomoć pri održavanju oralne higijene dobijalo je 2,3% ispitanika. Navike ispitanika u održavanju oralne higijene prikazane su u Grafikonu 2.

of Treatment Needs) index. CPITN index was used to evaluate periodontal status and the need for its treatment. Periodontal pocket depth was measured by a graduated periodontal probe on three points, both on vestibular and oral surface of a tooth. According to CPITN index periodontal status was transferred into numeric values: 0 healthy periodontium; 1-bleeding after probing; 2 - supra- or subgingival calculus, inadequate restoration or crown as a iatrogenic factor; 3 - periodontal pocket 4-5 mm deep; 4 - periodontal pocket 6 mm or deeper; x-excluded sextant (less than two teeth in the sextant).[8-10]

During examination it was noted whether patient had a denture, its type and age. Bearing in mind the denture quality (comfort, stability, ability to chew and taste food, aesthetics, speech), participants were asked to subjectively grade their denture from 0 (very bad) to 10 (excellent). After that, dentists made an objective and expert assessment of denture retention, stabilisation, vertical dimension, artificial teeth attrition and denture hygiene, and therefore a conclusion about the need for denture repair.

Statistical analysis was performed by a computer programme SPSS 22.0 (Chicago, Illinois, USA). Descriptive analysis, i.e. freque-ncy, average values and cross-tabs were calcu-lated, as well as the independent T-test samples.

Results

Sociodemographic features of participants are shown in Table 1, and their most common general diseases in Figure 1.

Oral hygiene level

It was noticed that less than half of the interviewed had the habit of brushing teeth two or more times a day. Two point five percent of people received help with oral hygiene maintenance. Habits concerning oral hygiene are shown in Figure 2.

Nine percent of the interviewed visit a dentist at least once a year, while 53.1% did that more than five years ago.

Independent samples T-test snowed no difference between males and females in the

Bar jednom godišnje stomatologa posećuje 9,0% ispitanika, dok je 53,1% poslednji put bilo kod stomatologa pre više od pet godina.

Pomoću T-testa nezavisnih uzoraka utvrđeno je da ne postoji statistički značajna razlika između muškog i ženskog pola u učestalosti pranja zuba, pranju proteza i u vremenu poslednje posete stomatologu. Isti rezultat dobijen je i kod ispitanika različitog nivoa obrazovanja i kod zavisnih i nezavisnih od tuđe nege.

Dentalni i parodontalni status

Kliničkim pregledom utvrđeno je da je 41,1% bezubo. Prosečan broj nedostajućih zuba iznosio je 25,18, dok je bilo prisutno prosečno 0,84 destruiranih, odnosno 0,58 plombiranih zuba. Prosečan DMFT iznosio je 26,36.

Najviša vrednost CPITN prosečno je iznosila 2,23. Nijedan sekstant sa vrednošću CPITN=0 nije imalo 81,8% pregledanih osoba, dok je 9,1% imalo jedan takav sekstant. CPITN je iznosio dva u jednom sekstantu kod 23,8% osoba, i u dva sekstanta kod 14,0% institucionalizovanih. Jedan sekstant imao je vrednost CPITN=3 kod 25,4% pregledanih, odnosno CPITN=4 kod 4,2%. Broj isključenih sekstanata najčešće je iznosio 5 (34,4% korisnika starčkih domova).

Pregledom je uočeno da je angularni hejlitis imalo 18,6% pregledanih osoba, dok je procenat gingivitisa iznosio 14,6%. Protetski stomatitis bio je prisutan kod 11,6% korisnika domova. Ekstremna alveolarna atrofija uočena je kod 10,6% pregledanih, a glositis kod 5,6%.

Prilikom sopstvene procene oralnog zdravlja, ispitanici su se najviše žalili na suvoću usta (59,9%), dok je gotovo polovina mislila da ima potrebu za stomatološkom intervencijom. Detalji sopstvene procene oralnog zdravlja prikazani su na Grafikonu 3.

Protetski status

Pregledani korisnici staračkih domova su dominantno koristili totalne proteze. Zastupljenost različitih vrsta zubnih nadoknada prikazana je na Grafikonu 4.

Protetski nije bilo zbrinuto 45,1% pregledanih osoba koje su imale potrebu za protezom. Od ukupnog broja pregledanih osoba 11,9% je bilo bezubo i nije imalo totalne proteze. Prosečna starost proteze iznosila je 11,9 godina. Ispitanici su svoje proteze ocenili prosečnom ocenom 7,42. Rezultati objektivne procene kvaliteta proteza su prikazani u Grafikonu 5, gde se vidi da je gotovo svim protezama koje ispitanici koriste potrebna neka vrsta korekcije.

frequency of tooth brushing, denture hygiene maintenance, and the time of the last visit to the dentist. The same goes for participants of different education level, and persons dependent and not dependent on other people's care.

Dental and periodontal status

Clinical examination revealed 41.1% participants to be edentulous. Average number of missing teeth was 25.18, while there was an average of 0.84 decayed and 0.58 filled. Average DMFT was 26.36.

The highest value of CPITN was 2.23 on average. Eighty-one point eight percent of the examinees had no sextant with CPITN=0, while 9.1% had one such sextant. CPITN was 2 in one sextant in 23.8% of examinees, and in two sextants in 14.0% of institutionalized elderly. One sextant had the value CPITN=3 in 25.4% of examinees, and CPITN=4 in 4.2%. The number of excluded sextants most frequently was 5 (34.4% of institutionalized elderly).

Clinical examination revealed 18.6% to have angular cheilitis, while gingivitis was present in 14.6% of cases. Denture-related stomatitis could be seen in 11.6% of participants. Extreme alveolar atrophy was noted in 10.6% of the institutionalized persons, and glossitis in 5.6%.

During subjective evaluation of one's own health, examinees complained mostly of dry mouth (59.9%), and almost half thought they needed a dental treatment.

Details of subjective evaluation of one's own oral health are shown in Figure3.

Prosthetic status

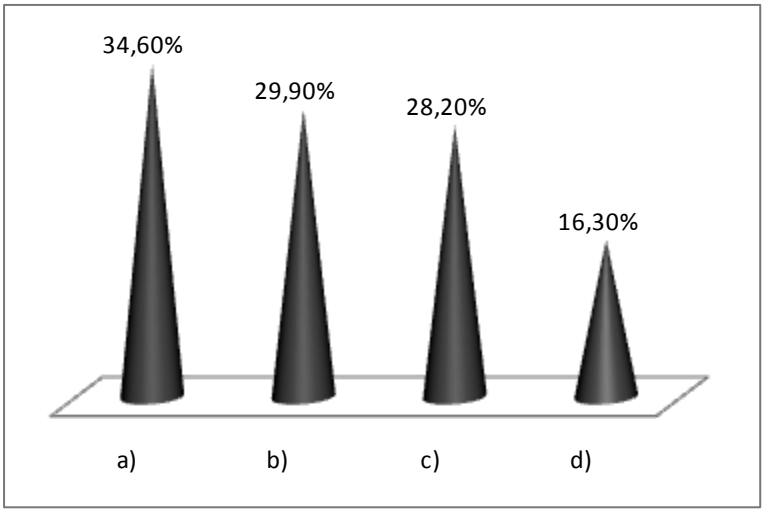
Examined institutionalized elderly mostly used complete dentures. Frequency of different types of prosthetic restorations is shown in Figure 4.

Prosthetic restoration was not applied in 45.1% of participants who needed it. Eleven point nine percent were edentulous, and had no dentures. Average age of a denture was 11.9 years. Examinees graded their dentures with 7.42 on average.

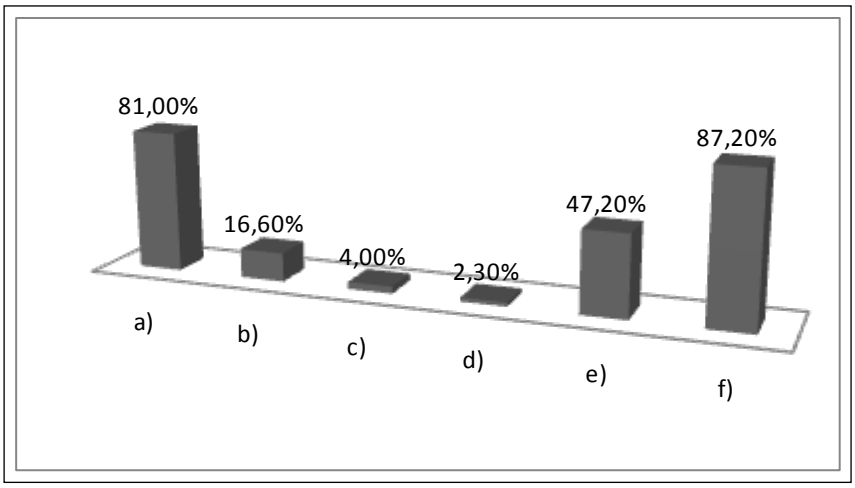
Results of an objective assessment of a denture quality are shown in Figure 5, and it can be seen that almost all dentures that institutionalized elderly used needed some kind of correction.

Tabela 1. Socioepidemiološke karakteristike ispitanika
Table 1. Sociodemographic features of participants

Ispitanici muškog pola/ Male participants	34,6%
Ispitanici ženskog pola/ Female participants	65,4%
Prosečna starost/ Average age	78,5 godina/ years
Završena srednja škola ili fakultet/ Educational level – high school or college	67,4%
Obrazovanje niže od srednje škole/ Education lower than high school	32,6 %
Zavisnost od tuđe nege/ Dependence on other people's care	36,5%
Prosečno vreme zavisnosti od tuđe nege/ Average duration of dependence on other people's care	4,8 godina/ years
Prosečno vreme stanovanja u domu/ Average duration of residency in a home for elderly	4,9 godina/ years

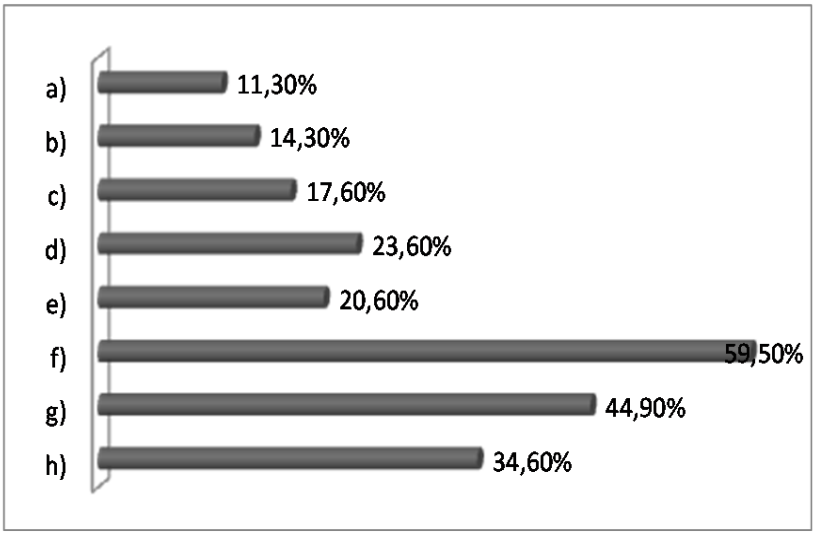


Grafikon 1. Najzastupljenija opšta oboljenja ispitanika: a) hipertenzija, b) ortopedska oboljenja, c) srčana oboljenja, d) neurološka oboljenja
Figure 1. Most frequent general diseases of participants: a) Hypertension, b) Orthopedic diseases, c) Heart diseases, d) Neurological diseases



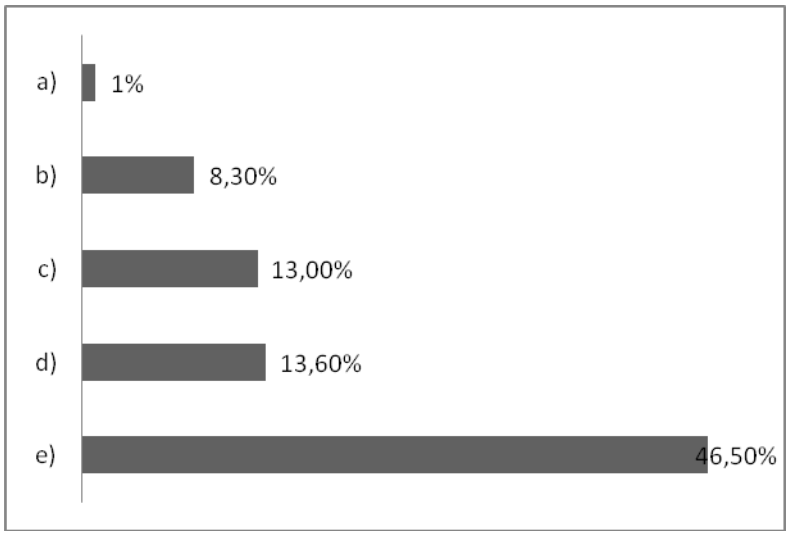
Grafikon 2. Navike ispitanika u održavanju oralne higijene: a) samostalno održavanje oralne higijene, b) neodržavanje oralne higijene, c) korišćenje dodatnih sredstava (konac, rastvor), d) pomoć pri održavanju oralne higijene, e) pranje zuba dva ili više puta dnevno, f) održavanje higijene proteza

Figure 2- Habits concerning maintaining oral hygiene: a) On their own, b) No oral hygiene, c) Use of dental floss, mouthwash etc., d) Help with oral hygiene maintenance, e) Tooth brushing two or more times a day, f) Denture hygiene maintenance



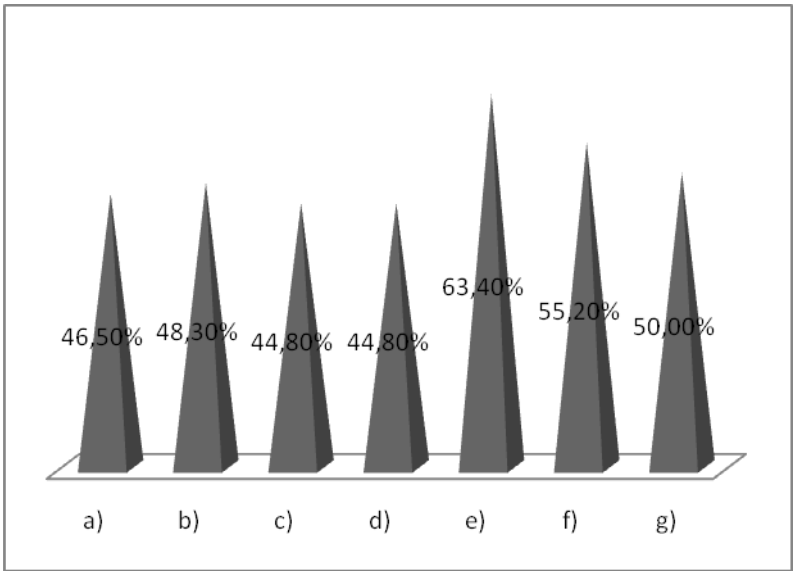
Grafikon 3. Sopstvena procena oralnog zdravlja: a) krvarenje desni, b) zubobolja, c) zadah, d) nemogućnost da se sažvaće hrana, e) osetljivost na vruće i hladno, f) suva usta, g) potreba za stomatološkom intervencijom, h) loše ili veoma loše oralno zdravlje

Figure 3. Subjective evaluation of one's own health: a) Bleeding gums, b) Toothache, c) Bad breath, d) Inability to chew, e) Pain to hot/cold beverage, f) Dry mouth, g) Need for dental treatment, h) Bad or very bad oral health



Grafikon 4. Zastupljenost različitih vrsta zubnih nadoknada kod pregledanih osoba: a) nadoknada na implantatu, b) parcijalna skeletirana proteza, c) parcijalna akrilatna proteza, d) fiksni most, e) totalna proteza

Figure 4- Frequency of different types of prosthetic restorations: a) Restoration on a dental implant, b) Metal clasp partial denture, c) Wire clasp partial denture, d) Dental bridge, e) Complete denture



Grafikon 5. Procena kvaliteta proteza: a) loša retencija, b) loša stabilizacija, c) snižena vertikalna dimenzija okluzije, d) nepravilan zagrižaj, e) abrazija zuba, f) potrebna reparatura, g) loša higijena proteze

Figure 5- Objective assessment of a denture quality: a) Bad retention, b) Bad stabilization, c) Low vertical dimension, d) Bad occlusion, e) Tooth attrition, f) Need for repairment, g) Bad hygiene

Diskusija

U našoj zemlji i regionu postoji mali broj istraživanja o stanju oralnog zdravlja starih institucionalizovanih osoba i većina je objavljena pre najmanje pet godina.[11-14] U istraživanju objavljenom u jednom od domaćih časopisa navodi se da mali broj objavljenih radova na temu starih osoba direktno smanjuje zainteresovanost lekara za ovu grupu bolesnika i udaljava nas od postavljanja standarda u dijagnostici i lečenju starih osoba.[14]

Primenjeni metod ima ograničenja u odnosu na druge metode opisane u literaturi, kada je u pitanju postojanje kontrolne, zdrave grupe pacijenata.[4] Osim analize frekvencije, srednjih i unakrsnih vrednosti, koje su bile deo i naše metode, neka istraživanja su koristila i druge analize, kao što su varijansa i regresija.[4,15]

Institucionalizovane osobe u našem istraživanju pregledane su u prostoru u kome žive, u sedećem ili ležećem položaju, u zavisnosti od zdravstvenog stanja i pod dobrim prirodnim ili veštačkim osvetljenjem. Kako nijedan dom u kome je vršeno istraživanje nema stomatološku ambulantu, pregledi su bili izvršeni na ovaj način. U drugim istraživanjima, stomatolozima su bile dostupne specijalno opremljene ordinacije u samim ustanovama, pa čak i opšta anestezija za pacijente sa intelektualnim hendikepom, koji su odbijali neophodni tretman.[15]

Važno je napomenuti da je prilikom anketiranja uočeno da neki korisnici staračkih domova neiskreno odgovaraju na pitanja o zavisnosi od tuđe nege i o održavanju oralne higijene. Naime, više ispitanika je reklo da nisu zavisni od tuđe nege, a bili su smešteni u odeljenju za poluzavisne ili nezavisne. U takvim slučajevima, ispitivači su sami „ispravljali“ odgovor u anketi. Takođe, primećeno je da pod pranjem zuba mnogi podrazumevaju ispiranje usta vodom, tako da su na pitanje o navici pranja zuba odgovorili potvrdno, a u toku kasnijeg razgovora rekli da ne koriste ni četkicu za zube niti pastu. I u takvim slučajevima, prethodni odgvor u anketi je prepravljen.

Discussion

There is a small body of research about oral health of institutionalized elderly in our country and region, and most of it was published at least five years ago.[11-14] A survey published in a local journal states that a small number of published articles about elderly directly decreases the interest of doctors for this group of patients, thus making us further from setting standards in diagnostics and treatment of elderly people.

The method applied has limitations in comparison to other methods described in the literature, when control group of healthy patients is concerned.[4] Apart from frequency analysis, average values and cross-tabs, which were a part of our method, some research used other analysis, such as variance and regression.[4,15]

Institutionalized elderly in our research were examined in their rooms, sitting or lying in bed, depending on their health condition, and under good natural or artificial lighting. As no residential home for elderly where the research was performed had a dental office, clinical examinations were done in a previously described way. In other surveys, dentists were able to use well-equipped dental offices within residential homes, including general anaesthesia for mentally disabled patients who refused necessary treatment.[15]

It is important to emphasize that during the interview some participants gave dishonest answers about dependence on other people’s care and oral hygiene maintenance. To be more precise, a number of the interrogated said to be independent of other people’s care, and they were accommodated in a section for half-dependent or dependent. In such cases, researchers corrected answers in questionnaires on their own. Furthermore, it was noticed that many refer to rinsing mouth with water as “toothbrushing”. Same persons said that they do not use toothbrush or toothpaste. Their answer that they do brush teeth was corrected into “do not brush teeth”.

Istraživački radovi objavljeni širom sveta govore o značaju pomoći institucionalizovanim osobama u odžavanju oralne higijene.[16-18] Štaviše, isti radovi govore i o neophodnosti organizovane brige o oralnoj higijeni, protokolima za njeno sprovođenje i posebnom obučavanju i motivaciji kadrova u te svrhe. Činjenica da samo 2,3% anketiranih osoba dobija pomoć u održavanju higijene usta i proteza govori u prilog potrebi za kvalitetnijom i doslednijom brigom o njihovom oralnom zdravlju. Jasno je da je uloga negovatelja važna, ali ograničenja u njihovom radu su nedostatak vremena i loša saradnja sa pacijentima.[19]

Imajući u vidu studije koje pokazuju visoku korelaciju između nošenja mobilnih proteza i smrtnosti osoba koje žive u staračkim domovima, možemo reći da je više od polovine pregledanih u našem istraživanju ugroženo smanjenim brojem zuba i prisustvom proteza.[20]

Konkretno, 67,8% pregledanih institucionalizovanih osoba nose mobilne zubne nadoknade, a prosečan broj nedostajućih zuba iznosi 25,18, što dovoljno govori o neophodnosti očuvanja prirodnih zuba kod ove grupe ljudi. Moguće je uporediti podatak o 45,3% bezubih institucionalizovanih osoba, koje navodi jedno istraživanje iz regiona, sa našim rezulatatom od 41,1% bezubih, iako je pomenutom istraživanju broj pregledanih osoba dvostruko manji (139) nego naš.[12] U istom istraživanju dobijen je prosečan DMFT 27,0, dok je naš rezultat gotovo identičan: 26,36.

Drugo istraživanje iz zemlje u okruženju navodi podatak o 70,0% bezubih korisnika staračkih domova, sa brojem ispitanika je približno jednakim našem (274; u našem radu 301).[11] Ovakva razlika se može objasniti različitim nivoom stomatološke zdravstvene zaštite između pojedinih zemalja, pa čak i u različitim regionima iste zemlje.[11,12] Iako se naši rezultati poklapaju sa istraživanjem koje prikazuje nešto bolje oralno zdravlje institucionalizovanih nego drugi pomenuti rad, rezultat koji smo mi dobili ukazuje na potrebu za poboljšanjem stomatološke zdravstvene zaštite u staračkim domovima, kao i van njih.

Scientific papers from worldwide underline the importance of helping institutionalized people with oral hygiene maintenance.[16-18] Moreover, the same papers emphasize the need for organized oral hygiene care, protocols for its implementation, and education of special staff for that purpose. The fact that only 2.3% of institutionalized elderly receive help with maintaining oral hygiene underlines the need for better care of their oral health. It is clear that the role of caregivers is important, and that limitations in their work are the lack of time and lack of cooperation with patients.[1]

Bearing in mind the studies that show a high correlation between denture usage and death rate of elderly people in residential homes, it can be stated that more than half of the examined people are endangered by decreased number of teeth and existence of dentures.[20]

To be more precise, 67.8% of examined institutionalized persons use mobile dentures, and the average number of missing teeth is 25.18, which strongly emphasizes the necessity to preserve natural teeth in this group of people. It is possible to compare 45.3% of edentulous institutionalized people, stated by a research from our region, with our result of 41.1% of edentulous participants, although that research was performed on a two times smaller sample (139) than ours.[12] The same research noted the average DMFT of 27.0. Our result is almost identical: 26.36.

Another research from our region found that 70.0% of residential home users were edentulous, after clinical examination of 274 persons, which is similar to the number of our participants (301).[11] Such various results can be explained by different levels of dental care among countries, even within one country.[11,12] Although our results match ones of a research that shows somewhat better oral health of institutionalized elderly, even such results stress the need for improving dental health care in residential homes for elderly.

Two researches from our region which explore dentures of elderly institutionalized

Dva istraživanja iz regiona koja se bave stanjem proteza korisnika staračkih domova navode da preko 80% pregledanih, od 175, odnosno 117 ukupno, imaju potrebe za protetskom terapijom.[14,21] Rezultat koji smo dobili iznosi 45,1%, ali treba imati u vidu gotovo dvostruko veći broj pregledanih u našem istraživanju.

Zaključci

Stare institucionalizovane osobe ne dobijaju pomoć u održavanju oralne higijene, iako su u velikom broju zavisne od tuđe nege. Takođe, u ovoj grupi ljudi je prisutan veliki broj nedostajućih zuba i potreba za kompletnom parodontološkom i protetskom terapijom većine osoba. Neophodno je poboljšati stomatološku zdravstvenu zaštitu pacijenata u staračkim domovima.

Izjava zahvalnosti

Za podršku koja je omogućila ovo istraživanje zahvalni smo: Stomatološkom fakultetu Univerziteta u Beogradu i Gerontološkom centru Beograd (domovima Bežanijska kosa, Voždovac i Karaburma).

people stated that over 80% of the examined (117 of 175) need prosthetic treatment.[14,21] Our result is 45.1%, but it must be emphasized that we had almost two times more participants in our research.

Conclusions

Elderly institutionalized do not receive help with maintaining oral hygiene, despite the fact that many are dependent on other people's care. Also, this group of people has a large number of missing teeth and the majority need a complete periodontal and prosthetic treatment. It is necessary to improve dental health care of patients in residential homes for elderly.

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