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Submission date: 05-Oct-2021 09:22AM (UTC+0700)
Submission ID: 1665537114
File name: AyubIA_ORAL_HEALTH_KNOWLEDGE,_ATTITUDE_AND_PRACTICE.pdf (278K)
Word count: 6715
Character count: 35719

Acta Stomatologica Naissi

Jun / June 2021. Vol. 37, br./no 83 str./p. 2158 - 2167

Primljen/Received on: 11.11.2021.
Revidiran/Revised on: 25.01.2021.
Prihvaćen/Accepted on 14.02.2021.

ORIGINALNI RAD
EPIDEMIOLOŠKA STUDIJA
ORIGINAL STUDY
EPIDEMIOLOGICAL STUDY
doi: 10.5937/asn2183158I

ZNANJE O ORALNOM ZDRAVLJU, STAV I PRAKSA PACIJENTA KOJI SE PRATE TOKOM PANDEMIJE COVID-19 VIRUSA U MAKASARU

ORAL HEALTH KNOWLEDGE, ATTITUDE AND PRACTICE AMONG PEOPLE IN MONITORING DURING COVID-19 PANDEMIC IN MAKASSAR

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Sažetak

Uvod: *Održavanje oralnog zdravlja je bitno za imuni sistem u borbi protiv korona virusnog oboljenja, (COVID)-19 infekcije, zbog prisustva IgA u pljuvački. Na oralno zdravlje utiču znanje, stavovi i praksa. Ova studija ima za cilj da ispita znanje o oralnom zdravlju, stavove i praksu među PKSP (pacijentima koji se prate) tokom covid-19 pandemije u Makasaru.*

Materijali i metode: *Populacija ove studije su bili stanovnici Makasara koji su bili identifikovani kao pacijenti koji se prate (PKSP). Online upitnik je poslat preko Google forme, da bi se vrednovalo znanje, stavovovi i praksa.*

Rezultati: *U pogledu znanja o oralnom zdravlju, stavovima i praksi među 72 PKSP u Makasaru, 25%, 50% i 25% ispitanika je kategorizovano sa lošim, umerenim i dobrim znanjem, redom. U pogledu varijable stava o oralnom zdravlju 40.3%, 34.7% i 25% ispitanika je kategorizovano sa lošim, umerenim i dobrim stavom, redom. U pogledu prakse oralnog zdravlja, bilo je 26.4%, 38.9% i 34.7% ispitanika sa lošom, umerenom i dobrom praksom, redom.*

Zaključak: *Većina PKSP ima nizak nivo znanja o oralnom zdravlju i stavovima, a srednji nivo prakse oralnog zdravlja.*

Ključne reči: *COVID-19, oralno zdravlje pacijenata koji se prate, nivo znanja, stavovi*

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Abstract

Introduction: *Oral health maintenance is essential in the immune system against corona virus disease (COVID)-19 infection due to the presence of IgA in saliva. Oral health is affected by knowledge, attitudes, and practices. This study aimed to investigate the oral health knowledge, attitudes and practices among PiM (People in monitoring) during the covid-19 pandemic in Makassar.*

Materials and methods: *The population of this study was Makassar citizens who have been identified as people in monitoring (PiM). Online questionnaire was sent via Google form to assess the knowledge, attitudes, and practice.*

Results: *In the category level of oral health knowledge, attitudes and practices among 72 PiM in Makassar, 25%, 50%, and 25% respondents were categorized as having poor, moderate and good knowledge, respectively. In the category of oral health attitude variable, 40.3%, 34.7% and 25% respondents were categorized as poor, moderate and good, respectively. In the category of oral health practices, there were 26.4%, 38.9% and 34.7% of respondents with low, moderate and good oral health practices, respectively.*

Conclusion: *Most PiM in had low oral health knowledge, low oral health attitude and medium oral health practices.*

Key words: *COVID-19, oral health, people in monitoring, level of knowledge, attitudes*

Uvod

Oboljenje izazvano korona virusom (COVID-19) identifikovano je kao uzrok respiratorne pandemije koja je počela 2019 godine. Patogen koji je uzorkovao oboljenje Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), član je porodice korona virusna[1-3].

Prema podacima koji su zabeleženi do maja 2020 godine, oboljenje SARS-CoV-2 raširila se među 207 zemalja i više miliona ljudi širom sveta zaraženo je COVID-19virusom. Jedanaestog marta 2020 godine, WHO (World health organization / Svestska zdravstvna organizacije) proglasila je širenje pandemije COVID-19 virusa[4-7].

Ova pandemija, koja je počela u Wuhanu (provincija Hubei, Kina) donela je mnoge izazove, naročito na polju javnog zdravstva u mnogim zemljama, uključujući Indoneziju. Indonezija je četvrta najnaseljenija zemlja na svetu i predviđeno je da će se suočavati sa pandemijom u dužem periodu u poređenju sa manje naseljenim zemljama[8,9].

Kada je Kina doživela najteži udar pandemije COVID-19 virusa u decembru 2019. godine, sve do februara 2020. godine, Indonezija još uvek nije prijavila ni jedan slučaj infekcije izazvane COVID-19 virusom. Međutim, 2. marta, potvrđena su dva slučaja infekcije COVID-19 virusom, prijavljena u Indoneziji. Drugog aprila bilo je 1790 potvrđenih slučajeva infekcije COVID-19 virusom, od kojih 113 novih slučaja, 170 smrtnih slučajeva i 112 izlečenih bolesnika[9].

Makasar kao glavni grad južnog Sulavesija, jedne od najvećih pokrajina u Indoneziji takođe je pogođen epidemijom COVID-19 virusa, od 11. maja. Na osnovu podataka Kancelarije za javno zdravlje južne pokrajine Sulavesija, bilo je 397 potvrđenih slučajeva infekcije COVID-19 virusom, 160 smrtnih slučajeva, 1229 PPK (pacijenata pod kontrolom) i 4413 PKSP (pacijenti koji se prate)[10,11].

Virus COVID-19 može se širiti preko pljuvačke (kapljično) kada inficirani ljudi kašlju i kijaju oko 6 stopa udaljenosti od zdravih osoba ili dodirivanjem površina gde se virus zadržao, kao na primer prilikom držanja za ruke, telefona ili dodirivanja kvake na vratima[12]. Na osnovu sprovedene studijeod strane Liu i sar., angiotensin konvertujući enzim II (ACE2) odgovoran je receptor za COVID-19 virus u ljudskom telu[13].

U usnoj duplji, ACE2 receptori češće se nalaze na jeziku u poređenju sa bukalnom sluzokožom i gingivom. To ukazuje na to da je sluzokoža usne duplje predstavlja potencijalni ulaz za COVID-19 virus. Zatim, COVID-19

Introduction

Corona virus disease-2019 (COVID-19) has been identified as the cause of a respiratory illness pandemic that startedat the end of 2019. The pathogen that causes this disease, the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), is a member of the corona virus family[1-3].

According to the data recorded until May 2020, SARS-CoV-2 has spread in 207 countries and more than 4 million populationsaround the world have been infected by COVID-19. On March 11th, 2020, WHO declared the spread of COVID-19 as a pandemic[4-7].

This pandemic,which started in the city of Wuhan in the province of Hubei, China, has brought many challenges, especially in the field of public health in many countries, including in Indonesia. Indonesia is the world's 4th most populous country and has been predicted to face this pandemic in a longer period of time compared to less populous countries[8,9].

When China experienced the most severe COVID-19 outbreak in December 2019-February 2020, Indonesia had yet to report any cases of COVID-19 infection. However,in March 2nd, 2020, two confirmed cases of COVID-19were reported in Indonesia. In April 2nd, 2020, Indonesia had reached 1790 confirmed COVID-19 cases, 113 new cases, 170 deaths, and 112 cured cases[9].

Makassar as the capitalcity of South Sulawesi, one of the largest provinces in Indonesia, is also affected by the COVID-19 outbreaks. Until May 11th, 2020, based on the data from the Public hHealth oOfficeof South Sulawesi,there has been 397 confirmed cases ofCOVID-19infection, 160 deaths, 1229 PiC (Patient In Control) and 4413 PiM (People In Monitoring)[10,11].

COVID-19 may be spread through saliva (droplet) when infected people cough or sneeze about 6 feet from the healthy orby touching the surface of object with this virus on it, such asholdinghands, phone, or the handle of the door[12]. Bas on the study conducted by Liu etal.,the angiotensin-converting enzyme II(ACE2) is theresponsible recep of COVID-19 in human body[13].

In the oral cavity, ACE2 receptors are more commonly found in tongue than the buccal or gingival mucosa. This indicates that oral mucosais a potential port d'entrée for COVID-19. In addition, COVID-19 may be detected through saliva secretion which containshigh immunoglobulin A (IgA) towards COVID-19[14,15].

virus može biti detektovan preko pljuvačke, koja sadrži visoke koncentracije imunoglobulina A (IgA) zbog infekcije izazvane COVID-19 virusom[14,15].

IgA je glavni imunoglobulin koji igra ulogu u sekreciji, uključujući i stvaranje pljuvačke. IgA deluje kao prva linija odbrane protiv patogena koji napadaju posebno površinu sluzokože usne duplje. Salivarna IgA (s-IgA) antitela mogu pomoći imunom odgovoru usne duplje, na način što sprečavaju pripajanje patogena kao što su virusi ili bakterije za sluzokožu usne duplje. Ova antitela mogu, takođe, da budu uskladjena sa drugim faktorima kao što su lizozimi i enzim laktoferin[16].

Dentalno i oralno održavanje zdravlja su bitni faktori koji pomažu imunom sistemu protiv virusa COVID-19, zbog toga što sugeriše da pljuvačka sadrži IgA antitela. Pored toga održavanje oralnog zdravlja će sigurno sprečiti mogućnost pojave karijesa i parodontalnih oboljenja, što će sprečiti potrebu posete stomatologu u toku pandemije COVID-19. Potrebno je da sprovode prevenciju kod kuće kao što je pranje zuba dva puta dnevno, korišćenje konca za zube i ispiranje vodicama za usta. To može takođe da redukuje širenje COVID-19 infekcije[15-17].

Dentalno i oralno zdravlje i dalje su glavni javno-zdravstveni problemi u svetu, iako se velikom procentu mogu sprečiti. Karijes zuba, parodontalna oboljenja i karcinom usne duplje su veoma česta hronična stanja i glavna dentalna i oralna oboljenja. Nejednakost prevalence se javlja u svim zemljama, ne može se objasniti razlikama u tremutnom zdravstvenom sistemu[18].

Na osnovu ankete o zdravstvenoj zaštiti iz 2001. godine, među 10 najučestalijih bolesti u Indoneziji, Bolesti zuba i oralna oboljenja su na prvom mestu sa prevalencom od 61%[19].

Glavna etiologija problema sa zdravljem zuba i usne duplje u zajednici je nezadovoljavajući odnos između stavova oralnog zdravlja i prakse. Na to utiče njihovo slabo znanje o značaju održavanja oralnog zdravlja. Pored toga, različiti faktori koji utiču na njihovo znanje, stav i praksu prema zdravlju zuba i usne duplje su upotreba četkice i paste, pranje zuba i poseta stomatologu[20].

Na osnovu prethodnog opisa, zainteresovani smo za ispitivanje znanja, stavova i praksi oralnog zdravlja među PKSP (pacijenti koji se prate) tokom pandemije COVID-19 u Makasaru.

Metode

Populacija u Makasaru koja je identifikovana kao PKSP sa kojima smo se susreli tokom COVID-19 od 12 poena.

IgA is the main immunoglobulin that plays a role in secretions, including saliva production. IgA acts as the first line of defense against pathogens that invade the mucosal surface especially in oral cavity. Saliva IgA (s-IgA) antibodies may help the oral cavity immunity by preventing the attachment of pathogens such as viruses and bacteria on mucosa. These antibodies can also synergize with other factors such as the lysozyme and lactoferrin enzyme[16].

Dental and oral health maintenanceare important factors that help the immune system against the infection of COVID-19 virus, because it is suggested that saliva contains IgA antibody. In addition, maintaining oral health will certainly prevent the possibility of dental caries and periodontal diseases, thus reducingtheneedfor dental visit during COVID-19 pandemic.Theylt isonly needed to perform the dental prevention at home such as brushing teeth twicea day, using dental flossand rinsing withmouthwash.It may also be help to reduce the spread of COVID-19 virus infection[15-17].

Dental and oral health diseases remain major public health problemsin the world although theyare largely preventable. Dental caries, periodontal disease and oral cancer are very common chronic conditions and the main dental and oral diseases are foundpresent. Inequality of prevalence occurs in all countries, it cannot be explained by contemporary differences in the health care system[18].

Based on the health nationwide survey in 2001,out of 10 of the most prevalent diseases in Indonesia, dental and oral health disease occupied the first placewith a prevalence of 61%[19].

The main etiology of dental and oral health problems in community is poor oral health attitude and practices. This is influenced by theirpoor knowledge of the importance of oral health maintenance. In addition, various factors that influence their knowledge, attitudes and practicestowards dental and oral health arethe use of toothbrush and toothpaste, brushing teeth and visitsto the dentist[20].

Based on the description in the background, we are interested in investigating the oral health knowledge,attitudes and practices among PiM (People in monitoring) during COVID-19 pandemic in Makassar.

Methods

The population was Makassar citizen identified as PiM whom we encountered during COVID- of 12 points.

Ovaj upitnik je testiran pomoću Pirosonovg testa korelcije (r vrednost M (SD) = 0.756 (0059) za kategoriju znanja, a r vrednost M10 za program nadzora od marta-aprila, 2020.

Ispitanici su bili uključeni u ovu studiju ukoliko su odgovorili na linkove online google upitnika koji su istraživači slali putem WhatsApp-apa i poruka.

Instrumenti

Instrumenti naše studije su online upitnici koji su poslati u vidu "google" forme. Upitnici su korišćeni da se utvrdi nivo znanja o oralnom zdravlju, stavovima i praksi među PKSP u Makasaru. U pogledu varijable znanja o oralnom zdravlju, ocena 1 je data za svako tačno odgovoreno pitanje, a ocena 0 za svaki pogrešan odgovor ili odgovor „ne znam". U pogledu varijable stava oralnog zdravlja, ocena 1 data je za svaki odgovor „da", osim za pitanja sa datim kodom (N) ili oni koji moraju da odgovore ne bi postigli ocenu 1. U promenljivoj oralne zdravstvene prakse, svaki odgovor „da" postigao bi 1, osim kodnih pitanja (N), ili onaj ko mora da odgovori ne bi postigao 1, postigavši maksimalnih 12 poena. Ovaj upitnik je testiran na validnost pomoću Pearsonovog testa korelacije (r vrednost M (SD) = 0,756 (0059) za kategoriju znanja, r vrednost od M (SD) = 0,755 (0053) za promenljive varijable i r vrednosti M (SD) = 0,592 (0058) za varijable prakse i njegovu pouzdanost je ispitana korišćenjem Cronbach Alpha testa (vrednost Cronbach alpha = 0,624 za promenljivu znanja, vrednost Cronbach alpha = 0,621 za varijablu stavova i vrednosti Cronbach alpha = 0 630 za varijablu prakse). Test je sproveden na prvih 30 ispitanika koji su popunili ovaj upitnik, od 72 ispitanika koji su bili uključeni u predmet našeg istraživanja.

Analiza podataka

Analiza podataka izvršena je deskriptivnom analizom kako bi se utvrdio nivo znanja o dentalnom i oralnom zdravlju, stavov i praksa među PKSP u Makasaru. Podaci u ovoj studiji predstavljeni su tabelama i figurom.

Rezultati

Od ukupno 120 ispitanika, 72 ispitanika je popunilo upitnik, njih je činilo 36 (50%) muškaraca i 36 (50%) žena. Na osnovu starosti, najviše ispitanika bili su odrasli (70 ispitanika, 97,3%), prosečne starosti 28 godina (dodatak appendix).

This questionnaire tested for validity using Pearson Correlation test (rvalue M (SD) = 0.756 (0059) for the category of knowledge, the r value of M 10 surveillance program from March - April, 2020.

Subjects were included in this study if they answeredthe online google form questionnaire links shared by the researchers via WhatsApp and message.

The Instruments

The instruments of our study areonline questionnaires that were distributed throug google form. Questionnaires were used to determine the level of oral health knowledge, attitudes, and practices amongPiM in Makassar. In term of oral health knowledge, a score 1 was given for every correctly answered question and a score 0 was given for every wrongor "do not know" answer.In oral health attitude variable, a score 1 was given for every "yes" answer, except for questions with the given code (N) or those who have to answer would not score 1.In oral health practices variable, every "yes"answer wouldscore 1 except for the code questions (N) or who must answer would not score 1, making a maximum score of 12 points. This questionnaire was tested for validity using Pearson Correlation test (rvalue M (SD) = 0.756 (0059) for the category of knowledge, the r value of M (SD) = 0.755 (0053) for attitudes variable and r values of M (SD) = 0.592 (0058) for practices variable and its reliability was tested by using Cronbach Alpha test (the value of Cronbach alpha = 0.624 for knowledge variable, the value of Cronbach alpha=0.621 for attitudes variable and values of Cronbach alpha = 0. 630 for practices variable). The test was conducted on the first 30 respondents who filled out this questionnaire, out of the 72 respondents who were included as subjects in our study.

Data analysis

The data analysis was through descriptive analysis to determine the level of dental and oral health knowledge, attitudes and practicesamong PiM in Makassar. The data in this study were presented in tables and narratives.

Tabela 1. Kriterijumi za procenu znanja o oralnom zdravlju, stavovima i praksi među PKSP (pacijentima koji se prate) tokom COVID-19 pandemije u Makasaru
Table 1. Criteria for Assessment of Oral health Knowledge, Attitude and Practice Among ODP (People in Monitoring) during COVID -19 pandemic in Makassar

Knowledge	
1. Održavanje zdravlja zuba i usne duplje može poboljšati imuni system u borbi protiv Covid-19? / Can maintaining the health of your teeth and mouth improvethe immune system to fight against Covid-19?	a. Da / Yes 1 b. Ne / No 0 c. Ne znam / I don't know 0
2. Da li se grgorenjem antiseptičkim rastvorom efektivno eliminiše Covid-19 ? / Does gargling with an antiseptic solution effectively kill the Covid-19?	a. Da / Yes 0 b. Ne / No 1 c. Ne znam / I don't know 0
3. Da li konzumiranje povrća i voća može efektivno da poboljša imuni sistem u borbi protiv Covid-19? / Can eating vegetables and fruitsimprovethe immune system to fight against Covid-19?	a. Da /Yes 1 b. Ne / No 0 c. Ne znam / I don't know 0
Stav / Attitude	
4. Svi mogu da posete stomatologa tokom pandemije COVID-19? / Can everyonevisit thedentistduring period of COVID-19pandemic?	a. Da / Yes 0 b. Ne / No 1
5. Da li četkanje zuba istovremeno može pomoći u prenošenju COVID-19? / Does wear brush your teeth are simultaneously able to transmit COVID-19?	a. Da / Yes 1 b. Ne / No 0
6. Da li se pažljivim pranjem zuba može prevenirati transmisija COVID-19? / Brush your teeth carefully with a will canprevent the transmission of COVID-19?	a. Da/ Yes 1 b. Ne /No 0
Praksa / Practice	
7. Do you brush your teeth every day? / Da li perete zube svako dnevno?	a. Da / Yes 1 b. Ne / No 0
8. How many times is the minimum number of times to brush teeth? / Koliko puta dnevno perete zube?	a. Jednom dnevno/ Once a day 0 b. Dva puta dnevno/Twice a day 1 c. Tri puta dnevno /Three times a day 0
9. When do you rinse your mouth? / Kada isperate usnu duplju?	a. Ujutru/ In the morning 0 b. Ujutru i uveče pre spavanja / In the morning and evening before sleeping 0 c. Ujutru, uveče pre spavanja i nakon konzumiranja slatkiša / In the morning, evening before sleeping and sweets consumption 1
10. Do you clean your tongue? / Da li čistite jezik?	a.Da /Yes 1 b. Ne /No 0
11. Do you use toolssuch as dental floss and solution of mouthwash to help clenning the teeth and mouth? / Da li koristite pomoćna sredstva za čišćenje zuba i usne duplje kao što je konac za zube i vodicu za ispiranje usta?	a. Da / Yes 1 b. Ne / No 0
12. Did you visit the dentist duringCovid-19pandemic? / Da li ste posetili stomatologa tokom Covid-19 pandemije?	a. Da /Yes 0 b. Ne / No 1

Tabela 2. Distribucija uzorka COVID -19 PKSP (pacijenti koji se prate) u Makasaru
Table 2. The Sample Distribution of COVID -19 ODP (People In Monitoring) in Makassar

Karakteristike	n	(%)
Pol/ Gender		
Muška/Male	36	50,0
Ženski/Female	36	50,0
Godine/Ages		
Deca/Childrens	2	2.7
Odrasli/Adults	70	97.3
Nivo obrazovanja/ Educational Levels		
Srednja škola/High school	17	23,6
Diploma/Bačelor	44	61,1
Master/Master	11	15,3
Profesije/ Professions		
Nezaposljeni/Unemployed	14	19,4
Zaposljeni privatno/ Private Employee	22	30,6
Državni službenici/Civil Servants	11	15,3
Medicinski radnici/ Medical Personnel	5	6,9
Nastavnici/ Teacher	7	9,7
Preduzetnik/ Entrepreneur	13	18,1
Bračni status/ Marital Status		
Nije u braku/ Not Married	47	65,3
U braku je/Married	25	34,7
Ukupno/Total	72	100,0

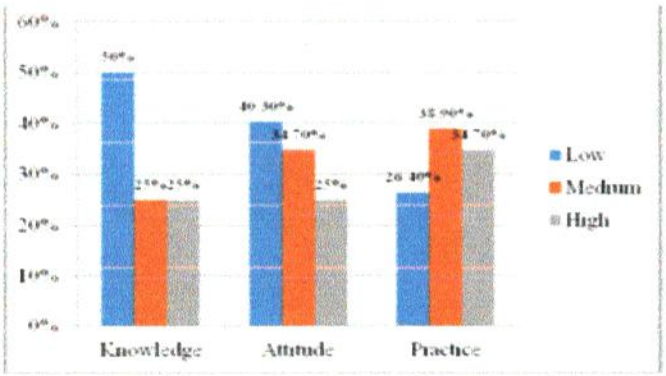

Figura 1. Totalni rezultat po kategorijama odgovora ispitanika baziranih na znanju, stavu i praksi

Figure 1. The total score category of respondents' answers is based on knowledge, attitude and practice

Većina ispitanika (44 ispitanika, 61,1%) ima bačelor diplomu. Što se tiče profesije i bračnog statusa, više ispitanika su bili privatno zapošljeni (22 ispitanika, 30,6%), a neoženjenih je bilo (47 ispitanika, 65,3%) (Tabela 2).

Distribucija odgovora na znanje o oralnom zdravlju, stavu i praksi ukazuju da je za varijablu znanja o oralnom zdravlju većina ispitanika smatrala da održavanje zdravlja zuba i usne duplje može uticati na bolji imuni odgovor u borbi protiv COVID -19, oko 42 (58,33%) ispitanika sa tačnim i pogrešnim odgovorom, a 36 (50%) sa po jednim od svakog. Što se tiče varijable "stav o oralnom zdravlju", većina ispitanika je odgovorila da ne mora da poseti zubara tokom pandemije COVID -19, oko 52 (72,22%) ispitanika bilo je sa ispravnim i pogrešnim stavovima o oralnom zdravlju, odnosno 39 (54,16%) i 33 ispitanika (45,84%). Za varijablu oralne zdravstvene prakse, većina ispitanika pere zube svaki dan, oko 55 (76,39%) ispitanika bilo je i sa ispravnim i pogrešnim stavovima o oralnom zdravlju od 43 (59,72%), odnosno 29 ispitanika (40,28%). Pored toga , većina ispitanika, 53 (73,61%) ispitanika, isto tako pretpostavlja da zube moraju da peru minimum dva puta dnevno (Tabela 3).

Slika 1 prikazuje nivo znanja o oralnom zdravlju, stavu i praksi među PKSP u Makasaru.

U pogledu znanja o oralnom zdravlju, oko 50% ispitanika je imalo slabo znanje, dok je 25% ispitanika je imao umeren, odnosno visok rezultat. U pogledu odnosa prema oralnom zdravlju, 40,3% ispitanika je dobilo nisku ocenu, 34,7% ispitanika je dobilo umerenu ocenu, a 25% visoku ocenu.

Results

Out of a total of 120 subjects, 72 respondents (36 (50%) men and 36 (50%) women)filled the questionnaire.Based on the age, most respondents were adults (70 respondents, 97.3%) with an average age of 28 years (appendix). Most respondents (44 respondents, 61.1%) had bachelor's degree. For profession and marital status, more respondents were private employees(22 respondents, 30.6%) and unmarried (47 respondents, 65.3%)(Table 2).

The answers fordistribution of oral health knowledge, attitude and practice indicated that for oral health knowledge variable, the majority of respondents,42 (58.33%)of them with correct and wrong answer, 36 (50%) of each,considered that maintaining the dental and oral health could increase the immune system to fight Covid-19. For oral health attitude variable, most respondents,52 (72.22%) of them with right and wrong oral health attitudes, 39 (54.16%) and 33 (45.84%), respectively,answered that theydidnot have to visit a dentist during Covid-19 pandemic. For oral healthpractice variable, the majority of respondents,55 (76.39%) of them with correct and wrong oral health attitudes, 43 (59.72%) and 29 respondents (40.28%), respectively, brushtheir teeth every day. In addition, most respondents, 53 (73.61%) of themalso assumed that they hadto brushtheir teeth twice a dayminimum (Table 3).

Figure 1 shows the level of oral health knowledge, attitude and practice among PiM in Makassar.

Što se tiče usmene prakse, bilo je 26,4% ispitanika sa niskim rezultatom, 38,9% ispitanika sa umerenim i 34,7% sa visokim ocenama.

Diskusija

Održavanje oralnog zdravlja jedan je od važnih faktora koji pomažu imunom sistemu protiv virusne infekcije COVID19 putem IgA antitela u pljuvački . Takođe će sprečiti mogućnost nastanka karijesa i parodontalnih oboljenja tako da nije potrebno ići kod stomatologa zbog stomatoloških usluga već bi samo trebalo da održavaju dobru oralnu higijenu kod kuće , što može pomoći u suzbijanju širenja infekcije virusom COVID-19[15-17].

In term of oral health knowledge, about 50% of respondents had poor knowledge while 25% of respondents had moderate and high score, respectively. In term of oral health attitude, 40.3% respondents obtained low score, 34.7% of respondents obtained moderate score and 25% obtained high score. In term of oral practice, there were 26.4% of respondents with low score, 38.9% of respondents with moderate score and 34.7% of with high score.

Discussion

Maintaining the oral health is one of important factors that help the immune system against COVID-19 viral infection through IgA antibody in saliva.

Tabela 3. Distribucija odgovora: znanje o oralnom zdravlju, stav i praksa među PKSP (pacijenti koji se prate) u Makasaru

Table 3. The answer distribution of Oral health Knowledge, Attitude and Practice among COVID -19 ODP (People in Monitoring) in Makassar

		The answer/odgovor Right/Tako je		The answer/odgovor False/pogrešno/Don't Know/Ne znam	
		n	%	n	%
Knowledge/Znanje					
1.	Maintain the health of your teeth and mouth can increase the immune system to against Covid-19? 1. Održavanje zdravlja zuba i usne duplje može poboljšati imuni system u borbi protiv Covid-19?	42	58.33	30	41.67
2.	Is gargling with an antiseptic solution effectively kill the Covid-19? 2. Da li se grgoranjem antiseptičkim rastvorom efektivno eliminiše Covid-19?	38	52.78	34	47.22
3.	Are eating vegetables and fruit can increase the immune system to against Covid-19? 3. Da li konzumiranje povrća i voća može efektivno da poboljša imuni system u borbi protiv Covid-19?	28	38.89	44	61.11
Average Knowledge Prosek znanja		36	50.0	36	50.0
Attitude/Stav					
4.	Everyone can visit the dentist during period of Covid-19 pandemic? 4. Svi mogu da posete stomatologa tokom pandemije COVID-19?	52	72.22	20	27.78
5.	Does wear brush your teeth are simultaneously able to transmit Covid-19? 5. Da li četkanje zuba istovremeno može pomoći u prenošenju COVID-19?	25	34.72	47	65.28
6.	Brush your teeth carefully with a well can prevent the transmission of Covid-19? 6. Da li se pažljivim pranjem zuba može prevenirati transmisija COVID-19?	41	56.94	31	43.06
Average Attitude/ Prosek stava		39	54.16	33	45.84
Practice/Praksa					
7.	Do you brush your teeth every day? 7. Da li perete zube svakodnevno?	55	76.39	17	23.61
8.	How many times the maximum of brushing teeth? 8. Koliko puta dnevno perete zube?	53	73.61	19	26.39
9.	When you rinse your mouth? 9. Kada isperete usta duplju?	24	33.3	48	66.67
10.	Do you clean your tongue? 10. Da li čistite jezik?	45	62.50	27	37.50
11.	Do you use a tool to help in cleaning the teeth and mouth like dental floss and solution of mouthwash? 11. Da li koristite pomoćna sredstva za čišćenje zuba i usne duplje kao što je konac za zube i vodica za ispiranje usta?	45	62.50	27	37.50
12.	Did you visit the dentist during Covid-19 pandemic? 12. Da li ste posetili stomatologa tokom Covid-19 pandemije?	36	50.0	36	50.0
Average Practice Prosek prakse		43	59.72	29	40.28

Zdravlje zuba i usta je sastavni deo opšteg zdravlja čoveka koji je veoma usko povezano sa znanjem, stavom i praksom. Održavanje zdravlja zuba i usne šupljine smatra se doživotnom navikom i ključnim za zdravlje zuba i desni[17]. Oralna zdravstvena praksa je definisana kao oblik aktivnosti = zaštita, unapređenje ili održavanje oralnog zdravlja i prevencija oralnih oboljenja[21].

Većina ispitanika prikazanih u tabeli 3, 38 ispitanika (52,78%), je odgovorilo da grgorenje antiseptičnih rastvora nije efikasno u suzbijanu COVID-19. To je u skladu sa nemačkom studijom koju su sproveli Kampf i saradnici koja je sugerisala da antiseptični rastvor nije efikasan za eliminisanje COVID-19[22].

Pored toga, većina ispitanika (76,39%) je prala zube svaki dan, što je u skladu je sa studijom Abeer i saradnika iz Rijada koji su takođe objavili da je većina ispitanika , 66,5% pralo zube svaki dan[17].

Tabela 3 takođe prikazuje raspodelu odgovora na pitanje „koliko najmanje puta peru zuba", oko 53 ispitanika (73,61%) odgovorilo je dva puta dnevno. To je u skladu sa studijom Netti Surianti i sar. u Bandungu koja je izvestila da 85% ispitanika pere zube dva puta dnevno. Takođe je u skladu sa preporukom Američkog udruženja stomatologa (ADA) da se učestalost pranja zuba sprovodi dva puta dnevno[23].

Iz rezultata naše studije, tabela 3 isto tako prikazuje raspodelu odgovora na pitanje „da li četkate jezik?" gde je 45 ispitanika (62,50%) odgovorilo „da". Ovi rezultati studije su u suprotnosti sa studijom koju su sproveli Netti Surianti i sar. koja je objavila da 60% ispitanika nikada ne četka jezik[23].

Na osnovu studije u Kini, 47% odraslih je prijavilo da informacije o oralnom zdravlju dobijaju preko radio programa ili televizije, dok je 30% dobilo informacije čitajući novine ili časopise.

Poster u bolnici ili instrukcije stomatologa obeleženi su kao izvor informacija, 15% odnosno 21%. Pored toga, obrazovanje o oralnom zdravlju u školama i lokalne zdravstvene kampanje spomenulo je 10% od ukupnog broja ispitanika . Svi izvori informacija o oralnom zdravlju su češće zabeleženi u lokalnim urbanim sredinama nego u ruralnim[24].

Kampanja Love-Teeth-Day (LTD) je program edukacije o oralnom zdravlju koja je formirana u Kini radi podizanja javne svesti o oralnom zdravlju i podsticanja implementacije društvene edukacije o oralnom zdravlju na nivou pokrajine. LTD kampanja dizajnirana je da pošalje poruku

It will also prevent the possibility of dental caries and periodontal diseases so peopledo not need to visit dentistfor dental services and only need to perform oral health practicesat home, which may help to suppress the spread of COVID-19 virus infections[14,17].

Dental and oral health isan integral part of human general health which is very closely related to knowledge, attitude and practice. The maintenance of dental and oral health are both regarded as a life-long habitand central to the health of teeth and gums[17]. Oral health practice is defined as a form of activity = to protect, promote or maintain oral health and prevent oral disease[21].

The majority of respondents in Table 3, 38 respondents (52.78%), answered that gargling with antiseptic solution is not effective in killing COVID-19. It is in line with a German study conducted by Kampf etal.which suggested that the antiseptic solution was not effectiveto kill COVID-19[22].

In addition, the majority of respondents (76.39%) brushed their teeth every day, which isin line with the study by Abeer etal. in Riyadh which reported that the majority of respondents, 66.5% brushedtheir teeth every day[17].

Table 3 also shows the answer distribution to the question "how many times is the minimum number of times to brush teeth?",53 respondents (73.61%) answered two times a day. It is in line with the study by Netty Suryanti etal. in Bandung whichreported that 85% of respondents brushtheir teeth two times a day. It is also in accordance withthe American Dental Associations (ADA) recommendation that the frequency of brushing teeth should be two times a day[23].

From the results of our study,Table 3 also shows the answer distribution to the question "do you clean your tongue?" with 45 respondents (62.50%) who answered "yes". This result of ourstudy is contradict with the study conducted by Netty Suryanti etal. which reported that 60% of respondents never brush their tongue[23].

Based on the study in China, 47% of the adults reported that they heard theinformation about the oral health on a radio program or television while 30% received the information through reading newspaper or magazine.

Poster at hospital or instruction from a dentist is indicated as a source of informationby 15% and 21%of adults, respectively. In addition, oral health education in schools and local health campaigns were mentioned by 10% of total respondents. All sources of information about oral health were reported to be more frequently given in local urban areas than in rural[24].

društvu o oralnom zdravlju, kao što je važnost redovnih stomatoloških pregleda, pranje zuba najmanje dva puta dnevno, praksa sistematskog pranja zuba, kao i upotrebe standardne zubne paste sa četkicom i fluorom.

Studija je prijavila da samo jedna trećina odraslih Kineza pere zube najmanje dva puta dnevno i ovaj broj je mnogo manji nego što je to slučaj kod dece i adolescenata koji su učestvovali u istoj anketi. Pored toga, održavanje oralnog zdravlja je i dalje mnogo slabije u poredenju sa nalazima studije u zapadnim industrijskim zemljama i Hong Kongu[24].

Do danas, prema našim saznanjima, ova studija je prva koja analizira znanje, stav i praksu PKSP. Na opšti nivo znanja o oralnom zdravlju, stavove i praksu u društvu o održavanju dentalnog i oralnog zdravlja mogu uticati nekoliko faktora, kao što su socio-demografija, među drugim faktorima prikazano je okruženje, nivo obrazovanja, ekonomska situacija, tradicija i pružanje stomatoloških usluga zdravstvenih ustanova. Nivo obrazovanja može uticati na nivo dentalne i oralne higijene; ljudi nižeg obrazovnog nivoa imali su tendenciju da imaju slabije znanje o održavanju zdravlja zuba i usne duplje. Studija je pokazala da nivo obrazovanja veoma utiče na znanje o zdravom životu, stav i praksu[25].

Na osnovu rezultata ovog istraživanja, predlažemo stvaranje programa svesti o oralnom zdravlju usmerenom na PKSP. Predloženi programi treba da se usredsrede na značaj i praktični pristup u postizanju i održavanju dobrog oralnog zdravlja među PKSP u Makasaru zbog suzbijanja širenja infekcije COVID-19.

Zaključak

Postoji još uvek veliki broj PKSP sa slabim znanjem o oralnom zdravlju, stavovima i praksi.

Love-Teeth-Day (LTD) campaign is anoral health education program which was formed in China to increase the public awareness of oral health and to encourage the implementation of oral health education-based society at the province level. The LTD Campaign has been designed to send oral health message to society, such as the importance of visiting dentist regularly, brushing the teeth at least twice a day, practice of systematic toothbrushing method, as well the use of a standard toothbrush and fluoridetoothpaste.

Study reported that only one-third of Chinese adults brush their teeth at least two times a day and this number is much lower than the observed for children and adolescents who participated in the same survey. Besides that, the oral health maintenance is still much lower compared with the findings of the study performed in west industrial countries and Hong Kong[24].

Until today, to our knowledge, this study is the first to analyze the knowledge, attitude, and practice of PiM.The general level of oral health knowledge, attitudes and practice among society towards maintaining the dental and oral health may be affected by several factors, such as socio-demographics, among other factors environment, level of education, economy, tradition and the provision of dental health service facilities. Education level may affect the level of dental and oral hygiene; people with lower educational level tended to havelower knowledge in dental and oral health maintenance. A study has shown that education level is very influential on the knowledge, attitude and practice of healthy living[30].

Based on the results of this study, we suggest creatingan PiM-targeted oral health awareness program. The proposed programs should focus on the importance and practical approach in achieving and maintaining good oral health among PiM in Makassar to suppress the spread of COVID-19 infections.

Conclusion

There was still a high number of PiM with low oral health knowledge, attitude, and practice.

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