Digital Repository Universitas Jember

Proceeding

fdi CE

FDI - PDGI Continuing Education
Good oral health for brighter smile

Bandung, 11 - 12 Nov 2016
Holiday Inn Pasteur

Digital Repository Universitas Jember

PROCEEDING
PDGI-FDI CONTINUING EDUCATION 2017

Reviewer:

Dr.drg.Risty Saptarini Primarti, Sp.KGA.
Prof. Dr.drg. Sunardhi Widyaputra, M.S.,Ph.D.
drg. Fahmi Oscandar, Sp.RKG.
Dr.drg.Hendra Dian Adhita,Sp.KG.
Dr. drg.Irmaleny Satifil, Sp.KG.
Dr.drg.Sri Susilawati, M.Kes.
Dr.drg.Yanti Rusyanti, Sp.Perio.
Dr.drg.Endang Syamsudin, Sp.BM.
Dr.drg.Rasmi Rikmasari,Sp.Pros.
Dr.dr. Kosterman Usri, MM.
drg. Arief Cahyanto, MT.PhD.
Dr.drg.Ida Ayu Evangelina, Sp.Ort.(K)
Dr.drg.Avi Laviana, Sp.Ort.
Nocola Cirillo, DMD,LDSMHE(I),PhD.
drg. Elizabert Fitriana Sari, Sp.PM.

Holiday Inn Hotel, Bandung Pasteur 11-12 November 2016

Digital Repository Universitas Jember

PROCEEDING
PDGI-FDI CONTINUING EDUCATION 2017

Published by Lembaga Studi Kesehatan Indonesia (LSKI) for PDGI-FDI Continuing Education 2017 Committee

Bandung, November 2016

Editor Anna Muryani, Diani Prisinda, Ninda Kartikadewi, Aisya Alifiani Kurnia, Fathin Vania Rahmadina
Setting Siti Mariam
Production Agus Sono
Printed Sono Offset
Copyrigt @ 2017 PDGI-FDI CDE 2017 Committee
ISBN 978 602 18082 9 0

Perpustakaan Nasional : Katalog Dalam Terbitan (KDT)

Proceeding PDGI-FDI Continuing Education/Editor : Risti Saptarini, dkk

-- Bandung : LSKI (Lembaga Studi Kesehatan Indonesia), 2016. x + 788 hlm; 25 cm

ISBN 978 602 18082 9 0

Digital Repository Universitas Jember

CONTENT

PRELIMINARY SYNTHESIS OF CALCIUM CARBONATE USING CO2 BUBBLING METHOD FOR BIOMEDICAL APPLICATION
N.H. Azzakiroh[1] , Z. Hasratiningsih[2], I.M. Joni[3], A.Cahyanto[2]
1-6

COMPARISON OF THE DIAMETRAL TENSILE STRENGTH OF BONE CEMENT BASED ON CARBONATE APATITE BETWEEN MICRON AND NANO PARTICLES CALCIUM CARBONATE AS A PRECURSOR
L. Arianti[1] , E. Karlina[2], A. Cahyanto[2]
7-11

APATITE CEMENT VERSUS CARBONATE APATITE CEMENT
A. Cahyanto[1], M.N. Zakaria[2]
12-16

BIOCERAMICS MATERIAL: LIFTING HOPE IN ENDODONTICS 26
M. N. Zakaria[1], A. Cahyanto[2]
17-23

REVIEW ON BIOCERAMIC NANOFIBER USING ELECTROSPINNING METHOD FOR DENTAL APPLICATION
N. Djustiana*, Y. Faza, A. Cahyanto
24-31

MICROLEAKAGE IN COMPOSITE RESTORATION DUE TO THE APPLICATION OF CARBAMIDE PEROXIDE BLEACHING MATERIAL WITH A CONCENTRATION OF 10%, 15% AND 20%
Renny Febrida[1], Elin Karlina[1], Oksania Wahyuni Putri[2]
32-37

RECONSTRUCTION PROCEDURE USING ELASTOMER PUTTY MATERIALS, WHAT TYPE TO CHOOSE?
V. Takarini1, E. Karlina[1], R. Febrida[1], Z. Hasratiningsih[1]
38-44

Digital Repository Universitas Jember

CORONALLY ADVANCED FLAP FOR THE TREATMENT OF A SINGLE RECESSION: A TWO-YEAR FOLLOW UP 327 280-285
P Metta, I Komara 327

CORRELATION BETWEEN PATIENTS WITH PARTIAL TOOTH LOSS CHARACTERISTICS AND PATIENTS' MOTIVATION TO USE DENTURES AT RSGM OF JEMBER UNIVERSITY 332 286-290
Dewi Kristiana1, R Rahardyan Parnaadji1, Asti Widaryati2 332

DESCRIPTION OF THE MAXILLARY RESIDUAL RIDGE MORPHOLOGY BASED ON CLASSIFICATION FOR COMPLETE EDENTULISM 340 291-296
M. Andreas1, R. Rikmasari2, A. Adenan2 340

ONE PIECE DENTAL IMPLANTS TREATMENT FOR NARROW EDENTULOUS SPACE REHABILITATION 352 297-305
F.Mardiyantoro1, Y.Sidarta2 352

The Radiograph Fourth Molars Mandibular Impaction 361 306-313
Hadiyat Miko1, Ernawati2, Emma Kamelia3*, Yayah Sopianah4 , Fahmi Oscandar5 361

Description of Mandible Density in Patients with Type 2 Diabetes Mellitus using Panoramic Radiograph 368 314-320
1L Epsilawati, 2H. Polli, 2DD Dian S 3 M..S. Haris 368

COMPATIBILITY MANDIBLE GONIAL ANGLE MEASUREMENT ON DIGITAL LATERAL CEPHALOMETRIC AND PANORAMIC RADIOGRAPHS 377 321-329
R.J. Harahap1, B. Sam 2, F. Pramanik2 377

DESCRIPTION THE FORM OF HEAD CONDYLE IN TEMPOROMANDIBULAR JOINT BASED ON GENDER AND AGE ON PANORAMIC RADIOGRAPH 389 330-339
S.A Sistia*, B. Sam**, F. Pramanik** 389

Description of Microstructure in Trabecular Jaw Quality for Patient with Smoking Habits Using Panoramic Radiograph 403 340-350
1Jing L, 2Epsilawati L, 2Azhari 403

Digital Repository Universitas Jember

Correlation Between Patients With Partial Tooth Loss Characteristics Andpatients' Motivation To Use Dentures At Rsgm Of Jember University

Dewi Kristiana[1], **R Rahardyan Parnaadji**[1], **Asti Widaryati**[2]

*Departement of Prosthodontics Dentistry Faculty of Jember University
**Students of Dentistry Faculty of Jember University
dewikrristiana_drg@yahoo.co.id

ABSTRACT

Objective: The impact of losing teeth can disturb the intake of nutrition because of the decreasing of the mastication, dysfunction of phonetic functions so we can't spell some alphabet and uncomfortable feeling. Many people think that losing teeth is not a big problem that can run your life so the small percentage of the usage of denture. Patients' characteristics, socio-demography knowledge and level can affect someone's motivation to take a decision to get a prosthetic care. The characteristics of the patients that take treatment from RSGM Universitas Jember are about gender (male/female), age and education level. **Objective**:The purpose of this study is to know the correlation between patients' with partial tooth loss characters and patients' motivation to use denture at RSGM of Jember University. **Materials and methods**: An observational analytical research with cross sectional approach. All patients who attended the oral diagnostic department at RSGM of Jember University on January-Maret 2016 were chosen as samples with total number of 106 patients. The study used intraoral examination and questionnaires. The data were analyzed using Chi-Squareand Rank Spearman test. **Results and Discussion:**The result of statistical analysis is there are correlation between patients' characteristics (education) with the motivation to use denture $p<0,05$, but there's no correlation between gender, age of the patients with their motivation to use denture ($p>0,05$)).

Keywords: Motivation, patients' characteristics, to use dentures

INTRODUCTION

Teeth are the main functional component of the oral cavity. Teeth provide variety of function includes mastication, speech and esthetics. Absence of teeth in the oral cavity resulting in difficulty in chewing food, alteration of speech and poor esthetics, greatly affect the quality-of-life.[1,2]The other effects are psychological and emotional impact that relate with someone's appearance. Someone that loose his teeth will keep of from social activities

Digital Repository Universitas Jember

because of he is unconfident, this can reduce his productivity at work and also his life quality. Therefore, there is interaction among edentualism, physical condition, social, and mental of somebody.[3]Edentulism can lead directly to impairment, functional limitation, physical, psychological, and social disability, and handicap .[4]

Periodontal, caries disease and trauma may cause the edentualism. Tooth loss is a general indicator of the severity of oral diseases experienced by an individual or a population, as tooth loss may be the result of caries, periodontal disease and trauma. Tooth loss also reflects the non-disease related aspects of the dental delivery system including attitudes, belief, behavior, treatment cost, access to and utilization of dental services, limitation of dental services and variation among treatment options.[5]Tooth loss also has relation with age and education level. The increasing of age often get related to the increasing number of the teeth that loose.[6]Tooth loss also related with the education level. With high education level, someone will periodically get dental care.[7]

In Indonesia, the mean ofDMF-T tend to be increasing. In 1970 DMF-T = 0,70, in 1980 DMF-T = 2,30 and in 1990 DMF-T = 2,70, SKRT 2001 DMF-T = 5,30. The result of Riset Kesehatan Dasar (RISKESDAS) 2013 that the amount ofDMF-T on ≥12 aged category in Indonesia is 4,6with each amount of D-T=1,6 M-T=2,9 F-T=0,08. M-T= 2,9shows thatthe amount of tooth loss reach 290 teeth every 100 people.[8]RISKESDAS 2007 said that the utilization of dental care services for teeth extraction reach 79,6% and the utilization of denture only reach.[9]This shows that the low motivation of Indonesian, especially in Jember, to change their teeth that lost with denture. Moreover, there are lot of people that think that tooth loose is not a big problem that can affect their life, it causes the low percentage of denture used. Furthermore, social-demographic factors, knowledge, and economy also affect the motivation of someone to takes decision to get prosthetic care. The clinical situation as the region and the amount of tooth that loosedisturbs the mastication, phonetics, and also the aesthetic. The disruption also affect someone's motivation to get prosthetic care.[10]Motivation is a set or a group of behaviors that give base of someone to act in way to a specific purpose.Motivation shows up in two ways, there are extrinsic motivation that comes from other people influence, and intrinsic motivation that comes from our selves.[11]. Someone's decision that lost his tooth to wear denture can be affected of motivational factors.

From that INTRODUCTION, writers want to know correlation between the patients' characteristics (gender, age, education) with partial edentolous ridgesand their motivation to use denture at RSGM, University of Jember.

MATERIALS AND METHODS

This research is analytical observation that use cross sectional approach. The subject of this research was determined by purposive sampling of the taking sample method. The amounts of sample are 106 patients from RSGM University of Jember with oral diagnose, on January until March 2016, with partial edentulous and the tooth root that left has indication of extraction on maxilla or mandible, gents or ladies, and state the agreement to take part of

Digital Repository Universitas Jember

this research and agree the inform consent. This research is done by the intra oral check and the questionnaire about motivation fulfilled. The patients' characteristics are about gender, age and education. Patients' motivation is patients' booster factor who lose their teeth to use denture.Their motivation divided into intrinsic and extrinsic motivation. Questions about intrinsic motivation consist of knowledge level and attitude of patients to use dentures, while the questions extrinsic motivation consist of economy, social class, and family support. Motivation divided into three classes, there are low motivated with 1-5 as the score, average motivated with 6-10 as the score, and high motivated with 11-15 as the score.This data will be analyzed with non-parametric statistic test with*Chi-Square Test* and*Rank Spearman*.

RESULT

This research is held in Oral Diagnose section at RSGM University of Jember, subjects of this research are new patients that get checked on Oral Diagnose section with*partial edountulus ridge* on January-March 2016 with the amount of subjects were 106 people.The result is right down below

Tabel 1. Subjects distribution based on gender

Gender	Frequency	Percent
Laki laki	55	51.9
Perempuan	51	48.1
Total	106	100.0

Tabel 2 .Subjects distribution based on age

Age	Frequency	Percent
15-24	32	30.6
25-34	11	10.4
35-44	21	19.8
45-54	31	29.2
55-64	11	10.4
Total	106	100.0

Tabel 3 . Subjects distribution based on education.

Education	Frequency	Percent
SD	27	25.5
SMP	11	10.4
SMA	48	45.3
Sarjana	20	18.9
Total	106	100.0

Digital Repository Universitas Jember

Motivation Description Use of Denture

Patient's motivation with partial missing teeth (partial edentolous ridge) to use denture to be measured using a questionnaire stating right or wrong in a sentence. In this study, the motivation was measured using a questionnaire with questions about the intrinsic motivation that statement the level of knowledge and attitude of patients to use dentures and extrinsic motivation namely from economic factors, social class, and environment push to use denture.

Table 4. Patientmotivate distribution to use denture based on gender

Gender	Motivationcategory Low		Moderate		High		Total		p value
	Count	%	Count	%	Count	%	Count	%	
Man	15	14.2%	15	14.2%	25	23.6%	55	51.9%	.673
Woman	15	14.2%	17	16.0%	19	17.9%	51	48.1%	

Table 5. Patient motivate distribution to use denture based on education.

Education	Motivation category Low		Moderate		High		Total		p value
	Count	%	Count	%	Count	%	Count	%	
SD	12	11.3%	11	10.4%	4	3.8%	27	25.5%	
SMP	3	2.8%	3	2.8%	5	4.7%	11	10.4%	.001
SMA	11	10.4%	17	16.0%	20	18.9%	48	45.3%	
Bachelor	4	3.8%	1	.9%	15	14.2%	20	18.9%	

Table 6. Patientmotivate distribution to use denture based on age.

Age	Motivationcategory Low		Moderate		High		Total		p value
	Count	%	Count	%	Count	%	Count	%	
15-24	10	9.4%	13	12.3%	9	8.5%	32	30.2%	
25-34	3	2.8%	4	3.8%	4	3.8%	11	10.4%	.304
35-44	4	3.8%	7	6.6%	10	9.4%	21	19.8%	
45-54	9	8.5%	5	4.7%	17	16.0%	31	29.2%%	
55-64	4	3.8%	3	2.8%	4	3.8%	11	10.4%	

The gender table shows the distribution of low motivation to use dentures are 15 people that equal between man and woman (14.2%), while main motivation to use denture was the highest (25 people /23.6%).The education table shows that the secondary school education had the lowest motivation to use denture (3 people/2.8%), While the senior high school education motivation using denture was the highest (20 people /18.9%).

The age table shows that the 25-34 age had the lowest motivation to use denture (3 people/2.8%), while the 45-54age motivation using denture was the highest (17people/16.0%).

Analysis of the patients characteristic (gender) with partial tooth loss with motivation using a denture tested using Chi-Squaretestwith the result of p = .673(p>0,05). This did not show a significant correlation with patients' motivation to wear.Analysis of the patients characteristic (age) with partial edentolous ridge with motivation using a denture using Rank Spearman with the result of p = .304(p>0,05). This did not show a significant correlation with patients' motivation to use denture. Analysis of the patients characteristic (education) with partial tooth loss with motivation using a denture using Rank Spearman with the result of p = 0,001 (p<0,05). This show a significant correlation with patients' motivation to wear..

Digital Repository Universitas Jember

DISCUSSION

According to Haggard in Bastable motivation was a psychological boost that drives someone to the various actions.[12] Someone would take action if he/she wanted to achieve his/her goals or needs. Motivation was a force that encourages a person to behave and active to achieve goals.[13]Patientscharacteristicswas a feature that's on the patient and owned by every patient that's different from other patients.

Data from patients with partial missing teeth were 106 people who check their teeth at the Oral Diagnosis in the RSGM Universitas Jember shows that the man had more motivation using denture than women (25 people/23.6%). The statistic test results shows there's no significant correlation between gender and motivation from using denture. The number of male patients with partial tooth loss was 55 people from 106 resoponden. Lukacs, 2006 stated that the percentage of tooth loss is more common in women than men. [14]The percentage of tooth loss was higher in women because women experienced a period of puberty, menstruation, and pregnancy resulted hormonal fluctuations, this resulted in the decreased salivary flow caused more cariogenic oral conditions. High caries incidence also increases the risk of tooth loss. Females in this study had higher number of tooth loss and earlier tooth loss compared to males.[15] This shows that the percentage of tooth loss is more common in women than men, but in this study males had higher motivation to make dentures, however the analysis results of the relationship between gender and patients motivation using a denture with a statistical test Chi-Square tests had value of 0,521 which means greater than value of $p>.05$. This showed no relationship between gender and patients' motivation using denture. The need of denture is influenced by several factors such as health status, gender, social structure, the capability, the individual perception of the price of making the denture, the distance from home to the place of service and patient attitude towards the denture care.[16]

The patient motivate distribution based on education to use denture, undergraduate education had a high motivation to use denture (20 people/18.9%). On the analysis results of the relationship between education level and patients motivation using a denture with a statistical test of Rank Sepearman correlation with the result of $p= 0.00$ 1 which means smaller than the value of α ($p< 0.05$) showed a correlation between education level and patients motivation using dentures. Highly-educated respondents are more obedient to undergo treatment than less educated respondents.[17]it's due to the highly educated respondents had higher knowledge of how to maintain their dental health than low-educated. A person's education level affects the health level of knowledge. The level of denture function knowledge will affect a person's attitude to use denture after the extraction.[18] This attitude affects the motivation of the patient to determine the decision to use dentures. According to Muneeb, the lack of awareness due to poor educational level leads to poor level of motivation therefore resulting in bad oral hygiene and multiple saddle areas. The majority of our study population belonged to the primary education status, and most subjects in this group required more complete dentures. This is also the case for subjects with no education

Digital Repository Universitas Jember

or with secondary educational status. Subjects with higher educational status (university) needed more of partial dentures. Our study showed that the need for complete dentures decreased with increasing level of education ($p < 0.05$), hence the likelihood of retaining teeth in the mouth becomes higher as the educational level increases. This might be due to the fact that those with higher level of education are more informed about their health needs and may seek dental treatmentsearlier and more often than those of lower educational status who may only seek dental treatment when there is apparent morbidity.[19]

Patients motivate distribution to use dentures by age, 45-54 years of age had the highest motivation to use denture (17 people/16.2%). On the analysis results of the relationship between age and patients motivation to use dentures with statistical Rank Spearman had significance value of 0.46 which means greater than the value of α ($p>0.05$) showed there is no relationship between age and patients motivation to use denture. In the range age 45-54 years old had higher motivation to use denture that possible because young age are more concerned in masticatory function or aesthetic function. According to World Health Organization, adult should have a minimum of 21 functional teeth to provide good dietary intake.[20]According to Dwairitthe older age groups required more of removable complete dentures than the younger age groups who needed more of removable partial dentures.[19]Tooth loss is a major clinical dental problem and it is considered an inevitable outcome of old age. It has been documented in the literature that age and missing teeth show a direct relationship.[21,22]

CONCLUSION

From the results of research conducted at the Hospital Dental Jember University from January to March 2016, it can be concluded that there's no correlation between characteristics gender and age with patient motivation to use denture and there's a correlation between education level and patients motivation to use denture.