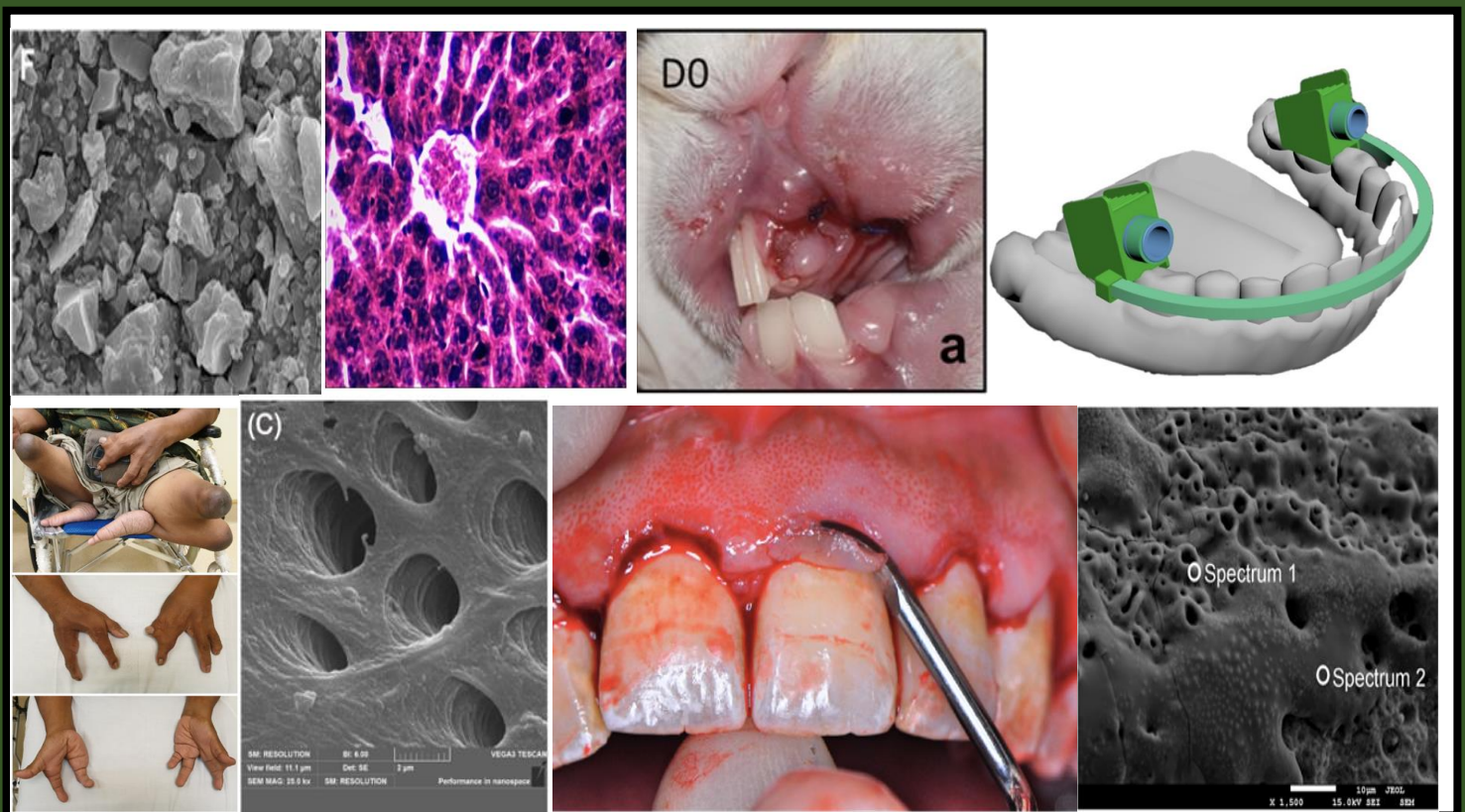


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DENTISTRY

EXPERIMENTAL ARTICLE

- 1. The Status of Local Immunity and Biocenosis of the Oral Cavity After the Removal of Wisdom Teeth Against the Background of Phage Therapy**
Evgeniy V. Fomichev, Sergej V. Poroykiy, Yuliya A. Makedonova, Anatoliy T. Yakovlev, Nadezhda A. Oleinik, Elena N. Yarygina
Pages 875-879
- 2. A Comparison of Victim Identification Effectiveness between Digital and Analogue Dental Antemortem Data as Humanitarian Operation**
Sugeng Winarno, Suhardjo Sitam, Yoni Fuadah Sukri, Bambang Hidayat, Amaliya Amaliya
Pages 880-886

EXPERIMENTAL ARTICLE

- 3. Establishment and Characterization of Rabbit Model for Alveolar Bone Regeneration**
Thuy-Duong Thi Nguyen, My-Huong Le, Tan-Tai Tran, Tae-Sung Bae, Tung Nguyen-Thanh
Pages 887-895

EXPERIMENTAL ARTICLE

- 4. The Effect of Curing Mode in Universal Adhesive on Zirconia and Resin Cement Shear Bond Strength**
Awiruth Klaisiri, Nantawan Krajangta, Panupat Phumpatrakom, Tool Sriamporn, Niyom Thamrongananskul
Pages 896-900

EXPERIMENTAL ARTICLE

- 5. Comparative Evaluation of the Remaining Dentin Thickness Using Different Root Canal Retreatment Techniques: A Cone-Beam Computed Tomography Study**
Priyatharshini Subramanian, Maan Ibrahim Khalil Al-Marzok, Devarasa G Murugesappa, Kranthi R Kacharaju, Nur Sulwana Mohamad Hanapi, Phrabhakaran Nambiar
Pages 901-909

EXPERIMENTAL ARTICLE

- 6. Study of the Structure of the Implant Surface and the Effectiveness of Various Methods of Implant Treatment with Peri-Implantitis**
Furtsev T.V., Zeer G.M.3, Zelenkova E.G.
Pages 910-918

EXPERIMENTAL ARTICLE

- 7. Bio-Modification of Demineralized Dentin Collagen by Proanthocyanidins-enrich Cranberry: An In-Vitro Study**
Md Sofiqul Islam, Smriti Aryal A C, Mohannad Nassar, Junji TAGAMI
Pages 919-924

EXPERIMENTAL ARTICLE

- 8. Mung Bean Flour Increases Blood Folate Levels in Pregnant Mice Model of Cleft Lip and Palate**
Ruby Riana A, David S. Perdanakusuma, Retno Handajani
Pages 925-928

EXPERIMENTAL ARTICLE

- 9. Assessment of Calcium Hydroxide Pastes to Maintain Alkalinity in Combination with Different Vehicles**
Alvin Saju, Payalben Kansara, Arjun Kini, Raksha Bhat, Preethesh Shetty, Prajwal Shetty, Shehin Abootty, Anush Bekal. B.E, Bapanaiah Penugonda
Pages 929-932

EXPERIMENTAL ARTICLE

- 10. Evaluation the Efficacy of Er:YAG Laser in Removing the Smear Layer During Endodontic Treatment**
Svetlana Razumova, Anzhela Brago, Yuliya Kozlova, Haydar Barakat, Ammar Howijieh
Pages 933-937

TABLE OF CONTENTS / 2021; 14 (3)

- EXPERIMENTAL ARTICLE
- 11. Effect of Different Cleansing Agents on the Shear Bond Strength Between Resin Composite and Lithium Disilicate Ceramic after Contamination with a Hemostatic Agent**
Sirichan Chiaraputt, Tool Sriamporn, Sirirat Manopinives
Pages 938-943
- EXPERIMENTAL ARTICLE
- 12. Toxicity Test of Toman Fish (Channa Micropeltes) against Cultured Baby Hamster Kidney-21 Fibroblasts**
Amy Nindia Carabelly, Hanna Sari, Maharani Laillyza Apriasari, Shahida Mohd Said, Zaleha Shafiei, Rosihan Adhani
Pages 944-948
- EXPERIMENTAL ARTICLE
- 13. Bactericidal Effectiveness of 810 Nm Wavelength Diode Laser: An In-Vitro Study**
Thuy Thu Nguyen
Pages 949-953
- EXPERIMENTAL ARTICLE
- 14. Increase of CD 34 in Bone Defect Healing Lesions of Periodontitis by Capsaicin Administration**
Fery Setiawan, Ahmad Yudianto, Dian Agustin Wahjuningrum, Jenny Sunariani
Pages 954-958
- EXPERIMENTAL ARTICLE
- 15. The Effect of Ferrule Designs on the Fracture Resistance of Endodontically Treated Premolars**
Eshamsul Sulaiman, Afaf Al-Haddad, Nada Alarami
Pages 959-964
- EXPERIMENTAL ARTICLE
- 16. Comparative Study of Calretinin Expression in Dentigerous Cyst, Odontogenic Keratocyst, and Unicystic Ameloblastoma**
Hendro A. Sunjaya, William R. Fatah, Nur Rahadiani, Evy E. Vitria
Pages 965-969
- EXPERIMENTAL ARTICLE
- 17. Accuracy of LCD Printed Hollow Models with Differences in Thickness and the Presence of Grid**
Natthitikarn Chanyawatana, Attavit Pisitanusorn, Pattarika Angkasith
Pages 970-976
- EXPERIMENTAL ARTICLE
- 18. Effect of Zinc Supplementation on Salivary MMP-8 Level in Male Wistar Rats with Experimental Periodontitis for a Better Dental Care**
Nila Kasuma, Tofrizal, Haria Fitri, Fildzah Nurul Fajrin, Gian Ernesto, Dinda Ratna Juwita, Tasha Octaricha
Pages 977-981
- EXPERIMENTAL ARTICLE
- 19. Effect of Coating Agents on Surface Microhardness of Highly Viscous Glass Ionomer Cement/Resin Coatings for Atraumatic Restorative Treatment after an Acid Challenge**
Burachattra Ruangdit, Samerchit Pithpornchaiyakul, Boonlert Kukiattrakoon
Pages 982-987
- EXPERIMENTAL ARTICLE
- 20. Effects of Complex Phytoadaptogens in the Treatment of Experimental Periodontitis Associated with Chronic Stress**
Dzampaeva Zh.V., Khadartsev A.A.2
Pages 988-995

TABLE OF CONTENTS / 2021; 14 (3)

- EXPERIMENTAL ARTICLE
- 21. Corrosion Resistance of Titanium Alloy Orthodontic Mini-implants Immersed in Chlorhexidine, Fluoride, and Chitosan Mouthwashes: an in-vitro Study**
Adisty Setyari Putri, Haru Setyo Anggani, Nia Ayu Ismaniati
Pages 996-1002
- EXPERIMENTAL ARTICLE
- 22. Comparison of the Micro-Gap of Original and Non-Original Abutment Platforms in Conical Connections**
Furtsev T.V., Zeer G.M., Zelenkova E.G.
Pages 1003-1007
- EXPERIMENTAL ARTICLE
- 23. The Effect of Uv-B Exposure and Vitamin K2 on the Bone Formation in Covid-19 Pandemic Era**
Sindy Cornelia Nelwan, Udijanto Tedjosongko, Satiti Kuntari, Haryono Utomo, Tania Saskianti, Mega M Putri, Devi Dharmawan, Yufita Fitriani, Pradita Agung Kurnia, Amalia Ramadhani Mufida, Nadhia Zahria
Pages 1008-1013
- CLINICAL ARTICLE
- 24. The Ph Salivary Biomarker – is There a Difference Between Cleft and Non-Cleft Orthodontic Patients?**
Helena Reis de Souza Schacher, Mariana Lemos Rinaldi, Fabiane Azeredo, Susana Maria Deon Rizzato, Maria Bernadete Sasso Stuani, Luciane Macedo de Menezes
Pages 1014-1020
- CLINICAL ARTICLE
- 25. Assessment of Alveolar Bone Resorption and an Analysis of Occlusion for Implant Prosthetic Restorations in The Mandibular Molar Toothless Region**
Bilge Ergünbaş, Mustafa Zortuk, Ayşegül Sarı, Hasan Alpay Çelik
Pages 1021-1025
- CLINICAL ARTICLE
- 26. The Outcomes of Root Canal Treatment Undertaken by Dental Students in Kulliyah of Dentistry, IIUM: Periapical Health**
Muhamad Sharifuddin Mat Daud, Mohamad Shafiq Mohd Ibrahim, Musliana Mustaffa
Pages 1026-1031
- CLINICAL ARTICLE
- 27. Comparative Analysis of the Effectiveness of Standard Treatments and Piezosurgery in Dentistry**
Oxana Bogaevskaya, PhD, Ara Karapetyan, PhD, Alexei Yumashev
Pages 1032-1038
- CLINICAL ARTICLE
- 28. Relationship between Oral Health Status and Stunting in 5-Year-Old Children in Indonesia**
Iwany Amalliah Badruddin, Khairissa Muthia, Risqa Rina Darwita, Febriana Setiawati, Melissa Adiatman, Diah Ayu Maharani, Anton Rahardjo
Pages 1039-1043
- CLINICAL ARTICLE
- 29. Biopsied Facial Dermatologic lesions in a Jordanian Population a Retrospective Analysis over 10 Years**
Taiseer Hussain Al-Khateeb
Pages 1044-1051
- CLINICAL ARTICLE
- 30. Questionnaire Study among Doctors of Dental Medicine on the Applications of Telescopic Crowns**
Magdalena Urumova, Yavor Kalachev, Svetlin Alexandrov, Elena Vasileva
Pages 1052-1056

TABLE OF CONTENTS / 2021; 14 (3)

CLINICAL ARTICLE

- 31. The Relationship between Tooth Loss and Gingival Status with Oral Hygiene in Postmenopausal Women**

Pitu Wulandari, Lindawati S Kusdhany, Sri Lelyati C Masulili, Susi R Puspitadewi, Ali Baziad
Pages 1057-1063

CLINICAL ARTICLE

- 32. Clinical, Technical, and Esthetic Performance of Different Ceramic Materials Crown on Posterior Single Implant-Supported Restorations: Prospective Clinical Study 3 Years**

Raafat Tammam, Samar Hatem Abuzinadah, Abdulrahman Jafar Alhaddad, Ahmed Mortada
Pages 1064-1072

CLINICAL ARTICLE

- 33. Comparison of Image Negatives and Brightness Enhancement for Temporomandibular Joint Visualisation in Lateral Cephalometric Digital Radiography**

Nateetip Hanmongkhonsin, Sirilawan Tohnak, Weeraya Tantanapornkul, Sodsi Wirojchanasak, Peraya Puapichartdumrong, Thosapol Piyapattamin
Pages 1073-1078

CLINICAL ARTICLE

- 34. Analysis of the Position and Density of Condyle Head, Gonial Angle, and Ramus Height in Terms of Panoramic Radiographs**

Novi Kurniati, Ria N Firman, Farina Pramanik, Willyanti Soewondo, Inne S.S
Pages 1079-1086

CLINICAL ARTICLE

- 35. An Image-Based Assessment of Parents' Knowledge of their Children's Oral Health: A Cross-Sectional Study**

Hala Alshalawi, Heba Abduljabbar, Lamia Alanezi, Leena Alhussain, Mona Alsaykhan, Lubna Alkadi, Fathima Fazrina Farook
Pages 1087-1092

CLINICAL ARTICLE

- 36. Orthodontic Postgraduates Satisfactions and Expectations: A Qualitative Study**

Alizae Marny Fadzlin Syed Mohamed, Balqis Zulkiflie, Tanti Irawati Rosli
Pages 1093-1099

CLINICAL ARTICLE

- 37. Molar Incisor Hypomineralization Prevalence in Arab Children in UAE and its Association with Risk Factors- A Cross Sectional Study**

Vivek Padmanabhan, Mustahsen Rehman, Rayan Osama, Roba Anas
Pages 1100-1106

CLINICAL ARTICLE

- 38. The Relationship between Salivary IgA and White Oral Lesion in Bedridden Patients**

Basma Ezzat Mustafa Al-Ahma, Nazih Shaban Mustafa, Muhanad Ali Hamdon Kashmola, Salwana Binti Supa'At, Wan Noor Nazayan Bt. Wan Nik, Omar Abdul Jabbar Abdul Qader, Yunita Dewi Ardini, Mohamad Shafiq Bin Mohd Ibrahim, Muhammad Hazim Mohd Jefri, Amarul Firdaus Alias
Pages 1107-1111

CLINICAL ARTICLE

- 39. Attitudes of Dental Students in Indonesia About Infection Control During the COVID-19 Pandemic**

Ade Apriedi Syaputra, Normaliza Ab Malik, Anton Rahardjo, Diah Ayu Maharani
Pages 1112-1115

TABLE OF CONTENTS / 2021; 14 (3)

CLINICAL ARTICLE

- 40. The presence of Accessory maxillary ostium: A Cone-Beam Computed Tomography Study in Malaysians**

Sanual S. Peter, Phrabhakaran Nambiar, Subramaniam Krishnan, Nisreen Mohammed AL-Namnam
Pages 1116-1120

CLINICAL ARTICLE

- 41. IGF-1 Rs5742632 Snps in Mandibular Asymmetry Adult Patients at Dental Hospital Universitas Sumatera Utara**

Muslim Yusuf, Ervina Sofyanti, Ananda Permata Sari, Trelia Boel, Syafruddin Ilyas, Erliera
Pages 1121-1126

CASE REPORT

- 42. Graftless Soft Tissue Augmentation with Volumetric-Stable Collagen Matrix: Case Series and Early Results**

Anzhela Adzhieva, Zurab Khabadze, Andrei Zoryan, Inna Bagdasarova, Khadizhat Omarova, Samvel Verdiyan, Hakob Nalchajyan, Oleg Mordanov, Ekaterina Shilyaeva, Daria Nazarova, Alexandra Kotelnikova
Pages 1127-1131

CASE REPORT

- 43. E-Max Restoration on an Endodontically Treated Maxillary Lateral Incisor Using an Intra-Oral Digital Scanner**

Irmaleny, Dian Agustin Wahjuningrum, Elvi Sahara3, Setyabudi
Pages 1132-1137

CASE REPORT

- 44. Esthetic Management of Gummy Smile with Maxillary Bone Protuberance and Altered Passive Eruption of Teeth**

Nuzul Izwan Omar, Nurulhuda Mohd
Pages 1138-1143

CASE REPORT

- 45. A Rare Clinical Manifestation of Pemphigus Vulgaris in Elderly Patient: A Case Report and Brief Review**

Fika Faradillah Drakel, Irna Sufiawati
Pages 1144-1148

CASE REPORT

- 46. Familial Ectrodactyly: a Rare Report Of Lobster-Claw in a Malay Family**

Nur Ayuni K.A, Imma Isniza I, Rahul L, Naadira Faa'iza, Nur Syahirah A
Pages 1149-1153

REVIEW

- 47. Pneumosimulator-Mouth Expander Usage in Patients with Spastic Cerebral Palsy**

Yuliya A. Makedonova, Alexander A. Vorobev, Oksana N. Kurkina, Anna N. Osyko, Denis Yu. Dyuchenko, Alexander V. Alexandrov, Anastasiya G. Pavlova-Adamovich
Pages 1154-1159

REVIEW

- 48. Diagnostic Indices for Temporomandibular Disorders (TMD): A Systematic Review**

Melati Fitria Putri, Lindawati S Kusdhany, Ira Tanti
Pages 1160-1168

REVIEW

- 49. The Expanded Role of Dentists in the COVID-19 Pandemic Worldwide**

Van Viet Dam, The Hanh Nguyen, Hans Erling, Manoj Humagain, Sonika Khanal, Natthamet Wongsirichaichat, Trinh Dinh Hai
Pages 1169-1176

REVIEW

- 50. Buccal Corridor as Component of Mini Aesthetic on Caucasoid, Mongoloid, and Negroid Race**
Alfri Yuslizar Anhar, Ari Triwardhani, Alida
Pages 1177-1184

MEDICINE

EXPERIMENTAL ARTICLE

- 51. A Study on Hepatoprotective Role of Virgin Coconut Oil on Liver Toxicity Induced by Cadmium Chloride in Rats**
Sanjana Basavanahally Lokesha, Rekha D kini, Nayanathara Arun Kumar, Rashmi KS, Vinodhini NA
Pages 1185-1189

EXPERIMENTAL ARTICLE

- 52. Anti-Prolactin and Antigrowth Hormone Effects on Oxidative Stress and Physiological Parameters in MNU Induced Mammary Tumor in Sprague Dawley Rat**
Maninder Kour, Kumar M bhat, Vinodini NA, Saraswathy Sreeram, Durga rao
Pages 1190-1195

EXPERIMENTAL ARTICLE

- 53. Mesenchymal Stem Cells Transplantation in Endometriosis Model Mice on VEGF mRNA Expression to Improve Infertility**
S. R. Dwiningsih, H. Hendarto, F. A. Rantam, E. G. Dachlan, I. W. A. Wiyasa, Widjiati
Pages 1196-1201

CLINICAL ARTICLE

- 54. Features of the Restoration of Arterial Circulation in Liver Transplantation**
Khubutia M.SH., Gulyaev V.A., Novruzbeikov M.S., Olisov O.D., Lutsyk K.N., Zhuravel A.V., Lemenev B.L., Magomedov K.M., Mironov A.S., Yaremin B. I., Dydykin S.S., Vasil'ev Yu.L., Kapitonova M., Gupalo S.
Pages 1202-1209

CLINICAL ARTICLE

- 55. Acute Effects of Dynamic Stretching and Self Mobilization Exercises on Balance and Proprioception**
Mahmut Berat Akdag, Feyza Sule Badilli, Zeki Akkus
Pages 1210-1218

CLINICAL ARTICLE

- 56. Analysis of Factors in Emotional Disorders of Patients with Confirmed Positive Covid-19 while Undergoing Isolation in a Quarantine Home**
Arief Andriyanto, Enny Virda Yuniarti, Eka Nur So'emah, Emyk Windartik, Ima Rahmawati
Pages 1219-1223

CLINICAL ARTICLE

- 57. Mental Disorders Caregiver Burden and Stress during Covid-19 Pandemic**
Rindayati Rindayati, Ah Yusuf, Nisa K. Illahiati
Pages 1224-1229

CLINICAL ARTICLE

- 58. Menstrual Hygiene Management of Junior High School Students in Rural Areas of Indonesia (Study in Tinambung Sub-District, Poliweli Mandar, West Sulawesi)**
Ella Nurlaella Hadi, Ulfa Diya Atiqa
Pages 1230-1235

CLINICAL ARTICLE

- 59. Determinants of Health Cadre Capabilities in Early Detection of Mental Disorders for Better Outcomes: Community Mental Health Nursing (CMHN) Approach**
Arifal Aris, Ah. Yusuf, Rizki Fitriyarsi, Siti Solikhah, Suhariyati, Abdul Rokhman, Virgianti Nur Faridah
Pages 1236-1239

- CLINICAL ARTICLE
- 60. The Effect of Health Education on Knowledge, Attitudes, and Actions in Prevention of Leukorrhea in Adolescent Girls**
Iswatun Iswatun, Kusnanto Kusnanto, Abd Nasir, Lailatul Fadliyah, Endah Sri Wijayanti, Joko Susanto, Amellia Mardhika, Arifal Aris, Ni wayan Suniyadewi
Pages 1240-1245
- CLINICAL ARTICLE
- 61. Oxidative Stress in the Elderly with Hypertension: A Cross-Sectional Study**
Novi Silvia Hardiany, Annisa Nurul Kirana, Erfi Prafiantini
Pages 1246-1250
- CLINICAL ARTICLE
- 62. Culture-Based Situational Leadership Model in Improving the Organization Nurse Performance**
Heryyanoor Heryyanoor, Nursalam Nursalam, Abdul Aziz Alimul Hidayat, Taufik Hidayat, Raziansyah Raziansyah, Zubaidah Zubaidah, Iis Pusparina
Pages 1251-1259
- CLINICAL ARTICLE
- 63. The Outcomes of Root Canal Treatment Undertaken by Dental Students in Kulliyah of Dentistry, IIUM: Tooth Survival**
Musliana Mustaffa, Muhamad Sharifuddin Mat Daud, Mohamad Shafiq Mohd Ibrahim
Pages 1260-1264
- CLINICAL ARTICLE
- 64. Possibilities for Recovery of Blood Outflow During Thrombosis of the Liver's Own Hepatic Veins in the Early Periods after Transplantation**
Khubutia M.Sh., Novruzbekov M.S., Dydykin S.S., Gulyaev V.A., Lemenev V.L., Olisov O.D., Lutsyk K.N., Vasil'ev Yu.L., Kapitonova M.3, Gupalo S.
Pages 1265-1270
- CLINICAL ARTICLE
- 65. The Activity of Epigallocatechin-3-Gallate (EGCG) Extract Against Weight Loss in Obesity**
Noer Saudah, Catur Prasastia L. D
Pages 1271-1275
- CASE REPORT
- 66. Lennox Gastaut Syndrome with Bilateral Temporo-Parietal Encephalomalacia Cyst in a Child: The First Indonesian Report**
Prastiya Indra Gunawan, Nur Aisiyah Widjaya
Pages 1276-1278
- REVIEW
- 67. Elderly Sleep Quality in Crosscultural Perspective**
Syaifurrahman Hidayat, Kusnanto Kusnanto, Mujib Hannan
Pages 1279-1295
- REVIEW
- 68. Emotional Regulation Intervention for Reducing Distress Psychologist in Breast Cancer Woman: Systematic Review**
Lilik Supriati, I Ketut Sudiana, Hanik Endang Nihayati, Ahsan, Muhammad Rodli
Pages 1296-1301
- REVIEW
- 69. Teaching Methodologies Regarding Palliative Care Competencies on Undergraduate Nursing Students: A Systematic Review**
Ni Luh Putu IB. Agustini, Nursalam Nursalam, Tintin Sukartini, Gst. Kade Adi W. Pranata, Ni W. Suniyadewi, I Dewa A. Rismayanti
Pages 1302-1308

70. Multifactorial Culture-Based Intervention on Improving Self-Management of T2DM Patient: A Systematic Review

I Dewa Ayu Rismayanti, Nursalam Nursalam, Yulis Setiya Dewi, Ida Bagus Wirawan,
Ni Luh Putu Inca Buntari Agustini, Ni Wayan Suniya Dewi

Pages 1309-1313

Determinants of Health Cadre Capabilities in Early Detection of Mental Disorders for Better Outcomes: Community Mental Health Nursing (CMHN) Approach

Arifal Aris¹, Ah. Yusuf^{2*}, Rizki Fitriyarsari³, Siti Solikhah⁴, Suhariyati⁵,
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Abstract

As part of the CMHN, health cadres can be seen as one of the front guards in early detection of mental disorders. However, the ability of health cadres in early detection of mental disorders in CMHN is not widely understood. The purpose of this study is to examine the determinants of the ability of health cadres in early detection of mental disorders using the CMHN approach.

This research was conducted in Lamongan Districts from 2017 to 2018, using correlation design with a cross-sectional approach. The research sample was 140 health cadres (121 female and 19 male). The sampling technique used multistage random sampling. The data were collected using a questionnaire with a Likert scale. Data analysis used chi-square with a 95% confidence level ($\alpha = .05$).

The results showed that the ability of health cadres in early detection of mental disorders was influenced by attitude ($p < .05$), experience ($p < .05$), motivation ($p < .05$), compensation ($p < .05$), and benefits of action ($p < .05$).

Cadres must always develop their abilities in the early detection of mental disorders. Puskesmas are expected to always support health cadres in the implementation of early detection of mental disorders.

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Introduction

Mental health services have experienced a paradigm shift from an institutional care model to care that is carried out in the community. It enables patients to be closer to their community with goals focused on empowerment, engagement and recovery. In addition, community care can help develop more integrated care, reduce hospitalization time and

increase focus on patient needs¹. However, there are obstacles that occur, namely the limited number of mental health workers, which can create a critical problem in providing accessible care for people with mental illness².

Community health workers or so-called cadres are community members who come from the patient's environment who have been trained to provide support³ education^{4,5}, and patient care coordinators⁶. The presence of health cadres can complement health workers who have a high burden and may be the key to increasing the availability and access of basic health services, especially in areas that are difficult to reach, so as to bridge the health equality gap⁵. Health cadres receive mental health training in accordance with their duties and functions⁷. In addition, health cadres also have a role in early detection of people

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experiencing mental health problems. Early detection programs are likely to detect mental health problems from the start⁸. Prediction of risk is associated with high expectations that a shift in the health paradigm toward disease prevention and significant reduction in disease risk can be achieved in the long term⁹⁻¹¹. This is a predictive, preventive and personal treatment effort¹².

Health cadres have a role in health promotion and disease prevention, basic medical treatment, and health data collection⁵. Regarding health promotion and disease prevention, health cadres are involved in activities both within the community and related to the health facilities that shelter them. In the community, health cadres provide services to promote healthy lifestyles and prevent disease¹³⁻¹⁶, and help patients to improve their clinical condition by providing psychosocial support¹⁷⁻¹⁹, and also have a role to play in helping to gather and reporting data through existing mechanisms, as well as providing information on the health status of community members^{20,21}. The CMHN model that uses mental health nursing interventions in the community can be used to increase the skills and work productivity of patients with schizophrenia so that it can be an action to strengthen community skills in patients²³.

Based on the explanation above, the role of health cadres is very vital in implementing CMHN in patients with schizophrenia. So, in this case, there needs to be a study to examine the determinants of the ability of health cadres in early detection of mental disorders using the CMHN approach.

Materials and methods

The research design used was correlational with a cross-sectional approach. This research was conducted in Lamongan Regency, Indonesia in collaboration with 140 (121 female and 19 male) mental health cadres. Participants were involved in this research which was obtained by multistage random sampling. The data were collected in 2017-2018, and statistical analysis was made in 2019. The independent variables in this study were attitude, experience, motivation, compensation, and benefits of action, while the dependent variable in this study is the ability of cadres in

the early detection of mental disorders. Six types of questionnaires must be filled in by participants. The questionnaire demographic data included questions about gender, occupation, and recent education. Surveys for attitude, experience, motivation, compensation, benefits of action, and abilities were assessed using the Likert scale. The data were analyzed using the chi-square test ($\alpha = .05$). This research has received an ethical eligibility letter from the Health Research Ethics Commission Universitas Muhammadiyah Lamongan, with the reference No.053/EC/KEPK-S2/09/2017.

Results

Based on Table 1, most of the participants are women (86.43%), work as housewives (36.43%) and most of them have high school education (60%).

Table 2 shows that most of the participants had positive attitudes about early detection of mental disorders in the community (60.7%). It was also revealed that most of the participants had good experiences (48.6%), good motivation (53.6%), good compensation (68.6%), and felt positive benefits of action (62.1%). Based on the results of the correlation in Table 2, it shows that all independent variables are significantly related to the ability of cadres in early detection of mental disorders in the community ($p < \alpha \leq .05$).

Demographic Data	Categories	F	%
Gender	Male	19	13.57
	Female	121	86.43
Occupation	Teacher	18	12.86
	Farmer	24	17.14
	Self-employed	36	25.71
	Housewife	51	36.43
	Others	11	7.86
Level of education	Elementary	9	6.43
	Junior high	21	15.00
	Senior high	84	60.00
	College	26	18.57

Table 1. Frequency and percentage distribution of respondents' demographic.

Discussion

Health cadres come from various backgrounds and characteristics, but according to several sources most are women²⁴. Most of them have a positive attitude toward early

detection of mental disorders. Attitudes have a significant relationship with the ability of health cadres in early detection of mental disorders. This is in accordance with research that attitudes have a positive and meaningful relationship with the ability of health cadres in early detection²⁵. They mentioned that their work focuses on patients with the goal of preventing mental disorders in the community. If they find a patient with mental disorders, they immediately report it to the puskesmas for treatment.

Variable		Ability				Analysis
		Less		Good		
		F	%	F	%	
Attitude	Positive	62	44.3	23	16.4	.004
	Negative	27	19.3	28	20	
Experience	Good	61	43.6	7	5	.000
	Less	28	20	44	31.4	
Motivation	Good	70	50	5	3.6	.000
	Less	19	13.6	46	32.8	
Compensation	Good	70	50	26	18.6	.001
	Not so fair	19	13.6	25	17.8	
Benefits of action	Positive	64	45.7	23	16.4	.002
	Negative	25	17.9	28	20	

Table 2. The relationship between the cadres' abilities with attitudes, experiences, motivation, compensation, and benefits of action.

* significance of differences $p < .05$

In addition to attitudes, experience is also significantly associated with the ability of the health cadres' role in the early detection of mental disorders. This is in accordance with the research that experience has a positive and significant effect on the ability of health cadres to detect early²⁵. Those who have work experience >5 years have a better understanding of the symptoms of mental disorders so they have better early detection abilities, although half of them still have work experience that is <5 years. This is supported by previous research that health cadres with longer tenure are better able to recognize health problems²⁶.

Motivation has a significant relationship with the ability of health cadres to early detection of mental disorders. Health workers who are motivated can do their job effectively²⁷. The main motivations for health cadres at work are social respect, morals and religious obligations²⁸. This is also experienced by health cadres; they work because they want to help others.

Compensation has a significant relationship with the ability of health cadres to early detection of mental disorders. The compensation given to them is not only in the form of wages, but also rewards. Awards are important in the motivation of health cadres²⁹. Some of them think wages are not the main thing. It may be that obtaining and sharing experiences with community members, building relationships between cadres and the community have a higher value than getting wages³⁰. However, other studies reveal that government funding support and informal funds are one of the factors related to the ability of cadres to solve health problems^{31,32}.

The benefits of action by cadres were significantly related to the ability of health cadres to early detection of mental disorders. This is in accordance with the research that there is a positive perception of the perceived benefits, the influence of increasing the good behavior of cadres in carrying out their duties²⁴. Perceived employability may, in fact, be a strong indicator of perceived productivity³³.

Conclusions

Cadres who have a positive attitude about early detection of mental disorders have >5 years of experience, good motivation, good compensation, and feel positive benefits of action will have better early detection skills for mental disorders CMHN Approach. Cadres must always develop their abilities in the early detection of mental disorders. Puskesmas are expected to always support health cadres in the implementation of early detection of mental disorders. This can be done by always providing education and training, other facilities needed by cadres, and monitoring every activity.

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Declaration of Interest

The authors report no conflicts of interest related to what is discussed in this article.

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