



Indian Journal of Forensic Medicine & Toxicology

Website: www.ijfmt.com



Official Organ of Indian Association of Medico-Legal Experts (Regd.)

Indian Journal of Forensic Medicine & Toxicology

EDITOR in Chief

Prof. R K Sharma

Formerly at All India Institute of Medical Sciences, New Delhi, E-mail: editor.ijfmt@gmail.com

EDITOR

Prof. Dr. Adarsh Kumar

Forensic Medicine & Toxicology, AIIMS, New Delhi

INTERNATIONAL EDITORIAL ADVISORY BOARD

1. **Prof Mete Gulmen** Cukurova University, TURKEY
2. **Prof. Leandro Duarte De Carvalho**, Minas Gerais, Belo Horizonte, Brazil
3. **Prof. Donata Favretto** (Full Professor) Forensic Toxicology at University of Padova, Italy
4. **Prof. Babak Mostafazadeh** Department of Forensic Medicine & Toxicology, Shahid Beheshti University of Medical Sciences, Tehran-Iran
5. **Prof Halis Dokgoz**, Mersin University, TURKEY
6. **Prof Jozef Sidlo**, Comenius University, Bratislava, SLOVAKIA
7. **Dr. Rahul Pathak** (Lecturer) Forensic Science, Dept of Life Sciences Anglia Ruskin University, Cambridge, United Kingdom
8. **Dr. Hareesh** (Professor & Head) Forensic Medicine, Ayder Referral Hospital, College of Health Sciences, Mekelle University, Mekelle Ethiopia East Africa
9. **Dr. Mokhtar Ahmed Alhrani** (Specialist) Forensic Medicine & Clinical Toxicology, Director of Forensic Medicine Unit, Attorney General's Office, Sana'a, Yemen
10. **Dr. Sarathchandra** Kodikara (Senior Lecturer) Forensic Medicine, Department of Forensic Medicine, Faculty of Medicine, University of Peradeniya, Sri Lanka
11. **Dr Noha A. Magdie El Rafie**, Forensic Toxicology, Ain Shams University, Cairo, EGYPT

SCIENTIFIC COMMITTEE

1. **Prof Udai Pratap Singh**, Department of Anthropology Lucknow University Lucknow
2. **Dr Anil Rahule** (Associate Professor) Dept of Anatomy, Govt Medical College Nagpur
3. **Dr Shankar Bakkanwar** (Associate Professor) Forensic Medicine, Kasturba Medical College, Manipal, Karnatakad
4. **Dr K. Ravikumar** Raksha Shakti University, Ahmedabad, Gujrat.
5. **Dr. Pragnesh Parmar** (Associate Professor) Forensic Medicine, Valsad, Gujrat
6. **Dr Vandana Mudda** (Awati) (Associate Prof) Dept of FMT, M.R. Medical College, Gulbarga, Karnataka,
7. **Dr. Asha Srivastava** (Senior Scientific Officer) Forensic Psychology, Central Forensic Science Laboratory, CBI, Delhi
8. **Dr. Lav Kesharwani** (Asst.Prof.) School of Forensic Science, Sam Higginbottom Institute of Agriculture Technology & Sciences, Allahabad U.P,
9. **Dr. Anu Sharma** (Associate Prof) Dept of Anatomy, DMCH, Ludhiana (PB)
10. **Dr. Shalini Gupta** (Prof) Oral Pathology and Microbiology, Dental Sciences King George Medical University, Lucknow, UP
11. **Dr Rituja Sharma**, Associate Prof, Law Banasthali Vidyapeeth Jaipur

"Indian Journal of Forensic Medicine & Toxicology" is peer reviewed quarterly journal. It deals with Forensic Medicine, Forensic Science, Toxicology, DNA fingerprinting, sexual medicine and environment medicine. It has been assigned International standard serial No. p-0973-9122 and e- 0973-9130. The Journal has been assigned RNI No. DELENG/2008/21789. The journal is indexed with Index Copernicus (Poland) and is covered by EMBASE (Excerpta Medica Database). The journal is also abstracted in Chemical Abstracts (CAS) database (USA). The journal is also covered by EBSCO (USA) database. The Journal is now part of UGC, DST and CSIR Consortia. It is now official publication of Indian Association of Medico-Legal Experts (Regd.).

NATIONAL EDITORIAL ADVISORY BOARD

Chairman

Prof Sudhir K Gupta - Head, Department of Forensic Medicine
All India Institute of Medical Sciences, New Delhi

Members

1. **Prof. SK Dhatarwal**, Forensic Medicine, PGIMS, Rohtak, Haryana
2. **Prof. N K Aggrawal** Forensic Medicine, UCMS, Delhi
3. **Prof Ajay Ghangale** Forensic Medicine Dr DY Patil Medical College, Pune, Maharashtra
4. **Dr. Amar Jyoti** Patwory Professor, Forensic Medicine NEIGRIHMS, Shillong
5. **Dr S. Venkata Raghava** Professor, Forensic Medicine, Bangalore Medical College, Bengaluru
6. **Prof Praveen Arora**, Professor Department of Forensic Medicine & Toxicology, SAIMS, Indore
7. **Dr. Pankaj Datta** (Principal & Head) Department of Prosthodontics, Indraprastha Dental College & Hospital, Ghaziabad
8. **Dr. Mahindra Nagar** (Head) Department of Anatomy, UCMS & GTB Hospital, Delhi
9. **Dr. Virender Kumar Chhoker** Professor Forensic Medicine and Toxicology, Santosh Medical College, Ghaziabad, UP
10. **Dr. Dayanand G Gannur** (Professor) Department of Forensic Medicine & Toxicology, Shri BM Patil Medical College, Hospital & Research centre, Bijapur, Karnataka
11. **Dr. Alok Kumar** Professor Department of Forensic Medicine & Toxicology, UP Rural Institute of Medical Sciences and Research, Saifai, Etawah, U.P.

Print-ISSN:0973-9122 Electronic - ISSN: 0973-9130

Frequency: Quarterly, © All Rights reserved The views and opinions expressed are of the authors and not of the Indian Journal of Forensic Medicine & Toxicology. Indian Journal of Forensic Medicine & Toxicology does not guarantee directly or indirectly the quality or efficacy of any products or service featured in the advertisement in the journal, which are purely commercial.

Website: www.ijfmt.com

Editor

Dr. R.K. Sharma
Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall, Sector- 32, Noida
- 201 301 (Uttar Pradesh)

Printed, published and owned by

Dr. R.K. Sharma
Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall, Sector- 32, Noida
- 201 301 (Uttar Pradesh)

Published at

Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall, Sector- 32, Noida
- 201 301 (Uttar Pradesh)



1. Morphology of Palatal Rugae in Various Sagittal Skeletal Malocclusions in Kerala Population- A Retrospective Study 1
Crystal Runa Soans, Azhar Mohammed, Murali PS, Mcqueen Mendonca, Prajwal Shetty, Vartika Kumari
2. Analysis of Hospital Deaths at Tertiary Care Teaching Hospital..... 8
Jeeveswararao Bagadi, Srinivasulu Pothireddy Sujan Kumar Mohanthy
3. Study of Fingerprints in Relation to Dental Caries 13
Maitrayee Dutta Swargiary, Bhanukul Barman
4. Trends & Pattern in Unnatural Female Death Cases Due to Burn: A One Year Retrospective Study 19
Manjit Nayak, Saumil Merchant, Kalpesh Shah
5. Effectiveness of Structured Exercise Programme Versus Elastic Band Exercise on Individuals with Rounded Shoulder 24
Geetan Manoj Pathak, Khushboo Chotai, Smita Patil, Amrutkuvar Rayjade
6. Effectiveness of Cognitive Therapy in Post-Menopausal Women..... 29
Mrunal V Ghangrekar, Trupti Yadav, Amrutkuvar Jadhav, Smita Patil
7. Effect of Meditative Movement Exercises with Breath Control on Depression in Nulliparous Women..... 33
Mrunmayi Sandip Gadre, T Poovishnu Devi
8. To Assess Dentist Knowledge About Lipid Treatment of Local Anesthetic Systemic Toxicity 37
Nitin Bhagat, Rohit Sharma, Siddharth Rawat, Sheikh Abrar, Singh Priyanka Jaiprakash
9. Assessment of Medico- Legal Awareness of Practicing Obstetricians and Gynecologists..... 41
Ajay V Patil, Rajendra Bangal
10. Pattern of Cranio-Cerebral Injuries at a Tertiary Care Centre – A Retrospective Study 45
Anand Patil, Tasgaonkar V N, Rakesh M Marigoudar
11. Profile of Deaths Due to Poisoning: Autopsied at Ssims & Rc - A Cross Sectional Study 49
Anand Patil, Rakesh M Marigoudar, Vijayakumar B. Jatti
12. Scope of Periodontium in Forensic Science 54
Gayathri S, Gomathi M, Nandhini V, Sumathi H R, Geetha T, Dona Samm
13. Touch Dna as Forensic Aid: A Review 58
Indresh Kumar Mishra, Bhoopendra Singh, Amarnath Mishra, Braja Kishore Mohapatra, Ruchika Kaushik, C Behera

II

14. Flibanserin: A Miracle Drug in Management of Hypoactive Sexual Desire Disorder in Female..... 63
Jeetendra Kumar Gupta, Ahsas Goyal , Kajal Thareja, Bhavini Saraf
15. Canine Width as a Means for Stature & Sex Prediction..... 70
Jyoti Barwa, Rattan Singh, Shipra Agarwal
16. Introducing Micro-hardness Test in Forensic Odontology as an Aid in Solving Crimes: Multidisciplinary Approach 76
Kuldeep Singh Shekhawat, Arunima Chauhan, Manoj Varma
17. Effect of Plyometric Training on Vertical and Horizontal Jump in Recreational Athletes Indulging in Jumping Activities 83
Prina Y. Patel, Trupti Yadav
18. Risk factors in Implant Placement: A Retrospective Analysis..... 89
Thilak Shetty, Shobha Rodrigues, Sharon Saldanha, Umesh Pai, Mahesh M, Puneeth Hegde, Manawar Ahmad
19. Short Term Effectiveness of Maitland Mobilization Along with Neurodynamics Vs Maitland Mobilization in Subjects with Cervical Spondylosis with Radiculopathy- A Randomized Control Trial..... 94
Trupti Yadav, Amrutkuvar Rayjade
20. Effect of Upper Body Strength Training in Spatiotemporal Parameters of Gait In Individual with Thoracic Kyphosis..... 100
Vinayak Sawant, Poonam Patil
21. Factors Related to Alzheimer’s Disease, Tau Pathology in Alzheimer’s Disease: Possible Treatments for Tau Pathology 106
Vityala Yethindra, Narsimharaj Alenur, Lakkam Saicharan
22. Association between Running Activity and Pronated Foot Posture in East Java Puslatda Athletes..... 115
Yani Christina, Indrayuni Lukitra Wardhani, Bayu Santoso
23. Morphometry Study on Thoracic Vertebrae Pedicle with Computed Tomography Scan in Population of Surabaya, Indonesia 121
Yoki Surya, I Ketut Martiana
24. Awareness about Whole Slide Imaging and Digital Pathology among Pathologists - Cross Sectional Survey 126
Sandhya Sundar, Pratibha Ramani, Herald J Sherlin, Gheena Ranjith, Abilasha Ramasubramani, Gifrina Jayaraj
25. Alteration in Physicochemical Parameters of Soil Beneath Rabbit Carcass: Consequence of Carcass Decomposition..... 131
Sarabjit Singh, Madhu Bala
26. Knowledge and Awareness of Medical Students about Injuries in Forensic Perspective..... 139
Sulekha Naresh
27. A Cross Sectional Study on the Awareness and Practice of Road Safety Measures among the Medical Students in Chennai 146
Sushil Chakravarthy. A, Magendran J,

28.	A Study on Awareness of Breast Cancer among Nursing Students	152
	<i>Tansushree. B, Magendran.J</i>	
29.	Assessment of the Feedback Questionnaire from Students for a Weekend Lecture	158
	<i>Vishal Marwaha, Anu Sasidharan, Greeshma C.R</i>	
30.	Assessment and Examination of Female Rape Victims and Their Genital Injuries.....	164
	<i>Yamini Patil, Sanjay Kumar Patil</i>	
31.	Sexual Ambiguity Based on The Length of Femur- A Statistical Analysis In South Indian Population.....	167
	<i>Yogesh C, Amirthvarshan A</i>	
32.	Effectiveness of Conventional Physiotherapy Exercises Versus Kinesiotaping in Recreational Football Players with Plantar Fasciitis.....	172
	<i>Pratiksha Rahane, Khushboo Chotai, Amrutkuvar Rayjade, Smita Patil</i>	
33.	Metanalysis of Qualitative and Quantitative improvement in Active Rehabilitation of Post ACL Repair or Reconstruction	179
	<i>Radhika Chintamani</i>	
34.	Effectiveness of Lifestyle Modification in Late Adolescent Females with Normal BMI Polycystic Ovarian Syndrome	185
	<i>Snehal Walmik Hukire, T. Poovishnu Devi</i>	
35.	Study of Profile of Sexually Related Unnatural Deaths	190
	<i>Siddaramanna T C, Dileep Kumar R, Girish Chandra Y P, Shailesh V Parate, Harish S</i>	
36.	Knowledge and Awareness about Medical Ethics among Medical Practitioners in a Teaching Medical College and Hospital, Chennai	194
	<i>Subhashree Bangaru, Magendran. J</i>	
37.	Effectiveness of Bosu Ball Exercises Versus Thera Band Exercises on Core Stabilization and Balance Performance.....	200
	<i>Rasika A. Sawant, Khushboo Chotai, Smita Patil, Amrutkuvar Rayjade</i>	
38.	A Novel Method of Establishing the Identity of an Individual by Analyzing the Pattern & Volume of the Frontal Sinus Using Computerized Tomogram – A Retrospective Cross Sectional Study.....	207
	<i>R. Harshada, Nalini Aswath</i>	
39.	Study of Adverse Drug Reactions (ADRs) Occurring with the Drug Use in a Tertiary Hospital.....	214
	<i>R. Selveraj</i>	
40.	Pattern of Homicidal Deaths at Raichur District Region – A Retrospective Study	218
	<i>Ravishankar M G, Sunil Kumar Kainoor, Suraj, S Sharmila,</i>	
41.	Chronic Alcoholism and Drug Abuse Behavior: A Menace to Society- A Research Study.....	223
	<i>Rajesh Kumar Baranwal, Pradeep Yadav, Sanjeet Kumar</i>	
42.	Role of Physiotherapy on Quality of Life in Stroke Survivors – A Systematic Review.....	226
	<i>Kanase Suraj B, G.Varadharajulu, Pragati V. Salunkhe, Mayuri D.Burungale</i>	

IV

43. Effect of Goal Oriented Exercises Versus Combined Physiotherapy Intervention on Functional Independence in Subject With Traumatic Brain Injury 231
Pragati V Salunkhe, Suraj B Kanase
44. The Effect of Structured Physiotherapy Exerciseprogramme on Lung Function in Industrial Workers 236
Patil Poonam, Kanase Suraj B
45. Effect of Integrated Neuromuscular Inhibition Technique on Frozen Shoulder 242
Amir A. Khan, Smita Patil, Khushboo Bathia
46. Comparison of Closed Kinetic Chain Exercises and Conventional Therapy on Cardiac Parameters in Post CABG Subjects 248
Ankita Ajit Patil, Chandrakant Patil, Smita Patil
47. Effect of Step Aerobics Applied Early in Phase 2 Cabg Subjects on Functional Capacity and Exercise Tolerance 254
Kaustubh G. Jadhav, T. Poovishnu Devi
48. Improving the Motility of a Scleral Shell prosthesis with an Acrylic Orbital Implant: A case report..... 260
Varsha Ignatious, Umesh Y Pai, Shobha J Rodrigues Thilak Shetty B
49. Assessment of Serum Levels of Salusin α and Salusin β in Cardiovascular Disease Patients Undergoing Transcatheter Therapy 264
Ayat Saeed Awad, Hanaa Addai Ali, Mohauman Mohammad AL-Rufaie*
50. Effect of Multi-Wall Carbon Nanotubes on the Microhardness of the Tooth Enamel..... 270
Mohammed K. Jawad, Abbas F. Ali, Ali B. Roomi
51. Evaluation of CEA, CA19-9, and CA242 Tumor Markers in Patients with Colorectal Cancer by ELISA Technique 276
Ahlam Shakir Hammood AL- Rubaiawi Mukhtar Khamis Haba, Laith Raouf Ahmed AL- Hadad
52. Knowledge about Emergency Contraception Pills among Primary Health Care Doctors in Baghdad\ Al-Karkh Sector..... 282
Waleed Arif Tawfeeq, Amer Abaas, Zaid Abdulateef Abdulkareem
53. Relationship of Vitamin D with Some Electrolytes in the Serum of People with Rheumatoid Arthritis in the City of Samarra..... 288
Adeeb Mahfooth Farag Al-Samaria, Kader Abdullah Shanak Al-Esawi, Esraa Ali Abdul Kareem Al-Samaria, Dhamer Ismael Madab AL-Khazraji
54. Study of Thyroid Hormones for Vitiligo Patients in AL-Anbar Governorate 293
Yasser Q. Hussein Wajeeh Y. Mohammed Abdulla S. Al-Hasan, Sabri M. Al-marsomi
55. Detection of Quorum Sensing Signal Molecules and Identification of *espB* and *Crt4* genes among Biofilm Forming of *Citrobacter freundii*..... 297
Wathiq Abbas Hatite Al-Daraghi, Mautham Khazaal Kadhim AL-Behadili
56. The effect of Beta-amino Butyric Acid in Levels of Interleukin4 & Interleukin 10, Complement Proteins C3 & C4 and Immunoglobulin IgM in Males Rats Sprague Dawley Infected with *Pseudomonas aeruginosa*..... 303
Zainab Makki Sagheer Mohammad Abas Jasim

57. The Toxic Effect of Cadmium Chloride on Lung Function and Tissue and the Protective Role of Pomegranate Seed Oil in Female Rabbits 309
Noor Ibrahim Hasan AL-Kraie, Israa Salman Dalas; Qasim Azeez Razooqi
58. A Biometric Assessment of a Combined Topical Levofloxacin, Retinol, Cloxacillin and Ascorbic acid Against Facial Acne..... 316
Naser A Naser, Hussein Abdulkadhim A, Sahar A. Alhar, Karrar K. Alhaidary, Rana Talib Al-Nafakh
59. Assessment the Efficacy of Arthrocentesis with Corticosteroid and Arthrocentesis with Sodium Hyaluronate in Treatment Temporomandibular Joint Disorders: A Comparative Study..... 322
Samer Majeed Mohammed, Muntathar Muhsen Hassan Abusanna, Zina Ali Daily
60. Aqueous Extract of Date Palm Fruit (*Phoenix dactylifera*) Protect Liver Against Cyproterone Acetate Toxicity in Male Mice 328
Nuha Yaarub Al-Harbi, Eman Fadhel Abbas Awadh, Wasan Najim Abdul-Sada
61. Molecular Detection of *Pseudomonas aeruginosa* and its Relationship with Multidrug Resistance and Transposons 334
Wathiq Abbas Hatite Al-Daraghi, Mohammed Sattar Abdulkadim Al-Badrwi, Haider Rida Jassim
62. Antifungal Activity of Silver Nanoparticles Using *Penicillium Chrysogenum* Extract Against The Formation of Biofilm for *Candida Glabrata*..... 340
Nada S. Salah, Thamer A.A. Muhsen, Mohssen H. Risan
63. Study of Epidemiological Factors According to the Positive Response of Igg of Patients Infected with *Blastocystis hominis* in Diyala province, Iraq 346
Muna Hameed Ahmed Alazzawi, Nabaa Ali Jasim, Masar H. Ismail
64. Epidemiological and Histopathological Study of Appendicitis in Karbala Province..... 351
Khetam L.Hussain, Aiyat hazem al-shugary, Eman Jabbar Rahim, Amear Ali Aenad, Sajida Jawad Mahdi, Abdullah ali Kate
65. Molecular investigation of virulence factors genes in *streptococcus pyogenes* by PCR..... 356
Russell Issam AL-Daher, Maysa S. AL-Shukri, Hayam K. AL-Masoodi
66. Iron Deficiency among Patients with Febrile Seizures in Al Ramadi Maternity and Children teaching Hospital, Western Iraq 361
Sahar j. AL- Hiali
67. Antibiotic Susceptibility of Bacteria Isolated From Under Nails..... 367
Zahraa AL-Taee, Sura Ihsan Abed Jabuk, Raflaa S.H. Hussian, Zainab H. Kareem, Yasir H. AL-Mawlah
68. Removal of Tetracycline from Aqueous Solutions using Pomegranate Peels Residues Accessing to ZRL. 371
Rajaa S. Abass Suad Turkey Ali, Tamara Sami Naji
69. Complications of Laparoscopic Cholecystectomy in a Sample of Patients Admitted to Al-Ramadi Teaching Hospital, Anbar-Iraq 376
Tarek Mahdi Salih
70. Physiological Study Comprising the Sequelae of Magnetic Radiation on Human 382
Wissam Sajid Hashim, Azal Hamoody Jumaa, Noor Thamer Alsaadi, Ayad Gaber Arean

VI

71. Assessment of Transdermal Vasodilatory Effect of a Combined Panthenol, Amlodipine, Isosorbide Dinitrate and Betahistine HCl on Peripheral Vessels 387
Hussein Abdulkadhim A, Naser A Naser, Fadhaa A. Ghafil, Rana Talib Al-Nafakh, Karrar K. Alhaidary
72. Evaluation of Using Titanium Mesh in the Reconstruction of Traumatic Orbital Floor Fracture 394
Mukhalld Salim Alasady, Ihsan Abdullah Kumail , Alyaa Turkey Alsultany, Ali B. Roomi
73. Association of Epstein- Barr Virus (EBV) with the Development of Nasopharyngeal Carcinoma (NPC) in Western Region of Iraq: Unmatched Molecular Case-Control Study 400
Mothana Ali Khalil, Arkan Obaid Jasim Al-Essawi, Mohammed Tafash Dagash
74. Molecular Detection of Toxogenic Cyanobacteria Isolated from Tigris River in Baghdad City –Iraq 407
Zainulabdeen H. A. AL-Khafaji, Ahmed S.Dwaish
75. Flame Atomic Absorption Spectrophotometry Analysis of Heavy Metals in Some Food Additives Available in Baghdad Markets, Iraq..... 412
Wasan Abdulwahid Jasim, Jassim Dawood Salman, Jasim Mohammed Shamar Jamur
76. Detection Malta Fever by Interferon-gamma and Steroid Hormone S Level 418
Ali Anok njum, Layla Saleh Abdul-Hassan Ihasan A. Hashem
77. Hepatic Toxicity in Patients with Rheumatoid Arthritis and Psoriasis Taking Methotrexate Therapy 424
Haider Hamza Omran, Basim Mohammed Mothlum
78. Scolicidal Activity of Zirconium Oxide (ZrO₂) nanoparticles Against Protoscolices of Hydatid Cysts 430
Amenah Abdul-Jabbar Ibrahim
79. Molecular Study of ***Fimh*** Gene in ***Klebsiella Pneumoniae*** Isolated From Urinary Catheter Patients 434
Israa Abdul Ameer Al-Kraety, Zahraa Hameed Oda Alquraishi, Aqeel A Alsadawi
80. Chemerin Level as a Marker in Preeclampsia and its Relation to the Disease Severity and Neonatal Outcome..... 439
Ali Mohammed Murad, Marwa Jaafar Sadac (M.B.Ch.B)2; Hanan Hazim Mohammed Noori (M.B.Ch.B, C.A.B.O.G, DGO)3
81. Production, Analysis and Optimization of Inulin Produced from ***Pseudomonas fluorescens*** 446
Alyaa Razooqi Hussein, Alaa Raheem Kadhim
82. Epidemiology of Hepatitis B and C in Al-Muthanna Province..... 453
Adian Abd Alrazak Dakl, Wafaa Ayad Alnuaimy
83. The Impact of Congenital Heart Diseases on Growth Parameters in Children and Their Correlations with Leptin Levels 456
Fouad Shareef, Amal Salih Mahdi Bayee
84. Hormonal and Mineral Imbalance Effect on Bone Resorption in Predialysis Iraqi Patients with Chronic Kidney Disease 462
Inaam Ahmed Ameen, Sarah Hashim Mhaibes, Shahad Wisam Ahmed, Kaled Nather Taha And Dhikra Abdul Hameed Dawood
85. Robust Controller Electromyogram Prosthetic Hand with Artificial Neural Network Control and Position 469
Saygin Ahmed, Aydin S. Ahmed, Bülent Yilmaz, Nuran Dogru

86. Study the Genotoxicity of Aqueous and Alcoholic Extracts of *Adhatoda Vasica* on the Roots of *Allium cepa* L. by RAPD-PCR Technique 475
Adnan Owayez Jasim, Mohammed Mahdi Jawad
87. Histological Study of the Effect of Isoxicam on Ovary of Albino Mice *Mus Musculus* 481
Ali Khudheyer Obayes, Wurood Mohamed Mutar, Rasha Hamid Ayub, Sahar Abdullah Mohammed
88. Genotyping of Tumor Necrosis Factor- α in Inflammatory Bowel Iraqi Patients 487
Inas Fadhe, Wafaa Sabri Mahood
89. Antibacterial activity of *Eruca Sativa* Seeds Aqueous Extract Against Human Pathogenic Bacteria 494
Madeha H. Hussain, Aml Hendi Salih, Rajaa Hendi Salih, Ali S. Hassoon
90. Possible Role of Toxoplasmosis on Gene Sequence Alteration in Patients with Cardiovascular Diseases.. 498
Nazar Sh. Mohammed, Ammer Abd. Mohammed, Salwa S. Muhsin
91. *Toxoplasma Gondii* Infection and Toxoplasmosis in North Africa: A Review 502
Esraa Salman Jasim, Noor F. K. Al-Khawaja
92. Study the Cytochrome P450 Gene Expression Changes in Iraqi Patients with Chronic Liver Disease..... 507
Areej GH Al-Charak, Hamza H Kzar
93. The Reliability of Orthodontic Treatment, According to the Needs of Patients Using the Dental Aesthetic Index 512
Esraa Salman Jasim, Noor F. K. Al-Khawaja
94. Study the Protective Role of Arabic Gum Extract on Some Physiological and Histological Criteria for Liver of Male Rabbit Treated with Atrazine 519
Noor Rahi AL-Shimmari, Rasha Abdulameer Jawad
95. Relation between Working in Petrol Station and Blood Hemoglobin Levels for the Filling Workers in Al-Najaf City/ Iraq..... 526
Fulath Abdul-Redah Muhsin
96. Effect of Preoperative Breathing Exercise on Postoperative Patients' Lung Functions 531
Dhiaa A. Al-Reda, Rajha A. H.
97. Glomerular Diseases: Systemic Lupus Erythematosus is Most Common Finding: A Cross-Sectional Study 537
Fadhil Handhal Khleif, Haider Jebur Kehiosh, Salman Azeez Aljubori, Sabah Nemah Alfatlawi
98. Synthesis of Diimidazole Has Pyrazole, Isoxazole and Pyrimidine Derivatives and Evaluation as Antibacterial 542
Sahar Abdullah Kadham, Abdul Jabar Kh. Atia
99. Novel approach and Cloud Point Extraction Method for Determination of Acetazolamide Drug 547
Muna Iskandar Mahdi, Kassim Hassan Kadhim
100. Preparation and Characterization of Nano-Hydroxyapatite Particles and Chitosan by Sol-Gel Method (in Vitro Study)..... 554
Saja Kareem Esmael, Raghdaa Kareem Jassim, Rasha Mahdi

VIII

101. Inactivation of *Enterococcus Faecalis* in Drinking Water using Silver Nanoparticles Embedded Paper 561
Alaa H Al-Fatlawi, Shahad A. Raheem
102. Assessment of the Correlation between the Salivary Flow Rate and Dental Caries Experience among Children with β -Thalassemia Major 567
Mudhafar Fadhil Jaddoa, Alhan Ahmed Qasim
103. Determine Effect of Carbothera Therapy on Foot and Leg Ulceration for Diabetic Patients in Endocrine and Diabetic Center at Al-Nasiriya City..... 573
Sameer Razak Oleiwi, Oday Faris Washeel, Hassan Al-Yassin, Adel Gassab Mohammed
104. Outcome of Endoscopic Endonasal Repair of CSF Rhinorhea Using Fascia Lata Graft 580
Hani Musa Al-Akbi, Ahmed Adhab Mayan, Ammar Jabbar Najm Alkelabi, Laith Ali Mahmood
105. Genotype and Haplotype of HLA- Class II in Type I and Type II Diabetes Mellitus in Iraqi Patients 586
Abeer Mazin, Abdalnabi J Abid
106. Cloud Point Extraction, Preconcentration and Spectrophotometric Determination of Co (II) and Cu (II) using 15-Crown-5..... 592
Yussra O.Mussa, Azhar A. Ghali, Ashwaq S.Hussei
107. Hormonal and Immunological Study in Serum of Pregnant albino rats Treated with Nickel Oxide Nanoparticles 601
Haneen M.Alsoltane, Amel A.Altae
108. Assessment of Mental Health of Healthcare Professionals Working in the Infectious Diseases Units: Comparative Study 607
Maysaa Niama Aboalshon, Hayder H. AL-Hadrawi, Ammar Abbas Shalan
109. Emotional Intelligence and Work-related Stress among Nurses Working in Psychiatric Hospitals..... 613
Zaman Ahmed Hrefish, Hayder H. AL-Hadrawi
110. The relationship between smoking and Urokinase gene 3'-UTR T/C expression on occurrence of bladder cancer..... 618
Zainab Nizar Jawad , Kamal Abdul Rasool , Weaam Awad
111. Effect of Carcinogenic Substance (7,12 Dimethylbenz [a] anthracene (DMBA)) on Tissue, Hematology Character and Enzyme Activity in Rat 621
Abdulridha Mohammed Al-Asady, Ntisar Kadhum Ghaleb, Abeer Muhammedali Jasim Alnasrawi, Thoalffakar A. ALhamed
112. Psychological Factors Affecting on Developing Reading Skills and Evaluation of Reading Strategy Knowledge..... 626
Wathiq Al – Husseini , Asst. Prof. Dr. Daa Oued Al Arnousi , Qassim Raheem
113. Comparison between Photoselective Vaporization of Prostate by Diode Laser and Monopolar Transurethral Resection of Prostate in Single Center Experience..... 631
Zaid Ali Abdul Hussein, Ali Hamdan Fahad, Falah Mahdi Al Khafaji
114. Tympanometric Findings among Adults with Chronic Nasal Obstruction Due to Sinonasal Pathology..... 638
Salim Hussain Ibrahim

115. The Impact of Mindfulness Education on Elementary School Students 643
Rawaa Saadoun Al-Abedi, Ibtisam Al-Zaywaini, Rassem Ahmed Al-Jerayi
116. Prevalence of Bronchiolitis among Hospitalized Children less than Two Years in Babylon Province 648
Maha. A. Kadim, Nuhad M. AL-Doori
117. Nanotechnology Issues Included in the Subjects of the Department of Biology in the Colleges of Education 653
Mazen Thamer Shenif, Mustafa Abdel Amir Raheem Al-Zamili
118. Color Stability of Different Aesthetic Resin Composite Materials: A Digital Image Analysis 659
Shatha Abdul-Kareem, Ahmed G. Al-Marroof, Noor H. Fadhil
119. Bergamot Essential Oil Effect against Candida Albicans Activity on Heat Cure Acrylic Denture Base 664
Zinah Salah Mawlood, Ghassan Abdul-Hamid Naji
120. Antimicrobial Activity and Characterization of Some Oxazole, Thiazol and Quinoline 670
Amjad Gali. Eliwi, Safaa. Abdul-Hameed. Dadoosh, Zainab Z. Mohammed Ali, Abdul Jabar Kalaf Atia, Iman Rajab Mohammed, Zaman Ahmed. Hussein
121. Risk Factors related to Sudden infant death syndrome (SIDS) 677
Hussein Jassim Mohammed, Musadaq Abdulkadhim Dohan, Nuhad Mohammed Kassim, Mohamed Igrish, R.N Kadhim Hussein Jassim
122. Design and Implementing System to Study Environmental Noise Pollution Using Microcontroller 681
Ahmed Yousif Falih, Ali Talib Qasim, Basma Jumaa Saleh, Walaa Sami Tahlok
123. Nurses Staff Knowledge Regarding Standard Hand Hygiene Precautions in Rania City/Kurdistan Regional Government of Iraq 687
Blend B. Ameen
124. Risk Factors Increasing Prevalence of Type 2 Diabetes Under The Age of 40 Years Attending Al-Diwanyia Teaching Hospital 693
Hassan Raji Jallab, Zahraa Abdul Ameer Kadhim
125. Psychosocial Consequences of Children with Idiopathic Growth Hormone Deficiency in Baghdad 699
Adraa H. Shawq, Zaid W. Ajil
126. Prevalence of Hepatitis B and Hepatitis C Viruses in β -thalassemia Major Patient in AD-Diwanya Province, Iraq 704
Hassan Raji Jallab, Zahraa Muayad Eesa
127. Deposition of TaN Film on Commercial Pure Titanium Disk by Modified Reactive Plasma Sputtering Technique 709
Hassan Jawad Farhan, Raghdaa Kareem Jassim, L.thair
128. Influence of Carcinogenic Substance (7, 12 Dimethylbenz [a] Anthracene (DMBA) on Tissue, Hematology Character and Enzyme Activity in Rat 715
Abdulridha Mohammed Al-Asady, Intisar Kadhum Ghaleb, Abeer Muhammed ali Jasim Alnasrawi, Thoalfakar A. ALhamed

X

129. Immunohistochemical Expression of CD68, P53 and Bcl2 in Thyroid Tumors..... 720
Samar Abdul Raheem AL-Gharrrawi, Ali Hussein Mohammed Ali Alkhafaji, Rana Zuhair Naji
130. Prevalence of Lung Cancer in Non Smoker Patients Attending Al-Diwaniyah Teaching Hospital 727
Hassan Raji Jallab, Thimar Malik Khudhair
131. Aging Influence Mitochondrial Dysfunction and Oxidative Stress through Check Some Proinflammatory Cytokines Levels and Oxidant Status in Older Adults: an Observational Study 733
Kaniaw R. Khafar, Esmail S. Kakey
132. Robust Bayesian Estimators For Survival Function Under Prior Data Conflict With Practical Application in the Health Side..... 739
Entsar Arebe Al.Doori, Ahmed Sadoun Mannaa
133. Phenotypic detection of AmpC β -lactamase in *Pseudomonas aerogenosa* isolated from Burns and Wounds in Al-Rumetha Hospitals 751
Abeer Mohammed Ali Al-garawyi
134. Assessment Knowledge of Thalassemia Care Giver in Kirkuk City..... 759
Idrees Hasan Mohammed
135. Evaluation the Effect of Nano Yttrium Oxide Addition on the Mechanical Properties of Room Temperature-Vulcanized Maxillofacial Silicone Elastomers..... 764
Yasir N. Al-Mohammad
136. Immunohistochemical Correlates of Epidermal Growth Factor Receptor Mutations in Lung Adenocarcinoma in Iraq Patient 771
Sabreen Saleem AbdAlkreem Alsaqi, Merza Hamza Homady Almurshidi, Rand Muhammed Abdul-Hussein Al-Husseini
137. Depression in Relation to Serum Ferritin a Cross-sectional Study at Najaf Governorate..... 777
Ashwan Abdulzahra Hashim
138. Histological Evaluation the effectiveness of Aloe Vera oral gel Application on Gingiva Subjected to Dental Light –emitting Diodes 783
Noor Abdulkareem Razouki, Rawaa Abdul-Jabbar Mahmood, Hadeel Ali Mahdi, Mustafa Ghani Taher
139. A Concordance Study between Polymerase Chain Reaction Assay and Conventional Culture-based Methods for Detection of *Fusobacterium necrophorum* 788
Muhammed Asaad Saleh, Haider Ali Muhammed and Adil Ateyah Alnasrawi
140. Do Attendances to the Medico-legal Directorate in Baghdad Referred as Alive Police Cases Have HIV Infection? 795
Nabeel Ghazi Hashim Al-Khateeb, Wisam Shakir Salman, Munjid Rezali, Muthana A.Jaber Abdullah, Aysar Sakin Abdulfattah, Khalid Majeed Lafta, Khalid Majeed Lafta, Ban Sabeeh Alwan
141. Determination of Copper and Lead in Samples of Fungicides and Insecticides in Diyala Governorate 799
Zeina Gany Fadeel, Suaad k.Abd-Alwahab
142. Phytochemical Study and Evaluation of Iraqi Fennel Seed Oil as Antibacterial of Urinary Tract Infection 803
Baydaa H. Abdullah, Ibrahim S. Abbas, Thamer Mouhi Jasiem

143. Detection Antimicrobial Suscep Tibility Patterns of Bacterial Species Isolated from Burns and Wounds Infections in Basrah Hospitals.....	808
<i>Ghosoan Al-Kanaany</i>	
144. Evaluation Protective Role of <i>Salvia officinalis</i> Silver Nanoparticles Against Toxic Effect of Bisphenol a in Female Rats	813
<i>Hussein Abdulmaged Raheem, Rana Fadhil Mousa, Ayyed Hameed Hassan</i>	
145. Assessment of the Needs among Families of Martyrs of Terror Victims in Al Furat Al awsat Governorates / Iraq	819
<i>Dalal Z. H., Hussein J.M</i>	
146. The Psychological, Mental and Physical Effects of Defamation Crimes and Their Severity on the Health of the Iraqi Individual	823
<i>Ammar Saleem Abid Hamza, Noori Saadoon Abdulla, Thaaer Ahmed Hassoon</i>	
147. New Diaz Coupling Reaction, Cloud Point Extraction Spectrophotometric Determination of Sulphadimidine Soudium in Pure form and Pharmaceutical Preparation with Salicylic Acid as the Coupling Reaction	829
<i>Esraa Amer Kadhim , Saadiyah A. Dhahir, Muna S. Sando</i>	
148. The Relationship of Refereeing Performance of the Leading Personality and Thyroxin Hormone Level for Football Referees (First Division)	836
<i>Ali Mahdi Hassan, Ali Hussein Ali, Hayder Naji Habash Alshawi</i>	
149. Effect of Topical Simvastatin Therapy on Patients with Psoriasis.....	840
<i>Sundus Hakim Abd, Sarmad Nory AL-Dujialy, Haider A. AL-Sabak</i>	
150. Multiplex PCR for detection of the predominant diarrhea-causing protozoa (<i>Giardia intestinalis</i> , <i>Entamoeba histolytica</i> , and <i>Cryptosporidium parvum</i>) in fecal samples of cattle from Babylon Province, Iraq.....	847
<i>Nawras Abdul Bari Madlol, Qassim Jawad Ameer</i>	
151. Study on Breast Cancer Patients and Some Variables in Babylon Province.....	851
<i>Zainab Kareem Al-Kazazz, Zainab Naser Nabat</i>	
152. Knowledge about Obstetric Warning Signs during Pregnancy among Mothers Attending the Primary Health Care Centers in Hilla City	855
<i>Zainab Ali Hussein Al-Ali, Salma Kadhum</i>	
153. EEG Changes in Neonatal Hypoxic Ischemic Encephalopathy	863
<i>Rand Jassim Mohammed Alwatefi, Farah Nabil Abbas, Adnan Handhil Aljothery</i>	
154. Knowledge Attitudes and Barriers of Undergraduate Medical Students towards Research in University of Babylon	870
<i>Nadia H. Sahib, Hasan Alwan Baiee, Hadi Mohammad Ali Al mosawi, Zaid Amjed Al-husseini</i>	
155. Study of Some Hematological and Biochemical Parameters in Children with Thalassemia in City of Karbala.....	877
<i>Wafaa S.H. AL-Nasrawi, Taghreed A. Najm , Alyaa A. Kadhum</i>	

XII

156. A Comparative Study in Psychological Burning among Football Referees And Football Referees of First Class Halls in Southern Zone in Iraq 881
Ahmed Sa'ad Abdul Razak , Ali Hussein Ali , Anmar Atshan Khargan , Asmaa Sattar Khudhair
157. Drug Addiction and the Most Important Diseases that affect Human Mental, Mental and Physical Health in Iraqi Society 886
Ammar Saleem Abid Hamza, Fatima Abid Ali, Thaaer Ahmed Hassoon
158. Human biotoxic, Human Reproduction Effects and Biomarkers to Assess the Health of the Ecosystem by Estimate the Ratios of Heavy Elements 892
Haider Mashkoor Hussein
159. Histological Study of the Adrenal Gland of the Adult Female Rabbit (*Oryctolagus Cuniculus*) 898
Faiza Jabar Joda, Ahmed obaid Hossain
160. The Effect of Physical Exercises According to Deny Foot to Improve Some Skillful and Muscular Abilities among Fencing Young Players 903
Muna Ihsan Muhammad Baqr, Ali Naeem Ajeel, Anmar Atshan Khargan
161. Assessment of Primary School Teachers' Knowledge Towards Post-Traumatic Stress Disorder among Pupils In Mosul City 910
Nawaf Mohammed Dhahir, and Saja Hashem Mohammed.*
162. Predictors of Bone Mass Density in Patients with Chronic Obstructive Pulmonary Disease 915
Ahmed Hussein Jasim, Amjed H. Abbas, Mohammed Mahmood Abbas
163. Quality Assessment of Commercial Fruit Juices and Health Hazards in Slemani City- Kurdistan Region/ Iraq 921
Kawa Khwarahm Hamafarj 1, Kadamkheer Tawfiq Aziz 2, Attallah Omar Qasem3, Halgord Ali M. Farag4
164. A Questionnaire-Based Survey Assessment of Iraqi Dentists Using Repair Versus Replacement of Defective Composite Restoration 926
Huda M. Al-Badri, Zainab Mahmood Mansi, Raghad A. Alhashimi
165. Assessment of the Level of Spirituality among the Patients with Major Depressive Disorder in Sulaimani City 932
Taha Ahmad Faraj, Professor Dr. Salwa Shakir Muhsin
166. Isolation and Diagnosis of Some Dermatophytes Using Nitrogen Base Tracking Technique (Scquence)... 938
Saba kadhim Naser, Meethaq Staar Abood
167. Nursing Student's Satisfaction of Nursing Program in the Euphrates 946
Dr. Hussein Jassim Mohammed, R.N Kadhim Hussein Jassim, Salah Saeed, Mohammed Abass
- 168. Relationship Between Nasal Septum Deviation angle and it is Effect on Maxillary Sinus Volume in Sulaimani Population..... 953**
Lamia alnaqib, Nasir Abdul Alla, Shara Mustafa haji karem, Salah Qadir Mahmood
169. Detection of the vaginal microflora in Pregnant and non-pregnant women using culture-independent method 957
Adnan H. Aubaid, Samira R. Gahadeer, Noor M. Jabar

170. Detection of <i>mec A</i> , <i>van A</i> and <i>van B</i> genes of <i>Staphylococcus aureus</i> Isolated from Patients in Al Muthanna Province Hospitals.....	963
<i>Adnan H.Aubaid , Ziadoon H. Mahdi , Tabarek S. Abd-Alraoof , Noor M.Jabbar</i>	
171. Client’s Attitude Regarding Antibiotics Misuse in Primary Health Care Centers.....	970
<i>Alia’a Neamah Abo Alshon, Naji Yaser Almiahi</i>	
172. Hemostasis in sickle cell disease.....	973
<i>Nawal Khalil Ibrahim, Awatif Radhi , Nehaya Mnahi Al-Aubody</i>	
173. Assessment of Primary Schools Teachers’ Knowledge and Attitudes toward Communicable Diseases Prevention and Control at Primary Schools	976
<i>Mohammed Abbas Hussein, Muna Abdul Wahab Khalil</i>	
174. Developing the Rear Circular Motion According To Auxiliary Device In The Ground Gymnastics.....	983
<i>Wahab Abdul Wahhab Abdul Wahid, Imad Kadem Yasser</i>	
175. The Effect of Different Cement Space on the Fracture Strength of Two Different Types Zirconium CAD/CAM Crowns	987
<i>Dalia Abdalreda Sadiq, Lateef Essa Alwan , Abdul Kareem J. Al-Azzawi</i>	
176. Compliance of Hypertensive Patients with Medications at Marjan Teaching Hospital in Babylon Governorate	994
<i>Nibras.H. Abdel-Hussein, Gossoon J. Elywy</i>	
177. Immunization Status of Children Under 6 Years Old in Holly Karbala Governorate.....	1000
<i>Muhsan Sahib Salih Almusawi</i>	
178. Spectrophotometric Determination of Isopropamide Iodide based on Ion-pair Complex Formation with Thymol Blue.....	1004
<i>Wasan Ajam Hannoun, Khalid Waleed S. Al-Janabi</i>	
179. Effects of Sulfonylureas Treatment on Apoptosis, Total Superoxide Dismutase activity and Some Biochemical Parameters in Type 2 Diabetic Patients.....	1011
<i>Noor Khalid Zaidan, Perry H. Saifullah</i>	
180. An analytical Study of the Maximum Force Variable on the walkway of the (100, 1500 and 5000 m Sprinters For Applicants).....	1017
<i>Assist. Prof. Dr. Haider Fayyadh Alamiri</i>	
181. An optimized Retina Recognition Technique Based on PSO Inspired Algorithm.....	1023
<i>Suhad Fakhri Hussein</i>	
182. Role of TNF alpha and IL-6 in Inflammatory Process after Tooth Extract in Children Under 12 Years ...	1033
<i>Saad Mohammed Sulaiman, Ahmad Orkhan Hasan, Noora Abdulrazzaq Naji</i>	
183. Effect of Psychoeducational Program on Eating Disorder Behaviors and Severity Level of Depression: A Quazi Experimental Study	1037
<i>Shwan Asaad Qadir, Salwa Shakir Muhsin</i>	
184. Effect of High Trace Element Levels in Serum of Women Undergoing Intra-cytoplasmic Sperm Injection (ICSI) on Implantation Rate.....	1045
<i>Lana Nazar Abdul-Razzaq , Khalid Mahdi Salih , Bushra Jawad Al-Musawi.</i>	

XIV

185. Effect of Copper Nanoparticle and Magnetized Salty Water in Chlorophylls and Carotenoids content of Tomato (*Lycopersicon esculentum* L.) 1051
Noora I. H. Al-Shemmary, Basheer A. H. Al-Alwani, Rihab E. Kadhim
186. Effectiveness of an Educational Program on Physically- Disabled Fighters' Quality of Life at Rehabilitation Military Center in Al-Basra City 1058
Mukdad Ali Hamead, Hala Saadi Abdul Wahid
187. Antibacterial Activity and Phytochemical Screening of Iraqi Taraxacum Officinale L 1066
Hayder Yousif Falih, Suhad Y. Abed, Saba Adnan Abbas, Thamer Mouhi Jasiem
188. Effect of Different Resin Luting Materials on the Marginal Fit of Lithium Disilicate CAD/CAM Crowns (A Comparative Study) 1071
Manar M. Alajrash, Mohammed Kassim
189. Antibacterial and Antifungal Activities of Centaurea bruguierana (Asteraceae) from Iraq 1076
Shaima H. A. Alabbasi, Talib O.H. Al-Khesraji, Sirwan H. Salih
190. Colorimetric Determination of Uric Acid in Live samples 1081
Abbas Shebeeb Hasan Al-kadumi, Jwan O. Abdulsattar, Khitam J. Nabhan
191. Control of Risk in the Process **Loading / Unloading** In. Pelindo Iii Surabaya 1089
Achmat Kuncoro, Endang Dwiyantri, Abdul Rohim Tualeka
192. An Investigation into the Effect of Multimedia Training on the Knowledge and Self-Efficacy of Children with Asthma 1096
Ahmadreza Zarei, Afshin Ostovar, Fatemeh Alhani, Faezeh Jahanpour
193. Determination of Safe Level of Benzene Concentration in Mechanics Workshop "X" Tembalang Semarang 1102
Aisy Rahmania, Abdul Rohim Tualeka
194. Andrographolide and its Attributes Against Triple-Negative Breast Cancer: A Review of the Literature. 1109
Alhakam A. Aljarrah, Norliza Nik, Siti Norasikin M Nafi
195. **Cortisol And Psychological Factors in Etiology of Lichen Planus** 1114
Alhakam Ibrahim, Hajer Ibrahim, Shakir J. Al-Saedy
196. Purification of L-Glutaminase from *Bacillus* sp. **B12** and study its properties 1121
Alyaa Abdelhameed, Rana Alqaysi, Hiba Ali Hilal, and Nada Alharbi
197. The Role of immunohistochemical Expression of monoclonal VE1 antibody in detecting the BRAF gene mutation in patients with colorectal carcinoma. 1128
Ammar Eesa Mahdi, Hadeel A. Karbel, Sura Salman Ejam
198. Evaluation the Effects of *Zingiber officinale* L. as a feed Additive on Growth and Some Serum Biochemical Profiles of *Cyprinus carpio* L 1136
Eqbal Salman Najem Sabah Mahmood Hamad Al-Shammari Ali M. Kane
199. The Infestation Study of *Oestrus ovis* L. 1761 in Sheep of Al-Amara Region, Maysan Province, South of Iraq 1142
Hussain A. Mhouse Alsaady, Aswan Al-Abboodi, Ayat Awdaa, Mohammed Rshak

200. Development and Preparation of ciprofloxacin Drug Derivatives for Treatment of Microbial Contamination in Hospitals and Environment..... 1149
Aseel Mahmood Jawad, Naghah Mahmood Aljamali, Saher Mahmood Jwad
201. Comparison of Surgical Outcomes between Patients Treated with The Harmonic Scalpel and Ligasure Device During Total/Near Total Open Thyroidectomy..... 1156
Aseel Mahmood Jawad
202. Safe Concentration of Benzene Exposure Based on Safe Human Dose of Workers in The Paint Manufacturing Industry Sidoarjo, East Java, Indonesia 1163
Ayu Prima Kartika, Vivi Budiarti, Achmat Kuncoro, Charles Kimura, Abdul Rohim Tualeka
203. Determination of the Health Costs of Effective Detoxification Based on Effective Doses of Benzene Exposure To workers in oil and gas mining companies, Central Java, Indonesia..... 1168
Ayu Prima Kartika, Vivi Budiarti, Achmat Kuncoro, Charles Kimura, Abdul Rohim Tualeka
204. Relationship of Hot Work Climate with Employee Blood Pressure in Binat Installation, Dr. Sardjito..... 1174
Charles Kimura, Ledita Sartika Goddess, Zikri Fathur Rahman, Abdul Rohim Tualeka
205. Analysis of Worker's Level of Knowledge on Handling Chemicals in Oil and Gas Industry Laboratory of Pt "X" Indonesia..... 1179
Dani Nasirul Haqi, Putri Ayuni Alayyannur
206. Climate Relationship Work with Fatigue Employees Working in Laundry Plant Dr. Sardjito 1185
Dyah Ayu Kusuman Ningrum, Anggita Kurniawati, Abdul Rohim Tualeka
207. Association of Noise Exposure and Physical Workload on Systolic Blood Pressure of Ceramic Industry Workers 1190
Erike Anisa Nurshafa, Noeroel Widajati
208. Determination of Oxidant / Antioxidant Levels in Sheep with Hydatite Cyst in Liver 1196
Evan Abdul Kareem Mahmood, Mert Handan, Mert Nihat
209. Assessment of Health-Related Quality of Life Among Patients Management Program of Chronic Diseases Type 2 Diabetes Mellitus..... 1200
Fajriansyah, Iskandarsyah A, IM Puspitasari, Keri Lestari
210. Health Costs for Detoxification Benzene Exposure Workers in the Mining Oil and Gas Pt. A Balikpapan 1206
Farhana Syahrotun NS, Suherdin, Tedi Levinrarian, Bella Oktavia, Abdul Rohim Tualeka
211. Levels of Interleukin-10 in Iraqi Childhood Acute Lymphoblastic Leukemia after Chemotherapy 1212
Fatima Mallalah Mohammed, Moroog Ali Fahd, Nabaa Ali Jassim
212. Correlation of Standing Work Position and **Musculoskeletal Disorders** (MSDs) Complaints on Rack Frame Bending Section Workers in Informal Industry of Rack Making in Surabaya, Indonesia..... 1218
Genduk Lintang Rusmawarda, Endang Dwiyaniti
213. Evaluation of Quality of Nursing Documentation in Surgical Wards at Baghdad Teaching Hospitals..... 1224
Haider M. Majeed, Tahseen R. Mohammed · Raja I. Abid
214. The Effect of Empowerment Program on Participation of Mothers with Premature Infants Hospitalized in Neonatal Intensive Care Unit 1230

XVI

Hania Sajadi, Golbahar Akhundzadeh, Hamid Hojjati

215. In Vitro Technique for Heavy Metal, Cobalt Tolerance in Aloe Vera Callus..... 1236
Hashim K. Mohammed Al-Obaidi, Sundus Hameed Ahmed, Liqaa Jameel Ibraheem
216. Risk Analysis of H₂S Gas Exposure at Benowo Landfill Surabaya 1241
Herman Bagus Dwicahyo, Lilis Sulistyorini, Abdul Rohim Tualeka
217. The Influence of Age, Time off and Pesticides Exposure on Haemoglobin Levels on Vegetable Farmers in Landasan Ulin Utara Subdistrict Banjarbaru City..... 1246
Herry Cahyadi, Achmad Rofi'i, Eko Suhartono, Husaini, Meitria Syahadatina Noor
218. Impact of Salmonellosis on Antineutrophil Cytoplasmic Antibodies, Alkaline Phosphatase and Lactic Dehydrogenase 1251
Khalil Ismail A. Mohamed, Saad Hasan Mohammed Ali, Wifaq M. Ali Al-Wattar, Suha A. Al-Fukhar and Jinan M. Mousa, Basim.M.Ibrahim
219. Preparation and Characterization of Some Complexes with New (Azo-Schiff base) Ligand and Study of Complex as Anticancer 1257
Layla Ali Mohammed, Muna Abass Hadi, Noor Alhuda Basim
220. The Omega-3 Fatty Acids can Significantly Increase the Height of Children Under Five with Stunting .. 1265
Lewi Jutomo, Bambang Wirjatmadi, Rudi Irawan
221. Relations Exposure to Dust Inhalation Against Impaired Lung Function in Worker Unloading at the Port of Manado, North Sulawesi 1269
Lili Sutanti, Zikri Fathur Rahman, Nur lailatul Masruroh, Abdul Rohim Tualeka
222. Urinary Tumor Markers for Detection and Surveillance in Non-Muscle Invasive Bladder Cancer 1274
Mohamed Jamal Saadh, Abeer Mohammad Kharshid, Hala Mousa Sbaih, Khalil Altaif
223. Relationship between QT Interval Dispersion and Degree of Coronary Artery Disease 1280
Mohammed Almyahi, Tahseen A., Alkinani, KadhumMajdi, Falah Shaheed Azzawi, Ahmed Basheer
224. Measurement of Interleukin 17a and Transforming Growth Factor-B1 and Its Relation to Disease Activity in Systemic Lupus Erythematosus Patients 1288
Mohammed.T. Alaanzay, Jinan .MJ.Alsaffar, Ahmed AbdulBari
225. Device-associated Infections (DAIs) in ICU: Using new CDC/NHSN definitions.....1294
Mostafa Mohammadi, Arash Seifi, Maryam Mokhtaryan, Azam Ghahan, Sara Ghaderkhani, Esmaeil Mohammadnejad, Reza Ghanei Gheshlagh
226. NOAEL Benzene in White Mice as the Basis for Determining the Safe Limit of Benzene Concentration in the Pulogadung Shoe Industry Home in Jakarta..... 1300
Muh. Arfandi Setiawan, Herman Bagus, Aisy Rahmania, Cut Suci, Carmelita Agustin, Abdul Rohim Tualeka
227. The Relationship between Heat Stress and Dehydration in the Continous Casting Machine Section of Pt X..... 1306
Muhammad Cahya Nur Siddiq, Mulyono
228. The Effect of CHOP Chemotherapy Implementation Towards Reduced Global Longitudinal Strain in Non-Hodgkin Lymphoma..... 1312
Muhammad Perdana Airlanga, Rochmad Romdoni, Ami Asharianti

229. Effect of Metronidazole on Clopidogrel Bisulphate Efficacy in Male Albino Rats..... 1318
Saddam Jumaa Nasser, Muhammed M. Al-Ani, Mohammad Sinjar Farhan
230. The Influence of Slow Back Stroke Massage, Cold-compress and Warm-compress to the Level of Prostaglandin F2 α (PGF2 α) in Primary Dysmenorrhea 1323
Mukhoirotin, Kurniawati, Diah Ayu Fatmawati
231. Enhanced the Antibacterial and Mechanical properties of UHMWPE by Addition Sort Fibers of Polyacrylonitrile PAN, Graphene Nanoplate (GNP) and Hydroxyapatite (HAp)..... 1329
Najim A. Saad, Massar Najim Obaid
232. The Relationship of Age, Working Period, and Work Attitude with Complaints of Carpal Tunnel Syndrome on Workers in the Sumenep Batik Industry Indonesia..... 1336
Nanik Khomairoh, Noeroel Widajati
233. Comparative Analysis Study of Different Positions by Hands and Feet on Functional Mobility Assessed by Five Times Sit to Stand Test on Post-Stroke Patients..... 1342
Nini Natalia Li, Bayu Santoso, R. A. Meisy Andriana
234. Relationship between Fatigue and Musculoskeletal Complaints on Pedicab drivers in the Pedicab Association Solo Balapan Station..... 1348
Novvini Miriam Suaebo, Kinanti Anggraini Dewi, Abdul Rohim Tualeka
235. A Selective Membrane Electrode for Iodide Ion based on New Ionophore and its Application to Pharmaceutical Samples 1353
Omid Hossieni, Sayed Aboalfazl Maashi, Narges Chamkouri Zolfaghar Sabati, Pardis Nourbakhsh, Mohammad Sajedinejad, Avishan Gholamiyan*
236. Rituximab in the Treatment of Refractory Myasthenia Gravis : Studying the Outcomes using MMT Score and Need for Plasmapheresis in Baghdad Teaching Hospital 1359
*Abeer Abdulhadi Rashid, Sarmad Abdulrasool Almashta, Rana Ali Hussein, Ahmed khaleel Mashaallah**
237. Assessment of Nurses' Knowledge toward Nursing Intervention for Eye Trauma at Baghdad Teaching Hospitals 1365
Ahmed F. Hassan, Tahseen R. Mohamed, Aqeel H. Jassim
238. Anti malignant (HepG2, MOLT-3) Activity of One, Two, Three- Triazoles New Prepared Bearing Hetero Compounds in Baghdad 1370
Ahmed Sa'adi Hassan
239. Forensic Human and Non-human Blood Discrimination using Mitochondrial 12S rRNA gene..... 1378
Ameer K. Idan, Hussein O.M. Al-Dahmoshi
240. Antifungal Activity of Crude and Phenolic Extract to Rice Crusts and Chemical Pesticide (Blitinate) in Inhibition of Fungi Isolate from Rice Seeds..... 1386
Angham Najah Al-khafaji Athraa Harjan Muhsin, Mays Talip Abdallah
241. Identification of Farnesoid X Receptor as a Novel Nuclear Receptor Sensing for Gallstone Diseases 1393
Antesar Rheem Obead, Maha Fahdil Mohammed, Mohend AL. Shalah

XVIII

242. Comparison between Nonvisualized Finding of 3D-Tof Mrv Cerebral and Cerebral Angiography Result 1399
Arif Shidiq, Anggraini Dwi Sensusiaty
243. Investigating the Effect of Short-Term Educational Program on Readiness of Patient's Candidate for Endoscopy 1406
Arsalan Rostami, Ali Khorshidi, ghobad abangah, Mosayeb Mozafari
244. In silico Analysis of "Interferon Beta 1" In some Selected Animal Species 1411
Ashraf Fadhil Jomah, Sepideh Parvizpour, Jafar Razmara
245. Rapid Qualitative Test for Drunkenness Detection and the Presence of Alcohol in Beverages 1417
Ausama Abbas Faisal, Maher Ahmed Abed, Khalid Jamal Abdulwahab
246. Nurses' Knowledge Regarding Prevention of Surgical Site Infections at Baghdad Cardiac Centers and Hospitals 1420
Bassima A. Naji Msc, Aqeel H. jasim, Ayad M. Moussa
247. Molecular Docking, Pharmacokinetics, and Toxicity Prediction of Epigallocatechin-3-Gallate (EGCG) on IKK Receptor in Photoaging Prevention..... 1426
Damayanti, Cita Rosita Sigit Prsakoeswa, Djoko Agus Purwanto, Anang Endaryanto, Siswandono
248. Correlation between High Serum Uric Acid Levels with Occurrence of Diabetic Peripheral Neuropathy in Patients with Type 2 Diabetes 1433
Deasy Putri Sukarno
249. Nephrotoxicity Effects of Post-Cisplatin Paclitaxel Chemotherapy in Severe Head and Neck Tumor 1439
Des Dwiputra Effendy, Soeprijadi
250. Correlation of CD4 and Distal Sensory Polyneuropathy in Hiv-Aids Patients 1444
Desti Ariani Kistanti, Paulus Sugianto, Erwin Astha Triyono
251. Legal Efforts on Forensic Examination of the Death of Polling Station Working Committees (KPPS) Members 1449
Dewi Iriani, Abdul Kadir, Agus I Supriyanto, Ahmad Arifin, Made Wira Suhendra
252. The Burden of *Toxoplasma Gondii* In Spontaneous Miscarriage and its Association with Rhoptry Protein 5 Gene and *Toxoplasma gondii* specific primers GRA 6 Gene Expression in Iraq Women..... 1455
Dhamyaa Kareem Kadhim, Abdulsada Abdulabbas Rahi
253. Changes of Interleukin-6 (IL-6) and Immunoglobulin G (igG) in Respiratory Excercise 1460
Didik Agus Santoso, FM. judajana, Elyana Asnar
254. Association between Stretching Exercise with Virtual Reality Game and Over Head Pulley of Frozen Shoulder Patients 1466
Donny Gunawan, Reni Hendrarati Kusharyaningsih, Noor Idha Handajani
255. Correlation of Serum Alkaline Phosphatase, Lactate Dehydrogenase, C-Reactive Protein, Blood Deposition Rate, B-Hcg Expression and Tumor Volume to Lung Metastasis Risk in Osteosarcoma Patients..... 1472
Achmad Fachrizal, Dwikora

256. Effect of Amniotic Membrane-Derived Mesenchymal Stem Cells on TNF- α Expression and Inflammatory Cells Infiltration during Vesicovaginal Fistule Repair Healing Process 1477
Eighty Mardiyani Kurniawati, Agung Nur Rachman W, Tri Hastomo, Budi Santoso, Widjiati, Fedik A. Rantam, Purwati*
257. suPAR is a Bad Omen for Chronic Kidney Disease Progression..... 1482
Ekhlas Abdallah Hassan, Fayhaa M. Khaleel
258. Interventions on Women Under Intimate Partner Violence: An Integrative Review..... 1490
Elaheh Asadi-Bidmeshki, Jamileh Mohtashami, Foroozan Atashzadeh-Shoorideh, Meimanat Hosseini
259. The Effectiveness Comparison of Valproic Acid 500 mg and Amitriptyline 15 mg in Reducing the Frequency of Headache Attack in Patients with Tension-Type Headache..... 1495
Elsa Susanti
260. Decrease of Epstein-Barr Virus Anti Early Antigen Immunoglobulin a Levels and Primary Tumor Size in Post-Cisplatin-Paclitaxel Chemotherapy in Nasopharyngeal Carcinoma Patients..... 1500
Elvi Syahrina Fiorisa, Achmad Chusnu Rhomdhoni, Budi Sutikno, Anggraini Dwi Sensusiaty
261. Correlation of Cardiorespiratory Fitness Levels with Functional Mobility Ability in Post Thrombotic Infarction Stroke Patient 1505
Eny Susilowati, Reni Hendrarati Kusharyaningsih, Dewi Poerwandari
262. The Early Detection in Gestational Diabetes Mellitus at Indonesia Primary Health Care..... 1511
Erni Rosita Dewi, Budi Prasetyo, Muhammad Ardian Cahya Laksana, Hermanto Tri Joewono, Ivon Diah Wittartika
263. Observation of Oral Contrast Media Filling Into Lumen Appendix 1516
Faradilla litiloly, Hartono Yudi Sarastika
264. Study the Biological Efficiency of an Isolated Terpenic Compound from the Ether Petroleum Extract and the Trace Elements of the Plant *Tribulusterrestris* 1520
Fatima S.Sabah Eman A.Mukhaifi
265. Medico-legal Significance of Diatoms Detection in Different Organs of Drowning Victims 1526
Haidar N. Hussein, Nabeel G. Hashim, Niran M. Ahmed
266. Evaluation of Nurses' Knowledge and Attitudes toward Pain Management at Baghdad Teaching Hospitals 1533
Haider M. Majeed, Ahmed F.Hassan, Raja I. Abid
267. The Effect of Empowerment Program on Participation of Mothers with Premature Infants Hospitalized in Neonatal Intensive Care Unit 1539
Hania Sajadi, Golbahar Akhundzadeh, Hamid Hojjati
268. Association of Diffusion Weighted Magnetic Resonance Imaging Profile and Apparent Diffusion Coefficient Value with Brain Tumor's Histopathology 1545
Hartati Rusmi Tri Wilujeng, Anggraini Dwi Sensusiaty, M. Yamin Sunaryo Suwandi
269. Mitochondrial 16S rRNA gene-dependent Blood typing as a Forensic Tool..... 1553
Hayder J.H. Al-Nayili, Hussein O.M. Al-Dahmoshi

270. Curcumin Improves the Regulation of Ovarian Folliculogenesis in Culture Media with Peritoneal Fluid from Infertile Women with Endometriosis 1562
Hendy Hendarto, M Yohannes Ardianta Widyanugraha, Widjiati, Soehartono Darmosoekarto
271. Correlation of Fugl-Meyer Assesment Score with Barthel Index and Functional Independence Measure in Patients with Stroke 1568
Husnul Mubarak, Noor Idha, Bayu Santoso
272. Determination of Priority Elements of Vigilance in the Use of Pesticides based on Difficulty and Usefulness (A Supporting Study for Law and Policy in Health) 1574
Ilyas Ibrahim, I Ketut Sudiana, H J Mukono, Suhartono, Heru Santoso Wahito Nugroho
273. The Association Between Myoglobin, Troponin I, Hfabp and Nt-Probnp Levels with Acute Myocardial Infarction in Patients with Acute Coronary Syndrome 1579
Ime Fransiska Adidharma, Jusak Nugraha, Muhammad Aminuddin
274. Evaluation of Some Inflammatory Cytokines and Glycated Hemoglobin in Uncontrolled Type 2 Diabetes Mellitus with Nephropathy 1587
Inaam Ahmed Ameen, EmanSaadi Saleh, Sarah Hashim Mhaibes, KaledNather Taha, Dhikra Abdul Hameed Dawood, Hawaa Salman Kamil
275. The Impact of High Cortisol Level in Increasing Incidence of Infection Cases among Acute Stroke Patients..... 1592
Indah Ari Handaayani, Muhammad Hamdan, Paulus Sugianto, Achmad Firdaus Sani, Mohammad Saiful Ardhi
276. Time Recommendation and Alternative Parameters for Severe Maxillofacial Trauma Reconstruction 1597
Indri Lakhsmi Putri, Magda Rosalina Hutagalung, Ida Bagus Narmada, David Sontani Perdanakusuma
277. Development of Geogebra Learning Media Based on Statistical Reasoning on Statistics Materials of Junior High School Students and its Influence for the Inteligent of Student 1602
Intan Sari Rufiana, Cholis Sa'dijah, Subanji, Hery Susanto
278. The Association between Blood Glucose Control Measured with Serum Hna1c Level With Peroneal Motor Nerve Conduction Velocity in Patients with Type 2 Diabetes Mellitus with Polyneuropathy 1608
Intan Sudarmadi, Sri Murtiwi
279. Decrease of Sensorineural Hearing Frequency and Cochlear Hair Cell Function in Malignant Head and Neck Tumor Post Cisplatin Chemotherapy Series II 1614
Irawati. Bakti Surarso.Haris M. Ekorini
280. Thiophene-Cyclic and Sulfazane Derivatives (Preparation, Spectral Analysis, the Behavior in Organic Solvents, Microbial Testing) 1621
Jalal Hasan Mohammed, Alaa Jawad Kadhim, Nagham Mahmood Aljamali
281. Diagnostic test of Brief Peripheral Neuropathy Screen as Distal Sensory Polyneuropathy-HIV Diagnostic Tool 1629
Joko Rudyono, Mudjiani Basuki, Erwin Astha Triyono
282. Effect of Exercise Training Program in Pain, Muscle Strength and Functional Mobility in Post Cervical Decompression Surgeries..... 1635
Kamble Jyotsna Prabhakar, Kanase Suraj B

283. Relation of Homocysteine With Malondialdehyde and Dyslipidemia in Type 2 Diabetic Patients with Coronary Artery Diseases..... 1647
Khalid Shaalan Sahab, Ali S. Mahmoud Al-Saadi
284. Determination of Some Biomarkers that affect in Behaviors of Autism Spectrum Disorder Individuals in Iraq..... 1652
L. Basim M. Ali, Iqbal Jasim Badr Alasadi, Sameerah Ahmed Zearah
285. Detection of VT1 and VT2 genes in *Escherichia coli* isolated from Diarrhea patients in AL-Anbar, Iraq using PCR Sequencing..... 1658
Laheeb Rajab Hamad, Muthanna Hamid Hassan, AbdalwahabBdewi Hussain
286. Correlation between the Duration of Ethambutol Therapy and the Toxic Optic Neuropathy Occurene in Patients with Multidrug-Ressistance Tuberculosis 1665
Laily Irfana, Eko Wahono, Gatot Soehartono, Tutik Kusmiati
287. Macrophage Activity and Histopathological Differences of Lung Tissue on Sequential Co-infections of Heligmosomoides Polygyrus Nematode on Mycobacterium Tuberculosis Infection..... 1670
Laksmi Wulandari, Muhammad Amin, Soedarto, Gatot Soegiarto, Kenji Ishiwata
288. Nurses' Knowledge Regarding Pneumonia in Children Under Five Years of Age at Pediatric Wards in Kirkuk Teaching Hospitals 1676
Luay Amjed Mahmood Al-Waly, Mohammed Ahmed Sultan Al-Wily, Radhwan Hussein Ibrahim
289. The Effectiveness Comparison of Desloratadine and Loratadine in Reducing Total Nasal Symptom Score and the Level of Interleukin 4 in the Nasal Secretions of Allergic Rhinitis Patients..... 1682
Luh Putu Dhena Purwaningsih, Dwi Reno Pawarti, Bakti Surarso
290. Prevalence of Dermatophytes Fungal Infection among Different Gender 1688
Luma T. Ahmed, Zahraa A. Darweesh, Wathiq M. Hussain
291. Risk Factors of the Elderly Falling in Public Hospitals: A Systematic Review Study 1694
Masoumeh Otaghi, Zahra Mohammad-Niakan, Sanaz Aazami, Ali Khorshidi
292. Effect of Web-Based Early Diagnosis of Dental and Oral Diseases with Validity Level of Dentist Final Diagnosis in Public Health Center, Makassar, Indonesia 1699
Masriadi, Dolly Indra, Harlinda
293. Association between Intelligence Level and Handicap Degree in Epilepsy Patients..... 1707
Meity Meiliyanny Beslar, J. Eko Wahono, Isti Suharjanti, Paulus Sugianto, Riani Wisnujono
294. Effect of Glutamine Before Gets Cisplatin on Aif and Bcl-2 in the Evidence of Apoptosis Cell Tubulus Proximal in Rats Kidney of *Rattus Norvegicus* Strain Wistar..... 1713
295. Association between Soluble Contents CD40 Ligand (sCD40L) and Acute Coronary Syndrome (ACS) . 1718
Mirza Elita, Muhammad Aminuddin, Jusak Nugraha
296. The Potential Role of Radiology in Diagnosis of Traumatic Versus Non-Traumatic Cerebral Hemorrhages for Medicolegal Application 1724
Mohamed Khairy, Dina A. Shokry, Ehab Abdelhaleem, Reham Nafad Elbendary
297. Comparison of Saffron versus Fluoxetine in Treatment of Women with Premenstrual Syndrome: A Randomized Clinical Trial Study 1731

Mohammad Nemat-Shahi, Atefeh Asadi, Mahbobeh Nemat-Shahi, Davoud Sorosh, Shakiba Mozari, Hamidreza Bahrami-Taghanaki, Mahsa Mehrpour

298. Comparison of the Effects of Passiflora Incarnata and Piroxicam in opioids withdrawal-Induced Myalgia and Anxiety: A randomized Clinical Trial 1737
Mohammad Nemat-Shahi, Seyyed Mehdi Mir Mohammadi, Davoud Soroush, Atefeh Asadi, Samaneh Nakhaee, Mahsa Mehrpour
299. Hematological Changes in Blood of Smokers of Cigarettes and Nargyle..... 1742
Mohammed S. Hussain, Nuhad Mohammed Hamid, Mohammed Qais Al-Ani, Belal K. Muden, Mustafa J. Hamad-Allah, Omer H. Sweed, Suror S. Sabbar
300. Correlation between Hyperglycemia Stress and Short-Term Memory Function in Thrombotic Stroke Patients..... 1748
Muhammad Hamdan, Yudha Hsaryono, Abdulloh Machin, Dian Puspitarini
301. The Difference between hs-CRP and Serum IL-6 Levels in Patients with Glaucoma and Non Glaucoma 1753
Muhammad Riduan, Nurwasis
302. The Risk Factors Effect of Knee Osteoarthritis Towards Postural Lateral Sway 1758
Muhammad Siddik, Ratna Darjanti Haryadi
- 303. Microbial Risk Assessment (MRA) As a Method of Assessment for Drinking Water Refill in Pattinggaloang District of Makassar City 1764**
Alfina Baharuddin, Muhammad Ichsan
304. Association of Early Nutritional Status with the Clinical Severity in Patients with Acute Stroke 1770
Myrna Ika Purnama, M. Hasan Machfoed, J. Eko Wahono R
305. The Legal Protection of Well-Known Service Trademark (The Case of Inter-Continental Vs The Intercontinental)..... 1775
Nanda Riwanto, Agung Sujatmiko
306. Determining the Quality of Services Provided in Delivery Room at Ayatollah Kashani Hospital (Jiroft, Iran) from the Perspective of Clients Using Service Quality Model (SQM) During Spring 2019 . 1780
Narges Mahyapour Lori, Hourie Taheri Sarvetomin, Mahdiyeh Ahmadi, Sareh Mehni, Neda Dastyar
307. Correlation between Serum & Urinary Placental Protein (Pp13) in Pre-eclamptic Women at their Third Trimester..... 1785
Nesreen Ahmed Nasser, Rayah Sulaiman Baban, May Fadhil Al- Habib, Risala A. Ali Jameel
308. Efficacy of Acetaminophen Plus Amitriptyline Compared to Acetaminophen to Reduce Pain Intensity in Nonspecific Chronic Lower Back Pain 1790
Nita Kurniawati, Isti Suharjanti, Muhammad Hamdan, Joseph Ekowahono Rahardjo, Djohan Ardiansyah, Hanik Badriyah Hidayati
309. Society Perception of Pasung Behavior in People with Mental Disorders..... 1797
Nur Khriesna Habita, Ahmad.Yusuf, Rr Dian Tristiana
310. Effects of the Use Knee-Ankle-Foot Orthosis on Proprioception Function Change in Healthy Adult Male 1803
Nuralam Sam, Andriati, Noor Idha Handajani

311. The effectiveness of Aqueous Extract of Grape Seeds *Vitis vinifera* as an antibiotic for some microorganisms and its Protective Role Histology for Liver, Kidney in Mice 1809
Osama Nadhom Nijris, Zinah Ibrahim Khaleel, Swiss Yonis Hamady, Mohammed Ahmed Mustafa
312. Comparison of Stability And Sternum Healing Rate in Clinical and Ultrasonography (USG) between Stainless Steel Wire and Polydioxanone Yarn in Children Heart Surgery Operation..... 1817
Prima Kharisma Hayuningrat, Heroe Soebroto, Paulus Rahardjo
313. Discrimination the Gender in the Criminal Evidence at Crime Scene 1824
Qutaiba S. H. AL-Ameedy, Noor Salman Kadhim Al-Khafaji
314. Effect of Workload and Breastfeeding Motivation of Working Mothers..... 1829
Rachma Anisa Ulya, Retnayu Pradanie, Aria Aulia Nastiti
315. Effectiveness of an Educational Program on Nurses- midwives' Practices about Pain Management during Labor in Baghdad Maternity Hospitals 1837
Rajaa Tareq Hasan, Rabea Mohsen Ali, Ekhlash A. Hussein
316. 3D CBCT Analysis of Odontometric Variables for Gender Dimorphism in Saudi Arabian Subpopulation..... 1843
Rakhi Issrani, Zhar Iqbal, Mohammad Khursheed Alam, Namdeo Prabhu
317. Violation of Dapek Salah Customary Law in Bengkulu: Forensic Psychological Analysis Toward The Criminal Behavior of Indigenous 1852
Rangga Jayanuarto, Khudzaifah Dimiyati, Absori Absori, Natangsa Surbakti
318. The Effect of Marmet Technique on Mother's Satisfaction in Breastfeeding..... 1857
Rani Dwi Sulistiawati, Tiyas Kusumaningrum, Retnayu Pradanie, Ni Ketut Alit Armini,
319. The Increase Level of Muscle Adductor in Idiopathic Vocal Cord Adductor Paralysis Post Biofeedback Vocal Therapy 1867
Rani Maharyati, Irwan Kristyono, Muhtarum Yusuf
320. Periodontal Evaluation of One-Piece and Two-Piece Single Implant Loaded in Esthetic Zone..... 1873
Rezan Anwar, Ziwar Al Qasab
321. Effect of CaCl₂ Crosslink Solution Concentration on the Characteristics of Gelatin Alginate Microspheres 1880
Rizka Safitri, Tutiek Purwanti, Widji Soeratri
322. Association of Adiponectin and IgE levels with occurrence of asthma in Babylon Province 1887
Ruwaida Wahab Salman AL-Jebory
323. Comparison of the Total amount of Macrophages on Full Thickness Wound Bed in The Use of Tulle, Freeze-Dried Amnion, and Microbial Cellulose 1893
Saktrio Darmono S., Beta Subakti Nata'atmadja, David Sontani Perdanakusuma
324. Evaluation of Women's Perception toward Childbirth Experience after Utilization of Pain Management Practices at Al -Elwyia Maternity Teaching Hospital 1899
Sarab Nasr Fadhil, Rabea Mohsen Ali

XXIV

325. Mention the Treatment of Anger in Hospitalized Patients in the CCU department of Social Security Hospitals of Golestan Province 1904
Soudabeh Aloustani, Leila Mamashli, Adeleh Sadeghloo, Mohammad Reza rajablou
326. The Comparison of Social Support Against the Life Quality of The Spinal Cord Injury Under Stress 1909
Soudabeh Aloustani , Karvan Bekmaz, Adeleh Sadeghloo, Hamid Hojjati
327. Risk Factors Related To Mastalgia 1914
Suhad Kahdum Ali
328. Genetics Risk Factors and Progression of Renal Failure 1920
Suhayr A.Alqaysi
329. The Diagnostic Accuracy of Phalen Test and Prayer Test in Carpal Tunnel Syndrome..... 1927
Suroso Agus Widodo, Fatchur Rochman, Ratna D. Haryadi, Patricia Maria K
330. Conservative & Operative Management of Tuberculous Spondylitis in Children..... 1933
Teuku Arief Dian, Komang Agung Irianto
331. A New Automated Approach for Early Lung Cancer Detection with Improved Diagnostic Performance – A Preliminary Analysis 1939
Thavavel Vaiyapuri
332. Validity of Star Excursion Balance Test as Dynamic Balance Test In Subjects with Non-Operative Anterior Cruciate Ligament Injury 1945
*Yudith Dian Prawitri, Imam Subadi, Bayu Santoso**
333. Correlation between Parenting Styles and Peer Attachment with Aggressive Behavior Potentials in Adolescent Boys 1951
Yunias Setiawati, Kusufia Mirantri, H. J. Mukono, Joni Wahyuhadu, Endang Warsiki
334. Bacteriological Study of *Klebsiella pneumoniae* Isolated from Burn Patient in Al-Najaf City..... 1958
Zahraa Hameed Oda Alquraishi, Basaad Abdzaid Al-Fatlawi
335. Immunomodulation of IraqiLyciumbarbarium Carotene *in vitro* 1965
ZainabYaseen Mohammed Hasan; NajwaShAhmed; Raguad Kadium
336. Activity of Biosynthesized Reduced Graphene Oxide against Multidrug resistant Uropathogenic Bacteria..... 1972
Zina Bakir Al-Hilli, Nawfal Hussein Aldujaili
337. Legal Protection Against Women in Sexual Violence 1979
Absori Absori, Fitriani Nur Damayanti, Kelik Wardiono, Sri Rejeki
338. The Clinical Function Comparison of Post Operative Nerve Grafting and Nerve Transfer in Patients with Brachial Plexus Injury 1984
339. Combination Use of Aloe Vera and VEGF Promotes Osseointegration and Stability of Titanium Implants 1990
Athraa Y Al-Hijazi; Zaid M.Akram; Emad H Abdulla

340. Anthropometric Study of Nose Parameters in Iraqi Arabic and Kurdish Subjects (Possible Personal Identification Tool)..... 1998
Sinan S. Farhan , Watheq M Al-Jewari , Aiman Q. Afar, Aiman Al-Qtaitat
341. Subjective Work Fatigue Due to Hot Work Climate (A Study on Indoor Production Workers of Ud King Rack Surabaya Indonesia) 2005
Putri Arianto, Endang Dwiyanti
342. Histopathological Assessment of Hepato-Nephrotoxicity Induced by Nano Copper Particles in Adult Male Albino Rats and the Potential Protective Effect of Alpha Lipoic Acid: A Chronic Study 2012
Rabab Abdulmoez Amin Eltokhy, Mervat Hamdy Abdelsalam, Eman Abdelfattah Elzoheiry, Marwa Issak Mohamed, Laila Ahmed Rashed and Reham Shehab Elnemr.
343. Safe Concentration of Benzene Exposure to Worker's in Gas Station at the Area of Diponegoro University, Semarang 2020
Rizki Adi Sulistyanto, Abdul hamid, Aditya, Dyah Ayu Kusumaningrum, Novvini Miriam Suaebo, Abdul Rohim Tualeka
344. Effect of Local Anesthesia and Extraction on Mouth Opening..... 2026
Ali Falah Hassan
345. Physiological and Gen Study for Animals Exposed to Leaves of Plant (Eucalyptus) from Selected Locations at, Al-Nassiriy/ Iraq 2031
Sabah H. Enayah, Mohammed A. Gati
346. Effect of Metronidazole on Clopidogrel Bisulphate Efficacy in Male Albino Rats..... 2036
Saddam Jumaa Nasser, Muhammed M. Al-Ani, Mohammad Sinjar Farhan
347. Estimation of Serum AdiponectinIrisin and Apelin in Iraqi Obese Women Patients with Polycystic Ovary Syndrome..... 2041
Sarah Ibrahim Hashoosh , Asmaa A. Hussien, Salah Al Chalabi
348. Antibacterial and Antifungal Activities of Centaureabruguerana (Asteraceae) from Iraq..... 2046
Shaima H. A. ALAbbasi, Talib O.H. Al-Khesraji, Sirwan H.Salih
349. Application of Infection Control Rules by Iraqi Orthodontics..... 2112
Rehab adil Al-Rawi Noor Nourie Abbass Abdulla, Fudhla Sadoon Al- Zubaydi, Bassam Alsheekhly
350. Mast cell, IL-1 Beta and IL-6 for Wound timing and Vitality in Forensic Practice..... 2120
Mohammad Abdul Mohsin Jebur, Nabeel Ghazi Hashim, Salim R. Hamoudi Al-Obeidi
351. Association between Genetic Polymorphism of 5-HTTLPR, and SGOT, SGPT and Catalase with Alcoholism of Iraqi People..... 2125
Anwar A. Abdulla
352. Sensitive Simultaneous Estimation of Atorvastatin. Ca in Pure and Dosage Forms Via Developed CFIA Using 1,2 Naphthoquinone-4-Sulfonate as a Suitable Organic Agent 2132
Bushra B. Qassim, Asmaa A. Zydan
353. Gall Bladder Wall Thickness: Sonographic Accuracy and Laparoscopic Cholecystectomy Conversion Rate, Evaluated by Histopathology 2140
Mohammad Faraj Dawod Al. Jafary , Ammar Fouad Abdulrazaq , Ayman Nadeem Kadum

XXVI

354. Evaluating the Effect of Addition of Titanium Dioxide Nanoparticle on Some Physical Properties of Flowable Composite Resin 2145
Sazgar Srbast Qasim, Diyar Khalid Bakr, Dara H. Rasheed
355. Antimicrobial Activities of Green Biosynthesized Iron Oxide Nanoparticles Using *F. Carica* Fruit Extract..... 2152
Nada Khudair Abbas, Azhar A. F. Al- Attraqchi, tutor Jenan Hussien Taha
356. Molecular Detection of Antibiotics Resistance Genes in *Burkholderia Cepacia* Isolated From Diabetic Foot Infection 2159
Maryam Riyadh Al-Muhanna, Mahdi Al-Ammar
357. Evaluation the Antimicrobial Effect of Glycerin Magnesia on Some Bacteria, in-Vitro Study 2164
Maher Saber Owain, Khalid Ismael Oleiwi, Ali Ghazi Atiyah, Mustafa Salah Hasan
358. The Role of CTX-II , Dyslipidemia ,Vitamin D in Polycystic Ovary Syndrome 2168
Samah Amer Hammood Alaauldeen S. M. AL-Sallami
359. Prevalence of Histopathological Diagnosis of Benign and Malignant Breast Lesions in Al-Muthanna Province for Two Years Duration 2173
Sarah Ali Abed; Ali Adnan Jabbar; Roaa Salih Mahdi; Ali Mohammed Khaleel; Suha Suhiel Hussein; Maha Khadum Ghayadh
360. A Histological and Histochemical Study on Olfactory Bulbs to Detection Amyloid Protein Depositions by Congo-Red and Routine Staining Techniques..... 2180
Rajaa Ali Moheiseen Al- Tae, Muna Hussain Al-Aameli, Yarub Modhar Al-Qazwini
361. The Intraperitoneal-Ketoprofen-Histopathological Induced Alterations in the Wistar Rat Kidneys 2186
Samer Riyadh Fadhi, Hakim Bahlok Jebur
362. Association between IL12A Gene of G/A genotype Polymorphism and Pulmonary Tuberculosis Risk in Baghdad Population..... 2191
Anwar Abed Nasser Dhabaan, Mayes Abdul-Hadi Mahdi
363. The Effect of Allogenic Bone Marrow on Integration Dev-Mesenchymal Stem Cell And Vascular Endothelial Growth Factor 2197
Ferdiansis
364. Influence of BRACA Usage on Self Improvement of Breast Cancer Patient by Post Mastectomy..... 2204
Dewi Maryam, Iskandar Ali
365. Correlation of Quadriceps and Hamstring Muscles Strength with Knee Osteoarthritis Stages and Pain Levels in Elderly Female Subjects 2208
Mohammad Fathul Qorib, Hening Laswati Purba
366. Effect of Dates (*Phoenix dactylifera L.*) on Liver of Broiler Chicks Infected with Infectious Bursal Disease Virus. Biochemical and Histological Study 2214
Balqees Hassan Ali, Ziad Khalaf Jalob, Zaid Yaseen Ibrahim, Ahmed Sami Jarad, Mahmood Khudair Abbas, Zahraa Kamal Hiad, Khaldoon Jalal Ahmed

367. Identifying the Correlation between the Incidence of Breast Cancer and Hepatitis B Virus of Iraqi Women..... 2221
Minen Al-Kafajy
368. Cyclic Fatigue Resistance of Wave One Gold, F6 SkyTaper, One Curve, and AF Blue R3 NiTi Rotary Instrumentation Systems..... 2227
Zainab M. Abdul- Ameer, Samar Abdul Hamed, Rasha H. Jehad, Jacob Al-Hashemi
369. Relation between Cardiorespiratory Fitness Measured with Six-Minute Walk Test and Walking Speed Measured with 1—Meter Walk Test in Patients of Post-Subacute and Chronic Ischemic Stroke..... 2236
Hening Laswati, Cut Jaswanita Eka Putri, Patricia Maria Kurniawati
370. Comparison Study of Urinary Retention Incidence in Assisted Vaginal Delivery Case with and without 24-Hour Catheterization 2242
Eighty Mardiyani Kurniawati, Hari Parathon, Suskhan Djusad, Fernandy Moegni, Junizaf, Budi Iman Santoso
371. Effectiveness of Additional Intranasal Phototherapy through Decrease Score of Nose Symptom and Eosinophil Mucosa on Persistent Allergic Rhinitis 2248
Hamna Fitriah, Roestiniadi Djoko Soemantri
372. Hydration Status and Degree of Clinical Severity Patients with Thrombotic Infarction Stroke..... 2254
Agung Nugroho, Hendro Susilo
373. Prevalence of Benign Vocal Cord Disorder at Dr. Soetomo General Hospital Surabaya Indonesia in June 2015-June 2016 2260
Lucia Miranti Hardianingwati , Diar Mia Ardani
374. Utilization of Deconcentration Health Funds in Planning, Budgeting, and Implementation in Indonesia . 2265
Gurendro Putro, Ristrini, Tumaji
375. The Influence of Slow Stroke Back Massage, Cold-compress and Warm-compress to the Level of Prostaglandin F₂ α (PGF₂ α) in Primary Dysmenorrhea 2272
Mukhoirotin, Kurniawati, Diah Ayu Fatmawati
376. The Effect of Dexterity and Perturbation Exercise on Knee Osteoarthritis through Functional Balance and Power Improvement of Quadriceps and Hamstring 2278
Rini Lestari Ansanay, Damayanti Tinduh
377. Biocompatibility Test of Decellularized Cartilage Bovine Scaffold in Vitro and In Vivo 2284
Achmad Fachrizal, Dwikora Novembri Utomo
378. Predictors of Hospital Utilization Among Papuans in Indonesia 2290
Agung Dwi Laksono, Ratna Dwi Wulandari
379. Hydration Status and Degree of Clinical Severity Patients with THROMBotic Infarction Stroke 2296
Agung Nugroho, Hendro Susilo
380. The Effect of Allogenic Bone Marrow Mesenchymal Stem Cell - Platelet Rich Plasma (Bmscs - Prp) Intra-Articular Injection Effect on the Regeneration of Full-Thickness Joint Cartilage Defect on Rabbit. 2302
Ahmad Taufik.S, Dwikora Novembri Utomo, Hari Basuki Notobroto

XXVIII

381. Health Wisdom in the Traditional Healing of the Panaragan Java Subethnicity: The Case Study of *Warok* Ponorogo..... 2308
Alip Sugianto, Waktu Abdullah, Sumarlam, Sahid Teguh Widodo
382. Correlation between Coenzyme Q10 Level Long-Term Steroid Inhalation in Patients with Bronchial Asthma..... 2313
Deny Perdana Putra, Arief Bakhtiar, Muhammad Amin
383. Association between Fear of Falling, Balance and Functional Mobility in the Elderly..... 2319
Fatmawaty Abasmay, Nuniek Nugraheni S, Reni Hendrarati Masduchi
384. Relation between the Increase of Alpha Fetoprotein Serum Level and the Size of Hepatocellular Carcinoma in Multi Slice Computed Tomography Examination..... 2324
Ika Putri Maharani, Nifa Koesmarsono, Budi Laraswati
385. Study of Gastroesophageal Reflex Disease in Adult Type II Diabetes Mellitus patients with Upper Gastrointestinal Symptoms..... 2329
Maysam Riyadh Mohammed Hussein Alaasam, Sadiq Jabar Almohana, Hayder Nadhum Muhsen, Jalal Jasim ALbdairi
386. Association between Dose and Duration of Cisplatin Exposure with Sitotoksicity Effect on Nasopharyngeal Carcinoma Stem Cell..... 2335
Lakshmi Kusuma Wardhani, Achmad C Romdhoni
387. Optimization of Streptokinase Mutant Protein Purification Method Using Affinity Chromatography Technique 2340
Nastaran Rahimi, Mohammad AlinezhadChamazketi, Amir Yaghoubi Nezhad, Forough Talaeizadeh
388. Effect of Dietary Energy Density on Increasing Blood Glucose Pattern and Hunger-Satiety Sensation.... 2345
Ni Luh Putu Ayu Putri Sariningrat, Purwo Sri Rejeki, Irfansyah Irwadi
389. Effect of Phenytoin Usage Duration Against Hs-Crp Levels in Epilepsy Patients..... 2350
Ratna Wajiyanti, Kurnia Kusumastuti
390. Comparison of Clinical Severity Improvement Degree between Acute Thrombotic Stroke Patients with Low and High Matrix Metalloproteinase-9 Levels 2356
Sita Setyowatie, Hendro Susilo
391. The Effect of Model Intervention Towards the Intention of Early Detection of Cervical Cancer with Via Test..... 2362
Sondang Sidabutar, Santi Martini, Rachmat Hargono
392. The Role of Wide Pore Drain in Successes of Spontaneous Closure of the Cysto- Biliary Fistula after Hydatid Disease of The Liver..... 2368
Jalil Ibrahim Awaid alrubaye; Hussein Ali Abed Ahmad; Salah Mahdi Tager
393. Causes of Emergency Hysterectomy in AL-Fallujah Maternity & Children Teaching Hospital..... 2374
Huda Hamid Al-Janabi; Omar Mahmood Shakir; Bashar Talib Huweidy
394. The Immunological Study of Salmonella Infantis in white Mice Immunized with Killed Antigen 2379
Basimraihan Sahar, Khalied Yassenzakairalzamily, Alaa SalimHamzah

395. The Inhibition Effects of Withania somnifera leaves Extracts for Multi Drugs Resistance Bacterial Isolates 2384
Kareem Ibrahim Mubarak
396. The Diagnostic Role of Anti-Human Salivary Gland Protein-1 (anti-SP1) in the Early Detection of Primary Sjogren's Syndrome in Some Iraqi Patients 2390
Haael Subhi Abbas ; Laila Hamzah Huzaim ; Tiba Salim Naseif
397. Effect of Sunlight and Vitamin D3 on some Men Fertility Parameters 2397
Riyadh Hussein Wally
398. Effect of Different Die Materials on the Marginal Fit of CAD/ CAM crowns pre and post -cementation.. 2403
Sara AbdulBasit Turkey AL-Bayat BSc, Amal Abudl Latif MSc, Abdulla M.W. Al-Shamma
399. Evaluation of Inhibin B, FSH, and LH in Male with Thalassemia..... 2408
Fatimah Kadhim Ibrahim AL- Mahdawi, Zaid Nabeel Elia, Hayder Abdulhafedh Kurji
400. Anti-phosphoryl Choline and hs - CRP in Serum of Atherosclerosis Cardiovascular Patient with Chronic Periodontitis 2412
Reham Adnan Radhi Alaa Omran Ali ALmosawi
401. The Diagnostic Test in Lumbosacral Vertebrae Image towards Magnetic Resonance Imaging in Radicular Low Back Pain 2419
Dhimas Hantoko, Isti Suharjanti, Sri Andreani Utomo

Health Wisdom in the Traditional Healing of the Panaragan Java Subethnicity: The Case Study of *Warok* Ponorogo

Alip Sugianto¹, Wakit Abdullah², Sumarlam³, Sahid Teguh Widodo⁴

¹Doctoral Student, ²Professor, Universitas Sebelas Maret, Surakarta, Indonesia

Abstract

The Panaragan Java Subethnicity has a customary leader called *warok*. This leader is known for his ability to possess supranatural powers which may heal diseases. This traditional skill is obtained from the ancestors. It uses natural materials complete with the mantras. The aim of this research is to know the local wisdom in the field of health, especially in the art of *Reyog* from Ponorogo. This research uses a descriptive-qualitative design. The data is obtained through the technique of observation and interview. The results show that there are three types of health wisdom in the Panaragan subethnicity which are the wisdoms of health profession, medicine, and healing.

Keywords: Health Wisdom, Warok, and Ponorogo

Introduction

The province of East Java, Indonesia, has ten cultural subareas which are Mataraman Java, Panaragan Java, Arek, Samin (*Sedulu Sikep*), Tengger, Osing (*Using*), Pandalungan, Madura Pulau, Madura Kangean, and Madura Bawean.⁽¹⁾ These ten cultural subareas have various cultural characters which are different from one and another. These variations exist in the language, the arts, and the culture. One of the interesting cultural subareas is the Panaragan subarea.

According to a Western observer,⁽²⁾ the Panaragan Java subethnicity is included in the Mataraman subarea which includes Madiun, Magetan, Trenggalek, Pacitan, and Ngawi. This is different from the opinion of an Indonesian researcher⁽³⁾ who suggests that the Panaragan subarea is separate from the Mataraman subarea. The justification is that the Panaragan ethnicity subarea has a different language, traditional costumes, and traditional arts. It is also an autonomous area which was formerly known as the Wengker area before there was an acculturation from the Mataraman culture.

Wengker came from the words *wewengkon angker* (a mysterious place).⁽⁴⁾ As reflected from the etymology of the word “Wengker”, this place is known as sacred. There are many ancestral traditions which include mystical-magical rituals, which are still practiced by some of the Panaragan subethnicity until now. These traditions include *larungan sesaji*, *bedhol pusaka*, and *kirab pusaka* Ponorogo, which are practiced on the night of the first of every Sura (the first month in the Javanese calendar).

These traditions are continually practiced generation to generation by the Ponorogo people. The discussion on Ponorogo people cannot be separated from the customary leader, who is called the *warok*. *Warok* has a high social status in the society. This social status makes a *warok* become respected. Thus, it is not strange how the *warok* has the role as the patron and protector of the society. If viewed from the meaning of the *warok* term, no clear terminology has been found up to now. According to Poerwawijaya *warok* came from the word *waro'I* or *wirangi* (in Javanese language), which means *wis pana*, *wis mangerti banget marang agal alus lahir batin*, *tumindake mung kangge tetulung marang liyan*.⁽⁵⁾

The *warok* is a central character in the art of *reyog*. His closeness with the spiritual world makes the *warok* identical with the mystical and magical world. It is believed that a *warok* must master *reh kamusankan*

Corresponding Author:

Alip Sugianto,

Universitas Sebelas Maret, Ir. Sutami Street, Surakarta, Indonesia. Email: alipsugianto@umpo.ac.id

sejati, which is the 'path to true humanity'. It is obtained through the attitude of concern, fasting, penance, and even meditation. Because the *warok* has magical power, it is not seldom that people ask them for help regarding traditional healing. At least, there are two types of healings carried out by the *warok*, which are the non-physical healing and the traditional physical healing.

Examples of the non-physical healing are the action of healing diseases caused by ghosts such as witchcraft, trance, exorcism, etc. The *warok* also heals physical diseases such as sores, stomach ache, colds, etc. The two types of disease are healed through different treatments. The non-physical diseases are healed through rituals and mantras. Then, the physical diseases are healed by using traditional herbs or other media, depending on the type of disease.

Based on the two types of healing – which are the healing of the physical and the non-physical diseases – there is a similar view of the Panaragan people, both for the traditional and the modern healing. For example, in the modern view, stomach aches are believed to be caused by unhygienic foods, flus, the minimal condition of the immune system, or the unfriendly weather. It may also be caused by the violation of prohibitions determined by the ancestors, such as the consumption of certain foods and drinks which are prohibited as they endanger the body.

The description above, it becomes interesting to analyze the local wisdom of the Panaragan Java subethnicity in the field of health, with the case study of the Panaragan *warok*, in the case of their method of healing, their mix traditional medicine, supernatural prayers, or the combination of these things which are applied in the society.

Method

This research uses the method of qualitative research approach, as it is naturalistic. The reality is plural, heterogenous, and holistic, thus it cannot be measured or separated fragmentally. The researcher and the research objects are interrelated. They are inseparable, as the interact with each other to reveal the analyzed worldview. In the context of traditional healing, the effort to understand the local wisdom within traditional healings are not limited to what is visible. Yet, it tries to reveal what is hidden, so that we may see the ideology, the understanding, and the world view of the *warok* from

Ponorogo.

This is a descriptive research, as it describes and explains the traditional healing by the Panaragan subethnicity. It tries to reveal the phenomenon of local wisdom. The descriptive method uses the ethnographic method, which has the characteristics of holistic, integrative, and which has thick description. The qualitative analysis is aimed to obtain the native's point of view.⁽⁶⁾ There are two types of data in the qualitative method, which are the primary and the secondary data.

This research uses two main methods to obtain and to present the data. The *first* is observation. *Second*, the researcher carries out an interview. The type of interview used is the in-depth interview. *Third*, the researcher carries out a document analysis by collecting supporting documents such as journals and books. The analysis is created by study and development. This research uses a criterion-based sampling technique to obtain purposive samples to accommodate all possible data in the research field. Thus, there are no deviant cases or those which are forced to be part of a certain category.⁽⁷⁾ The data analysis technique is carried out through these steps: *Domain analysis*, *Taxonomy analysis*, *Componential analysis* and *Cultural theme analysis*

Results

The health wisdom is the method carried out by the society in solving cases related to health problems, both which are physical and non-physical wisely.⁽⁸⁾ In the Panaragan Java subethnicity, especially in the art of *reyog* Ponorogo, there is the classification of three important domains related to health. These domains are the medical profession wisdom, medicine wisdom, and treatment wisdom. These three domains are inseparable as they are integral. This health wisdom is contained in several kinds of wisdoms, which are classified by the writer as follows:

a. Medical profession wisdom

This wisdom of medical profession is related to the skills of the Panaragan Java subethnic people in solving problems of various diseases. This profession is based on the *warok's* type of expertise in handling some problems related to health. This expertise is ordained to the people because of their capabilities in handling various health problems. For example, there is the type of *warok* who is an expert in the field of health. Generally, they are

called *dukun* (shaman). This *dukun* usually heals general diseases, both which are physical and non-physical.

There are also *dukun* who have a specialization in healing diseases of muscles, such as *sprain*, *twisted muscles*, and broken bones. People call them the massage *dukun*. For example, Mr. M and Mr. IR. Mr. M is known as a *dukun* who can heal the disease of madness, but his specialization has shifted into massaging, even though he still heals people with the disease of madness. Meanwhile, a *warok* who has specialization for children are called the baby *dukun*. They usually handle diseases suffered by babies, as done by Mr. S and Mr. M. They handle diseases including *sawanen* (a condition where children are thought to be disturbed by ghosts), and they massage babies, and they also help anything to do with babies.

b. Medicine wisdom

The medicine wisdom is the method in handling types of diseases by making use of traditional herbal medicine. The traditional medicine used are from plants, including ginger, galangal, turmeric, *laos*. The usage of the herbal medicine is according to the type of disease, as each herbal medicine has its own use and function. Apart from herbal medicine, they also use other traditional medicine such as water and salt, which are believed to be able to neutralize negative aura in the human body. The wisdom of these medicine is according to the type of disease; thus, the type of medicine is based on the disease. For example, the type of medicine used by *warok* in the *Reyog* art of Ponorogo are as follows:

1) Achy rheumatic potion

Red onions, ginger, clove oil, and water are mixed together. They are mashed up by grinding. Then, this potion is smeared on the painful parts of the body. The red onions and the ginger are believed to be able to warm up the body, and that it may increase the blood flow. The achy rheumatic is usually suffered by the *Reyog* players, and they are usually healed by using that traditional method.

2) Head ache potion

Bitter coffee or eucalyptus leaves. Bitter coffee is believed to be able to ease the tensed-up nervous system. Then, the sufferer is advised to sniff ground cajuput leaves are believed to be able to ease the tensed-

up nervous system and to ease the mind. Usually, in the *Reyog* art group, there are people who cannot take the aroma of the offerings, so they become dizzy. These simple methods may ease their dizziness.



3) Fever potion

(The documentary photo of Mr. P, with Coffee, Turmeric, and Water placed on a tray in front of *Reyog*)

The turmeric is one of the elements in the *Reyog* offering, with water and coffee. The philosophy of turmeric is *nirajim*, the water is clarity of thought, and coffee gives off pleasant aroma.

4) Potion to treat *sawanen*

Dlingo leaves are a type of soft-stemmed plant which has an aroma similar to garlic. Part of the society believes the myth that these leaves may shoo away genies, as the smell is not liked by Satan.

5) Potion for possessed people

Water and salt are believed to heal those who are possessed by evil spirits. This non-physical disease comes from the disturbance of genies, and it can be healed by using salt and water. Water is believed to be able to neutralize Satan's disturbance. Satan is made of fire, and fire can be extinguished by water. Salt comes from sea water which has the philosophy that the sea is never dirty, as all rubbish that comes to the sea will be pushed to the shores.

c. Treatment wisdom

The treatment wisdom is the manner practiced to heal diseases suffered by a person so he/she may be healthy as before. The players of the *Reyog* art, which is a form of dance which uses physical moves, usually experience pains in the joints, muscles, and achy rheumatic. These types of conditions are caused by lack of warming up. It may also be caused of lack of practice of unpredictable

accident.

The type of health condition is then treated by *urut* (which literally means to order). The lexical meaning is to massage certain parts of the body which is in pain, such as strain, twisted muscles, pains, pinched nerves, and bruises. Before massaging the painful parts of the body, the *warok* will chant a mantra as follows:

Assalamualaikum Kakang kawah, adi ari ari, kiki kipu nini kipu, bahu tengen bahu kiwa, awalane srina sewengini sedulure putuku nek ngembani panjang umur rejekine anteng, eyang eyang singngungkuli bapa biyong, sing ngayomi anak putuku paringi sehat, lara encok loro ayu lara dengen, oleho sak njobone sumsum aja sak njerane belung sri tolah ada tolah wasalamualaikum (Mr. M).

After praying, the *warok* will massage the painful parts of the body. He will smear red onions and oil on the body parts while massaging it, so that the body will feel warm. Another condition which appears to those around the *reyog* art show is *sawanen*. It is usually suffered by little kids after having watched the show. If there is a little kid who experienced *sawanen*, thus the *warok* will chant the following prayer.

Kakang kawah adi ari ari sedulure batur aja mincok ning manungsa panggonamu ning.....ning ara ara asal balik neng ara ara, asale ning duwur balik neng duwur, asale ngisor balika ngisor aja mincok ning drema manungsa (Mr. M)

The *warok* will pray by *suwuk* while kissing the little child's forehead. Usually, people can tell if a kid experienced *sawanen* by seeing the indicators. Usually the kid with *sawanen* will often cry and throw tantrums.

The *reyog* art show, there are usually spectators who experienced disturbance from the mystical realm. They may be possessed by evil spirits. The symptoms of this non-physical disease are the sufferer having a blank mind, daydreaming, or screaming unconsciously. The disease may be healed by reading the following mantra.

"Dhedhemit podo morat marit, Jin setan mawut ra karu-karuan, Kaya watu bledug dadi awu, kun faya kun kersaning Allah, Laillahailallah Muhamadar Rosullullah" (Mr. P).

After reading that mantra, the *warok* will smear salted water to the possessed person's face or forehead.

The water or *toyo petak* which has been given the mantra may absorb the positive energy of that mantra. Thus, it may help neutralize the negative effects in the person's body.

Discussion

The traditions which exist in the society is the traditional healing. The society's capability in mixing potions and also medicine and potions which may heal diseases are traditions from the previous generations. Based on the results of the research, there are local wisdoms in the aspect of health among the Panaragan Java subethnicity. This wisdom includes the wisdom of the medical profession, wisdom of medicine, and wisdom of healing.

The skills in the field of traditional health are obtained from the previous generation. Indonesians have long known and used plants with medical properties as one of the efforts to solve health problems. The use of natural products has been used by the ancestors since centuries ago. The evidence is that people still believe in the effects of herbal medicine to solve health problems.⁽⁹⁾

The ability to mixing medical plants are usually followed with the ability to manage the mind, as done by the *warok* of Ponorogo. They believe that sometimes, diseases are not caused by visible things. They may also be caused by invisible things which come discreetly. Thus, the medicine is also from non-physical things. As carried out by *warok* P, who used the supernatural therapy to heal the diseases of someone being possessed by evil spirits or *sawanen*, by giving water with mantra.

This is in accordance with the opinions of Foster and Anderson.⁽¹⁰⁾ They stated that some parts of the society still believed that the source of some diseases are from the disturbance of invisible creatures. Further, they stated that this phenomenon is called ethnomedicine. Ethnomedicine is a practice regarding diseases which is a result of an original culture. It is explicit and does not come from modern medical science.

Conclusion

The conclusion of the health wisdom in traditional healing by the Panaragan Java subethnicity with the case study of *warok* Ponorogo are as follows. First, there is a wisdom of the healing profession, where someone has

the profession as a traditional healer. This profession is adapted with different specific abilities, such as child *dukun*, baby *dukun*, and general *dukun*. Second, the medicine wisdom, which is medicine which comes from natural plants, such as *dlingo* leaves, turmeric, coffee, and *cengkeng*. The third is the healing wisdom, which are all methods taken to heal a sick person, such as massage, blows, and smearing potions to the hurt body parts.

Conflict of Interest : No

Ethical Clearance : Yes

Source of Founding : Authors

References

1. Yuwono AS. The Mapping Study of East Java Cultures. A Descriptive Study Regarding the Ten Sub Areas of East Java). Jember: Fisip Universitas Jember; 2008
2. Uhlenbeck EM. A Critical Survey of Studies on the Languages of Java and Madura. The Hague: Martinus Nijhoff; 1964.
3. Sugianto A. The Language and Culture of *Warok* Ponorogo: A Study of Ethnolinguistic. [Thesis]. Surakarta: Pascasarjana Universitas Sebelas Maret; 2014.
4. Mulyadi. Uncovering the History of *Wengker* and *Reyog* Ponorogo. Ponorogo: Pemuda Pancamarga; 1985.
5. Purwawidjaya. Babad Ponorogo (The chronicle of Ponorogo). Ponorogo: Dinas Pariwisata, Pemuda dan Olahragan Kabupaten Ponorogo; 1990.
6. Spradly JP The Ethnographic Interview. Yogyakarta: Tiara Wacana; 1997.
7. Guba LD. Naturalistic Inquiry. Beverly Hills: Sage Publication; 1985.
8. Abdullah W. The Local Wisdom Summarized in the Javanese Proverbs: A Case Study of The Javanese Community in e-Resident on Surakarta (An Ethnolinguistic Study). J Advance Science Letters. 2017: 4519-4523.
9. Sukendar EY. Trend and Paradigms of the Pharmacy World, the Industry of Clinical Technology, Health Clinics . Bandung ITB; 2006.
10. Foster GM, Anderson BG. The anthropology of Health. Jakarta : Penerbit Universitas Indonesia; 2006.