

ISSN-0976-0245 (Print) • ISSN-0976-5506 (Electronic)

Volume 11 / Number 01 / January 2020



# Indian Journal of Public Health Research & Development

An International Journal

Website:

[www.ijphrd.com](http://www.ijphrd.com)

# Indian Journal of Public Health Research & Development

## EXECUTIVE EDITOR

**Prof. Vidya Surwade**

Deptt. of Community Medicine, Dr Baba Saheb Ambedkar, Medical College & Hospital, Rohini, Delhi

## INTERNATIONAL EDITORIAL ADVISORY BOARD

1. **Dr. Abdul Rashid Khan B. Md Jagar Din** (*Associate Professor*)  
Department of Public Health Medicine, Penang Medical College, Penang, Malaysia
2. **Dr. V Kumar** (*Consulting Physician*)  
Mount View Hospital, Las Vegas, USA
3. **Basheer A. Al-Sum**,  
Botany and Microbiology Deptt, College of Science, King Saud University,  
Riyadh, Saudi Arabia
4. **Dr. Ch Vijay Kumar** (*Associate Professor*)  
Public Health and Community Medicine, University of Buraimi, Oman
5. **Dr. VMC Ramaswamy** (*Senior Lecturer*)  
Department of Pathology, International Medical University, Bukit Jalil, Kuala Lumpur
6. **Kartavya J. Vyas** (*Clinical Researcher*)  
Department of Deployment Health Research,  
Naval Health Research Center, San Diego, CA (USA)
7. **Prof. PK Pokharel** (*Community Medicine*)  
BP Koirala Institute of Health Sciences, Nepal

## NATIONAL SCIENTIFIC COMMITTEE

1. **Dr. Anju D Ade** (*Professor*)  
Community Medicine Department, SVIMS, Sri Padamavati Medical College, Tirupati,  
Andhra Pradesh.
2. **Dr. E. Venkata Rao** (*Associate Professor*) Community Medicine,  
Institute of Medical Sciences & SUM Hospital, Bhubaneswar, Orissa.
3. **Dr. Amit K. Singh** (*Associate Professor*) Community Medicine,  
VCSG Govt. Medical College, Srinagar – Garhwal, Uttarakhand
4. **Dr. R G Viveki** (*Associate Professor*) Community Medicine,  
Belgaum Institute of Medical Sciences, Belgaum, Karnataka
5. **Dr. Santosh Kumar Mulage** (*Assistant Professor*)  
Anatomy, Raichur Institute of Medical Sciences Raichur(RIMS), Karnataka
6. **Dr. Gouri Ku. Padhy** (*Associate Professor*) Community and Family  
Medicine, All India Institute of Medical Sciences, Raipur
7. **Dr. Ritu Goyal** (*Associate Professor*)  
Anaesthesia, Sarswathi Institute of Medical Sciences, Panchsheel Nagar
8. **Dr. Anand Kalaskar** (*Associate Professor*)  
Microbiology, Prathima Institute of Medical Sciences, AP
9. **Dr. Md. Amirul Hassan** (*Associate Professor*)  
Community Medicine, Government Medical College, Ambedkar Nagar, UP
10. **Dr. N. Girish** (*Associate Professor*) Microbiology, VIMS&RC, Bangalore
11. **Dr. BR Hungund** (*Associate Professor*) Pathology, JNMC, Belgaum.
12. **Dr Sartaj Ahmad**, PhD Medical Sociology, *Associate Professor*,  
Swami Vivekananda Subharti University Meerut. UP India
13. **Dr Sumeeta Soni** (*Associate Professor*)  
Microbiology Department, B.J. Medical College, Ahmedabad, Gujarat, India

## NATIONAL EDITORIAL ADVISORY BOARD

1. **Prof. Sushanta Kumar Mishra** (*Community Medicine*)  
GSL Medical College – Rajahmundry, Karnataka
2. **Prof. D.K. Srivastava** (*Medical Biochemistry*)  
Jamia Hamdard Medical College, New Delhi
3. **Prof. M Sriharibabu** (*General Medicine*) GSL Medical College, Rajahmundry,  
Andhra Pradesh
4. **Prof. Pankaj Datta** (*Principal & Prosthodontist*)  
Indraprastha Dental College, Ghaziabad

## NATIONAL EDITORIAL ADVISORY BOARD

5. **Prof. Samarendra Mahapatro** (*Pediatrician*)  
Hi-Tech Medical College, Bhubaneswar, Orissa
6. **Dr. Abhiruchi Galhotra** (*Additional Professor*) Community and Family  
Medicine, All India Institute of Medical Sciences, Raipur
7. **Prof. Deepti Pruthvi** (*Pathologist*) SS Institute of Medical Sciences &  
Research Center, Davangere, Karnataka
8. **Prof. G S Meena** (*Director Professor*)  
Maulana Azad Medical College, New Delhi
9. **Prof. Pradeep Khanna** (*Community Medicine*)  
Post Graduate Institute of Medical Sciences, Rohtak, Haryana
10. **Dr. Sunil Mehra** (*Paediatrician & Executive Director*)  
MAMTA Health Institute of Mother & Child, New Delhi
11. **Dr Shailendra Handu**, *Associate Professor*, Phrma, DM (Pharma, PGI  
Chandigarh)
12. **Dr. A.C. Dhariwal**: *Directorate* of National Vector Borne Disease  
Control Programme, Dte. DGHS, Ministry of Health Services, Govt. of  
India, Delhi

**Print-ISSN:** 0976-0245-**Electronic-ISSN:** 0976-5506, **Frequency:** Quarterly  
(Four issues per volume)

**Indian Journal of Public Health Research & Development** is a double blind peer reviewed international journal. It deals with all aspects of Public Health including Community Medicine, Public Health, Epidemiology, Occupational Health, Environmental Hazards, Clinical Research, and Public Health Laws and covers all medical specialties concerned with research and development for the masses. The journal strongly encourages reports of research carried out within Indian continent and South East Asia.

The journal has been assigned International Standards Serial Number (ISSN) and is indexed with Index Copernicus (Poland). It is also brought to notice that the journal is being covered by many international databases. The journal is covered by EBSCO (USA), Embase, EMCare & Scopus database. The journal is now part of DST, CSIR, and UGC consortia.

**Website : [www.ijphrd.com](http://www.ijphrd.com)**

©All right reserved. The views and opinions expressed are of the authors and not of the Indian Journal of Public Health Research & Development. The journal does not guarantee directly or indirectly the quality or efficacy of any product or service featured in the advertisement in the journal, which are purely commercial.

## 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)



# Indian Journal of Public Health Research & Development

www.ijphrd.com

---



---

## Contents

---



---

Volume 11, January 01

January 2020

1. Study Protocol: A Randomised Controlled Trial on Effectiveness of a Worksite Health Intervention on Common Musculoskeletal Problems and Work-Related Quality of Life (WRQoL) among Female Workers in the Garment Manufacturing Sectors ..... 1  
*A. Santham Lilly Pet, Timsi Jain, Bobby Joseph, Pethuru Devadason, Gayathri M*
2. Health of the Elderly in India: A Socio-Legal Study ..... 7  
*Arti, J.K. Mittal*
3. General Awareness of Diabetes Mellitus among a Hospital Population in Chennai: A Survey ..... 12  
*Sridhar M., Abilasha Ramasubramanian*
4. Vitamin D Deficiency in Rural Area of Gautam Buddh Nagar: An Observational Study ..... 16  
*Vijay Deepak Verma, Ajai Kumar Garg, Suresh Babu, Ashish Satyarthi*
5. Identifying the Status of Menstrual Hygiene Management ..... 20  
*Amrita Shilpi, Rajasree Roy, Gobina, Spriha Roy*
6. Effect of Strengthening of Scapular Stabilizers in Treatment of Rounded Shoulder Posture in Dental Students ..... 27  
*Ankita M. Patil, Sayali Gijare*
7. Elder Abuse in Indian Setting—A Misconception or a Reality— A Deductive Analysis ..... 31  
*Anusha Rashmi, Linda Sequeira, Prianka Shashi Kumar, Rashmi*
8. A Study on Women Entrepreneurs Dealing Through Stress ..... 35  
*Archana R.V., K. Vasanthi Kumari*
9. Effect of Bilateral Scapular Muscles Strengthening on Dynamic Balance in Post Stroke Individuals ..... 38  
*Arpan Dhoka, G. Varadharajulu*
10. In Vitro Antibacterial and Anticancer Study of Bioactive Compounds Isolated from Punica Grantum Peel. 45  
*Arunava Das, J. Bindhu, M. Bharath, Nithin Johnson, M. Jeevanantham*
11. A Study on Utilization of Primary Health Care Services among the People Residing in a Semi-Urban Area 53  
*B. Charumathi, D. Jayashri, S. Manisha, Aadithya, C. Hemanthkumar, Timsi Jain*
12. An Empirical Relationship between Stress and Job Performance: A Study with Private School Teachers .... 57  
*D.S. Premalatha, S. Subramanian*

## II

13. Discovery of Hidden Pattern in Thyroid Disease by Machine Learning Algorithms .....61  
*Dhyan Chandra Yadav, Saurabh Pal*
14. A Descriptive Study to Assess the Knowledge on Child Birth Preparation among Primigravid Mothers in a Selected Tertiary Care Hospital at Kelambakkam, Kanchipuram District, Tamilnadu, India .....67  
*J. Chrislin Jebisha, R.J. Joey Persul, D. Joaniepriya*
15. Lateral Periodontal Cyst Masquerading Dentigerous Cyst: A Rare Case Report .....71  
*Jagannath Patro, Swagatika Panda, Sreepreeti Champatyray, Alkananda Sahoo, Neeta Mohanty*
16. Investigation of a Food Poisoning Outbreak in a Private Hostel in Kanchipuram District, Tamilnadu .....75  
*Jayashri Damodharan, Prashanth Rajendiran, Charumathi Boominathan, Muthulakshmi Muthiah, Gomathy Parasuraman, Ruma Dutta, Timsi Jain*
17. A Review on Process of Data Mining Approaches in Healthcare Sectors .....80  
*K. Baalaji, V. Khanaa*
18. Prevalence of Musculoskeletal Pain among Manual Drummers and Electric Pad Drummers.....85  
*K. Jothi Prasanna, S. Rahul Prabhu*
19. Effectiveness of Low Level Laser Therapy Versus Ultrasound Therapy with Plantar Fascia Stretching in Subjects with Plantar Fasciitis.....92  
*K. Koteeswaran, Ramya K., Rajeshwari, Manikumar Muthiah, Sankara Kumaran Pandian*
20. Evaluation of Temporomandibular Disk Position in Symptomatic Temporomandibular Disorder Patients with Gnathological Splint Therapy Using MRI.....97  
*K. Sridhar, M.S. Kannan, Faisaltajir, Gnanashanmugam*
21. Antimicrobial Efficacy of Triphala as Root Canal Irrigating Solution in Infected Primary Teeth: An Ex Vivo Study .....104  
*Kiran N.K., Nagalakshmi Chowdhary, Y. Sharada Devi Mannur, Neethu Elsa Varghese, Arvind Sridhara, Pavana M.P.*
22. Association between Urinary Cotinine Levels and Buccal Mucosal Micronuclei Cells of Smokeless Tobacco Chewers Attending a Tertiary Care District Hospital.....108  
*Kiran S. Nikam, Kanchan C. Wingkar, Rajesh K. Joshi, Rajashekar K. Kallur*
23. Balanced Diet: Knowledge and Practice of Adolescents .....114  
*Krupa Reji, Leema Jacob, Liby Kuriakose, Linsha K., Maria Augustine, Maria George, Priya Reshma Aranha*
24. Influence of Self-Efficacy on Student Engagement of Senior Secondary School Students .....119  
*Kundan Singh, Bilkees Abdullah*
25. Psychological Effects of Trauma to Anterior Teeth.....125  
*Lakshmi Nidhi Rao, Aditya Shetty, Mithra N. Hedge*
26. Effect of Aerobic Exercises on Selected Physiological Variables among College Long Distance Men Athletes.....131  
*M. Senthil Kumar, P.R. Nagaraj, Ampili*

27.	A Descriptive Study to Assess the Knowledge on Pre-Menopausal Symptoms among Middle Aged Women in a Selected Village at Kanchipuram District, Tamilnadu, India .....	135
	<i>M. Deepan Babu, S.Vasuki, K.Sangeetha, D. Joaniepriya</i>	
28.	Health Care Services Under Consumer Protection Laws of Union Territories of Jammu and Kashmir: A Socio-Legal Mapping .....	139
	<i>M.Z.M. Nomani, Ajaz Afzal Lone, Alaa K.K. Alhalboosi, Aijaj A. Raj, Zubair Ahmed</i>	
29.	Comparison of Morphological Features of Second Cervical Vertebra between Genders Using Computed Tomography .....	145
	<i>Madhavan T.S., Sharath S., Rahul P. Kotian</i>	
30.	Acceptance of PBL by Students to Learn Pre-Clinical Sciences .....	151
	<i>Malini Dutta, K. Aditya, Dilip Mathai</i>	
31.	Effect of Dance Therapy on Stress and Anxiety in Working Women .....	157
	<i>Manali B. Badave, Khushboo Bathia, Smita Kanase, Amrutkuvar Jadhav</i>	
32.	A Study on Effect of Favorite Film Songs on Heart Rate Variability (HRV) and Heart Rate (HR) with Moderate Exercise .....	162
	<i>Manibalanvijayaraman</i>	
33.	A Proximate Analysis of Phytochemical in Sonalum Trilobatum after the Addition to Leavened Yeast Goods with Sensory Evaluation .....	167
	<i>Manivel K., John R. William, Moyeenudin H.M.</i>	
34.	Satisfaction Level of Physiotherapy Students in North India.....	172
	<i>Manoj Malik, Charu Gera, Jaspreet Kaur, Vandana Yadav</i>	
35.	Prevalence of Lumbar Lordosis in Middle-Aged Females.....	178
	<i>Manpreet Bajaj, S. Anandh</i>	
36.	Radiographic Evaluation of Different Combinations of Zinc Oxide as an Obturating Material in Pulpectomy: A Comparative in Vivo Study .....	183
	<i>Kiran N.K., Nagalakshmi Chowdhary, Megha Kumar, Pavana M.P., Aravind Sridhara</i>	
37.	Development of “Young Planning Clinic” Program as a Prevention Early in Adolescent Attitude in Martapura River Areas .....	189
	<i>Meitria Syahadatina N., Atikah Rahayu, Fauzie Rahman, Fahrini Yulidasari, Dian Rosadi, Nur Laily, Hadianor</i>	
38.	Patterns and Determinants of Utilization of Healthcarein Urban Field Practice Area of a Tertiary Care Institute, Hyderabad.....	194
	<i>Moniza Maheen, Fawwad M. Shaikh, Vaseem Anjum, A. Chandrasekhar</i>	
39.	Awareness & Practice of Road Safety Measures among Under Graduate Medical Students of a Medical College in Bengaluru, Karnataka .....	198
	<i>Shyam A.C., Mubarak Nadeer</i>	
40.	The Effect of Eye-Hand Coordination Device on Coordination in Subjects with in-Coordination.....	202
	<i>MuzahidKadir Sheikh, Suraj B. Kanase</i>	

#### IV

41. Prevalence of Depressive Symptoms among Incognizant Patients Visiting a Hospital.....207  
*A. Vinita Mary, N. Manikandan, K. Pavithra, M. Nathiya, R. Kesavan*
42. Intelligent System for Physically Challenged Person in Virtual Prototype Environment.....212  
*N. Prabhakaran, N.D. Bobby, M. Munireddy, G.S. Sivapriya*
43. Health Insurance Utilisation Pattern in Two Districts of Karnataka .....217  
*Nagaraj Shet, Ghulam Jeelani Qadiri, Sunita Saldanha, Gayathri Kanalli S., Prajna Sharma*
44. Study of Knowledge, Attitude and Practise (KAP) Regarding Swachh Bharat Mission Among High School Students in Field Practise Area of Medical College in Dakshina Kannada, Karnataka.....223  
*Nanjesh Kumar S., Jithin, Harshitha, Rashmi Kundapur, Sanjeev Badiger, Pavan Kumar*
45. Association of Personality Traits, Life Satisfaction, Subjective Happiness and Oral Health Status in School Teachers of Vikarabad.....227  
*N. Sindhu Reddy, M. Monica, T. Abhinav Nithin, P. Parthasarathi Reddy, Irram Abbas Hameed, B. Prathibha*
46. Effect of Structured Exercise Programme on Pulmonary Function and Physical Performance in Geriatric Population.....233  
*Gaurav S. Chandolkar, Javid H. Sagar, Govindhan Vardharajulu*
47. Comparative Evaluation of Depth of Cure of Bulk-fill Composite Resin and Alkasite Restorative Material by Vicker's Hardness Test.....237  
*Gowrish Bhat, Namrata Khanna, Mithra Nidarsh Hegde, Vandana Sadananda*
48. Population Growth and its Impact on Public Health in India: A Legal Analysis.....242  
*Hiranmaya Nanda, Shyamantak Misra*
49. Evaluation of Malondialdehyde, Glutathione Peroxidase and Defensin Levels in Patients with and without Periodontitis.....246  
*J. Hemashree, Sreedevi Dharman, Selvaraj*
50. Effect of Neurodynamic Sliding Technique on Hemiplegic Stroke Subjects with Hamstring Tightness.....251  
*J. Anandhraj, A. Kumaresan*
51. To Compare the Flexural Properties of Three Commercially Available Heat Cure Denture Base Resins After Water Immersion Over a Period of Three Months: An in Vitro Study.....255  
*Neha Chugh, Pradeep Sheriger, Dhanasekar Balakrishnan, Aparna Ichalagod Narayan*
52. Effect of Weight Bearing and Neurobic Exercises on Bone Health and Physical Function in Elderly Individuals .....261  
*Neha Dighe, S. Anandh, G. Varadharajulu*
53. Knowledge, Attitude and Practice of Biomedical Waste Management in Nursing Staff of a Private and a Government Tertiary Care Teaching Hospital: A Comparative Study.....267  
*Nishitha K., Alice Matilda Mendez, Nisha B., Timsi Jain*
54. WTO and its Impact on Indian Pharmaceutical Production: A Legal Perspective.....273  
*Nitesh Kumar Srivastava, R.L. Koul*

55. Prevalence and Molecular Characterization of Glucose-6-Phosphate Dehydrogenase Deficiency among Brahmins and Muslims of Manipur, India.....278  
*Nongthombam Achoubi, Mohammad Asghar, Anand Kumar Gyanendra Singh Wahengbam, Soibam Jibonkumar Singh, Kallur Nava Saraswathy, Benrithung Murry*
56. Efficacy of Technology Based Method to Improve Knowledge on Health Promoting Behaviour towards Maternal Hypothyroidism among Primi Mothers with Hypothyroidism .....283  
*P.M. Arulmozhi Baskaran, Prasanna Baby*
57. Effect of Water Aerobic and Aerobic Exercise on VO<sub>2</sub> Max Parameter among College Men Students .....289  
*P.R. Nagaraj, R. Senthil Kumar*
58. Assessment of Different Types of Malocclusion Using IOTN Index and Geographic Information System: A Cross-sectional Observational Study .....293  
*Bhagyalakshmi Avinash, Balasubramanian S., Ravikumar M., Suma Shekar, Avinash B.S.*
59. Hair Mercury Exposure and Hypertension among Community Artisanal and Small Scale Gold Mining in Banten, Indonesia .....299  
*Elvi Sahara Lubis, Budi Hartono*
60. Effect of Lavender Oil Massage on Pain among Patients with Knee Osteoarthritis .....304  
*Enas Mahmoud El Sayed, Hanan Ahmed Al Sebaee, Heba Ahmed Mohammed, Zeinab Osman Nawito*
61. How Soon Can You Expect to Get Pregnant after Discontinuing Reversible Contraceptive Method? A Survival Analysis of the 2017 Indonesia Demographic and Health Survey Data .....310  
*Maria Gayatri, Budi Utomo, Meiwita Budiharsana*
62. Reviving the Lost Extremity: A Case Report .....315  
*Nitika Gupta, Jeewan Bachan Dhinsa, Urvashi Sukhija, Sanjeev Mittal*
63. Lower Extremity Perfusion among Patient with Type 2 Diabetes Mellitus in a Tertiary Care Hospital, Kochi .....319  
*Reshma K. Sasi, Rafia Islam, Anjana Sunil, Anju Markose*
64. A Glimpse of Manual Scavenging in India .....325  
*Shailla Cannie, Aasavri Cannie*
65. Out of Pocket Spending for Natal Care Services: A Comparative Analysis among High and Less developed States in India .....329  
*A.K. Ravisankar*
66. Current Research in Neuropathology and Pharmacotherapy of Alzheimer's Disease: A Review .....334  
*Amit Yadav, Prabhat Kumar Upadhyay, Manish Kumar, Vishal Kumar Vishwakarma, A. Pandurangan, Pradeep Mishra*
67. In Vitro Anticancer Study of Bioactive Compound Isolated from Musa Extract (Musa Acuminata) .....340  
*Arunava Das, J. Bindhu, P. Deepesh, G. Shanmuga Priya, S. Soundariya*
68. Optimized Feature Selection and Classification in Microarray Gene Expression Cancer Data .....347  
*B. Lakshmanan, T. Jenitha*



## VI

69. Evaluation of Autonomic Dysfunction in Underweight, Normal Weight, Overweight and Obese Patients with Chronic Obstructive Pulmonary Disease.....353  
*Desai Nabil, Jyoti Ganai, Shobitha M., Nabi N.*
70. Effect of Exercise Program in Reducing Risk of Fall in Elderly People.....359  
*Elizabeth J. Shende, Pranjali M. Gosavi, S. Anandh, Yogita A. Pawar*
71. Regenerative Endodontics-The Future? A Questionnaire Based Study.....363  
*Farhan Ariwala, Mahalaxmi Yelapure, Mithra N. Hegde, Darshana Devadiga, Upasana*
72. Breast Cancer Screening: Are ‘At Risk Population’ Known by Public Health Nurse Practitioners? .....369  
*G.M. Venkatesh, M. Sundar*
73. Credibility of Health Care Advertising-An Empirical Understanding of its Multi-Dimensional Structure and Scale Validation with Special Reference to Children’s Health Food Drinks .....374  
*Indu Manish Kumar*
74. Association of Epicardial Adipose Tissue Thickness with Resting and Post-Exercise Cardiac Output in Overweight and Obese Individuals .....380  
*Sridevi, Kalyana Chakravarthy Bairapareddy, Bhamini Krishna Rao, Arun G. Maiya, Gopala Krishna Alaparathi, Krishnananda Nayak*
75. The Effectiveness of Health Belief Model as an Educational Intervention in Improvement of Oral Hygiene: A Systematic Review .....385  
*Nesa Aurlene, Sunayana Manipal, Rajmohan, Prabu D.*
76. Marriage Trajectories among Patient with Mental Health Problem.....390  
*Chittaranjan Subudhi, Ramakrishna Biswal, Padmanaban Srinivasan*
77. Relevance of Goiter and its Association with Consumption of Iodized Salt among School Children, in a Rural Area, Tamilnadu .....394  
*D.Jayashri, B.Charumathi, Timsi Jain, Gomathy Parasuraman, Ruma Dutta*
78. E-waste: The Serious Health Hazard.....400  
*Trailokya Deka*
79. A Survey of Oral Medicine Curriculum and Practice in India.....405  
*Priyanka.S.R, M.Arvind*
80. A Retrospective Study on Side of Nerve Involvement and Distribution of Pain in Patients with Trigeminal Neuralgia.....410  
*Priyanka.S.R, M.Arvind, Priyanka.S.R*
81. A Comparative Analysis of Self-Efficacy in Low Fidelity Vs High Fidelity Simulation Post Advanced Cardiac Life Support (ACLS) Sessions on Cardiac Arrest Algorithm amongst EMS Students of Pune, India .....415  
*Parag Rishipathak, Anand Hinduja, Navnita Sengupta*
82. Concept Map Prebriefing Versus Traditional Prebriefing in Ischemic Stroke Management amongst EMS Students of Pune, India.....420  
*Parag Rishipathak, Shrimathy Vijayraghavan, Anand Hinduja*



83.	Incidence, Prevalence and Mortality Rates of Malaria in India, 1990-2015: An Analysis for the Global Burden of Disease Study .....	426
	<i>Ravi Prakash Jha, Krittika Bhattacharyya, Nisha Tiwari, Durgesh Shukla, Pawan Kumar Dubey</i>	
84.	Effectiveness of Structured Exercise Protocol for Post Menopausal Stress Urinary Incontinence .....	434
	<i>Pooja Rajendra Mane, S. Anandh G. Varadharajulu</i>	
85.	Treatment Success Rate among Multi-Drug Resistant Tuberculosis Patients Registered Under Programmatic Management of Drug Resistant Tuberculosis Services in District Amritsar, Punjab, India...441	
	<b>Pooja Sadana, Vishal Verma, Priyanka Devgun</b>	
86.	Microbial Contamination of Tooth Paste Tube Orifice .....	447
	<i>Pooja.M.R, Jithesh.Jain, Ananda.S.R, Bhakti Jaduram Sadhu, Rohit A Nair, Aparna H gopalakrishna</i>	
87.	Effectiveness Bearing Down Techniques During Second Stage of Labour on Maternal and Neonatal Outcome among Primigravida Mothers .....	453
	<i>PoonamYadav, Shital VWaghmare, Seeta Devi A, Manuacharoy</i>	
88.	Denture Identification Methods: A Review.....	459
	<i>Prabhjot Kaur, Anchal Arora, Navjot Kaur</i>	
89.	Maternal Tobacco Use and Risk for Congenital Anomalies .....	463
	<i>Prabhuswami Hiremath, R P Patange, J A Salunkhe, Vaishali R. Mohite, Prakash Naregal, Ajit Pawar, Tejas Bhosale</i>	
90.	Repair of Cast Partial Denture Made Easy– An Alternative Approach .....	467
	<i>Pradeep S</i>	
91.	Role of Demographic, Cognitive, Social Factors and Personality Trait on Treatment Modality Related Decision Making: A Conceptual Framework .....	470
	<i>Praheli Dhar Chowdhuri, Kaushik Kundu</i>	
92.	Factors Associated with Use of Dental Sealants among Dental Professionals in Mangalore—A Cross Sectional Study .....	477
93.	In Vitro Comparative Study of Dimensional Stability of Three Different Polyvinyl Siloxane Interocclusal Recording Materials after Storage for Different Time Intervals of 12Hours, 24Hours, and 48Hours.....	484
	<i>Priscilla Shalini.S, Narayana Reddy, Sanjna Nayar</i>	
94.	Factors of Happiness among Indian Adolescents.....	490
	<i>Priyamvada Shrivastava, Gayatri Jay Mishra, Mahendra Kumar</i>	
95.	Clinical Decision Making for Biopsy of Oral Mucosal Lesions .....	496
	<i>Priyanka.S.R, M.Arvind</i>	
96.	Role of Oral Physicians in Special Care Dentistry.....	501
	<i>Priyanka.S.R, M.Arvind</i>	
97.	Lifestyle Diseases among Girl Child in Urban India .....	506
	<i>Puja Gupta, Papia Raj</i>	

## VIII

98. Effect of Core Training with and without Yogic Practices on Elasticity among College Female Athletes...511  
*R. Meera, R.Mohanakrishnan , T. Arun Prasanna*
99. A Study on Impact of Environmental Pollution on Health in Referance to Tuticorin Industrial Town, Tamil Nadu .....516  
*R.V.Suganya, R.lakshmi*
100. Seasonal Variation and Malaria in Endemic Mangalore City in South India.....521  
*Rakshita Maskeri, Animesh Jain, Sheetal Ullal, Suchitra Shenoy, Damodar Shenoy, Sharada Rai*
101. A Study to Assess the Level of Burden and Coping Strategies among Caregivers of Patient with Affective Disorders at Selected Hospitals of Sangli, Miraj, Kupwad Corporation Area .....526  
*Ramesh Giramalla Honamore, Narayan K Ghorpade*
102. Cognitive Impairments and its Associated Risk Factors among Patients with Diabetes Mellitus .....531  
*Rasika Panse, Ujwal Yeole, Nikita Aher*
103. A Study on Antibiotic Utilization in Pediatric Hospitalized Patients and Antibiotic Stewardship.....535  
*Ratikanta Tripathy, Shantadeepa Chopdar, Nirmal Kumar Mohakud, Suresh Chandra Pradhan, Prasanna Kumar Panda*
104. Understanding the Basics of Research as a Beginner: A Highlighter .....540  
*Ravishankar M.V, Vidya C.S.*
105. Food Insecurity, Standard of Living and Nutritional Status of People Living with HIV/AIDS (PLHAs) on ART: Rural–Urban Differences.....546
106. Evaluation of Lung Function in Automobile Diesel Mechanics in a Semi Urban Town of South India- Kumbakonam Urban Rural Epidemiological Study–KURES 6.....554  
*M.R.Suchitra, S. Parthasarathy, Mohamed Hanifah*
107. Estimation of Thyroid Stimulating Hormone Level in Normal Female School Children in A Semi Urban Indian Town-Kumbakonam Urban Rural Epidemiological Study-KURES-2 .....558  
*M.R.Suchitra, T.S.Shanthi, S. Parthasarathy*
108. A Review on Medical Tourism in India .....562  
*S.Gunaseelan, N.Kesavan*
109. Ophthalmomyiasis Due to Oestrus Ovis Complicated with Methicillin Rensitive Staphylococcus Aureus First Report Near Coastal Area.....566  
*Shaik Khaja Moinuddin, Anandi.V, Amirtha C*
110. A Descriptive Study to Assess the Effect of Habitual Usage of Mobile Phone on the Sleep Quality among Adolescents in Selected Colleges, Chennai.....569  
*Sandhya R, Sujitha Jebarose T*
111. Neck Circumference as an Indicator of Obesity and its Comparison with Body Mass Index and Waist Circumference in Coastal Karnataka .....574  
*Sanjay Kini, Avinash kumar, Unnikrishnan B, Siddharudha Shivalli, Vaman Kulkarni, Prasanna Mithra, Nithin Kumar*

112. Potential Role of Electromyography in Kinesiology: A Review .....	581
<i>Saranya S, Poonguzhali S</i>	
113. Oral Health Literacy and its Relationship with Level of Education and Self-Efficacy among Patients Attending a Dental Rural Outreach Clinic in India .....	587
<i>Shatakshi Srivastava, Shashidhar Acharya, Deepak Kumar Singhal, Abhishek Dutta, Kush Kalra, Nishu Singla</i>	
114. A Study of Relationship between Maternal Height and Fertility: Indian Concern .....	593
<i>A. K. Tiwari, Shivam Mishra, Ravi Kant Maurya</i>	
115. Risk Factor Associated with Anthrax Transmission among the Tribal Communities of Odisha.....	597
<i>Sipra Makhija, Kumar Sumit, Shah Hossain</i>	
116. Assessment of Risk Factors For Diabetes among Bank Employees Using Indian Diabetes Risk Score: A Cross Sectional Study .....	603
<i>Smriti, Anusha Rashmi, Manjula A., Kurulkar P.V., (Brig) Hemant kumar</i>	
117. Emotion Dysregulation in Patients with Major Depressive Disorder and Borderline Personality Disorder..	610
<i>Snehalata Choudhury, Surjeet Sahoo, Soumya Ranjan Dash</i>	
118. A Study on Stress Management and Health Impacts on Women Employees of it Sectors in Chennai City .	616
<i>Snigdha Preethi R.V, M. Valliappan</i>	
119. Superbrain Yoga Enhances Well-Being among School Students .....	623
<i>Srikanth N Jois ,K. Nagendra Prasad, Lancy D'Souza</i>	
120. Impact of Kinship on the Chosen Autosomal Anomalies in Sivagangai, Tamil Nadu, India .....	629
<i>Subalakshmi T, Jeya Chandra Mohan</i>	
121. Preliminary Phytochemical Screening and FTIR analysis of an Indian Medicinal Herb: Paederia Foetida (Prasarini) .....	635
<i>Subhashree Satapathy, Gurudutta Pattnaik</i>	
122. Clinical and Biochemical Profile of Indians with type 2 Diabetes Mellitus: A Study from a Tertiary Care Hospital in Greater Noida .....	641
<i>Suresh Babu, Payal Jain, Saurabh Srivastava, Parwinder Kour, HM Kansal</i>	
123. Effect of Proprioceptive Neuromuscular Facilitation (PNF) Pattern on Respiratory Parameters in Chronic Bronchitis.....	647
<i>Sushma Singh, Javid H. Sagar, G. Varadharajulu</i>	
124. Impact of Thera-Pep and Forced Expiratory Technique in Chronic Bronchitis Patients .....	654
<i>Sushmita Goswami, Javid H Sagar, G. Varadharajulu</i>	
125. Critically Appraisal of Tools to Measure Using the COSMIN Checklist .....	660
<i>Suvi Kanchan, Anitha. R. Sagarkar, Ranadheer. R</i>	
126. Mental Toughness in Indian Elite Athletes: Psychometric Validation of the Psychological Performance Inventory.....	665
<i>Tarun Jain, Ritu Sharma, Abha Singh, Karuna Mehta</i>	

**X**

127. An Assessment of Trust in Medical Profession amongst People Residing in a Semi-Urban Area, Tamil Nadu ..... 671  
*Taseen Sida.A.S, Alice Matilda Mendez, Nisha B, Timsi Jain*
128. Effectiveness of Eccentric Exercises on Selfie Elbow ..... 677  
*Tharani.G, Rajalaxmi.V<sup>2</sup>, Yuvarani.G, Kamatchi.K, Lakshmi Prabha.P*
129. Evaluation of Cyclic Fatigue Resistance of Three Different Niti Rotary Systems-An Invitro Study ..... 682  
*Thirunavukkarasu Manojkumar, Paramasivam Vivekanandhan, Malarvizhi Dhakshinamoorthy , Ramachandran Tamilselvi, Arunajatesan Subbiya*
130. Prediction of Normal & Grades of Cancer on Colon Biopsy Images at Different Magnifications Using Minimal Robust Texture & Morphological Features ..... 689  
*Tina Babu, Deepa Gupta, Tripty Singh, Shahin Hameed*
131. Effect of Scapular Position- Motion Maintenance Exercise Programme During Post Traumatic Shoulder Immobilization ..... 696  
*Trusha Shambhubhai Goti, Sandeep Babasaheb Shinde*
132. Hand Hygiene Practices and Training Gap in a Neonatal Intensive Care Unit at Coastal Karnataka India .. 703  
*Usha Rani, Kiran Chawla, Leslie E Lewis, Indira Bairy, Vasudeva Guddattu, Jayashree Purkayastha, Christy Thomas Varghese*
133. A Study to Assess the Effectiveness of Protocol on Care of Newborn in Phototherapy on Knowledge and Practice among Nurses at Selected Hospitals in South India ..... 709  
*V.Santhi , S.Nalini, Lisy Joseph*  
*Lecturer, Lecturer Faculty of Nursing, Sri Ramachandra Institute of Higher Education & Research (DU), Porur, Chennai*
134. Analysis of Dermatoglyphic Pattern in Potentially Malignant Disorder and Oral Carcinoma Patients..... 715  
*Vaishali.S, Sreedevi Dharman*
135. Evaluation of Safety and Efficacy of Nifedipine in Pregnancy Induced Hypertension: A Prospective Observational Study ..... 720  
*Venkateswarlu K., T. Ram Mohan Reddy , B. Naveena, E. Sneha Reddy, A. Prithi*
136. Comparison of Immunization Coverage Status Reported through NFHS Coverage Evaluation Survey and HMIS in Maharashtra ..... 726  
*Vijay Baviskar, Rutuja Patil, Sudipto Roy, Satish Doiphode, Arun Dhongade, Sanjay Juvekar*
137. Skin Diseases Prediction: Binary Classification Machine Learning & Multi Model Ensemble Techniques. 731  
*Vikas Chaurasia, Saurabh Pal*
138. Compressive Strength Evaluation between Metal Ceramic and Zirconia Crowns. An in-Vitro Study ..... 737  
*Vikram.V, Sanjna Nayar, Narayana Reddy*
139. A Study on Patients of Scrotal Dermatitis..... 743  
*Akhil Kumar Singh, Ranjana Singh, Parth H Thakkar*
140. Health Status of Children in Assam ..... 749  
*Chayanika Goswami*

141.	Relationship of Character Strengths to Influence Psychological Well-Being During Adolescence .....	754
	<i>Mallika Vohra, Neelam Pandey</i>	
142.	Dental Health Handbook as Parents Monitoring in the Formation of Independence for Brushing Teeth in Early Childhood.....	760
	<i>Ngatemi, Tedi Purnama</i>	
143.	Women’s Mental Health in India: An Analysis through the Gender Lens.....	766
	<i>Parismita Bhagawati</i>	
144.	Transmission of Actinobacillus Actinomycetemcomitans & Porphyromonas Gingivalis in Periodontal Diseases .....	771
	<i>Prabhu Manickam Natarajan, Sura Ali Ahmed Fuoad Al Bayati, Dusan Surdilovic</i>	
145.	Application of a Health Belief Model to Hypertension within Rural India .....	776
	<i>Rajkumar E, Romate J</i>	
146.	Clinico-Mycological Profile of Dermatophytosis in a Tertiary Care Hospital in North India .....	785
	<i>Sachin Sharma, Megha Maheshwari, Shobha Broor, Paramjit Singh, Rameshwari Thakur, Anita Chakravarti</i>	
147.	Professional and Psychological Help Seeking Behavior among College Students.....	791
	<i>Shreevidya P</i>	
148.	Evaluation of Prehypertension among School Going Adolescents in Chennai.....	796
	<i>Srihari R, Dilara K, Latha R, Manikandan S</i>	
149.	Study of Death among Children Below Five Years of Age and its Relation to Parentseducation and Place of Residence Using Verbal Autopsy as a Tool in Deharadun.....	801
	<i>Sushil Dalal, Kiran Pande, Vishal Modgil</i>	
150.	Prevalence of Goiter and its Association with Consumption of Iodized Salt among School Children, in a Rural Area, Tamilnadu .....	806
	<i>D.Jayashri, B.Charumathi, Timsi Jain, Gomathy Parasuraman, Ruma Dutta</i>	
151.	Health Care Facilities in Child Care Institutions in Delhi.....	811
	<i>Hrishika Rakesh Rai</i>	
152.	Quality Assessment Using EFQM Model for Overall Excellence of Indian Health Care Sector .....	816
	<i>Bindusagar Pattanaik, Aurolipy</i>	
153.	A Modified Technique for Establishing the Occlusal Plane in Complete Denture Prosthesis.....	820
	<i>Pradeep S.</i>	
154.	To Evaluate the Hypnotic Doses of Etomidate and Propofol Using Entropy Monitor and to Determine their Hemodynamic Response During Laryngoscopy and Intubation.....	823
	<i>Laveena Dabla, Sapna Bansal, Nalin Vilochan, Vaishali Syal, Pankaj Kumar, Sheenam Wadhwa, Shikha Gulia</i>	

## XII

155. A Study on Work Life Balance and Stress of Female Employees in IT Sector: A Study with Special Reference to Employees in Chennai..... 829  
*Mary Sudharshini Fernando, M. Kavitha*
156. Effectiveness of Sublingual Versus Oral Misoprostol for Induction of Labour at Term ..... 834  
*Rekha Parimkayala, Shraddha Shetty K.*
157. Study of Death among Children Below Five Years of Age and its Relation with Socio Economic Status and Place of Residence Using Verbal Autopsy as a Tool in Deharadun ..... 839  
*Sushil Dalal, Kiran Pande, Md Abu Bashar*
158. Impact of Body Mass Index and Age on Mental Health of Adolescents Girls ..... 843  
*Reeta Venugopal, Priyamvada Srivastava, Aniksha Varoda, Mahendra Kumar*
159. Early Childhood Caries and its Prevalence among the Preschool Children's Attending the Anganwadi's at Ukkali Vijayapura District, Karnataka India ..... 850  
*Shardha Bai Rathod, Anand V. Nimbale, Padmeshree S., Sanjeev Khanagoudra, Ishwar B. Bagoji, G.A. Hadimani*
160. Knowledge, Attitude and Practices of Biomedical Waste Management among Dental Practitioners in Karad City, Maharashtra, India ..... 856  
*Surabhi Mahajan, Shivakumar K.M., Vidya Kadashetti*
161. Exploring the Role of Hatha Yoga in Altering Dispositional Mindfulness ..... 862  
*Teesta Saksena, Ritu Sharma, Ishwar V. Basavaraddi*
162. Morphometry of Acromion Process of Scapula with Respect to Gender..... 868  
*Pushpa N.B., Roshni Bajpe, Pushpalatha K., Deepabhat*
163. Evaluation of Knowledge and Attitude of Undergraduate Medical and Dental Students towards Integrative Medicine and Integrative Dentistry: A Questionnaire Study ..... 874  
*Jaber Emad Mohamed, Ishita Mittal, Sukanya Goswami, Swathi Pai, Vishal Bhat*
164. Antibacterial Activity of Combination between Probiotic Milk and Mango Honey Against Streptococcus Mutans..... 879  
*Inaarah Waachidah Azzulfiyyah, Isnaeni, Noor Erma*
165. Prevalence of Premarital Sex among Adolescents in Kulende, Sango in Ilorin South Local Government Area, Kwara State, Nigeria..... 884  
*Oniyangi, Shuaib Olanrewaju, Jamiu Abdul Qudus Tosin, Umar Ibrahim Babangida, Ahmad Makama Getso, Sindama Helen*
166. Perceived Effect of Sleep Deprivation on the Health of Undergraduates in Kwara State University, Malete, Nigeria ..... 889  
*Oniyangi, Shuaib Olanrewaju, Jamiu Abdul Qudus Tosin, Umar Ibrahim Babangida, Ahmad Makama Getso, Sindama Helen*
167. Noise Relationship with Complaints of Disorders of Hearing in Crafts Industry with Iron in Parigi Moutong District..... 894  
*Abdul Hamid, Abdul Rohim Tualeka*

168. The Role of Cultural Social Factor in Decision Making of Choosing Female Family Planning Contraception..... 898  
*Abdul Jalil Amri Arma, Surya Utama*
169. Epidemiology of Hypercholesterolemia among Adults in Samara City ..... 903  
*Abid Ahmad Salman Al-Mahmood, Ehan Abdulhadi Hussein Al-Sharifi, Asia Abed Al-Mahmood*
170. Corn Silk Based Ethosomal Gel: A New Treatment for Periodontitis in Diabetic Albino Rats a Preliminary Study ..... 909  
*Riuwpassa I.E., Kim YR, Tenrilili A.N.A., Untung J.S., Djamaludin N.S., Achmad M.H.*
171. Circuit Training to Increase Cardiorespiratory Endurance in Male Basketball Players..... 915  
*Agung Wahyu Permadi, I. Made Wisnu Adhi Putra, Endang Sri Wahjuni*
172. Relationship between Self-Care for Fluid Limitation and Interdialytic Weight Gain among Patients with Hemodialysis at Ratu Zalecha Hospital, Martapura ..... 921  
*Agus Rachmadi, Ita Ratnasari, Nursalam, Arief Wibowo*
173. Effect of Preoperative Biofeedback on Anal Continence After Fistula in Ano Surgery..... 926  
*Ahmed Farag, Hany M.S. Mikhail, Ahmed S. Khalifa, Mohamed T. Mostafa, Abdrabou N. Mashhour*
174. Relation between Human Epididymis Protein 4 and Endometrial Pathology in Women with Postmenopausal Bleeding..... 931  
*Ahmed L. Aboul Nasr, Ghada A. Abdel Moety, Mostafa S. Salem, Marwa M. Elsharkawy, Nada Kamal, Ahmed M. Maged*
175. Evaluation of Eye Relaxation to Decrease Eye Strain in PT Japfa Comfeed Indonesia Unit Sragen..... 937  
*Aisy Rahmania, Noeroel Widajati, Abdul Rohim Tualeka*
176. Effectiveness of Dorsata Honey Supplement on Interleukin-3 Levels in Breast Cancer Patients Who Underwent Chemotherapy ..... 941  
*Aji Kurniawan, Daniel Sampepajung, Salman Ardy Syamsu, Prihantono Prihantono*
177. Effect of Blood Sampling Method During a Mating Time in Male Camels (Dromedary Camels) ..... 947  
*Alaakamil Abdulla, Ali Habeeb Jaber AL-bdeery, Basim Hameed Abed Ali*
178. Hyaluronidase Versus Magnesium Sulphate as Adjuvants to Bupivacaine in Ultrasound Guided Supraclavicular Brachial Plexus Block in Upper Limb Surgeries..... 953  
*Amany K abo Elhusein, Mamdouh Hassan, Nagat A. Ali*
179. Influence of Social Cultural Capital and Marketing on Skin Whitening Products Use among Higher Education Female Students in the Northeast of Thailand ..... 960  
*Anawat Phutongnak, Wongsu Laohasiriwong, Kittipong Sornlorm*
180. Knowledge Management Based Performance Improvement on Certified Health Workers in Health Center of South Sulawesi ..... 966  
*Andi Mansur Sulolipu, Ridwan Amiruddin, Sukri Palutturi, Ridwan M. Thaha, Arsunan A.A.*
181. Determinants that Influence Relationship between Motivation and Job Satisfaction of Health Workers at Primary Health Care in Indonesia..... 970  
*Armedy Ronny Hasugian, Jaslis Ilyas, Besral, Adang Bachtiar*



#### XIV

182. Risk Factors for Obesity in Patients with Hypertension.....976  
*Aylinda Wahyuni Putri, Ratu Ayu Dewi Sartika*
183. The Role of Social Support on Coping Stress in Type-2 Diabetes Mellitus Patients with Gangrene Complications.....982  
*Ayu Aisah Zuraidah, Arif Nur Muhammad Ansori, Suhailah Hayaza, Ilham Nur Alfian, Suryanto, Nurul Hartini*
184. The Relationship of Work Instructions Compliance with Safe Behavior of Production Part Workers in PT X.....986  
*Ayu Prima Kartika, Windi Wulandari, Noeroel Widajati, Abdul Rohim Tualeka*
185. The Relationship of Age and Work Period with Hearing Disorders on Workers Which are Exposed to Noise Above Threshold Limit Value of Loom Part Weaving Ajl Department in Pt Bintang Asahi Tekstil Industry.....991  
*Bella Oktavia, Rezania Asyfiradayati, Abdul Rohim Tualeka*
186. Health Literacy on Weighing Control and Use of Weight Loss Products among Working-age Women in the Northeast of Thailand .....996  
*Chalee Yaworn, Wongsu Laohasiriwong, Kittipong Sornlorm*
187. Awareness Regarding Heart Diseases among Middle Aged Adults in a Rural Area of Rupandehi District .....1001  
*Chanda Sah, Priyanka Gyawali*
188. Correlation of Osteocalcin Urine Levels with Bone Mass Density in Menopause Women in H. Adam Malik General Hospital Medan .....1005  
*Cherry Kumalasari, M. Fidel Ganis Siregar, Deri Edianto, Christoffel L. Tobing, M. Fahdhy, Cut Adeya Adella*
189. Benefit of Thai Hermit Exercise on MCI Patients': A Randomized Controlled Trial .....1011  
*Chomlak Kongart, Yuttachai Likitjaroen, Surasak Taneepanichskul, PhD*
190. Relationship of Individual Characteristics and Noise Intensity with Subjective Hearing Loss to Workers at Pt. X .....1018  
*Cut Suci Almadiana T., Sumihardi, Abdul Rohim Tualeka*
191. The Role of Matrix Metalloproteinase-9 (MMP-9) and Tissue Inhibitor Metalloproteinase-1 (TIMP-1) Level in Dengue Hemorrhagic Fever .....1023  
*Dasril Daud, Nina Cicci Hasnani, Husein Albar*
192. Ethanol Extract with Black Cumin (*Nigella Sativa*) Against sFlt-1 Level and VEGF Serum on Laboratory Mice with Preeclampsia.....1028  
*Deasy Irawati, Hidayat Suyuti, Titi Maharrani, Fitriah, Ani Media Harrumi, Suryaningsih, Nursalam*
193. Effect of Nutritional Status, Hemoglobin Levels and Psychosocial Emotional Behavior with Cognitive Function of Female Teenager .....1034  
*Diana Septaria Abidin, Roedi Irawan, Windhu Purnomo*

194.	Life Experience of Adolescents with Thalassemia: A Qualitative Research with Phenomenological Approach .....	1039
	<i>Dini Mariani, Sri Mulatsih, Fitri Haryanti, Sutaryo</i>	
195.	The Effect of Metabolic Syndrome on Systolic Function of Left Ventricle Using Echocardiographic Examination.....	1044
	<i>Doaa H. EL-Farook, Hatem A. Sarhan, Manal M. Mohamed, Ahmed EL-Barbary, Khaled A. Khaled</i>	
196.	The Role of Mean Arterial Pressure (MAP) Roll Over Test (ROT) and Body Mass Index (BMI) in Preeclampsia Screening in Indonesia .....	1050
	<i>Dwi Putri Rahayu Tampubolon, Lilik Herawati, Nursalam, Ernawati</i>	
197.	Strategic Contribution of Health Services in the Indonesia-Malaysia Border to the National Resilience: Analysis of Implementation in the West Kalimantan Province .....	1054
	<i>Dwi Rachmatullah, Dumilah Ayuningtyas, Raden Roro Mega Utami</i>	
198.	Survival Analysis of Chronic Kidney Failure with a History of Degenerative Disease .....	1059
	<i>Efri Tri Ardianto, Alinea Dwi Elisanti</i>	
199.	Capital Knowledge Concept: Accounting Behavior and Health Management in Indonesia.....	1065
	<i>Entar Sutisman, Bambang Tjahjadi, Hamidah</i>	
200.	Early-Onset Neonatal Sepsis in Low-Birth-Weight and Birth-Asphyxia Infants at Haji Hospital Surabaya, Indonesia.....	1070
	<i>Euvangelia Dwilda Ferdinandus, Berliana Devianti Putri</i>	
201.	Humanoid Robot Integration in Rehabilitation of Musculoskeletal Conditions .....	1075
	<i>Fayz S. Al-Shahry, Rayan F. Al-Shehri</i>	
202.	Does Give Malnourished Pregnant Mothers with Supplementary Feeding Biscuit Can affect Pregnancy Outcomes? .....	1081
	<i>Henrick, Andi Imam Arundhana Thahir, Khartini Kaluku, Elyse Theresia, Saifuddin Sirajuddin, Veni Hadju, Abdul Razak Thaha</i>	
203.	Heavy Metals Concentration and Biochemical Parameters in the Blood and Nails of Industrial Workers .	1086
	<i>Kameran Sh. Husien, Mohsin O. Mohammed, Tamara N. Ahmed</i>	
204.	Impact of Workplace Violence Educational Program on Self-Confidence for Nursing Staff Working in Psychiatric Hospital.....	1091
	<i>Mohga Fathy Abd Elmoteleb Ali Hamza, Afaf Abd Elhamed Abd Elrahman</i>	
205.	The Association of Glutathion Peroxydase-1 Serum and Sensorineural Hearing Lossin MDR TB Patients with Kanamycin Therapy.....	1096
	<i>Ratna Anggraeni, Arif Darmawan, Febri Wisudawan F.</i>	
206.	Post-Traumatic Growth with Police Officer: System Review (Focused on Korean and Foreign Studies) ..	1102
	<i>Seung Woo Han</i>	
207.	HIV Stigma among Clinical Medical Students in East Java, Indonesia.....	1107
	<i>Firas Farisi Alkaff, Adila Taufik Syamlan, Presstisa Gifta Axelia, Jovian Philip Swatan, Sulistiawati</i>	

## XVI

208. Effectiveness of Falls Prevention Education on its Prevention Behavior among Older Adults: A Systematic Review .....1113  
*Goh Jing Wen, Devinder Kaur Ajit Singh, Suzana Shahar*
209. Chipping Resistance of Nanosilica Treated Zirconia Cores Veneered with Porcelain after Thermocycling and Cycling Loading ..... 1119  
*Hanaa F Mahmoud, Yaser F Gomaa, A Nour A Habib*
210. Assessment of Fracture Force of CAD-CAM-fabricated Occlusal Veneer Restorations with Different Thicknesses .....1125  
*Hanaa Saber Rabeae, Cherif Adel Mohsen, Shams Waaz Amgad*
211. The Analysis of the Dynamics of the Willingness-to-Pay Indicator for the Use of Innovative Technologies in Healthcare Calculated on the Basis of the Purchasing Power Parity of the Population in the Post-Soviet Countries .....1131  
*Hanna Panfilova, Alla Nemchenko, Liusine Simonian, Oleg Gerush, Natalia Bogdan, Oksana Tsurikova*
212. Molecular detection of *C5a* Peptidase (*scpB*) Gene in Group B Streptococcus Isolated from Pregnant Women and the Correspondence with Adverse Pregnancy Outcome .....1138  
*Hassan Saad Sakap, Jabbar S. Hassan, Sahar Hisham Abdul Razak*
213. Relative Hypoxia in Immunized Mice Spleen Macrophages as Indicated by Hypoxia Inducible Factors, Cytoglobin and Peroxisome Proliferator Activated Receptor Gamma Coactivator (PGC)-1 $\alpha$  .....1144  
*Hijrah Asikin, Ninik Mudjihartini, Sri Widia A. Jusman, Mohamad Sadikin, Sarifuddin Anwar*
214. The Emerging Risk of Interaction Between Complementary Alternative Medicines and Cardiovascular Medicines .....1149  
*Huda S. Husni*
215. Effect of Exercises Using a Pressing Tool on Some Biochemical and Skilled Variables of Tennis Players .....1155  
*Hussein Ali Hussein Al Kufi*
216. Evaluation of Angiopoietin One and Angiopoietin Two with Missed Abortion .....1159  
*Hussien Saeed Masood, Sami Akreem Zbaar, Bushra Mustafa Mohamed*
217. Predictive Value of Toprs Score in Outcome of Pediatric Patient in Emergency Installation .....1165  
*Idham Jaya Ganda, Fitriya Idrus, Dasril Daud*
218. Cellular Phone and Laptop Radiation Effects on Subjective Complaints in Informatics Students .....1170  
*Isna Qadrijati, Haris Setyawan, Seviana Rinawati, Tutug Bolet Atmojo, Rizka Andhasari Santoso, Akbar Fadilah, Realita Sari*
219. Comparing the Effectiveness of Video-Assisted Teaching and Simulation on Nurses' Knowledge in Performing Cardiopulmonary Resuscitation .....1175  
*Jatim Sugiyanto, Karyono Mintaroem, Titin Andri Wihastuti*

220. Association of Exon Deletion of MX11 Gene with Cervical Abnormalities and Cancers Incidence in Some Iraqi Married Women ..... 1180
221. Curcumin and 6-Shogaol Increase Hemoglobin F Levels by Inhibiting Expression of STAT3 mRNA Gene in K562 Line Cell..... 1185  
*Joko Setyono, Ahmad Hamim Sadewa, Edy Meiyanto, Mustofa. Mustofa*
222. Introduction of Probiotic Type of Yogurt for the Treatment of Dysbiosis of Patients with Lymphogranulomatosis Under Polychemotherapy by BEACOPP-II Protocol..... 1191  
*Kaliberdenko V.B., Kuznetsov E.S., Morozova M.N., Malev A.L., Zakharova A.N., Shanmugaraj K., Balasundaram K.*
223. Influence of Mental Health and Social Relationships on Quality of Life among Myanmar Migrant Workers in the South of Thailand..... 1194  
*Kanit Hnuploy, Wongs Laohasiriwong, Kittipong Sornlorm, Thitima Nutrawong*
224. Lumbosacral MRI Findings in Chronic Lower Back Pain ..... 1200  
*Kermanj Ismail Bakr, Israa Mohammed Sadiq, Saman Anwer Nooruldeen*
225. Joint Effect Obesity and Oral Contraceptive Use towards Hypertension among Women in Thirteen Provinces in Indonesia..... 1206  
*Kuuni Ulfah Naila El Muna, Helda*
226. Tithonia Diversifolia vs Catechin: Role in Regulating Blood Glucose, Malondialdehyd, and Super Oxide Dismutase Level on Rat Induced Diabetes Mellitus and High-Fat Diet..... 1212  
*Lailatul Muniroh, Rondius Solfaine, Indra Rahmawati*
227. Comparison between the Antioxidant Activity of Volatile Oil and Hydrosol in Eucalyptus Camaldulensis (Young and Adult) Leaves ..... 1218  
*Lamiaa A. Gharb*
228. Self Care Behaviour of the Diabetic Patients in a Primary Health Center in Bali ..... 1223  
*Made Mahaguna Putra, Kusnanto, Candra Panji Asmoro, Tintin Sukartini, Tjahja Bintoro, Ni Made Dwi Yunica Astriani, Putu Indah Sintya Dewi*
229. Cut off Point of Insulin-Like Growth Factor-I (IGF-1) for Prediction of Child Stunting ..... 1228  
*Masrul, Doddy Izwardy, Ricvan Dana Nindrea, Ikhwan Resmala Sudji, Idral Purnakarya*
230. Effect of Generative Learning Strategy with Visual Technologies in Learning Some Basic Skills and Motor Abilities for 5-6-Years Kindergarten Children..... 1234  
*Mayadah Khalid Jasim*
231. The Effect of Self-Regulated Learning Strategy in Motor Hyperactivity and Learning the Performance of Skill of Jump Shot in Basketball for Freshmen High School Students..... 1239  
*Mayadah Khalid Jasim, Shaymaa Jasim Mohammed*
232. Influence Organizational Citizenship Behavior (OCB) on Performance Nurses Public Health Centre in the District Tuban ..... 1244  
*Miftahul Munir*
233. Combined Exercise Effects on Lipid Profiles in Hypertensive Patients ..... 1248  
*Mitiku Daimo, Soumitra Mondal, Mahmud Abdulkader, Dhamodharan Mathivanan*

## XVIII

234. Ego State Therapy (EST) and Systemic Desensitization (SD) to Reduce School Refusal among Senior High School Students ..... 1254  
*Mochamad Nursalim, Nur Hidayah, Adi Atmoko, Carolina L. Radjah*
235. Implant Materials Used for Orbital Floor Reconstruction..... 1260  
*Mohamed Esmail Khalil, Mohamed Farag Khalil, Raafat Mohyelddeen Abdelrahman, Ahmed Mohamed Kamal Elshafei, Tamer Ismail Gawdat*
236. Expression of Amylin and Preptinin Iraqi Patients with Type 2 Diabetes Mellitus..... 1266  
*Mohammed I. Hamzah, Israa A. Abdul Kareem, Mohammed Albayati*
237. Evaluate the Correlation Between Antioxidant Capacity and Interferon  $\Gamma$  Level with the Disease Activity of Sle Patients in Iraqi Woman..... 1272  
*Mohammed T. Alaany, Jinan M.J. Alsaffar, Ahmed Abdul Bari*
238. Comparative Effect of Mulligans Mobilisation Versus Stabilisation Exercise on Chronic Nonspecific Low Back Pain: A Pilot Study..... 1277  
*Mohan Kumar G., Jibi Paul, Sundaram M.S., Mahendranath P.*
239. Factors Associated with Work Fatigue in Workers of the Nipah Building Construction Project Makassar 1283  
*Muh. Arfandi Setiawan, Awaluddin, Andi Wahyuni, Abdul Rohim Tualeka*
240. Quality Evaluation of Health Services at Community Health Centers: through Accreditation Surveys in Indonesia..... 1288  
*Muhammad Tahir, Ridwan Amiruddin, Sukri Palutturi, Fridawaty Rivai, Lalu Muhammad Saleh, Owildan Wisudawan B*
241. Hypoglycemic and Antioxidant Activity of Yellow Pumpkin (*Curcubita moschata*) in Diabetic Rats..... 1294  
*Muji Rahayu, Menik Kasiyati, Atik Martsiningsih, Budi Setiawan, Furaida Khasanah*
242. Association of Diabetes Mellitus and Estrogen Hormone Levels with Vaginal Candidiasis..... 1299  
*Netti Suharti, Almudri, Ricvan Dana Nindrea, Silfina Indriani*
243. P24 Antigen Quantification of Indonesian Patients Infected with HIV-1 CRF01\_AE ..... 1304  
*Ni Luh Ayu Megasari, Devi Oktafiani, Elsa Fitriana, Nasronudin, Soetjipto*
244. Effect of Black Seed (*Nigella Sativa*) Extract on Release of Some Minerals from Human Enamel: An in Vitro Study ..... 1309  
*Nibal Mohammed Hoobi, Raya R. Al-Dafaai, Baydaa Hussain*
245. Efficacy of *Catharanthus Roseus* Extract Against Dengue Virus Type 2 Infection in Vitro ..... 1314  
*Noor Zarina Abd Wahab, Nazlina Ibrahim*
246. Psychometric Evaluation of a Feedback Conception Scale: Building Positive Feedback Practises of Charge Nurses in Public Hospitals ..... 1320  
*Nor Hasnida Che Md Ghazali, Mahizer Hamzah, Norazilawati Abdullah, Zahari Suppian*
247. Factors Associated with Hypertension among Adults in West Java, Indonesia..... 1325  
*Nurul Wahyu Wadarsih, Ratu Ayu Dewi Sartika*

248. Correlation of Interleukin-6 with Serum Estradiol Mean Levels in Menopause Women at Rsup H Adam Malik Medan.....1331  
*Nutrisia Latjindung, M. Fidel Ganis Siregar, Hanudse Hartono, Sarma N. Lumbanraja, Deri Edianto, Iman Helmi Effendi*
249. High Bride Price as Determinant of Marital Stability among Akwa-Ibom People in Surulere Area, Lagos State, Nigeria .....1337  
*Oniyangi, Shuaib Olanrewaju, Jamiu Abdul Qudus Tosin & Owo, Blessing, Umar Ibrahim Babangida & Ahmad Makama Getso, Sindama Helen*
250. Psychosomatic Impact of Social Networking Sites on Society and its Subtle But Real Consequences .....1342  
*Abhimanyu Chopra, J.K. Mittal*
251. Detection of Extended-Spectrum-Beta-Lactamase (ESBL) Producing Escherichia Coli in Meat Chicken from Traditional Market in Surabaya, East Java, Indonesia .....1347  
*Dhandy Koesoemo Wardhana, Mustofa Helmi Effendi, Nenny Harijani, Hong-Kean Ooi*
252. Health Problems of Prospective Brides in Rural Area of East Java, Indonesia .....1352  
*Nunik Puspitasari, Sri Sumarmi, Yuly Sulistyorini, Kuntoro*
253. Cytotoxic Activity and Selectivity Index of Solanum Torvum Fruit on T47D Breast.....1358  
*Nunuk Helilusiatiningsih, Yunianta, Harijono, Simon Bambang Wijanarko*
254. The Relationship between Father Involvement with Growth and Social-Emotional Development in Preschool Children .....1364  
*Nur Hijrah Tiala, Fitri Haryanti, Akhmadi*
255. Auditory evaluation with Pure Tone Audiometry and DPOAE in Kanamycin Treatment of Multidrug-Resistant Tuberculosis .....1371  
*Nyilo Purnami, Aditya Brahmono, Bakti Surarso*
256. Assessment of Coronary Heart Disease Risk among Diabetes Mellitus Survivor in Community Health Center Purwosari Indonesia.....1376  
*Okti Sri Purwanti, Ahmad Faris Muntaha, Agus Sudaryanto*
257. Effectiveness of Providing Self-Management Education to Deal With Emesis Gravidarum on Decreasing Nausea Vomiting Pregnancy (NVP) at Private Practice Midwives Puskesmas IV Denpasar Selatan Work Area.....1381  
*Ni Nyoman Deni Witari, Ni Made Dewianti*
258. The Effectiveness of Progressive Muscle Relaxation with Benson Relaxation on the Sleep Quality in Hemodialysis Patients.....1386  
*Theresia Uli Porman Purba, Ridha Dharmajaya, Cholina Trisa Siregar*
259. Characteristics of Patients with Diabetic Foot Ulcers and Predictors of Surgical Intervention in Basrah, Southern Iraq .....1391  
*Abdulhussein K. Marzoq, Rafid Abduljabbar Mohammed, Omran S. Habib*
260. Low CD4 Level Increased the Risk of Cognitive Impairment in the HIV Patient.....1397  
*Nurul Azizah, Abdulloh Machin, Muhammad Hamdan*



**XX**

261. Antibacterial Effect of the Combination of Probiotic Milk and Calliandra Honey against Streptococcus Mutans that Causes Tooth Cavities ..... 1402  
*Uswatun Chasanah, Isnaeni, Nuzul Wahyuning Dyah*
262. Reproductive Health Behavior of Street Youth Guided by Karya Putra Indonesia Mandiri Foundation in Central Jakarta Region ..... 1407  
*Prihayati, Hansrizka Raisna, Ridwan Amiruddin, Owildan Wisudawan B.*
263. Trend of Malaria Cases in Maluku Province 2012-2016 ..... 1411  
*Prisilia Oktaviyani, Budi Hartono, Ranti Ekasari*
264. A Qualitative Study: Perceptions of Premarital Sexual Behavior among Teenage Girls..... 1419  
*Mia Fatma Ekasari, Eros Siti Suryati, Raden Siti Maryam, Ahmad Jubaedi, Rosidawati, Tien Hartini, Santun Setiawati*
265. Hazard and Risk Analysis by Implementing Hiradc Method in the Laboratory of Medical-Surgical at Faculty of Nursing Universitas Airlangga..... 1424  
*Radhia Maya R.P., DaniNasirul H., PutriAyuni Alayyannur, Tjipto Suwandi, Rizky Agung Firnando*
266. A Three-Years Survival Rates of Chronic Myeloid Leukemia Patients with Targeted Therapy ..... 1430  
*Rani Silondae, Tutik Harjianti, Sahyuddin Saleh, Syakib Bakri, A. Makbul Aman, Hasyim Kasim, Haerani Rasyid*
267. The Effect of Alkaloid Extract of Teucrium Polium L. Against Some Pathogenic Bacteria of Urinary Tracts and on Pyelonephritis Induced in Rats ..... 1444  
*Rawa'a A. Kushaish, Bushra A.M. AL-Salem, Mouayed A. Hussein*
268. A Study of Complications of Infants of Diabetic Mothers in Babylon Teaching Hospital for Maternity and Pediatrics..... 1449  
*Rebee Mohsin Al-Ithary*
269. The Relationship between Obesity and Dyslipidemia in Adolescents ..... 1455  
*Ria Qadariah Arief, Ridwan Amiruddin, Syamsiah Russeng, Citra Kesumasari, Nurhaedar Jafar, Ummu Salamah, Nugrahaeni*
270. The Individual Factor and the Quality of Building's Physical Environment in Correlation with the Occurrence of Sick Building Syndrome (SBS) on Employees of PT. Telkom Jember ..... 1459  
*Rizki Adi Sulistyanto, Ragil Ismi Hartanti, Prehatin Trirahayu Ningrum, Abdul Rohim Tualeka*
271. Public Knowledge on Over the Counter Analgesics at Private Pharmacy Store in Makassar City Indonesia..... 1464  
*Rizqi Nur Azizah, Hendra Herman*
272. Effect of Different Levels of Coriandrum Sativum and Piper Nigrum and their Interaction on Production, Biochemical Parameter, Liver Enzymes, TSH and Growth Hormone for Broiler Chickens ... 1468  
*S.G. Hussein, H.Q. Baker*
273. Parental Style and its Relation to Adolescents' Self-Concept and Depression ..... 1474  
*Safaa Mohammed Zaki, Manal Hassan Abo Elmagd, Nagat Farouk Abo Elwafa*



274. Assessment of Exam-related Anxiety among the Students of the High Healthy Vocations Institute at Medical City .....1482  
*Sameer Allawi Khalaf, Meaad Kareem Halboos*
275. Urinary Intestinal Fatty Acid Binding Protein “IFABP” as a Marker for Gut Maturation in Preterm Babies ..... 1488  
*Samir Tamer Abd-Allah, Hanan Mostafa Kamel, Madeha Abd-Allah Sayed, Yossra Samir Fadle*
276. Associations between TNF- $\alpha$  and Interleukin-18 and ADIPOQ Gene Polymorphisms in Iraqi Obese Women Patients with Polycystic Ovary Syndrome..... 1493  
*Sarah Ibrahim Hashoosh, Asmaa A. Hussien, Salah Al Chalabi*
277. C2 Lateral Mass Vertebrae Anthropometry for Evaluating C2 Straight Lateral Mass Screw Fixation..... 1499  
*Sarra Dwiananda Mayasafira, Joni Susanto, Eko Agus Subagio*
278. Correlation between Health Locus of Control with Intention to Perform Cataract Surgery in the Area of Public Health Center of Tempurejo Jember ..... 1505  
*Siswoyo, Baskoro Setiopotro, Kushariyadi, Iqbal Luthfi Nauri*
279. Implementation of Tender Loving Care-Based Growth and Development Monitoring by Health Cadres.. 1511  
*Siti Asiyah, Dewi Retno Suminar, Ahsan, Shrimarti Rukmini Devy, Moersintowarti B. Narendra*
280. Regional Health Care: Does Give Benefits for Poor Communities?..... 1516  
*Siti Nuraini, Riski Isminar Ardianti, Deddy Kurniawansyah*
281. Measures of Modern Society to Limit the Prevalence of Sexually Transmitted Infections..... 1521  
*Sizov A.A., Pashina I.V., Lischuk N.G., Alferova M.E., Lyaskovets A.V., Shahbazov R.F., Andreeva N.A.*
282. Effect of Non-Computerized Cognitive Remediation and Risperidone to Improve Disability Function in Schizophrenia ..... 1526  
*Sonny T. Lisal, Saidah Syamsuddin, Anisa*
283. The Effect of Olanzapine on the Improvement of the Clinical Symptom of Schizophrenia..... 1532  
*Sonny T. Lisal, Saidah Syamsuddin, Balgis*
284. Study of Some Virulence Factors of Candida Albicans Causing Intestinal Infection..... 1538  
*Sozan Khaled Kadhum*
285. Correlation between Protein Intake, Parity and Miscarriage History Anemic Pregnant Women in Sukoharjo Regency, Indonesia with Low Birth Weight Incidence: A Case Control Study ..... 1544  
*Sufia Fitriani, Eti Poncorini Pamungkasari, Suminah*
286. Changes in Community Behavior and Keeping the Quality of Drinking Water Based Ranas Models ..... 1549  
*Sugeng Mashudi, Ah. Yusuf, Rika Subarniati Triyoga*
287. Breast Cancer and Hormonal Level Changes ..... 1555  
*Suhad Kahdum Ali*
288. Socio-demographic Characteristics and Caregiver’s Quality of Life Associated with Suspected Developmental Delay among Early Childhood in Northeast of Thailand..... 1561  
*Supattra Boonjeam, Rajda Chaichit, Benja Muktabhant, Suwit Udompanich*

## XXII

289. The Influence of ACTN3 Gene Polymorphism on VO<sub>2</sub>max and Sprint Speed Based on Sprint Interval Training Intervention ..... 1567  
*Susiana Candrawati, Nur Signa Aini Gumilas, Dyah Ajeng Permatahani, Muhammad Fadhil Wasi Pradipta, Lantip Rujito*
290. Predisposing Factors to Risk of Low Birth Weight in Premature Baby in Bengkulu Indonesia ..... 1573  
*Susilo Damarini, Hadi Pratomo, Helda, Besral*
291. Education and Knowledge Level Analysis of the Teachers Regarding Dental Education Program in Primary Schools..... 1578  
*Taufan Bramantoro, Titiiek Berniyanti, Retno Palupi, Ninuk Hariyani, Fatan Fakihardi, Aulia Ramadhani, Sarah Fitria Romadhoni*
292. Revised Trauma Score (RTS) as Outcome Predictor of Head Injury Patients ..... 1583  
*Tengku Isnii Yuli Lestari Putri, Ahsan, Dhelya Widasmara*
293. The Relationship between Obesity and Fasting Blood Glucose Levels in High School Teachers ..... 1589  
*Tri Setyawati, Muhammad Ikbali, Fenny Nur Afny, Muhammad Nasir*
294. A Case Study of the Health Adaptation of Former Schizophrenics in Communicating with the Bugis Makassar Community in the South Sulawesi Province..... 1594  
*Tuti Bahfiarti, Arianto, Muhammad Harun Achmad*
295. Risk Factors Associated with HIV Infection among Male to Transvestites in Five Cities in Indonesia in 2015 ..... 1600  
*Udin Komarudin, Tri Yunis Miko Wahyono*
296. Shift Working Relationship with Blood Pressure in Excess Noise Workers Exposed NAB Spinning in the Department of the Winding Pt Star Asahi Textile Industry ..... 1606  
*Vivi Budiarti, Tina Rosa Rachmawati, Abdul Rohim Tualeka*
297. Is Osteopontin of Value in Diagnosis of Knee Osteoarthritis?..... 1612  
*Walaa F. Mohammed, Faten Ismail Mohamed, Gihan M. Ahmd, Rasha A. Abdelmagied, Aliaa M. Mounir, Mustafa Abdel- Kader*
298. A Prospective Study of Effectiveness of Pre-release Intensive Program for Prisoners in Thailand ..... 1615  
*Wanna Pajumpa, Manop Kanato, Kittima Momen*
299. Factors Associated with Behavior Usage of Respiratory Protective Equipment among Sugarcane Factory Workers in Northeast of Thailand ..... 1621  
*Wipada Panakobkit, Pornpun Sakunkoo*
300. Re-evaluation of Psoriatic Patients with Metabolic Syndrome: A Case Control Study Searching for the Highly Prevalent Criteria ..... 1627  
*Wisam Majeed Kattoof*
301. Effect of Dragon Fruit (*Hylocereus Polyrrhizus*) Peel Extract on Collagen Fiber Density of Rat Socket Healing..... 1633  
*Wisnu Setyari Juliastuti, Hendrik Setia Budi, Christiana Ayu Maharani*

302. Guided Group Investigation, Scaffolding Task Questions and Self-Efficacy in Learning to Solve Social Problems in Inclusive Schools.....1638  
*Wiwik Widajati, Punaji Setyosari, I Nyoman S. Degeng, Sumarmi, Mustaji*
303. Perceptions of Teachers, Parents and Adolescents about HPV, Cervical Cancer and HPV Vaccination ....1644  
*Wiwin Lismidiati, Ova Emilia, Widyawati*
304. Occupational History as a Predictor of Cognitive Ability in the Elderly .....1650  
*Yudhiakuari Sincihur, Felicia Sinjaya, Edith Maria Djaputra*
305. The Effect of Employment Time with the Low Back Pain Disorders on Workers in the ‘X’ Carpet Fitting Work Unit Pasuruan.....1655  
*Zikri Fathur Rahman, Nur Lailatul Masrurroh, Noeroel Widajati, Abdul Rohim Tualeka*
306. Lived Body Principle of a Nurse’s Experience in Emergency Treatment at Remote Area Kokonao, Papua, Indonesia .....1658  
*Zulkifli, Indah Winarni, Asti Melani Astarti*
307. Biliary Atresia Outcome in Egypt: A Descriptive Study .....1663  
*Omar N. Abdelhakeem, Gamal H. Eltagy, Alaa A. El. Sayed, M.M. Khedr*
308. Improvement of Women’s Skills toward their Children with Hemophiliaat Hereditary Blood Disease Center in Al-Nasiriya City, Iraq .....1667  
*Oday Faris Washeel, Radha. M. Lefta, Ali Hussein Abbas*
309. Isolation and Distribution of Microorganisms Causing Wound Infections in Diabetic Patients in Kirkuk City, Iraq.....1672  
*Aydin S. Ahmed, Pinar H. Tahir, Burhan A. Mohammed*
310. C-Reactive Protein and Soluble Intercellular Adhesion Molecule-1 in Helicobacter Pylori Infection Associated with Chronic Renal Failure .....1677  
*Sahlah Kh. Abbas, Najdat B. Mahdi, Aseel Sh.Abdulla*
311. Gonial Angle as a Determinant of Gender, a Panoramic Study in a Sample of Saudi Population.....1683  
*Ahmed Ali Alfawzan*
312. Determinants of Under-Five Mortality in Southern Asia .....1688  
*Ankika Dutta*
313. Can Better Infrastructure Ensure Better Healthcare? The Dialectic of Assam’s Health Sector Scenario....1692  
*Kasturi Goswami*
314. Study the Link between Laparoscopic Cholecystectomy and Abdominal Wall Paraumbilical Hernia .....1696  
*Mohammed Mohammud Habash*
315. Acute Head Injury with Pregnancy .....1699  
*Ajaydeep Singh, Arvinpreet Kour, Unmesh S. Santpur*
316. Effectiveness of Deep Brain Stimulation in Parkinsonism .....1704  
*Ajaydeep Singh, Arvinpreet Kour*

## XXIV

317. Significance of PD-L1 Expression and Tumor Infiltrating Lymphocytes in High Grade Serous Ovarian Cancer: Egyptian Experience ..... 1712  
*Mai Gad, Amany Abou-Bakr, Rasha Mahmoud Allam, Hanan Ramdan Nassar, Maher H. Ibraheem, Soha Talima, Ghada Mohamed*
318. Association between Jordanian Ostomates' Knowledge about Intestinal Ostomy Care and their Ostomy Health-Related Problems ..... 1719  
*Rami A. Elshatarat*
319. Comparison between Lord Dilitation Versus Lateral Internal Sphincterotomy for Management Post Hemorrhoidectomy Pain and Stenosis..... 1724  
*Raisan Mahdi Shoramah Aljabery*
320. Competency-based Assessment of Public Health Professionals in the Northeastern Region, Thailand: An Exploratory Factors Analysis ..... 1729  
*Wilawun Chada, Songkramchai Leethongdee, Supa Pengpid, Sangud Chualinfa*
321. Does Vertigo Predict Hypertension in Cervical Spondylosis Clinical Trail Study ..... 1735  
*Talib Kadhim Akar*
322. Is there an Effect of Serotonin on Attention Deficit Hyperactivity Disorder ..... 1739  
*Yunias Setiawati, H.J. Mukono, Joni Wahyuhadi, Endang Warsiki, Sasanti Yuniar*
323. Different Grades of BMI is Correlated with Left Atrium and Ventricle Structure in Patients with Hypertensive Heart Disease..... 1744  
*Meity Ardiana, Rofida Lathifah, Makhyan Jibril Al-Farabi, Muhammad Satya Bhisma*
324. Herbal Dental Products: The Impact of Social Media on Consumers' Behaviour..... 1749  
*Manar E. Al-Samaray, Humam M. Al-Somaiday, Ali Mahmoud Al-Samydai, Rudaina Othman Yousif*
325. The Effect of Moringa Oleifera Flour Given for Mothers Breastfeeding Against Morbidity of Baby Ages 0-6 Months in Jeneponto District ..... 1754  
*Suhartatik, Veni Hadju, Masyita Muis, Hasanuddin Ishak , Merryana Adriani*
326. Evaluation of an Experimental Poly-Methyl Methacrylate/Nano Graphene Oxide Composite..... 1760  
*Reem Gamal, Yasser F. Gomaa, Ashraf Mahroos*
327. Manipulative Movement Based on Information Technology Games for School Children Aged 10-12 Years ..... 1766  
*Nevi Hardika, Moch. Asmawi, James Tangkudung, Firmansyah Dlis, Abdul Sukur, Widiastuti M.E. Winarno*
328. The Influence of Job Stressor on Organizational Loyalty and Intention to Quit among Health Care Staff. 1773  
*Mohammad Saipol Mohd Sukor, Siti Aisyah Panatik, Wan Mohd Azam Wan Mohd Yunus*
329. Emotional Intelligence and Conflict Management Style among Staff in a Bank..... 1778  
*Maisarah Mohd, Halimah Mohd Yusof*
330. Trend on Drink Drive and Road Accident Across Asian Region: A Review Study ..... 1783  
*Siti Hawa Harith, Norashikin Mahmud*

331. Obesity and Job Performance among Teachers in Malaysia ..... 1791  
*Mohd Hakiki Md Tohid, Zulkifli Khair*
332. Does Instagram's Like Affected Teenager Self-worth? ..... 1797  
*Hayinah Ipmawati, Wiwien Dinar Pratisti*
333. The Application of MOPSI Module Forbreast Cancer Patients ..... 1801  
*Norhafizah Musa, Azahar Yaakub Ariffin, Siti Suhaila Ihwani, Adibah Muhtar, Abdul Hafiz Abdullah*
334. A Study on Consumers Perception on Halal Certification of Dietary Supplement Products ..... 1806  
*Norazlinabinti Abdul Aziz, Hartini Sariipan, Farizah Mohamed Isa, Mardiah Hayati Abu Bakar*
335. Identifying Environment Aspect in Academic Enhancement Support for Student-Athlete Using Fuzzy Delphi Method ..... 1813  
*Mohd Zulfadli Rozali, Saifullizam Puteh, Faizal Amin Nur Yunus, Thariq Khan Azizuddin Khan*
336. Non-Muslim Consumer Perspective on Cosmetics and Personal Care Products ..... 1818  
*Nusaibah Mansor, Nurul Ajmal Mohd Shukri, Siti Norbaya Yahaya*
337. Students' Pro-Eco Behavior Related to Healt Based on Environmental Big-Five Personality and Self-efficacy ..... 1822  
*I. Made Putrawan, Lisa Dwi Ningtyas*
338. Visualization Program of Practical Work Manual for Biology Concepts on Health Education Topics ..... 1828  
*Amalia Sapriati, Mestika Sekarwinahyu, Ucu Rahayu, Suroyo*
339. Effects on Memorized Information Quantity in Web Pages Using Bicolor Design-from the Perspective of Color Blind People and Non-Color Blind People ..... 1833  
*Kohei Sakamoto, Chieko Kato*
340. The Effect of Work Loads on Work Satisfaction with Work Structure as a Variable of Mediation ..... 1838  
*Isworo Pujotomo, Sasmoko, A. Bandur, Nugroho J. Setiadi*
341. Lecturers' Knowledge About Environmental Issues, Personal Responsibility and Personality: Its Effect on Lecturers' Intention to Act in Saving our Environment ..... 1842  
*Agus Priadi, I. Made Putrawan, Guspri Devi Artanti*
342. Biological Teachers' Citizenship Behavior: A Confirmatory Study Involving the Effect of School Leadership and Integrity ..... 1848  
*Astuti Esti Zharroh, I. Made Putrawan, Diana Vivanti Sigit*
343. Biological Teachers' Personality and Task Performance Mediated by Procedural Justice ..... 1852  
*Ilena Amalia Luthfi, I. Made Putrawan, Mieke Miarsyah*
344. How is Students' Personality towards the Environment Predicted by Students' Attitude and Locus of Control? ..... 1856  
*Damianus Daikoban, I. Made Putrawan, Diana Vivanti S.*
345. The Effect of Personality and Motivation on Junior High School Biology Teacher's Citizenship Behavior ..... 1862  
*Tri Ayu Astuti, I. Made Putrawan, Rusdi*

## XXVI

346. Connecting Biological Teachers Self-Efficacy with Organizational Commitment Mediated by Motivation .....1868  
*Fera Puji Astuti, I. Made Putrawan, Ratna Komala*
347. The Effect of Personality and Gender on Green Consumer Behavior.....1873  
*Cholilawati, I. Made Putrawan*
348. Keeping Teachers' Organizational Commitment High By Considering the Role of Teachers Leadership and Trust .....1879  
*Risky Hasanah, I. Made Putrawan, Diana Vivanti S.*
349. School Culture and Job Satisfaction: Its Effecton Biological Teachers' Task Performance .....1883  
*Dewi Robiatun, I. Made Putrawan, Rusdi.*
350. Strategies Overcome Barrier between Doctor and Patient Communication at National Heart Institute, Malaysia.....1887  
*Vimala Govindaraju, Aizai Azan Abdul Rahim*
351. The Character Education Concept for Prospective Parents: Societal View .....1893  
*Mita Septiani, Basuki Wibawa, Robinson Situmorang*
352. Effective Communication and Collaboration Training Evaluation for Employee Performance Improvement at National Nuclear Energy Agency .....1898  
*Shinta TD Nawangwulan, Achmad Hufad, Jajat S. Ardiwinata, Iip Saripah, Dadang Yunus L.*
353. Impacts of Date Palm Seeds (Phoenix Dactyliferous L.) on Common Carpcyprinus Carpio L. Biological Indices and Blood Pictures.....1904  
*Lecturer Nasreen Mohi Alddin Abdulrahman*
354. Evaluation of Maternal and Child Health Care Services in Health Care Centers with High Maternal and Infant Mortality Rate in Wassit Governorate, Iraq .....1908  
*Ahmed Thani Sadoon, Basim Hussein Bahir*
355. Estimation of Interferon Gamma and Zinc Concentration in Serum of Cutaneous Leishmaniasis Patients in Tikrit City .....1914  
*Ghaydaa Abdulwahed Awadh AL-Tikrity*
356. Obesity as a Risk Factor for Disease Development: Part-I Cardiovascular Diseases and Renal Failure.....1920  
*Moheb Ahmed Salih, Amina Hamed Alobaidi, Abdulghani Mohamed Alsamara*
357. Role of Interleukin-28B in Clearance of HCV in Hemodialysis Patients in Kirkuk City.....1926  
*Nuha M. Wahid, Israa H. Saadoon*
358. Levels of Interleukins Associated with Retinopathy in Sera of Iraqi Diabetic Patients.....1932  
*Osamah Jihad Abdul Qader, Marwan Salah Salman, Nihad Khalawe Tektook*
359. Prevalence of Celiac Disease among Cases of Irritable Bowel Syndrome in Baghdad, Iraq.....1937  
*Marwan Majeed Ibrahim*
360. Incidence of Caesarian Section (C/S) in AL- Fallujah Teaching Hospital.....1944  
*Huda Hamid Al-Janabi, Omar Mahmood Shakir, Aya Falah Ahmed, Suha Hamdi Mahmood*

361. Relation of Anti FSH Antibodies and Polycystic Ovarian Syndrome in Women.....1948  
*Najat jabbar Ahmed, Burhan Ahmed Salih, Bestoon Salah Othman*
362. Serum Ferritin Levels with Some Hematological Parameters in Women with Preterm Labour or PPRM.....1954  
*Lamia Ahmed Salih*
363. Evaluation the Effect of a Different Beta Blockers Agents on Somebody Metabolic Parameters in Patients with Essential Hypertension .....1960  
*Labeeb H. Al-Alsadoon, Thamer S. Ali, Shihab A. Al-Bajari, Aida M. Shafiq*



# The Relationship between Obesity and Dyslipidemia in Adolescents

Ria Qadariah Arief<sup>1</sup>, Ridwan Amiruddin<sup>2</sup>, Syamsiah Russeng<sup>2</sup>,  
Citra Kesumasari<sup>2</sup>, Nurhaedar Jafar<sup>2</sup>, Ummu Salamah<sup>2</sup>, Nugrahaeni<sup>3</sup>

<sup>1</sup>Faculty of Psychology and Medical Science, Universitas Islam Negeri Sunan Ampel, Surabaya,

<sup>2</sup>Faculty of Public Health, Hasanuddin University, Makassar, <sup>3</sup>Faculty of Public Health,

Diponegoro University, Semarang, Indonesia

## Abstract

**Background:** Obesity is a condition of chronic accumulation of body fat and a factor for the onset of serious diseases such as dyslipidemia. Obesity and dyslipidemia are emerging as significant public health challenges in South Asian countries

**Aim:** This study aimed to assess the association of obesity with dyslipidemia by measuring LDL and HDL in adolescents

**Method:** This study is an observational analytic study with a cross-sectional design. Sixty-two adolescents aged 17-19 years were randomly using systematic random sampling. LDL and HDL, anthropometric (weight, height, and BMI). Analysis data was performed using an independent t-test, chi-square test, and Fisher test

**Results:** The results showed that the samples with a high risk for the measurement of LDL and HDL.

**Conclusions:** It was concluded that obese adolescents have close links with dyslipidemia and have low HDL level. Obesity in adolescents is essential as early as possible so that it does become a significant health problem.

**Keywords:** Obesity, Dyslipidemia, LDL, and HDL.

## Introductions

Obesity is a chronic disease that can cause various other degenerative diseases. The development of the problem of obesity has been widespread throughout the country, and its occurrence has increased every year for the past 40 years. The increase in the incidence of obesity also increases the increase in the incidence of degenerative diseases. Such as dyslipidemia which even increased in adolescence.

The Problem of Body Weight Proportion has experienced a very remarkable development, from 1975 to 2014, with changes in the average value of BMI of the world's population, ranging from 21.7 kg/m<sup>2</sup> in 1975 to 24.2 kg/m<sup>2</sup> in 2014, where in males from 22.1 kg/m<sup>2</sup> in 1975 to 24.4 kg/m<sup>2</sup> in 2014. These data indicate that an increase in BMI of the world population supports a positive shift towards obesity BMI. And finally in 2014 the face of the world changes increasingly concentrated due to obesity problems with the prevalence of morbidity due to obesity globally of 0, 64% of male sex and 1.4% of women<sup>1</sup>. Thus, the change in BMI of the world's population for four decades supports the spread of obesity to high mortality rates.

Likewise, the development of the problem of obesity in Indonesia is clearly illustrated in the 2007 Riskesdas data with the national prevalence of obesity in people

---

### Corresponding Author:

**Ria Qadariah Arief**

Faculty of Psychology and Medical Science,  
Universitas Islam Negeri Sunan Ampel, Surabaya,  
Indonesia.

e-mail: ria.qadariah@gmail.com

Contact No.: 085255381987

aged > 18 years by 13.9% and becoming 19.7% in 2013<sup>2</sup>. The picture of the population above the age of 18 shows that for the Indonesian population the coverage of adults and the elderly has a problem of obesity which is quite alarming and requires special attention in their snacks.

The incidence of obesity for South Sulawesi has experienced a very large increase. The prevalence of obesity in the Selayar Archipelago District is 32.49% greater than the prevalence of obesity at the provincial level in South Sulawesi which amounted to 23.67% in 2016.

Where in adolescence, obesity, drugs cannot be done because they are still in growth period. While on the other hand the condition of obesity experienced by adolescents raises new problems namely dyslipidemia.

LDL and HDL changes that occur in adolescents can cause dyslipidemia problems more quickly at a younger age. This change is a very big dynamic from very high LDL and very low HDL in adolescents. Or a standard LDL level but a very low HDL level.

This study aimed to assess the association of obesity with dyslipidemia by measuring LDL and HDL in adolescents. The purpose of this study is to prove that there are changes in LDL and HDL in adolescents due to their obesity. This is important to be the reason for the importance of promoting obesity treatment in adolescents. To prevent dyslipidemia.

### Method

In our respondents we measured LDL, HDL, and anthropometric measurements including abdominal circumference using measuring tape, body weight with weight scales, height with microtoa, and BMI (Body Mass Index).

BMI measurement by calculating body weight in Kg divided by height in meters squared. Like the following formula:

$$BMI = \frac{weight(Kg)}{(height(m))^2}$$

Measurements of LDL and HDL were carried out as a result of venous blood tests taken from adolescents and measured in Lab. Prodia Makassar, Indonesia.

The data of this study were analyzed by independent t-test, chi-square test, and Fisher test to see the relationship of several measured variables.

## Results

### The results of this study

**Table 1. Characteristics of Adolescent Respondents**

Variabel	N	%
<b>Gender</b>		
Men	27	43.5
Women	35	56.5
<b>Age</b>		
17	5	8.1
18	45	72.6
19	12	19.4
<b>Central Obesity</b>		
Normal	21	33.8
Obesity	41	66.2
<b>BMI</b>		
Normal	22	35.5
Obesity	40	64.5

Based on table 1 above shows the majority of respondents are female adolescents with a percentage of 56.5%. and dominated by 18 years old with 72.6%. Respondents who had central obesity based on measurements of abdominal circumference were 66.2%, and for respondents who were obese based on the results of BMI measurements were 64.5%.

**Table 2. Lipid Profile and Obesity According to Central Obesity of Adolescent**

Central Obesity			
Variable	Normal Mean ± SD (n=21)	Obesity Mean ± SD (n=41)	P
HDL	51.9 ± 10	43.9 ± 7	0.001
LDL	98 ± 18	115 ± 33	0.01
LDL/HDL	2.2 ± 0.58	2.6 ± 1	0.063

From table 2 above shows that HDL levels in adolescents with central obesity conditions are much lower than in adolescents with normal abdominal circumference which is a mean of 43.9 ± 7 with a value of P < 0.005.

**Table 3. Lipid Profile and Obesity According to Body Mass Index of Adolescent**

Body Mass Indeks			
Variable	Normal Mean ± SD (n=22)	Obesity Mean ± SD (n=40)	P
HDL	51.4 ± 10.4	44 ± 7.6	0.002
LDL	98.2 ± 17	116.3 ± 32.8	0.007
LDL/HDL	2.2 ± 0.6	2.6 ± 1.05	0.057

In table 3 above shows that adolescents with obese conditions have very low HDL levels compared to normal adolescents. This obesity measurement was

based on the Adolescent Body Mass Index adjusted for BMI chart percentile tables for children and adolescents based on CDC 2000.

**Table 4. Obesity Based by Waist Circumferences According to Lipid Profile of Adolescent**

Variabel		LDL				P	HDL				P	LDL/HDL				P
		Hight Risk		Low Risk			Low Risk		Hight Risk			Low Risk		Hight Risk		
		N	%	N	%		N	%	N	%		N	%	N	%	
Central Obesity	Obesity	29	70.7	12	29.3	0.153 *	14	34.1	27	65.9	0.036*	11	26.8	30	73.2	0.046**
	Normal	11	52.4	10	47.6		2	9.5	19	90.5		1	4.8	20	95.2	

\*Chi-square test, \*\*Fisher test

Based on table 4 above shows that central obesity has a close relationship with HDL levels and LDL/HDL ratio which shows a close relationship with the risk of

heart disease. This is seen as a significant value from the Chi-squer and Fisher test analysis results as attached in table 4 above.

**Table 5. Obesity Based by Body Mass Index According to Lipid Profile of Adolescent**

Variabel		LDL				P	HDL				P	LDL/HDL				P
		Hight Risk		Low Risk			Low Risk		Hight Risk			Low Risk		Hight Risk		
		N	%	N	%		n	%	N	%		N	%	N	%	
Obesity by BMI	Obesity	29	72.5	11	27.5	0.076*	13	32.5	27	67.5	0.104*	11	27.5	29	72.5	0.042**
	Normal	11	50	11	50		3	13.6	19	86.4		1	4.5	21	95.5	

\*Chi-square test, \*\*Fisher test

Based on table 5, the relationship of obesity based on BMI in adolescents shows a very close relationship with the LDL/HDL ratio for those who are at high risk of heart disease.

in children is higher in the community of children with obesity so that the examination of lipid profiles in children with obesity is needed for prevention<sup>3</sup>. Conditions like this have a bad impact on their health status in adulthood<sup>4</sup>.

**Discussion**

This study provides an overview of the relationship of Obesity in adolescents both based on BMI and Abdominal Circumference have very low HDL levels and this poses a severe risk for heart disease in the future. This research provides evidence of the obesity conditions experienced by adolescents putting the burden of other health problems. And giving the weight of obesity management treatments is important given to adolescents to prevent the occurrence of diseases due to weight gain.

One important determinant that can cause early atherosclerosis problems at a younger age is adiponectin<sup>5</sup>. Low adiponectin is associated with atherogenic lipid profiles<sup>6</sup>. Likewise, the problem of cardio vascular disease in adulthood is suspected of having begun since childhood<sup>7</sup>. This is the main key to the importance of examining the lipid profile in the condition of observation both in children and adolescents.

Because further research is still needed to answer and provide a big picture of this in younger age groups and the involvement of more respondents.

The high prevalence of dyslipidemia problems

### Conclusion

Based on the results of this study it can be concluded that obesity experienced by adolescents can reduce HDL levels in lipid metabolism in adolescents' bodies and has a high risk of the appearance of heart disease.

**Conflict of Interest:** None.

**Source of Funding:** Source of personal funding

**Ethical Clearance:** From Faculty of Public Health, Hasanuddin University.

### References

1. Di Cesare M, Bentham J, Stevens GA, Zhou B, Danaei G, Lu Y, et al. Trends in adult body-mass index in 200 countries from 1975 to 2014: A pooled analysis of 1698 population-based measurement studies with 19.2 million participants. *Lancet* [Internet]. 2016;387(10026):1377–96. Available from: [http://dx.doi.org/10.1016/S0140-6736\(16\)30054-X](http://dx.doi.org/10.1016/S0140-6736(16)30054-X)
2. Balitbangkes. Riset KESEHATAN DASAR TAHUN 2013. 2013.
3. Boyd GS, Koenigsberg J, Falkner B, Gidding S, Hassink S. Effect of Obesity and High Blood Pressure on Plasma Lipid Levels in Children and Adolescents. 2019;116(2).
4. Mijailović V, Micić D, Mijailovi M. Effects of childhood and adolescent obesity on morbidity in adult life. *J Pediatr Endocrinol Metab* [Internet]. 2001;14 Suppl 5:1339–44; discussion 1365. Available from: <http://europepmc.org/abstract/MED/11964032>
5. Zech F, Tran H, Mong T, Clapuyt P, Maes M, Brichard SM. Determinants of Early Atherosclerosis in Obese Children. 2007;92(8):3025–32.
6. Marso SP, Mehta SK, Frutkin A, House JA, McCrary JR, Kulkarni KR. Low Adiponectin Levels Are Associated With Atherogenic Dyslipidemia and Lipid-Rich Plaque in Nondiabetic Coronary Arteries. *Diabetes Care* [Internet]. 2008;31(5):989–94. Available from: <https://care.diabetesjournals.org/content/31/5/989>
7. Cook S, Kavey REW. Dyslipidemia and Pediatric Obesity. *Pediatr Clin* [Internet]. 2011 Dec 1;58(6):1363–73. Available from: <https://doi.org/10.1016/j.pcl.2011.09.003>

---

Published, Printed and Owned : Dr. R.K. Sharma

Printed : Printpack Electrostat G-2, Eros Apartment, 56, Nehru Place, New Delhi-110019

Published at: Institute of Medico Legal Publications Pvt. Ltd., Logix Office Tower, Unit No. 1704, Logix City Centre Mall Sector- 32,  
Noida - 201 301 (Uttar Pradesh) Editor : Dr. R.K. Sharma, Mobile: + 91 9971888542, Ph. No: +91 120- 429 4015