The 9th International Nursing Conference 2018

"Nurses at The Forefront
Transforming care, Science, and Research"

Surabaya, April 7th - 8th 2018

Published by
Faculty of Nursing
Universitas Airlangga

The 9th INC 2018
THE PROCEEDING OF
THE 9TH INTERNATIONAL NURSING CONFERENCE 2018
“NURSES AT THE FOREFRONT IN TRANSFORMING CARE, SCIENCE, AND RESEARCH”

FACULTY OF NURSING
UNIVERSITAS AIRLANGGA
2018
The Proceeding of 9th International Nursing Conference:
Nurses at The Forefront in Transforming Care, Science, and research

Fakultas Keperawatan Universitas Airlangga

Hak Cipta © 2018,
Fakultas Keperawatan Universitas Airlangga Surabaya
Kampus C Mulyorejo Surabaya
60115
Telp.: (031)5913754, 5913257
Faks.: (031)5913752
Website: http:nurs.inair.ac.id
Email: dekan@fkp.unair.ac.id

Hak cipta dilindungi undang-undang. Dilarang memperbanyak sebagian atau seluruh isi buku ini dalam bentuk apa pun, baik secara elektronis maupun mekanis, termasuk tidak terbatas pada memfotokopi, merekam, atau dengan menggunakan system penyimpanan lainnya, tanpa izin tertulis dari Penerbit.

<table>
<thead>
<tr>
<th>UNDANG-UNDANG NOMOR 19 TAHUN 2002 TENTANG HAK CIPTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Barangsiapa dengan sengaja dan tanpa hak mengumumkan atau memperbanyak sutu Ciptaan atau memberi izin untuk itu, dipidana dengan pidana penjara paling lama 7 (tujuh) tahun dan/atau denda paling banyak Rp. 5.000.000.000,00 (lima miliar rupiah)</td>
</tr>
<tr>
<td>2. Barangsiapa dengan sengaja menyiarkan, memamerkan, mengedarkan, atau menjual kepada umum suatu Ciptaan atau barang hasil pelanggaran Hak Cipta atau Hak Terkait sebagaimana dimaksud diatas, dipidana dengan pidana penjara paling lama 5 (lima) tahun dan/atau denda paling banyak Rp 500.000.000,00 (lima ratus juta rupiah).</td>
</tr>
</tbody>
</table>

Penerbit: Fakultas Keperawatan Universitas Airlangga

The Proceeding of 9th International Nursing Conference:
Nurses at The Forefront in Transforming Care, Science, and research

433 hlm, 21 x 29,7 cm

ISSN: 1413536244
CONTENT

Different Of Asthma Control Level In Suburban And Urban Areas..................................................17
The Influence Of Age And Coping Mechanism On The Resilience Of Cancer Patients Undergo Chemotherapy .................................................................28
Effectiveness Of Mirror Therapy Against Upper Limb Muscle Strength In Ischemic Stroke Patients With Hemiparesis: Systematic Review ..........................................................37
Nurse Performance Analysis Based On Gibson Performance Theory On Voluntary Nurse In Sampang Regency Community Health Center ...................................................41
Model Of Reward System Development Based On Performance Of Nurse Working Satisfaction .....47
Nursing Discharge Planning For Patient With Diabetes Mellitus..................................................50
Effect Of Diaphragm Breathing Exercise And Electric Fan To Dyspnea, And Pulmonary Function In Clients Copsd; A Systematic Review .........................................................54
Factors That Affect The Cognitive Function In Elderly .................................................................59
At Jetak Public Health Center Of Tuban Regency .........................................................................59
Patient Between Satisfaction Related With Patient Loyalty .........................................................65
Effect Of Health Education Methods Against Sorogan Intention In The Theory Of Planned Behavior In Santri Nurul Jadid ..................................................................................69
Description Of Adherence Of Diabetes Mellitus Type 2 Patient At Universitas Airlangga Hospital ...71
Foot Massage To Treat Pain In Patients Post Laparatomy Surgery ............................................75
A Systematic Review Of The Predictors Of Perceived Autonomy By Patient With Chronic Kidney Disease ...........................................................................................................80
Emotional Freedom Technique (Eft) For Physiological Symptoms, Pain, Anxiety Disorders And Depression: A Systematic Review .................................................................83
Effect Of Pursed Lips Breathing For Peak Expiratory Flow Rate, Oxygen Saturation, Dynamic Hyperinflation : Systematic Review .................................................................88
Description Of Coping On Tuberculosis Patient In Community Health Center (Puskesmas) In Jember .......................................................................................................................92
Effect Of Pursed Lips Breathing And Distract Auditory Stimuli Against Dyspnea........................97
Evaluation Of Discharge Planning Implementation In Pamekasan Hospital ................................100
Systematic Review Knowledge, Attitude And Smoking Practice On Adolescent .........................104
Effects Of Electrical Stimulation On Swallowing Function In Stroke Patients With Dysphagia: A Systematic Review ...................................................................................................109
The Effectiveness Of Deep Breathing Relaxation Technique And Guided Imagery To Decrease Pain Intensity On Postoperative Fracture Patients In Bougenvile Ward Of Dr Soegiri Hospital Lamongan ........................................................................................................115
Telenursing Using Mobile Phone Features For Medication Adherence Tuberculosis Patients: A Systematic Review ......................................................................................................122
The Effect Of Resistance Exercise On Blood Glucose And Hba1c Of Patient With Type 2 Diabetes Mellitus: Systematic Review ................................................................................................127
Management Of Adjunctive Therapy On Diabetic Foot Ulcers: A Systematic Review ............133
Effectivity Clinical Supervision In Integrated Patient Development Records Of Compliance And Nursing Performance: Systematic Review .................................................................143

The 9th International Nursing Conference 2018
"Nurses at The Forefront in Transforming Care, Science, and research"
The Effectiveness Of Telemonitoring In Treatment Adherence Cardiovascular Disease: A Systematic Review .......................................................... 148
Yoga As An Alternative And Complementary Approach For Controlling Type 2 Diabetes Mellitus: A Systematic Review .......................................................... 158
Factors Related To Decubitus In Patient With Bed Rest And Physical Immobilization: A Systematic Review .......................................................... 166
Job Satisfaction In Nurses Perspective, Its Antecedent And Its Outcome A Systematic Review ....... 171
Information Technology Helps Self-Management Among Chronic Kidney Disease (Ckd) Patients... 174
The Effectiveness Of Diabetes Self-Management Education: A Systematic Review ...................... 178
Effect Of Isoflavones On Hot Flushes Women Menopause: A Systematic Review .................. 186
The Use Of Negative Pressure Wound Therapy For Treatment Surgical Wound Arthroplasty A Systematic Review .......................................................... 194
Comparative Effectiveness Of Internet Cognitive Behavioral Therapy For Insomnia (Icbt-I) With And Without Therapist Support: Systematic Review .......................................................... 201
The Effect Of Music Therapy For Elderly With Dementia: A Systematic Review Music Therapy For Elderly With Dementia .......................................................... 206
Analysis Of Patient Dependence Level Based On Triage Classification ........................................ 214
Evaluation Intervention In Improving Breastfeeding Self Efficacy: A Systematic Review ............ 217
The Effect Of Prenatal Yoga On Mental Health In Pregnant Women: A Systematic Review ............ 221
Regulation Of Blood Sugar Through Psychological Control To Type-2 Dm: A Systematic Review .. 227
Pressure Ulcer Prevention With Application Of Silicone Foam Dressing In Intensive Care Unit: A Systematic Review .......................................................... 232
Relaxation Techniques For Patients With Chronic Obstructive Pulmonary Disease (Copd): A Systematic Review .......................................................... 237
The Multivariants Of Physical Activity For Cognitive Impairment Among Elderly: A Systematic Review .......................................................... 243
The Effectiveness Of Cognitive Behavioral Therapy (Cbt) For Chronic Schizophrenia Patients: A Systematic Review .......................................................... 250
The Efficacy Of Stabilization Exercises For Chronic Low Back Pain: A Systematic Review .......... 256
Correlation Of Coping Mechanisms Towards Fulfillment Capabilities Daily Activities Of Elderly .. 260
Neglect Elderly In Family: A Systematic Review ...................................................................... 264
Patient Satisfaction Using Health Insurance To Nurse Communication ........................................ 268
Efficacy Of The Ginger On Chemotherapy-Induced Nausea And Vomiting (Cinv): A Systematic Review .......................................................... 272
The Effect Of Psychoeducation On Family Functions In Treating Schizophrenia Patients In Home: Systematic Review .......................................................... 284
Job Satisfaction On Nursing Staff At Hospital: A Systematic Review ........................................... 289
Shenmen, Neiguan And Yongquan Acupoints To Improving Sleep Quality Of Hemodialysis Patients: Systematic Review .......................................................... 292
Application Of Cognitive Therapy And Thought Stopping Therapy In Clients With Depression: Systematic Review .......................................................... 298
Effectiveness Of Therapeutic Non-Operative Management Of Wound Healing In Diabetic Foot Ulcer: A Systematic Review .......................................................... 305
Effect Of Progressive Muscle Relaxation Techniques To Blood Glucose Levels On Patients With Type 2 Diabetes Mellitus; Systematic Review ................................................................. 311
Description Of Factors Affecting Anxiety On End Stage Renal Disease Patients Which The Hemodialysis At Lavalette Hospital In Malang .............................................................................. 319
The Use Aromatherapy For Symptom Management In Hemodialysis: A Systematic Review .......... 323
The Correlation Between Nursing Therapeutic Communication With Patient Satisfaction .................. 335
Cervical Cancer Screening Barriers Among Women In Developing Countries: A Systematic Review ................................................................................................................................. 339
Preceptorship Program To The Achievement Of New Nursing Competency: Systematic Review ... 346
Parenting The Teen: A Review Of Parents’ Role In Preventing Problematic Behavior Of Adolescent ................................................................................................................................. 351
The Development Of The Uks Holistic Program In Preventing Aggressive Behavior And Low Self Esteem In Elementary School .................................................................................. 356
Preparatory Intervention To Reduce Anxiety In Patient Who Will Undergo Endoscopy: A Systematic Review .................................................................................................................. 362
Differences In The Level Of Knowledge After Health Education On The Handling Of Dysmenorrhoea In Teenager Women In Smp Muhammadiyah 4 Surabaya ........................................ 366
The Effectiveness Of Slow Deep Breathing To Decrease Blood Pressure In Hypertension: A Systematic Review .................................................................................................................. 370
Effectiveness Social Skills Training With Peers Programs For Individuals Autism Spectrum Disorder: A Systematic Review ...................................................................................................... 374
Caregiver Experiences Of Schizophrenia Patients With Self Care Deficit: A Systematic Review ..... 381
English For Nursing Strategies To Encourage Students Achievement In Speaking Skill ................. 387
Self-Management Education Program For Reduce Blood Glucose Type 2 Diabetes Mellitus: A Systematic Review ........................................................................................................ 390
Effect Of Oral Hygiene In Improving The Health Of Elderly People: A Systematic Review .......... 399
A Systematic Review Of Outcomes Of Self Management Education On Self Efficacy And Behavior In Cronic Disease ............................................................................................................. 403
The Effect Of Psychoeducation On Family Functions In Treating Schizophrenia Patients In Home: Systematic Review ........................................................................................................ 407
Faster Learning Organization (Flo) Model In Developing Health Professional Skill In The Hospital 412
The Comparison Of Elderly Life Quality Index Of Urban And Coastal Societies In Surabaya ...... 423
Zea Mays L To The Decreasing Blood Glucose Levels In Animal Trial (Rat) With Diabetes Mellitus: Systematic Review ....................................................................................................... 428
Psychoeducation Family Patients Mental Disorders (A Systematic Review) ................................... 432
Influence Of Nursing Information Management System Applications Based On Information Technology Toward Nursery Knowledge About Child Nursing Management In Lavalette Hospital Room Malang ........................................................................................................ 443
Prevalence of Burnout Syndrome in Nursing: A Systematic Review ............................................. 450
The Mock-Up Metode for Disaster Education on the of People Improvement and Attitude in Landslide Preparedness ................................................................. 455
Effectivity Of Pursed-Lips Breathing To Decrease Respiration Rate (RR) in Patient with COPD: A Systematic Review ................................................................. 461
Model Supervision Fair, Feedback, Follow Up Against Nurses Compliance in the Application of Prevention of Infection Control as Efforts to Reduce Flebitis Occurrence ..............................................466
Nurse Performance in Infection Prevention and Control in Hospital Pamekasan ...........................................472
Is It True that CPR Fraction mostly Caused by Physical Fatigue? .................................................................475
The Effect of Massage Therapy and Reflexology against Level of Anxiety on Preoperative Patients ..............477
Effectiveness Of Standard Oral Hygiene Standard Using Brush and Chlorhexidine 0.12% To Decrease Associated Pneumonia In Intensive Care Unit: A Systematic Review ...........................................485
Relationship of Working Stress with the Performance of ICU Nurse in Hospital Tk. II dr. Soepraoen Malang ..........................................................................................................................489
Sensory Stimulation (Audio, Visual, and Affective) to Enhance The Level of Consciousness Among Brain Injury Patients ........................................................................................................497
Chlorhexidine-Alcohol is Better Than Chlorhexidine and Povidone Iodine for Reducing Surgical Site Infection .................................................................502
The Effectiveness of Slow Deep Breathing to Decrease Blood Pressure in Hypertension: a Systematic Review ..........................................................................................................................505
Effectiveness of Hyperbaric Oxygenation Therapy in the Management of Chronic Diabetic Foot Ulcers: A Systematic Review ....................................................................................................509
How is the Effect of Peer Support on Type 2 Diabetes Mellitus Patients? ..................................................511
Aromatherapy for The Management and Control Effect of Chemotherapy .............................................521
Self-Care Adherence Experience in Patient with Diabetes Mellitus Type 2: A Systematic Review ..................530
The Effectiveness of Yoga on Blood Glucose and Anxiety Reduction in T2DM Clients: A Systematic Review ..........547
Methods of Preventing Sexually Transmitted Disease (STD): a Systematic Review ........................................556
Effect of School-Based Interventions in the Prevention of Child and Adolescent Obesity to Behavioral Health, Physical Activity, and Body Mass .................................................................569
Evaluation The Effect of Child Health Care Center on Physical Activity of Children ..................................575
The Effect of Mixing Oralit and Honey to Defecate Frequency in Children with Gastroenteritis in Balung ........579
Fual Risk Prevention in Elderly with Physical Exercise: A Systematic Review ..............................................582
Spirotif Relaxation Improve Anxiety and Sleep Quality in Elderly .................................................................585
The Hipertension Corelation with Ankle Brachial Index, and Anxiety Level in Elderly With Hipertension ..............................................................................................................................590
Aromatherapy as The Intervention of Anxiety: Systematic Review ..........................................................595
Chronic Sorrow in the Elderly with the Loss of a Spouse ............................................................603
An Overview of Lenolines, Anxiety and Depression Level of Elderly Suspected Relocation Stress Syndrom.................................................................................................................................609
The effect of physical activity to decreased of dementia (mild, moderate and severe) in elderly: A Systematic Review ........................................................................................................................................613
Systematic Review Depression and Relationships to the Quality of Life of Menopause Women ..................618
The Psychological Burden of Caregiver with a Family Members of Schizophrenia: A Systematic Review ..........................................................627
The Effectiveness of CBT in Reducing Depression: a Systematic Review ..................................................630
Effect of Play Therapy With Puzzle On The Level Concentrations of Mental Retardation Children In SLB C Ruhui Rahayu Samarinda ........................................................................................................634
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness Psychoeducation Parenting Support for Stress Mother of Children with Autism Spectrum Disorder: A Systematic Review</td>
<td>639</td>
</tr>
<tr>
<td>The Effectiveness of Community Mental Health Nursing (Cmhn) to Improve Mental Health in Community: A Systematic Review</td>
<td>644</td>
</tr>
<tr>
<td>Systematic Review On The Effectiveness of Music Therapy on Anxiety and Vital Signs of Patients with Mechanical Ventilation</td>
<td>648</td>
</tr>
<tr>
<td>Family And Counsellor Experience For Schizophrenic A Research Based On Community Health Mental Policy</td>
<td>652</td>
</tr>
<tr>
<td>Effectiveness of Family Psychoeducational to Improve Quality of Life Patients with Bipolar Disorder: A Systematic Review</td>
<td>657</td>
</tr>
<tr>
<td>Diabetes Self Management Education (Dsme) Through Calendar Media Increase of Foot Care Adherence of Type 2 Diabetes Mellitus (Dm) Clients</td>
<td>662</td>
</tr>
<tr>
<td>Correlations Between Age, Gender and Medical History to Colonization of Candida Albicans in Cerebrovaskular Accident Patients in Jombang</td>
<td>666</td>
</tr>
<tr>
<td>Mindfulness-based on Eating Improving Dietetic Measure Outcomes: Systematic Review</td>
<td>670</td>
</tr>
<tr>
<td>Role of Family Members in the Treatment of Tuberculosis Patients: A Systematic Review</td>
<td>680</td>
</tr>
</tbody>
</table>
GREETING FROM STEERING COMMITTEE

Assalamualaikum Warahmatullahi Wabarakatuh

Honorable Rector of Universitas Airlangga
Honorable Dean of Faculty of Nursing, Universitas Airlangga
Honorable Head of Co-Host Institutions
Distinguished Speakers and all Participants

Praise the presence of God Almighty, for his mercy so that Faculty of Nursing Airlangga University can organized The 9th International Nursing Conference 2018 “Nurses at The Forefront in Transforming Care, Science, and research”. Welcome in Surabaya, City of Heroes Indonesia.

This international nursing conference is conducted by The Faculty of Nursing Universitas Airlangga with cooperation of two nursing schools throughout the nation. These institutions including, Poltekkes Kementerian Kesehatan Surakarta, and STIKES Hang Tuah Surabaya. Once more aims to elaborate with the aforementioned institutions and international universities through holding an international nursing conference. The international universities include: La trobe University (Australia), University of Collegue Cork (Irlandia), University of Malaya (Malaysia), and Naresuan University (Thailand).

Proceeding of this International Nursing Conference will be submitted to SCOPUS. The selected papers will be submit at Journal Ners and online ISSN proceeding.

Participants of this conference are lecturers, nurses, students both from clinical and educational setting, regional and overseas area.

Finally, I would like to thanks to all speakers, participants, and sponsors so that this conference can be held successfully.

Please enjoy the international conference, I hope we all have a wonderful time at the conference.

Wassalamualaikum Warahmatullahi Wabarakatuh

Steering Committee
OPENING REMARK
FROM THE DEAN OF FACULTY OF NURSING

Assalamualaikum Warahmatullahi Wabarakatuh

Honorable Rector of Universitas Airlangga
Distinguished speakers and all Participants

First of all, I would like to praises and thanks to God for the blessing and giving us the grace to be here in a good health and can hold this conference together. Secondly, it is a great privilege and honor for us to welcome every one and thank you very much for your participation and support for The 9th International Nursing Conference 2018 “Nurses at The Forefront in Transforming Care, Science, and research”.

Research and education into practice is very important to enhance nursing competencies with nurse colleagues in the international sphere. Indonesia face problems such low frequency of nursing conference, number of researches, also international publications. This problem can hinder quality improvement of nursing services.

The demand of health care services including nursing care will increase continuously not only the quality but also the affordability and the service coverage. Facing this society’s demands, particularly in the field of nursing, we should make a change in various aspects such as in nursing education, nursing practice and nursing research. The science of nursing has philosophy and nursing paradigm that underlying the various aspects to improve professional in education, practice, and nursing research. As a science, nursing can grow continuously through research and education.

The interaction among education, practice, and nursing research are interrelated and affect the development of science in nursing. Nursing practice has interactions with nursing education and research. Practice can be used as a source of nursing phenomena that occurs, so it can become a nursing model in accordance with the theory developed in education and has been proven through nursing research. In addition, nursing research become a substance of the development of nursing science, because of through nursing research may prove the theory which developed in education so it is useful and can be practiced in the health service. So, it can be concluded that education, nursing practice and research have interaction each other that cannot be separated.

Along with Universitas Airlangga vision to become a world class university and enter top World University Ranking, Faculty of Nursing, participates actively in reaching the vision. To achieve World Class University ranking, faculty needs to meet the standards of World’s top Universities such as Academic reputation, employer reputation, publication, faculty standard ratio, international students and exchange. International Nursing Conference is one of the few strategies that have been implemented by the faculty to increase Publication standard.

Finally, I would like to thanks to all speakers, participants, and sponsorships that helped the success of this event. I hope that this conference having good contribution in increasing the quality of nursing and nursing care.
Please enjoy the international conference. I hope, we all have a wonderful time at the conference.

Wassalamualaikum Warahmatullahi Wabarakatuh

Prof. Dr. Nursalam, M.Nurs (Hons)
Dean, Faculty of Nursing
Universitas Airlangga
OPENING SPEECH
FROM THE RECTOR OF UNIVERSITAS AIRLANGGA

Assalamu'alaikum wa-rahmatullahi wa-barakatuh.
May the peace, mercy and blessings of Allah be upon you.

Alhamdulillah! Praise be to Allah, The Almighty for giving us the opportunity to gather here in The 9th International Nursing Conference 2018 “Nurses at The Forefront in Transforming Care, Science, and research”. Let us also send shalawat and salam to our Prophet Muhammad SAW (Praise Be Upon Him): Allaahumma shalli ‘alaa Muhammad wa ‘alaa aali Muhammad. May Allah give mercy and blessings upon Him.

Ladies and gentlemen,

Nursing is a dynamic science and profession. It can be seen from the relentless efforts made to optimize either the scientific or practical aspects of Nursing. These efforts towards excellence are absolutely needed.

Innovations in providing nursing care are possible to be introduced through education, practice and research. In this regard, we believe that those innovations are from “new concepts” formulated in the field of Nursing to provide the best service. If we can do this, there will be more benefits we can get such as gaining reputation for nursing profession and the education institution.

Ladies and gentlemen,

Higher education of Nursing has a strategic role towards excellent healthcare service. Therefore, the education format should be ready anticipating any developments. This readiness is needed to accelerate the realization of “Healthy Global Citizen”.

So, let us exploit these changes around us, and consider this improving healthcare service as our success towards welfare. Let us always be consistent to improve quality in the field of Nursing. This field of science is expected to respond and voice concern about all aspects of healthcare service development in any communities.

At this point, the organization of The 9th International Nursing Conference 2018 “Nurses at The Forefront in Transforming Care, Science, and Research” as the theme is important. We cannot deny that through the upgrade and transformation of Care Science by Research we will get valuable findings for Nursing science development.

In education, students’ questions can start new discourses towards Nursing science development. In its practice, various problems and solutions found in the field will broaden the scientific scope of Nursing. In research, through this activity we are developing the science in a well-planned and scientific manner.

Therefore, let us use this wonderful occasion to present research findings, either from the education, practice and research. We believe that this event will take on the challenges in providing quality healthcare service in the society.
Ladies and gentlemen,

Finally, I would like to express my gratitude to the committee, all nursing education institutions, either domestic or overseas, for participating in this event, and other people contributing to make this event a success. May everything run well and every objective achieved. Have a great conference and workshop. Good luck!

Wassalamu’alaikum wa-rahmatullahi wa-barakatuh.

Rector of Universitas Airlangga,
Prof. Dr. Moh. Nasih, SE., MT., Ak., CMA.
NIP. 196508061992031002
COMMITEE OF INTERNATIONAL NURSING CONFERENCE
FACULTY OF NURSING UNAIR TAHUN 2018

Patron : Rector Universitas Airlangga
Advisor : Prof. Dr. Nursalam, M.Nurs (Hons)
Dean of Faculty of Nursing, Universitas Airlangga
Steering Commitee : Dr. Kusnanto, S.Kp., M.Kes.
Vice Dean 1, Faculty of Nursing, Universitas Airlangga
Vice Dean 2, Faculty of Nursing, Universitas Airlangga
Person in Charge : Dr. Ah. Yusuf, S.Kp., M.Kes.
Vice Dean 3, Faculty of Nursing, Universitas Airlangga

Chairperson : Dr. Esti Yunitasari, S.Kp.,M.Kes
Secretary : Iqlima Dwi Kurnia, S.Kep. Ns.M.Kep
2. Sri Agustianningsih, S.Sos

Publication, Indexing and Editor
: 1. Ferry Effendi, S.Kep.,Ns.,M.Sc.,P.hD
2. University Task Force Team
3. Dimas Dwi Arbi, S.Kom
4. Gading Ekapuja Aurizky, S.Kep.,Ns
5. Praba Diyan, S.Kep.,Ns.,M.Kep
6. Retnayu Pradanie, S.Kep.,Ns.,M.Kep
7. Lingga Curnia Dewi, S.Kep.,Ns.,M.Kep
8. Nadia Rohmatul, S.Kep.,Ns.,M.Kep

Scientific Team
: 1. Prof. Dr. Nursalam, M.Nurs (Hons)
3. Dr. Joni Haryanto, S.Kp.M.Kes
4. Dr. Ah Yusuf, S.Kp.,M.Kes
5. Dr. Kusnanto, S.Kp., M.Kes.
6. Dr. Esti Yunitasari, S.Kp.,M.Kes
7. Dr. Retno Indarwati, S.Kep.,Ns.,M.Kep
10. Dr. Hanik Endang Nihayati, S.Kep.Ns.,M.Kep


Public Relation and Documentation
4. Tsuwaibatul Islamiyah, S.Kep.Ns
| Secretarial | 1. Dr. Andri Setiya Wahyudi, S.Kep.Ns.,M.Kep  
2. Hakim Zulkarnain, S.Kep.Ns  
3. Lingga Curnia Dewi, S.Kep.Ns.,M.Kep  
4. Akhmad Tirmidzi, A.Md.Kep |
| Sponsorship | 1. Dr. Retno Indarwati., S.Kep. Ns.M.Kep  
2. Erna Dwi Wahyuni, S.Kep. Ns.M.Kep |
| Transportation and Accommodation | 1. Dr. Makhfudli, S.Kep.,Ns.,M.Ked. Trop  
3. Achmad Efendik  
4. Luthfi Rahman |
| Consumption | 1. Dr Hanik Endang N, S.Kep. Ns.M.Kep  
2. Suyatik |
| Equipment | 1. Rahmad Affandi.,SE  
2. Moch Anwari, S.Pd  
4. Sodikin |
# TIME SCHEDULE

**9th INTERNATIONAL NURSING CONFERENCE**

“Nurses at the Forefront Transforming Care, Science, and research”

**Surabaya, 7 – 8 April 2018**

**DAY 1, SATURDAY 7th April 2018**

<table>
<thead>
<tr>
<th>TIME</th>
<th>ACTIVITY</th>
<th>VENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>07.00 – 08.30</td>
<td>Open Registration</td>
<td></td>
</tr>
<tr>
<td>08.30 – 08.45</td>
<td><strong>Opening Remarks</strong>&lt;br&gt;• Indonesia Raya: National Anthem&lt;br&gt;• Hymne Airlangga</td>
<td>Ballroom Isyaana Hotel Bumi</td>
</tr>
<tr>
<td>08.45 – 09.15</td>
<td>Welcoming Show (Traditional Dance): Sparkling Surabaya&lt;br&gt;- Speech from Dean of The Faculty of Nursing, Universitas Airlangga&lt;br&gt;- Speech from Rector Universitas Airlangga&lt;br&gt;- Opening ceremony: Hit the Gong&lt;br&gt;- Pray</td>
<td></td>
</tr>
<tr>
<td>09.15 – 09.45</td>
<td><strong>Keynote Speaker</strong>&lt;br&gt;Vice Rector I Universitas Airlangga&lt;br&gt;(Development of Nursing Faculty to World Class University)</td>
<td></td>
</tr>
<tr>
<td>09.45 – 09.50</td>
<td>Certificate Conferment &amp; Giving Souvenir</td>
<td></td>
</tr>
<tr>
<td>09.50 – 10.00</td>
<td>Coffee Break and Opening Poster Presentation&lt;br&gt;<strong>Speaker 1</strong>&lt;br&gt;Dr. Muhammad Hadi, SKM., M.Kep (Universitas Muhammadiyah Jakarta, Indonesia)&lt;br&gt;“The Role of AINEC to Improve Quality of Nursing Through Education, Clinical Practice and Research”</td>
<td></td>
</tr>
<tr>
<td>10.00 – 10.20</td>
<td><strong>Speaker 2</strong>&lt;br&gt;Professor Lisa McKenna (La Trobe University, Australia)&lt;br&gt;“Challenges in research publication in nursing”</td>
<td>Ballroom Isyaana Hotel Bumi</td>
</tr>
<tr>
<td>10.20 – 10.40</td>
<td><strong>Speaker 3</strong>&lt;br&gt;Elsi Dwi Hapsari, B.N., M.S., D.S (Universitas Gajah Mada, Indonesia)&lt;br&gt;“Improving Image of Nurses in Indonesia: Role of INNA”</td>
<td></td>
</tr>
<tr>
<td>10.40 – 10.55</td>
<td><strong>Speaker 4</strong>&lt;br&gt;Dr. Aileen Burton (University College Cork, Ireland)&lt;br&gt;“Diabetes and psychological wellbeing: a neglected aspect of care”</td>
<td></td>
</tr>
<tr>
<td>10.55 – 11.15</td>
<td>Plenary Discussion&lt;br&gt;Conferment of certificates</td>
<td></td>
</tr>
<tr>
<td>11.15 – 11.45</td>
<td><strong>Speaker 5</strong>&lt;br&gt;Professor Eileen Savage (University College Cork, Ireland)&lt;br&gt;“Online versus paper based screening for anxiety and depression in adults with cysticfibrosis in Ireland”</td>
<td></td>
</tr>
<tr>
<td>12.45 – 13.05</td>
<td><strong>Speaker 6</strong>&lt;br&gt;Dr. Bill McGuiness (La Trobe University, Australia)&lt;br&gt;“Evidenced based update on wound management”</td>
<td>Ballroom Isyaana Hotel Bumi</td>
</tr>
<tr>
<td>13.05 – 13.25</td>
<td><strong>Speaker 7</strong></td>
<td></td>
</tr>
<tr>
<td>13.25 – 13.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIME</td>
<td>ACTIVITY</td>
<td>VENUE</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------</td>
<td>------------------------------------</td>
</tr>
</tbody>
</table>
**“Family Centered Empowerment Model as a Effort to Increase Family’s Ability to Caring Children with Leukemia”** | Ballroom Isyaana Hotel Bumi        |
| 13.55 – 14.25| Plenary Discussion                                                        |                                    |
| 14.25 – 14.45| **Speaker 9** Addi Mardi Harnanto, M.Nurs (Poltekes Kemenkes Surakarta, Indonesia)  
**“The Effort to Improve the Competency and Softskill of Disaster Preparedness Management for Graduates of Nursing colleges in Indonesia”** |                                    |
| 14.45 – 15.05| **Speaker 11** Dr. Vimala A/P Ramoo (University Malaya, Malaysia)  
**“Palliative Care in Intensive Care: Malaysian Perspective”** |                                    |
| 15.05 – 15.20| **Speaker 12** Dr. Retno Indarwati, S.Kep., Ns., M.Kep (Universitas Airlangga, Indonesia)  
**“Peer Group Support Toward Stress Relocation Among Elderly in Nursing Home”** |                                    |
| 15.20 – 15.35| **Speaker 13** Dya Sustrami, S.Kep., Ns., M.Kes. (STIKES Hang Tuah Surabaya, Indonesia)  
**“The Comparation of Elderly life Quality index of Urban and Coastal Societies in Surabaya”** |                                    |
| 15.35 – 16.00| Plenary Discussion                                                        |                                    |
| 16.00 – 16.30| Coffee Break and Opening Poster Presentation                            |                                    |
| 16.30 – 16.50| **Speaker 14** Dr. Sonia Reisenhofer (La Trobe University, Australia)  
**“Using the World Health Organisation (WHO) guidelines to support women exposed to violence”** |                                    |
| 16.50 – 17.05| **Speaker 15** Dr. Abu Bakar, S.Kep., Ns., M.Kep., Sp. KMB (Universitas Airlangga, Indonesia)  
**“Decreased Cortisol Coronary Heart Patient Who Received Islamic Nursing Care: A pilot Study”** |                                    |
| 17.05 – 17.20| **Speaker 16** Dr. Mundakir, S.Kep., Ns., M.Kep (Universitas Muhamaddiyah Surabaya, Indonesia)  
**“Strategy Model Faster Learning Organization (FLO) as Improvement Effort a Holistic Nursing Services Based on Modelling-Role Modelling Therapy (MRM)”** |                                    |
| 17.20—17.50  | Plenary Discussion                                                        |                                    |
|              | Certificate Conferment & Closing Day 1                                   |                                    |
Early Warning Score System (EWSS) and Length of Stay Patients with Dengue Hemorrhagic Fever

Dwi Priyantini, Imroatul Farida and Herfina Setianingsih

STIKES Hang Tuah Surabaya

Keywords: Dengue Hemorrhagic Patient, Early Warning Score System, Length of Stay.

Abstract: Dengue hemorrhagic fever is a disease from dengue virus accompanied by bleeding and shock. Early Warning Score System may help nurses to predict risk of critical condition based on vital’s sign result. This study was analyze the relationship between EWSS Aggregate value and the length of stay in DHF patients. This study used observational design with retrospective cohort approach. The population in this study were DHF patients. The sample were 100 DHF’s patients, used probability sampling technique with simple random sampling approach. The instrument on this study used observational paper of EWSS form, analized by Spearman rho test. The result shows the most EWSS aggregate value is low risk (91.9%) whereas the length of stay is in category medium stay (73%). Spearman rho test showed that there was relationship between early warning score aggregate value with length of stay in DHF patient with $\rho = 0.002$ ($\rho < \alpha = 0.05$) and the correlation coefficient 0.590 ($r < 0.1000$). Implications of the results shows that the EWSS Aggregate value have a relationship with length of stay in DHF patient. Moreover this study can predict the length of stay DHF patients when they are got an EWSS aggregate value to improve Quality of care in hospital.

1 BACKGROUND

Dengue Hemorrhagic Fever (DHF) is an infectious disease that occurs in tropical area frequently. It cause by dengue viruses spread out by Aedes Aegypti mosquitoes, and its accompanied by bleeding manifestations which is tends to cause shock and death (Misnidiarly 2009; Hikmah and Moroni 2015).

Treatment and nursing care of DHF patients will takes time and intensively care. It refers with increases of vascular’s permeability membrane, leading to decreased platelets and plasma leakage. The risk of bleeding or shock, regarding with decreased of platelets’ level will impact on the worsening the condition itself. Furthermore, Early Warning Score System (EWSS) is an appropriate observation tool to identify the risk of critical condition in patients or patients at risk of death in hospital (Burch et al. 2008). More higher the score it will reflected the condition getting worse or critical. Critical condition of patients, will impact on the length of their stay in the hospital in order to get treatment intensively. Some studies were carried out on the benefit of Early Warning score system in order to detect the critical condition. However, the aggregate’s score of EWSS related with the length of DHF’s patients stay is still underutilized.

The World Health Organization (WHO) describes cases of dengue fever in worldwide around 50-100 million annually, with 250,000-500,000 cases and 24,000 deaths per year. Ministry of Health of Republic Indonesia stated until 28 August 2014 the number of DHF patients is 48,905 cases with 376 deaths. (Astuti 2016). Meanwhile, in Dr. Ramelan Hospital, one of the biggest hospital in East Java Indonesia, the number of dengue patients in 2016 around 257 patients with the average length of the day hospitalization in range 3-14 days.

In the study conducted by (Siregar 2010) reported that the average length of treatment of DHF patients is a minimum of two days while the longest is 9 days based on platelet count. Previous study reported that Early Warning Score over 4 in the first assessment then the patient would get longer treatment than patients who in the initial assessment received a 0-3 EWS score that only took 48 hours of treatment. Positive results on better clinical outcomes were obtained after introduction of EWS charts in patients with acute conditions (Alam 2014). This suggests that EWS can help accelerate the improvement of the patient’s condition by observing through the resulting
EWS score and reducing the length of patient's day in hospital, through recognizing signs of worsening condition.

By Identification of abnormal clinical signs as well as patient health history, and appropriate diagnostic test were tends to predict the risk of adverse outcomes objectively (Burch et al. 2008). However, the deterioration of these clinical signs is often unclear and may occur unnoticed. Furthermore, the development and availability of tools that can described the evidence of clinical deterioration are essential. Ultimately, this can prevent adverse events and improve the patient's condition (Alam 2014).

Early warning score (EWS) is a scoring system used to help detect early deterioration of the patient's condition and reduce unexpected events in the clinical ward associated with the patient's condition (Smith 2012). EWS will help the health worker to identify the emergency situation in the patients which can then be handled from the beginning, so the hospitalization time will be much faster because the patient gets the treatment well and can help improve the hospital service quality. This socialization needs to be done in order to improve the implementation of early warning score on inpatient patients especially in patients with critical condition so that the achievement of patient satisfaction and staff who do the maintenance.

Researchers want to analyze the relationship of early warning score system with length of stay dengue hemorrhagic patients in inpatient wards of the disease based on the above background. Dengue Hemorrhagic Fever (DHF) is an infectious disease that occurs in tropical area frequently. It cause by dengue viruses spread out by Aedes Aegypti mosquitoes, and its accompanied by bleeding manifestations which is tends to cause shock and death(Misnidiarly 2009; Hikmah and Moroni 2015).

Treatment and nursing care of DHF patients will takes time and intensively care. It refers with increases of vascular permeability membrane, leading to decreased platelets and plasma leakage. The risk of bleeding or shock, regarding with decreased of platelet’s level will impact on the worsening the condition itself. Furthermore, Early Warning Score System (EWSS) is an appropriate observation tool to identify the risk of critical condition in patients or patients at risk of death in hospital(Burch et al. 2008). Critical condition of patients, will impact on the length of their stay in the hospital in order to get treatment intensively. Some studies were carried out on the benefit of Early Warning score system in order to detect the critical condition. However, the aggregate’s score of EWSS related with the lenght of DHF’s patients stay is still underutilized.

The World Health Organization (WHO) describes cases of dengue fever in worldwide around 50-100 million annually, with 250,000-500,000 cases and 24,000 deaths per year. Ministry of Health of Republic Indonesia stated until 28 August 2014 the number of DHF patients is 48,905 cases with 376 deaths. (Astuti 2016). Meanwhile, in Dr. Ramelan hospital, one of the biggest hospital in East Java Indonesia, the number of dengue patients in 2016 around 257 patients with the average length of the day hospitalization in range 3-14 days.

In the study conducted by (Siregar 2010) reported that the average length of treatment of DHF patients is a minimum of two days while the longest is 9 days based on platelet count. Previous study reported that Early Warning Score over 4 in the first assessment then the patient would get longer treatment than patients who in the initial assessment received a 0-3 EWS score that only took 48 hours of treatment. Positive results on better clinical outcomes were obtained after introduction of EWS charts in patients with acute conditions (Alam 2014). This suggests that EWS can help accelerate the improvement of the patient's condition by observing through the resulting EWS score and reducing the length of patient's day in hospital, through recognizing signs of worsening condition.

By Identification of abnormal clinical signs as well as patient health history, and appropriate diagnostic test were tends to predict the risk of adverse outcomes objectively (Burch et al. 2008). However, the deterioration of these clinical signs is often unclear and may occur unnoticed. Furthermore, the development and availability of tools that can described the evidence of clinical deterioration are essential. Ultimately, this can prevent adverse events and improve the patient's condition (Alam 2014).

Early warning score (EWS) is a scoring system used to help detect early deterioration of the patient's condition and reduce unexpected events in the clinical ward associated with the patient's condition (Smith 2012). EWS will help the health worker to identify the emergency situation in the patients which is determine the treatment and nursing care. Turn over Interval (TOI) of hospital bed will influeneced by the lenght of stay each patients, so the lenght of hospitalization can be minimize if patients get the treatment efficiently. This socialization needs to be done in order to improve the implementation of early warning score on inpatient patients especially in patients with critical condition so that the achievement of patient satisfaction and the staff itself.
Researchers want to analyze the relationship of early warning score system with length of stay dengue hemorrhagic patients in inpatient wards Dr. Ramelan Hospital Surabaya.

2 METHODS

This study uses observational design with a retrospective cohort approach. The sample in this study were DHF patients in in-patient wards of Dr. Ramelan Surabaya, which amounted to 100 patients using probability sampling technique with simple random sampling approach. The independent variable is the aggregate value of early warning scored and the dependent variable is the length of patient care of DHF. In demographic data the instrument used is an observation sheet filled by researchers consisting of gender, age, Occupation, date of admisssion, date of discharge, and EWS score. Meanwhile, the observations sheet of EWS aggregate scores and observation of length of day care using day. The data used secondary data in the medical record of the EWS score.Data analysis techniques is Spearman rho test showed that there was relationship between early warning score aggregate value with length of stay in DHF patient with $\rho = 0.002$ ($p<\alpha = 0.05$) and the correlation coefficient 0.590 ($p<0.1000$). The length of their stay, based on the day the patient first entered the treatment room until return home. The hypothesis in this study is that there is an association Early Warning Score with the length of day treatment of DHF patients in the Inpatient Room Dr. Ramelan Surabaya.

3 RESULTS

Table 1: Aggregate Value of Early Warning Score System DHF patients in inpatient Ward Dr. Ramelan Surabaya (n=100).

<table>
<thead>
<tr>
<th>EWSS aggregate value</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>92</td>
<td>92%</td>
</tr>
<tr>
<td>Medium</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>High</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Based on table 1, 100 respondents had aggregate value of EWSS with a low score (92%), and moderate score (8%). Table 2 showed that from 100 respondents, there were 16 respondents (16%) short

Table 2: Lenght of stay DHF patients in inpatient Ward Dr. Ramelan Surabaya (n=100).

<table>
<thead>
<tr>
<th>Lenght of Stay</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Stay (≤ 3 days)</td>
<td>16</td>
<td>16%</td>
</tr>
<tr>
<td>Medium Stay (4-11 days)</td>
<td>73</td>
<td>73%</td>
</tr>
<tr>
<td>Long Stay (≥ 12 days)</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3: Spearman’s rho test of The relationship between EWSS aggregate value and the length of stay DHF patients in Inpatient ward Dr. Ramelan Surabaya (n = 100).

<table>
<thead>
<tr>
<th>Aggregate value EWSS</th>
<th>Lenght of Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short stay (1-3 days)</td>
</tr>
<tr>
<td>Low (0, 1-4)</td>
<td>16</td>
</tr>
<tr>
<td>Medium (5-6)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
</tr>
</tbody>
</table>

Spearman Rho test $\rho = 0.002$

Correlation Coefficient $= 0.590$

In this study, the amount of respondents with EWSS aggregate value and the length of stay of DHF patients in Dr. Ramelan Surabaya, there were low EWSS value and short stay (16%), medium stay (73%), and long stay (3%) respondents. Whereas 8% respondents with EWSS medium value (8%) have long stay care. According to Spearman statistic test results obtained $\rho$ less than $\alpha$, $p<0.002 < \alpha = 0.05$, which means that there is a statistically relationship between the EWSS aggregate value with the length of stay patient with DBD in Dr. Ramelan Surabaya. Then from the results of Correlation Coefficient showed the results of 0.590 which refers to the closeness of the relationship between the aggregate value of EWSS with the length of stayin a medium context.
4 DISCUSSION

4.1 Aggregate Value Early Warning Score System DHF Patients in Inpatient Room Dr. Ramelan Surabaya

Results of this research, reported that in general DHF patients in inpatient Ward, generally have low aggregate EWSS value as much as 92 respondents (92%). Low EWSS values can be affected by several factors including the age, the severity of the disease, and gender. Majority DHF’s patients were in range 17-25 years. In this period, one's body is able to compensate well in ill condition. It assumed the value obtained influenced by the patient's clinical condition which is showed by the increases of body temperature, the pulse and the presence of the respondent using the additional oxygen therapy (nasal canule). Any change in the EWSS component can be an indicator of physiological changes due to the degree of DHF condition. Increased body temperature is a mechanism of the dengue virus inflammation in patients with DHF. Patients may develop to shock dengue fever if the score are increased such as pulse and blood pressure, acral (tip) cold extremities, accompanied by skin congestion. These changes show symptoms of circulatory disorders, as a result of mild or severity of plasma infiltration (Nopianto 2012). Furthermore, the score will add with 2 point if the patients supported by oxygen therapy (Physicians Royal College 2012).

4.2 Length of Stay DHF Patient in Inpatient Ward Dr. Ramelan Surabaya

The results obtained that 73% have a medium stay (4-11 days). It means, DHF cases were in moderate treatment, varies depend on their clinical manifestations and the role of health care personnel during the treatment. Patients with DHF is highly potential for bleeding due to changes in homeostasis in the body caused by Dengue virus (Soedarto 2012). We assumed that the length of the day of care related with health’s history of patients and their physical condition to adapt and recover. Vital’s sign data obtained in average, their respiration rate is 20 times per minute, pulse rate 92 time per minute and 37 degree celsius for the body temperature. Surprisingly, there were 3 (three) female respondents on long stay (>12 days). It was argue that it was related with the anatomy of capillary permeability in female patients. Kasper DL et al (2009) cited(Nopianto 2012)mention that in female, the clinical manifestation dengue fever is more severe rather than in men. It related with the capillary walls in women tend to increase rather than in men anatomically.

4.3 Relationship Between Aggregate Value Early Warning Score System and Length of Stay Dengue Hemmoragic Patients in Dr. Ramelan Surabaya

In this research, it was found that there was significantly relationship between EWSS aggregate value and the length of stay patient with DHF and also the closeness relation both variable was in moderate relationship. It was appropriate with the theories that more higher the aggregate value will impact the worsening condition. The treatment and nursing care will depend on the necessity of body requirements focused on the leakage of plasma into extravascular space: It was a risk for severe bleeding such as petechia, epistaxis, bleeding in gums as well as hemoptisis.

5 CONCLUSIONS

The EWSS aggregate value of DHF patients have relationship with their length of stay during hospitalization. It was recommended to measure the EWSS aggregate value in the first and continued assessment in order to identify the condition of patients as well as to identify the appropriate treatment and the quality of nursing care.

REFERENCES

Ekstrak Daun Jambu Biji Bisa untuk DBD, Jakarta: Pustaka Populer Obor.


Smith, 2012. The ability of the National Early Warning Score (NEWS) to discriminate patients at risk of early cardiac arrest, unanticipated intensive care unit admission, and death.