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Surabaya, 12 Juni 2020

Ketua LPPM,




Dr. Istas Pratomo, S.T., M.T.

NPP. 16081074

LPPM Universitas Nahdlatul Ulama Surabaya

Website : lppm.unusa.ac.id

Email : lppm@unusa.ac.id

Hotline : 0838.5706.3867

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by Mulyadi 30

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“Facing the Uncertainty”

Focus on: Respiratory Care in Disaster



WORKSHOPS

RSPI Prof. Dr. Sulianti Saroso, Jakarta
24th - 25th July 2019

JW Marriott Hotel, Jakarta
25th July 2019

SYMPOSIUM

JW Marriott Hotel, Jakarta
26th - 27th July 2019

The 21st International Meeting on Respiratory Care Indonesia (Respina) 2019

Proceeding E-book



Editor

Pompini Agustina, MD

Wahyuningsih, MD

Anitta Florence Stans Paulus, MD

Asri Liqditta Bies, MD

Devina Arrandhikasari, MD

8

THE SOCIETY OF RESPIRATORY CARE INDONESIA (RESPINA)

Jakarta, Indonesia

8 The Society of Respiratory Care Indonesia

Apartment Menteng Square 3rd Floor Tower BO 55-56

Jl. Matraman No. 30 E Central Jakarta-INDONESIA

<http://www.respina.org>

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Welcome Message



Dear Colleagues,

On behalf of 21st Respina 2019 Organizing Committee, we extend a warm welcome to all participants to attend The International Meeting of Respiratory Care Indonesia which will be held on 24th – 27th July 2019 in JW Marriot Hotel, Jakarta. Respina has been organized since 1998 as one of the largest Respiratory Care event in Southeast Asia.

In its development, Indonesia has experienced many natural disasters such as: the eruption of Mount Merapi, forest fires, tsunamis and earthquakes which have an impact on respiration problems which are serious enough so that appropriate and true handling is needed from various disciplines.

Featuring the theme **“Facing the Uncertainty” Focus on: Respiratory Care in Disaster**”, Respina 2019 tries to solve this problem by inviting experts in their respective fields

There will be seven workshop’s, in which we collaborate with National Agency of Food and Drugs Control (Badan Pengawas Obat dan Makanan/BPOM) and National Institute of Health, Research, and Development (Badan Penelitian dan Pengembangan Kesehatan/Balitbangkes).

The scientific symposia will gather a number of prominent experts presenting plenary lectures as well as many more specific sessions. We do hope to create the attractive and knowledgeable conference. RespiQuizz will provide the chance to see the capabilities and competitiveness between students from various medical faculties in Indonesia. Last but not least, the novel studies and advancements in respiratory care will be presented by various specialists in poster session.

In conclusion, The 21st Respina will offer great opportunities for the participants to discuss recent topics regarding respiratory care in their respective expertise’s and share their experiences in daily practice.

We are looking forward to see you in Jakarta to enjoy the excitement of this scientific meeting

Warm Regards,



Pompini Agustina, M.D.
Chairperson of the Organizing Committee

About Respina 2019

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Respiratory Care Indonesia (Respina) is an annual international meeting in Indonesia on respiratory care. Respina is a result of collaboration of five pillars, which are Department of Pulmonology and Respiratory Medicine Faculty of Medicine University of Indonesia, American College of Chest Physician-Indonesia Chapter, Asian Pacific Society of Respirology, Indonesia Society of Bronchoscopy and Indonesian Society of Respirology, in answering the global problem of respiratory care. The mission of the meeting is to bring the up-to-date and latest information of respiratory care and as media of collaboration to each respiratory care practitioners in cooperative spirit.

Starting on 2006, Respina is proudly joined by societies that shared the same interest particularly in respiratory care, and they are as follows:

- Indonesian Society of Respirology
- Indonesian Association of Thoracic and Cardiovascular Surgeons
- Indonesian Radiological Society
- Indonesian Neurological Association
- Indonesian Heart Association
- The Indonesian Society of Anesthesiology and Intensive Therapy
- The Indonesian of Physical Medicine and Rehabilitation Association
- Indonesian Pediatric Society
- The Indonesian Otorhinolaryngological Head and Neck Surgery Society

Four other professional organizations joined Respina in 2011, they are:

- Indonesian Association of Clinical Pathologists
- The Indonesian Physician of community medicine and Public Health Association
- Indonesian Sports Medicine Association
- Indonesian Society for Clinical Microbiology

1

Respina 2019 is the 21st meeting we have been conducting and during the years, Respina has become one of the major respiratory events in Indonesia and gained greater and still growing interest from physicians across the regions, particularly from our colleagues in Southeast Asia.

Society by:



Organizing Committee

PILLAR

- Department of Pulmonology and Respiratory Medicine Faculty of Medicine University of Indonesia
- American College of Chest Physician (ACCP) - Indonesian Chapter
- Asian Pacific Society of Respirology (APSR) Representative for Indonesia
- The Indonesia Society of Bronchoscopy (PERBRONKI) Indonesia
- Indonesian Society of Respirology (PDPI)

HONORARY CHAIR

- Prof. Hadiarto Mangunegoro, MD, FCCP
- Venugopal S. Reddy, MD, FCCP

BOARD COMMISSION

- Prof. Hadiarto Mangunegoro, MD, FCCP
- Prof. Menaldi Rasmin, MD, FCCP
- Sutji A. Mariono, MD, FCCP, FCCM
- Ida Bemida, MD, FCCP
- Pradnaparamita, MD, FCCP

Supported by :



Organizing Committee

Chairperson	:	Pompini Agustina, MD
Vice Chair	:	Dian Yulianti, MD
Secretary	:	Santi Rahayu Dewayanti, MD
Treasurer	:	Linda Masniari, MD Feni Fitriani Taufik, MD

SCIENTIFIC BOARD

- Sri Dhuny Atas Asri, MD
- Anitta FS Paulus, MD
- Kasum Supriadinata, MD
- Andhika Chandra Putra, MD
- Mia Elhidsi, MD

PUBLICATION & AUDIOVISUAL

- Vinci Edy Wibowo, MD
- Raden Fajar Prosojo Utomo, MD
- Haruyuki Dewi Faisal, MD

RESPIQUIZZ

- Kasum Supriadinata, MD
- Shaogi Syam, MD
- Jaka Pradipta, MD
- Widhy Yudistira, MD
- Dian Prastiti, MD

FINANCE & FACILITIES

- Retno Wihastuti, MD
- Amira Anwar, MD
- Bambang Heru, MD

INVITED SPEAKERS

- Amanda Piper (AUS)
- Chiaki Toida (JPN)
- Gary Lee (AUS)
- Jennifer Ann Mendoza-Wi (PHI)
- Lim Chong Hee (SIN)
- Martin J. Tobin (USA)
- Menaldi Rasmin (INA)
- Naoto Morimura (JPN)
- Philip Eng (SIN)
- Rodolfo R. T. Bigornia (PHI)
- T. Agasthian (SIN)

Faculty Members



Cesare Gregoretti,

Director of General Intensive Care Unit and Anesthesiology Service Orthopedic and Trauma Center of Turin, Italy.

Independent referee ⁴ international journals such as Intensive Care Medicine, European Respiratory Journal, Respiratory Medicine.

Professor of Intensive Care and Anesthesiology at the postgraduate school, University of Turin and Novara Italy.

Speaker and chairman at main national and international conventions in the field of mechanical ventilation and an Invited Professor at Tuft University in Boston and Temple University in Philadelphia.



³ Solino Ambrosino

Appointed Professor of Universities of Pisa, Pavia, Firenze, Trieste, Milano

Professor Head, Pulmonary Department, Cardio-Thoracic Department, University Hospital, Pisa.

Head, Pulmonary Unit, Respiratory Intensive Care. Cardio-Thoracic Department, University Hospital, Pisa.

Head, Pulmonary Rehabilitation and Weaning Center, Auxilium ³ ae, Volterra Scientific Director of Auxilium Vitae, Volterra

Former Head : Pulmonary Division and Intermediate Intensive Care. Medical Center of Gussago, S. Maugeri Foundation



Jennifer Ann Mendoza-Wi

Full Professor Lyceum Northwestern FQ Duque College of Medicine, Dagupan City.

International Governor, American College of Chest Physicians, Philippine Chapter.



⁴ Paolo Navalesi

Ospedale Maggiore della Carità in Novara (Italy).

Head of the Intensive Care Unit of the Department of Anesthesia and Intensive Care.

Teaches at the School of Anesthesiology and Intensive Care of The University of the Oriental Piedmont.



Martin Tobin

Professor of Medicine, Pulmonary and Critical Care Medicine.

Division Director, Pulmonary & Critical Care Medicine Special Interests: Acute Respiratory Failure.

Neuromuscular Control of Breathing Mechanical Ventilation.



Richard Wayne Light

Practices Internal Medicine, Pulmonary Disease near Nashville, TN.

Professor of Medicine, Vanderbilt University, Nashville.

Professor Emeritus of Medicine, University of California at Irvine



⁶ Neil Ross Macintyre, JR

Professor of Medicine
Duke University Medical Center
Chief of Clinical Services

Division of Pulmonary and Critical Care Medicine

Medical Director of Respiratory Care Services,

Pulmonary Function Laboratory, and Pulmonary Rehabilitation Program

Duke University Medical Center
Durham, NC



Venugopal S Reddy

Associate Professor of Anesthesia and Critical Care Medicine.

Divisional Director Critical Care Medicine
Director of Surgical Anesthesia Intensive Care Unit.

Director of Mortality and Morbidity meeting Penn State College of Medicine and Hershey Medical Center, Hershey, USA.

Scientific Program

DAY 1 FRIDAY, 26th July 2019			
REGISTRATION			
MORNING SYMPOSIUM 1 Lung Problem in Enviromental High Risk Disaster : Children	MORNING SYMPOSIUM 2 Lung Problem in Enviromental High Risk Disaster : Adult	MORNING SYMPOSIUM 3 Lung Problem in Enviromental High Risk Disaster : Community	
PLENARY SESSION 1 Webinar : The Series of Natural Disaster			
OPENING CEREMONY			
SATELLITE SYMPOSIUM 1 Asthma & COPD in High Risk Disaster Area	SATELLITE SYMPOSIUM 2 Managing Recurrent RTI in Evacuated Victims With Immunotherapy	SATELLITE SYMPOSIUM 3 Medical Role in Disaster Management	
LUNCH & FRIDAY PRAYING			
MASTER CLASS 1 RESPIRATORY CARE : In the Event of Volcano Eruption & Fire	MASTER CLASS 2 RESPIRATORY CARE : In the Event of Tsunami & Floods	MASTER CLASS 3 RESPIRATORY CARE : In the Event of Earthquake & Landslide	
MEET THE EXPERT 1 RESPIRATORY FAILURE : Volcano Eruption and Fire	MEET THE EXPERT 2 Impact Acute and Chronic to Respiratory Post Disaster	MEET THE EXPERT 3 Emergency Invasive Care in Disaster Situation	
SATELLITE SYMPOSIUM 4 Acute Impact on Natural Disaster	SATELLITE SYMPOSIUM 5 Planning and Preparedness in Disaster Management	SATELLITE SYMPOSIUM 6 Physical Health Care in Disaster Area	FREE PAPER & POSTER SESSION
STUDIUM GENERALE Art of Medicine in Millennial Era: Continued Innovation is the Best Way to Beat the Competition			

Scientific Program

DAY 2 SATURDAY, 27st July 2019

REGISTRATION

MORNING SYMPOSIUM 4 Supporting Exam of Respiratory Disease on Disaster	MORNING SYMPOSIUM 5 Respiratory Problem in Tsunami Victims	MORNING SYMPOSIUM 6 Critical Care in Disaster
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PLENARY SESSION 2
From Upstream to Downstream : Disaster

RespiQuizz

LESSON'S LEARNED
Tsunami Lung

SATELLITE SYMPOSIUM 7 Preparing for Natural Disaster in Airway Disease	SATELLITE SYMPOSIUM 8 COPD in Disaster Situation	SATELLITE SYMPOSIUM 9 Respiratory Infection in Disaster
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LUNCH & PRAYING

LUNCH SYMPOSIUM 1 Tumor Event Following Disaster	LUNCH SYMPOSIUM 2 The Strategy on Pulmonary Infection Prevention, Detection & Treatment in Disaster
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SATELLITE SYMPOSIUM 10 Early Response During & After Disaster	SATELLITE SYMPOSIUM 11 Challenges Facing Lung Problems Post Disaster	SATELLITE SYMPOSIUM 12 Mucous Clearance Management
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SUMMARY
"Facing the Uncertainty" Focus on: Respiratory Care in Disaster

CLOSING CEREMONY

Scientific Schedule

DAY 1 FRIDAY, 26TH JULY 2019

REGISTRATION

07.00 - 07.30

MORNING SYMPOSIUM 1

Lung Problem in Environmental High Risk Disaster : Children

- 07.30 - 07.50 Acute Respiratory Problem in Children
Wahyuni Indawati (INA)
- 07.50 - 08.10 Chronic Respiratory Problem in Children
Bambang Supriyatno (INA)
- 08.10 - 08.15 Discussion

MORNING SYMPOSIUM 2

Lung Problem in Environmental High Risk Disaster : Adult

- 07.30 - 07.50 Respiratory Problem in Adult: Upper Airway
Syahrial M. Hutaeruk (INA)
- 07.50 - 08.10 Biomolecular Aspect of Chronic Obstructive Pulmonary Disease
Johnny Anwar (INA)
- 08.10 - 08.15 Discussion

MORNING SYMPOSIUM 3

Lung Problem in Environmental High Risk Disaster : Community

- 07.30 - 07.50 Epidemiology of Diseases in Volcanic Area
Trevino Pakasi (INA)
- 07.50 - 08.10 Lung Problem in Smoke Fire Event
Feni Fitriani Taufik (INA)
- 08.10 - 08.15 Discussion

PLENARY SESSION 1

Webinar : The Series of Natural Disaster

- 08.15 - 08.40 Health Policy in National Disaster Management
Ahmad Yurianto (Crisis Center KEMENKES - INA)
- 08.40 - 09.10 Clinical Science: The Consensus - Controversy Conundrum
Martin J. Tobin (USA)
- 09.10 - 09.35 Medical Team & Patient Safety in Disaster Area
Daeng M. Faqih (PB IDI - INA)

OPENING CEREMONY

09.35 - 10.30

SATELLITE SYMPOSIUM 1

Asthma & COPD in High Risk Disaster Area

- 10.30 - 10.55 COPD
Linda Masniari (INA)
- 10.55 - 11.20 Asthma
Hadiarto Mangunnegoro (INA)
- 11.20 - 11.30 Discussion & Quizz

SATELLITE SYMPOSIUM 2

Managing Recurrent RTI in Evacuated Victims With Immunotherapy

- 10.30 - 10.55 Pharmacological Point of View of Immunotherapy for Recurrent RTI in Evacuated Victims
Purwastyastuti Ascobat (INA)
- 10.55 - 11.20 Bacterial Lysate : In Prevention of Lung Disease
Menaldi Rasmin (INA)
- 11.20 - 11.30 Discussion

SATELLITE SYMPOSIUM 3

Medical Role in Disaster Management

- 10.30 - 10.55 Focus on Disaster Medicine
Naoto Morimura (JPN)
- 10.55 - 11.20 Management of COPD in Disaster
Faisal Yunus (INA)
- 11.20 - 11.30 Discussion

LUNCH & FRIDAY PRAYER

11.30 - 13.00

MASTER CLASS 1

RESPIRATORY CARE : In the Event of Volcano Eruption & Fire

- 13.00 - 13.25 Respiratory Care on Volcano Eruption and Fire
Ngakan Putu Parsama Putra (INA)
- 13.25 - 13.50 Respiratory Care on Volcano Eruption and Fire
Rodolfo R.T. Bigornia (PHI)
- 13.50 - 14.00 Discussion

MASTER CLASS 2

RESPIRATORY CARE : In the Event of Tsunami & Floods

- 13.00 - 13.25 Respiratory Care on Tsunami & Flood
Chiaki Toida (JPN)
- 13.25 - 13.50 Respiratory Care Tsunami & Flood
Mulyadi (INA)
- 13.50 - 14.00 Discussion
Chiaki Toida (JPN), Naoto Morimura (JPN), Mulyadi (INA)

Scientific Schedule

MASTER CLASS 3

RESPIRATORY CARE : In the Event of Earthquake & Landslide

- 13.00 - 13.25 Respiratory Care on Earthquake & Landslide
Jennifer Ann Mendoza-Wi (PHI)
- 13.25 - 13.55 The Physiologic Basis of Mechanical Ventilation
Martin J. Tobin (USA)
- 13.55 - 14.00 Discussion

MEET THE EXPERT 1

RESPIRATORY FAILURE : Volcano Eruption and Fire

- 14.00 - 14.25 Air Pollution in Disaster Area
Mukhtar Ikhsan (INA)
- 14.25 - 14.50 Inhalation Injury
Feni Fitriani Taufik (INA)
- 14.50 - 15.00 Discussion

MEET THE EXPERT 2

Impact Acute and Chronic to Respiratory Post Disaster

- 14.00 - 14.15 Community Acquired Pneumonia : From Moderate to Severe
Santi Rahayu Dewayanti (INA)
- 14.15 - 14.40 Management of Invasive Fungal Infections: Focus on Respiratory Fungal Infections
Anwar Jusuf (INA)
- 14.40 - 14.55 ILD Early Detection
Fanny Fachrucha (INA)
- 14.55 - 15.00 Discussion

MEET THE EXPERT 3

Emergency Invasive Care in Disaster Situation

- 14.00 - 14.25 Penetrating Cardiac Injury in Surabaya
Paul Tahalele (INA)
- 14.25 - 14.50 Latest Treatments for Chronic Pulmonary Thromboembolic Hypertension
Lim Chong Hee (SIN)
- 14.50 - 15.00 Discussion

SATELLITE SYMPOSIUM 4

Acute Impact on Natural Disaster

- 15.00 - 15.20 Impact Disaster Neurology System
Rakhsad Hidayat (INA)
- 15.20 - 15.40 Analgesia Considerations for Patients with Respiratory Problems
I Putu Pramana Suarjaya (INA)
- 15.40 - 16.00 Pneumothorax
Gary Lee (SIN)
- 16.00 - 16.05 Discussion

SATELLITE SYMPOSIUM 5

Planning and Preparedness in Disaster Management

- 15.00 - 15.25 Management of Acute Respiratory Emergency Cases
Tri Agus Yuarsa (INA)
- 15.25 - 15.50 Management of Respiratory Problems After Disasters
Arif Santoso (INA)
- 15.50 - 16.05 Discussion

SATELLITE SYMPOSIUM 6

Physical Health Care in Disaster Area

- 15.00 - 15.20 Focused on Healthy Subjects
Zaini (INA)
- 15.20 - 15.40 Pulmonary Rehabilitation of Respiratory Disease on Disaster
Siti Chandra Widjanantie (INA)
- 15.40 - 16.00 Prevention of Chronic Lung Disease in Disaster Area
Pompini Agustina (INA)
- 16.00 - 16.05 Discussion

FREE PAPER

- 15.00 - 16.05

POSTER SESSION

- 15.00 - 16.05

STUDIUM GENERALE

- 16.05 - 17.00 Art of Medicine in Millennial Era: Continued Innovation is the Best Way to Beat the Competition
Jennifer Ann Mendoza-Wi (PHI)

Scientific Schedule

DAY 2 SATURDAY, 27th JULY 2019

REGISTRATION

07.00 - 07.30

MORNING SYMPOSIUM 4

Supporting Exam of Respiratory Disease on Disaster

- 07.30 - 07.50 Radiologic Findings in Neonatal Respiratory Distress
Wuri Suryandari (INA)
- 07.50 - 08.10 Laboratory Parameter & Method of Choice for Health Problem After Natural Disease
Ida Parwati (INA)
- 08.10 - 08.30 Embolisation in Hemoptisis
Andi Darwis (INA)
- 08.30 - 08.35 Discussion

MORNING SYMPOSIUM 5

Respiratory Problem in Tsunami Victims

- 07.30 - 07.50 Interventional Procedure in Adults
Rita Rogayah (INA)
- 07.50 - 08.10 In Children
Tjatur K. Sagoro (INA)
- 08.10 - 08.30 Pleural Infection: What is New?
Gary Lee (AUS)
- 08.30 - 08.35 Discussion

MORNING SYMPOSIUM 6

Critical Care in Disaster

- 07.30 - 07.50 Pain Management in Critically Ill
Faisal Muchtar (INA)
- 07.50 - 08.10 Critical Care in Disaster :Thoracic Trauma
Susan H. Meity (INA)
- 08.10 - 08.30 Cardiac Resuscitation
Berlian Idriansyah Idris (INA)
- 08.30 - 08.35 Discussion

PLENARY SESSION 2

From Upstream to Downstream : Disaster

- 08.35 - 08.55 Do We Need a Disaster Curriculum in Medical Education?
Nurdin Perdana (Asosiasi Institusi Pendidikan Kedokteran Indonesia - INA)
- 08.55 - 09.15 National Disaster Management Policy
Bagus Tjahyono (BNPB - INA)
- 09.15 - 09.35 The Strength of Multidicipline in Disaster Emergency Response
Wahyuningsih Suharno (INA)

RESPIQUIZZ

09.35 - 10.35

LESSON'S LEARNED

Tsunami Lung

10.35 - 11.35

SATELLITE SYMPOSIUM 7

Preparing for Natural Disaster in Airway Disease

- 11.35 - 11.55 Asthma
Jennifer Ann Mendoza-Wi (PHI)
- 11.55 - 12.15 Time to Shift to New Paradigm in Asthma Management
Pradjnaparamita (INA)
- 12.15 - 12.35 COPD Management Care Post Disaster
Budhi Antariksa (INA)
- 12.35 - 12.40 Discussion

SATELLITE SYMPOSIUM 8

COPD in Disaster Situation

- Moderator : Wahyuningsih Suharno (INA)
- 11.35 - 11.55 Mastering the Art of COPD: How to Diagnose in Disaster Situation
Retno Wihastuti (INA)
- 11.55 - 12.15 Increasing LABA/LAMA Role in COPD Management: Working on Disaster Situation, Adaptation from GOLD 2019
Faisal Yunus (INA)
- 12.15 - 12.35 Prevention of COPD Exacerbation
Amanda Piper (INA)
- 12.35 - 12.40 Discussion

SATELLITE SYMPOSIUM 9

Respiratory Infection in Disaster

- 11.35 - 11.55 Rehabilitation Post Intervention
Anita Ratnawati (INA)
- 11.55 - 12.15 Microbiology Pattern in New Era of Antimicrobia Resistance
Kuntaman (INA)
- 12.15 - 12.35 Respiratory Failure due to Infection in Disaster
Erlina Burhan (INA)
- 12.35 - 12.40 Discussion

LUNCH & PRAY

12.40 - 13.30

Scientific Schedule

LUNCH SYMPOSIUM 1

Tumor Event Following Disaster

13.30 - 13.50 The Likelihood of Tumors Occurrence
Marlinda Adham (INA)

13.50 - 14.10 Mesothelioma & Asbestosis
T. Agasthian (SIN)

14.10 - 14.15 COUGHING ETHICS EXERCISES

14.15 - 14.35 Lung Cancer : The Long Term Effect After
Lung Injury in Disaster
Jamal Zaini (INA)

LUNCH SYMPOSIUM 2

The Strategy on Pulmonary Infection Prevention, Detection & Treatment in Disaster

13.30 - 13.50 Early Management for Patients in Volcano
Area
Jennifer Ann Mendoza-Wi (PHI)

13.50 - 14.10 ICU Setting in Disaster Area
Rodolfo R. T. Bigornia (PHI)

14.10 - 14.15 COUGHING ETHICS EXERCISES

14.15 - 14.35 Continuing Therapy Post Disaster
Rita Rogayah (INA)

SATELLITE SYMPOSIUM 10

Early Response During and After Disaster

14.35 - 15.00 Victims With and Without Disability
Adhityawarman (INA)

15.00 - 15.25 Emergency Medical Respiratory Team
Dewi Puspitorini (INA)

15.25 - 15.35 Discussion

SATELLITE SYMPOSIUM 11

Challenges Facing Lung Problems Post Disaster

14.35 - 15.00 Pulmonary Infection after Disaster : How
to Choose Antibiotics
Erlina Burhan (INA)

15.00 - 15.25 ECMO for Viral Pneumonia
Philip Eng (SIN)

15.25 - 15.35 Discussion

SATELLITE SYMPOSIUM 12

Mucous Clearance Management

14.35 - 15.00 Interventional Procedure in Mucous
Clearance Following Natural Disaster
Prasenohadi (INA)

15.00 - 15.25 Classic to Advance Airway Clearance
Technique
Nury N. Handikin (INA)

15.25 - 15.35 Discussion

SUMMARY

16.35 - 16.05 "Facing the Uncertainty" Focus on:
Respiratory Care in Disaster
Menaldi Rasmin (INA)

CLOSING CEREMONY

16.05 - 16.25

Exhibition Floor Plan



DUA MUTIARA BALLROOM
2ND FLOOR

Exhibitor List

NO. BOOTH	COMPANY
1.	Astellas Pharma Indonesia
2.	Meiji Indonesia
3.	Boehringer Ingelheim
4.	3M
5.	Novartis Indonesia
6.	Olympus
7.	Dexa Medica
8.	Zambon Indonesia
9.	Anugerah Pharmindo Lestari
10.	Novell Par Pharmaceuticals
11.	Pharmasolindo
12.	Glaxo Smith Kline
13.	Menarini
14.	Kalbe Farma
15.	Bayer Indonesia
16.	Darya Varia
17.	RS Citra Arafiq Medika

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2. **Glaxo Smith Kline**
3. **Astra Zeneca Indonesia**
4. **Boehringer Ingelheim**
5. **Actavis Indonesia**
6. **Pfizer Indonesia**
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8. **Dexa Medica**
9. **Novell Par Pharmaceuticals**
10. **Pharmasolindo**
11. **Menarini**
12. **Anugerah Pharmindo Lestari**
13. **Darya Varia**
14. **Astellas Pharma Indonesia**
15. **Meiji Indonesia**
16. **Kalbe Farma**
17. **Bayer Indonesia**
18. **Prodia Laboratories**
19. **Parkway Hospitals Singapore**
20. **RS Citra Arafiq Medika**
21. **Hutama Karya**



Full Paper Contents

FRIDAY, 26th JULY 2019

MORNING SYMPOSIUM 1

Lung Problem in Environmental High Risk Disaster : Children

- MS1 - 1 Acute Respiratory Problem in Children
Wahyuni Indawati (INA)
- MS1 - 2 Chronic Respiratory Problem in Children
Bambang Supriyatno (INA)

MORNING SYMPOSIUM 2

Lung Problem in Environmental High Risk Disaster : Adult

- MS2 - 1 Respiratory Problem in Adult: Upper Airway
Syahrial M. Hutauruk (INA)
- MS2 - 2 Biomolecular Aspect of Chronic Obstructive Pulmonary Disease
Johny Anwar (INA)

MORNING SYMPOSIUM 3

Lung Problem in Environmental High Risk Disaster : Community

- MS3 - 1 Epidemiology of Diseases in Volcanic Area
Trevino Pakasi (INA)
- MS3 - 2 Lung Problem in Smoke Fire Event
Feni Fitriani Taufik (INA)

PLENARY SESSION 1

Webinar : The Series of Natural Disaster

- PS1 - 1 Health Policy in National Disaster Management
Ahmad Yurianto (Crisis Center KEMENKES - INA)
- PS1 - 2 Clinical Science: The Consensus - Controversy Conundrum
Martin J. Tobin (USA)
- PS1 - 3 Medical Team & Patient Safety in Disaster Area
Daeng M. Faqih (PB IDI - INA)

SATELLITE SYMPOSIUM 1

Asthma & COPD in High Risk Disaster Area

- SS1 - 1 COPD
Linda Masniari (INA)
- SS1 - 2 Asthma
Hadiarto Mangunnegoro (INA)

SATELLITE SYMPOSIUM 2

Managing Recurrent RTI in Evacuated Victims With Immunotherapy

- SS2 - 1 Pharmacological Point of View of Immunotherapy for Recurrent RTI in Evacuated Victims
Purwastyuti Ascobat (INA)
- SS2 - 2 Bacterial Lysate : In Prevention of Lung Disease
Menaldi Rasmin (INA)

SATELLITE SYMPOSIUM 3

Medical Role in Disaster Management

- SS3 - 1 Focus on Disaster Medicine
Naoto Morimura (JPN)
- SS3 - 2 Management of COPD in Disaster
Faisal Yunus (INA)

MASTER CLASS 1

RESPIRATORY CARE : In the Event of Volcano Eruption & Fire

- MS1 - 1 Respiratory Care on Volcano Eruption and Fire
Ngakan Putu Parsama Putra (INA)
- MS1 - 2 Respiratory Care on Volcano Eruption and Fire
Rodolfo R.T. Bigornia (PHI)

MASTER CLASS 2

RESPIRATORY CARE : In the Event of Tsunami & Floods

- MS2 - 1 Respiratory Care on Tsunami & Flood
Chiaki Toida (JPN)
- MS2 - 2 Respiratory Care Tsunami & Flood
Mulyadi (INA)
- MS2 - 3 Discussion
Chiaki Toida (JPN), Naoto Morimura (JPN), Mulyadi (INA)

MASTER CLASS 3

RESPIRATORY CARE : In the Event of Earthquake & Landslide

- MS3 - 1 Respiratory Care on Earthquake & Landslide
Jennifer Ann Mendoza-Wi (PHI)
- MS3 - 2 The Physiologic Basis of Mechanical Ventilation
Martin J. Tobin (USA)

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- MTE1 - 2 Inhalation Injury
Feni Fitriani Taufik (INA)

MEET THE EXPERT 2

Impact Acute and Chronic to Respiratory Post Disaster

- MTE2 - 1 Community Acquired Pneumonia :
From Moderate to Severe
Santi Rahayu Dewayanti (INA)
- MTE2 - 2 Management of Invasive Fungal
Infections: Focus on Respiratory
Fungal Infections
Anwar Jusuf (INA)
- MTE2 - 3 ILD Early Detection
Fanny Fachrucha (INA)

MEET THE EXPERT 3

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Paul Tahalele (INA)
- MTE3 - 2 Latest Treatments for Chronic
Pulmonary Thromboembolic
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Lim Chong Hee (SIN)

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Rakhmad Hidayat (INA)
- SS4 - 2 Analgesia Considerations for Patients
with Respiratory Problems
I Putu Pramana Suarjaya (INA)
- SS4 - 3 Pneumothorax
Gary Lee (SIN)

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Planning and Preparedness in Disaster Management

- SS5 - 1 Management of Acute Respiratory
Emergency Cases
Tri Agus Yuarsa (INA)
- SS5 - 2 Management of Respiratory
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Arif Santoso (INA)

SATELLITE SYMPOSIUM 6

Physical Health Care in Disaster Area

- SS6 - 1 Focused on Healthy Subjects
Zaini (INA)
- SS6 - 2 Pulmonary Rehabilitation of
Respiratory Disease on Disaster
Siti Chandra Widjanantie (INA)
- SS6 - 3 Prevention of Chronic Lung Disease
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Pompini Agustina (INA)

STUDIUM GENERALE

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Continued Innovation is the Best Way
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SATURDAY, 27th JULY 2019

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MORNING SYMPOSIUM 6

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SUMMARY

- SM "Facing the Uncertainty" Focus on: Respiratory Care in Disaster
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FRIDAY, 26th JULY 2019



THE 21st INTERNATIONAL MEETING ON RESPIRATORY CARE INDONESIA (Respina) 2019



RESPIRATORY CARE: TSUNAMI AND FLOOD



Mulyadi*, Cut Husna, Nur Wahyuniati*****

* Pulmonology and Respiratory Department, Faculty of Medicine

** Department of Surgical and Medical Nursing, Faculty of Nursing

*** Medical Research Unit, Faculty of Medicine
Universitas Syiah Kuala, Banda Aceh, Indonesia

ABSTRACT

The causes of morbidity and mortality due to infection in the population survived from tsunami mainly because of the aspiration of tsunami water caused abnormalities in the lower respiratory tract, either directly or indirectly. *Tsunami lung* is a lung disorder that is associated with a tsunami-related effect on the lungs, including consequences of chemicals aspiration and also bacterial pneumonia. The direct manifestations of the *tsunami lung* depends on the severity in the form of an acute respiratory tract infection, pneumonia, pulmonary edema and respiratory failure. Indirect manifestations can occur after one year due to dust inhalation of the tsunami material residues that contains organic or inorganic particles, which results in a decrease in lung function. Treatment in the acute phase should refer to the etiology and clinical manifestations, but the use of fiber optic bronchoscopy is an alternative. Handling indirect manifestations due to decreased lung function is carried out symptomatically and requires continuous evaluation.

INTRODUCTION

Areas that are demographically described as The Pacific "*ring of fire*", a meeting of the Earth's plate surrounded by an active volcanoes path and the most active earthquake in the world, are extremely vulnerable and high-risk due to the frequent earthquakes and tsunami. Indonesia, as a part of the Pacific *ring of fire*, experienced 19 natural disasters in 2017 and 23 natural disasters in 2018 including earthquake and tsunami in Donggala-Palu and tsunami in Sunda strait. Tsunami impacts mainly on breathing disorders is because of drowning and swept away in the tsunami current. Apart from that, tsunami also causing physical injuries including lung, head injury, fractures, injuries, and water-borne diseases. The main infection problems after the earthquake and tsunami is wound infection and pneumonia. Severe pneumonia caused by the tsunami is known as *tsunami lung* and it is a major infectious in tsunami survivors.

LUNG PROBLEMS DUE TO TSUNAMI

Up to 65% of the main causes of morbidity and mortality in residents who survived the 2005 tsunami disaster in Aceh and Southeast Asia were caused by disorders in the lower respiratory tract, both directly or indirectly. According to the World Health Organization (WHO) after tsunami in Aceh Province-Indonesia in December 2005, based on surveillance and responses toward epidemic diseases data, there were 62% of patients with acute respiratory infections who were very vulnerable. Up to 40% suffered from aspiration pneumonia due to the aspiration of salt water or mud, causing acute respiratory distress syndromes, whereas 2% had another acute complications related to the impact of drowning or swept away. Another studies in Japan found the rate of hospitalization due to pneumonia increased by 5.7 times after 3.5 months after the Japan earthquake and tsunami in 2011 (5). Shibata (2016) found that in the coastal municipalities the death rate due to pneumonia had doubled at 4 weeks post tsunami, the increase occurred between week 1 and week 12. Victims who survived the sinking of the floods and tsunamis experienced aspiration of sea water, mud, and sea debris into the respiratory tract causing inoculum of the infection pathogens in the lungs, which caused pneumonitis and pneumonia. Tsunami and flood victims not experienced water

aspiration only, but also mud soil and other particles carried by water currents causing ARDS, cardiovascular disorders, and cardiac arrest.

Near drowning condition causes respiratory and cardiogenic shock are common problems found in patients affected by the tsunami. Aspiration Pneumonia are generally found a few days after the tsunami among survivors. Patients, who survived a *near drowning* in tsunami, experience aspiration of fluid, sea water and soil debris into the respiratory tract, and it leads to the inoculation of bacteria in the lower respiratory tract. Pathologically, these patients have a necrotic and cavity in their lungs as well another complications such as empyema, pneumothorax, and haematogenous infection into the central nervous system causes neurological complaints.

Aspiration Pneumonia is a direct consequence of a tsunami on the lungs, resulting in infection, reduced alveoli surfactant, pulmonary edema to ARDS, and also non-specific clinical manifestations that range from normal to respiratory failure. Management of this problems is depends on complaints and the severity of the disorder, and it should starts with symptomatic administration, causative antibiotics to invasive treatments including the use of fiber optic bronchoscopy.

Infection in *near drowning* cases is often caused by aerobic gram-negative bacteria, *Pseudomonas*, *Streptococcus* Pneumonia, *Staphylococcus aureus* and anaerobes bacteria. These infection occurs due to the aspiration in oropharynx and also fungi manifestation that occur up to several weeks after aspiration due to tsunami *near drowning*. The rarely found etiology of pneumonia due to aspiration in tsunami, in the Acquired pneumonia community, is especially caused by *Burkholderia pzedomallei*, *Escherichia coli* and *Legionella* Pneumonia.

In the 2005 Southeast Asian Tsunami as much as 65% of morbidity and mortality of patients who came to the outpatient clinic associated with *near drowning* and pneumonia, which in longer terms can further develop into pneumothorax, pneumomediastinum and ARDS. Acute Respiratory Infection is the leading cause of death in the first 3-5 days after the tsunami, which in the case of aspiration pneumonia the late diagnosis of prognosis will cause a worse prognostic.

Shibata (2016) found out some variables that contribute in pneumonia due to tsunami includes the lack of nutrition and medication, mental stress and the weather factor. Therefore, in patients with pneumonia attributed by the Tsunami, treatment and intensive supervision is necessary to reduce the risk of death.

In addition to clinical manifestations that depend on the severity, a diffuse bilateral infiltrate as well as the possibility of atelectasis can be found through chest radiography and computed tomography examinations.

In aspiration pneumonia caused by tsunami, the cough reflex is often not sufficient to clean the lower respiratory tract, a bronchoscopy examination should be taken if it is possible as diagnostic and also therapeutic management. Fiber optic bronchoscopy for clearing the respiratory tract (bronchial washing or bronchial toilette) from aspirated materials should be executed by using sterile liquid repeatedly, besides this procedure allows the cultivation of specimens for microorganism culture examination. In some cases earlier fiber optic bronchoscopy treatment can provide better recovery results.

Post-tsunami pulmonary disorders are not only results in direct consequences such as trauma, drowning or aspiration pneumonia, but also results in secondary consequences such as mud particle inhalation and

other particles from materials made from rubber. The inhalation of tsunami mud containing organic and inorganic materials resulting the *Organizing Pneumonia* (OP), a histopathology condition with polyps of intra luminal collagen with fibrotic condition at distal interstitial section, is not understood well yet rarely diagnosed. OP results in nonspecific signs and symptoms, which clinically characterized by progressive productive cough complaints, occurs usually 2-3 weeks after the tsunami because of the inhalation of mud residue particles due to environment cleaning activities while not using personal protection equipment.

Yamanda et al (2016) found several cases of OP in workers involved in post-quake restoration and Japan tsunami in 2011, patients seeks medical treatment with clinical complaints of productive cough and progressive shortness of breath, the diagnosis of OP based on histopathology examination associated with the inhalation of tsunami silt containing inorganic and organic materials.

Acute phase management of pulmonary disorders due to tsunami treated based on the severity and causes, and should be considering several points include:

1. Adequate ventilation with smooth air circulation.
2. Separation of treatment places between patients who have a risk of droplet transmission with patients without risk.
3. Restriction of direct contact between infected and healthy people.
4. Distance between patient's beds should be more than 1 meter.
5. Cleaning and disinfecting of equipment

In the long run, the decrease in lung function occurs not only due to tsunami water aspiration, but it is also associated with dust exposure due to inhalation of tsunami mud residues. A study by Shiga et al conducted 2 years after tsunami found the decline in lung function FEV1 and FEV% in the group who survived the tsunami, compared with those who's not experiencing a tsunami. Decline in lung function occurs due to blockage of peripheral airways, as well as due to fibrosis of the bronchial walls, alveolar walls and interstitium.

To reduce risk, people who carry out activities in areas that have experienced tsunami are required to anticipate the use of masks for personal protective equipment, as well as regular lung function examination. In areas that are demographically described as high risk areas of earthquakes and tsunami, readiness for possibilities that can occur in the lower respiratory tract is a necessity in pre and post-disaster mitigation.

SUMMARY

Tsunami lung is a lung disorder associated with the effects of a tsunami on the lungs, including aspiration of chemicals and bacterial pneumonia caused by the *tsunami*. Pneumonia risk and death caused by *tsunami lung* increased up to two-fold, especially in the coastal areas of society. Apart from the direct result, the long-term *tsunami lung* can be a decrease in lung function. In areas with high risk of tsunami, anticipation of pre and post-disaster needs to be anticipated against complications arising from the lower respiratory system.

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Welcome to


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Jakarta on August 13rd - 15th, 2020

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Apartment Menteng Square 3rd Floor Tower BO 55-56
Jl. Matraman Raya No. 30 E Central Jakarta-INDONESIA
Phone: (62-21) 2961 4273 ; 2961 4274 | Fax: (62-21) 2961 4274
Handphone: 0813 8200 8877 ; 0857 1933 5220
Email: info.respina@yahoo.com | info.respina.indonesia@gmail.com
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