



Mitra  
Keluarga



KEMENTERIAN  
KESEHATAN  
REPUBLIK  
INDONESIA



LI DIKTI 3



THE UNIVERSITY OF  
SYDNEY



Chula  
Chulalongkorn University



臺北醫學大學  
TAIPEI MEDICAL UNIVERSITY



bkkbn



# PROCEEDINGS

**The 1st International Allied Health Student Conference  
(IAHSC) 2021**

**“The Role of Civitas Academica through Research and  
Community Engagement Results in the Enhancement of  
Multi-disciplinary Collaboration on Global Health  
Science”**



**Indonesia, September 14-15 2021**

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 **STIKes Mitra Keluarga**

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Mitra Press

## CONFERENCE PROGRAM

### THE 1<sup>ST</sup> INTERNATIONAL ALLIED HEALTH STUDENT CONFERENCE (IAHSC)

September 14-15<sup>th</sup>, 2021

#### Program Schedule

Tuesday September 14<sup>th</sup> 2021

Time*	Program
08.00-08.30	Registration
08.30-09.00	<p>Opening and Welcome Remarks:</p> <ol style="list-style-type: none"> <li>Singing National Anthem: Indonesia Raya</li> <li>Committee Chair's Report</li> <li>Welcoming Message from the Head of Center of Research and Community Engagement of STIKes Mitra Keluarga.</li> <li>Opening by the Head of STIKes Mitra Keluarga.</li> </ol>
09.00-09.30	<p><b>“Future of Health Policy in Indonesia”</b>            Ir. <i>Budi Gunadi Sadikin</i>, CHFC, CLU.            (Indonesian Minister of Health)</p>
09.30-09.45	Q&A Session
09.45-10.15	<p><b>“Future of Research and Community Engagement in Indonesia”</b>            Nadiem Anwar Makarim, M.B.A            (Indonesian Minister of Education and Culture)</p>
10.15-10.30	Q&A Session
10.30-11.00	<p><b>“Trend &amp; Issues on Interprofessional Health Research Collaboration”</b>            Dr. dr. Yuda Turana, Sp.S.            (Atma Jaya Chatolic University)</p>
11.00-11.15	Q&A Session
11.15-11.45	<p><b>“The Role of Nurses in Interprofesional Collaborations on Education and Research in NCD as a COVID-19 Comorbid”</b>            Prof. Datuk Dr. Hj. Bibi Florina            (Lincoln University College, Malaysia)</p>
11.45-12.00	Q&A Session

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12.00-13.00	Lunch Break
13.00-13.30	<b>“Current Dietary Patterns in Diabetes Mellitus Management”</b> Assistant Professor Dr. Suwimol Sapwarobol, RDN (Chulalongkorn University, Thailand)
13.30-13.45	Q&A Session
13.45-14.15	<b>“Detections and Hematological Impact in COVID-19 Patients in Taiwan”</b> Assistant Professor Jungshan Chang Ph.D. (Taipei Medical University, Taiwan)
14.15-14.30	Q&A Session
14.30-15.00	<b>“Therapeutic Drug Monitoring in Infectious Diseases”</b> Prof. Jan-Willem Alffenaar, PhD, PharmD. (The University of Sidney, Australia)
15.00-15.15	Q&A Session

**\*Program will be held at UTC+7/ Western Indonesia Time**

### Program Schedule

Wednesday September 15<sup>th</sup> 2021

Time	Program
08.30-09.00	Registration (On Breakout Room) Room 1: (Nursing)
09.00-11.00	<b>1. “The Role of Nurses on Interprofessional Collaboration in the 4th Industrial Revolution Era”</b> Dr. Arwani, SKM., BN.Hons., MN. (Politeknik Kesehatan Kemenkes Semarang)
	<b>2. “The Role of Higher Education in Enhancing Interprofessional Collaboration”</b> Dr. Susi Hartati, S.Kp., M.Kep., Sp.Kep.An. (Head of STIKes Mitra Keluarga, Indonesia)

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Room 2: (Nutrition)

09.00-11.00

1. **“Perspective and Strategy in the Food and Nutrition towards Prevention in Triple Burden Malnutrition in Indonesia”**

Prof. drh. M Rizal. M. Damanik, MRep.Sc, Ph.D

(IPB University/ Deputy of Research, Training, and Development of BKKBN)

2. **“A Review of Diet Quality Assessment in Nutrition Through Lifecycle”**

Arindah Nur Sartika, S.Gz., M.Gizi.

(Coordinator of STIKes Mitra Keluarga Nutrition Bachelor Program)

Room 3: (Pharmacy)

09.00-11.00

1. **“Development and Integration of Pharmacy Clinical Services in Indonesia”**

Prof. Dr. apt. Zullies Ikawati

(Gadjah Mada University)

2. **“High Performance Liquid Chromatography in Pharmaceutical Analysis”**

apt.Melania Perwitasari, M.Sc.

(Coordinator of STIKes Mitra Keluarga Pharmacy Bachelor Program)

Room 4: (Medical Laboratory)

09.00-11.00

1. **“Challenges, Opportunities, and Prospects for Medical Laboratory Competencies in Post COVID-19 Molecular Examinations”**

Dr. Miswar Fattah, M.Si.

(Vice-Chief of PATELKI)

2. **“Enzymes as Disease Diagnostic Tools”**

Siti Nurfajriah, S.Pd., M.Si.

(Coordinator of STIKes Mitra Keluarga Medical Laboratory)



Diploma Program)

<b>11.00-12.00</b>	Oral Presentation 1 <sup>st</sup> session:
	Room 1: Nursing
	Room 2: Nutrition
	Room 3: Pharmacy
	Room 4: Medical Laboratory Technology
<b>12.00-13.00</b>	Lunch Break
<b>13.00-14.00</b>	Oral Presentation 2 <sup>nd</sup> session:
	Room 1: Nursing
	Room 2: Nutrition
	Room 3: Pharmacy
	Room 4: Medical Laboratory Technology
<b>14.00-15.00</b>	Oral Presentation 3 <sup>rd</sup> session:
	Room 1: Nursing
	Room 2: Nutrition
	Room 3: Pharmacy
	Room 4: Medical Laboratory Technology
<b>15.00-16.00</b>	Oral Presentation 4 <sup>th</sup> session:
	Room 1: Nursing
	Room 2: Nutrition
	Room 3: Pharmacy
	Room 4: Medical Laboratory Technology
<b>16.00-16.30</b>	Closing Ceremony & Award for Best Presenter

**\*Program will be held at UTC+7/ Western Indonesia Time**





2004	The Illustration Grow Of Contaminant Fungi At White Bread Based On Temperature And Humidity (Niken Saymona Sari Susanti, Maulin Inggraini, Reza Anindita - STIKes Mitra Keluarga, West Java)	Niken Saymona Sari Susanti
<b>3<sup>rd</sup> SESSION (14.00-15.00 UTC+7/ Western Indonesia Time)</b>		
2005	Identification Of Formalin In Unbranded Wet Noodles At Traditional Markets Of Tambun Selatan Using Test Kit Methods And Uv-Vis Spectrophotometry (Wilis Rarabiella, Elfira Maya Sari M.Si, And Siti Nurfaejriah, S.Pd, M,Si - STIKes Mitra Keluarga, West Java)	Wilis Rarabiella
2006	Overview Of Bacterial Cause Urinary Tract Infections And Resistance Antibiotics A Hospital In Depok (Dedeh Indriyani, Maulin Inggraini, Reza Anindita - STIKes Mitra Keluarga, West Java)	Dedeh Indriyani
2007	Comparison Between Musca sp. And Chrysomya sp. As Carriers of Pathogenic Parasites in TPA Bantar Gebang, Indonesia (Alma Latipah, Reza Anindita, Maulin Inggraini - STIKes Mitra Keluarga, West Java)	Alma Latipah
<b>4<sup>th</sup> SESSION (15.00-16.00 UTC+7/ Western Indonesia Time)</b>		
2008	Profile Of Bacteria That Cause Urinary Tract Infection (UTI) And Patterns Of Antibiotic Resistance In 2019-2021 At North Jakarta Private Hospital (Euodia Naomi Septiana Siburian, Maulin Inggraini, Reza Anindita - STIKes Mitra Keluarga, West Java)	Euodia Naomi Septiana Siburian
2009	Potential Test Of Momordica Charantia Extract As Larvicidal Against Culex Sp Larvae (Rido Aji Alamsyah, Elfira Maya Sari, Reza Anindita - STIKes Mitra Keluarga, West Java)	Rido Aji Alamsyah
2010	Description Of Routine Hematological Tests And Ns1 Antigen In Dengue Fever Patients In Depok Private Hospitals (Eka Ristiani Sormin, Ria Amelia, Siti Nurfaejriah - STIKes Mitra Keluarga, West Java)	Eka Ristiani Sormin

## LIST OF ORAL PRESENTATION

### ROOM 3

CODE	ABSTRACT TITLE	PRESENTER
<b>1<sup>st</sup> SESSION (11.00-12.00 UTC+7/ Western Indonesia Time)</b>		
1008	The Effect Of Bay Leaf (Syzygium Polyanthum) In Reducing Uric Acid Levels (Ghitza Darisa Rizkia Ramadani, Sri Mintarsih, Anik Enikmawati - ITS PKU Muhammadiyah Surakarta, Central Java)	Anik Enikmawati, S.Kep.,Ns.,M.Kep
1012	The Effectiveness Of Oral Sucrose On Pain During Invasive Procedures In Premature Infants: Scoping Review (Kamilah Hayatun Nufus, Adinda Salsabilah, Nurul Aeni, Zakiyyah Arief Athsillah, Casman - STIKes Rs Husada, Jakarta)	Kamilah Hayatun Nufus
1021	Family Support Of Youth With Thalassemia (Dewi Rejeki, Yuli Utami, Sari Narulita, Nani Asna Dewi - Binawan University, Jakarta)	Yuli Utami

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### 2<sup>nd</sup> SESSION (13.00-14.00 UTC+7/ Western Indonesia Time)

- |      |  |                           |
|------|--|---------------------------|
| 1022 | The Effect Of Social Support On Perinatal Depression: Literature Review<br><i>(Lina Herida Pinem – STIKes Mitra Keluarga)</i>  | Lina Herida Pinem         |
| 1011 | The Determinant Of The Incident Of Hypertension In Balekambang Helath Center, Bendungan Village, Jonggol Sub - Distric, In The Year 2021<br><i>(Wati Jumaiyah, Siti Latifah - Muhammadiyah University Of Jakarta)</i>                                      | Siti Latifah              |
| 3001 | Formulation And Evaluation Of Gel Mask Peel Of Black Glutinous Rice ( <i>Oryza Sativa Var Glutinosa</i> ) Extract And Green Tea ( <i>Camelia Sinensis</i> ) Extract<br><i>(Ajeng Ayu Pebriani, Maya Uzia Beandrade - STIKes Mitra Keluarga, West Java)</i> | Ajeng Ayu Pebriani        |
| 3002 | Determiration Of Flavanoid Levels In Ethyl Acetate Extract Of Lime Peel ( <i>Citrus X Aurantiifolia (Christm.) Swingle</i> )<br><i>(Niken Kanti Putri Nastiti, Intan Kurnia Putri - STIKes Mitra Keluarga, West Java)</i>                                  | Niken Kanti Putri Nastiti |

### 3<sup>rd</sup> SESSION (14.00-15.00 UTC+7/ Western Indonesia Time)

- |      |   |                             |
|------|---|-----------------------------|
| 3003 | Analysis Of Caffeine Levels In Arabica Decaffeination Coffee ( <i>Coffea Arabica L.</i> ) And Robusta ( <i>Coffea Canephora</i> ) Sold On Marketplace A Using Uv-Vis Spectrophotometry Method<br><i>(Helviana Maria Christa Abur, Melania Perwitasari - STIKes Mitra Keluarga, West Java)</i> | Helviana Maria Christa Abur |
| 3004 | Appropriate Use Of Antidiabetic Drugs Evaluation In Type Ii Diabetes Mellitus Patients At Installation Of A Private Hospital In East Bekasi Region In 2020<br><i>(Febriana Lulu Safitri, apt. Wahyu Nuraini Hasmar, M. Farm. - STIKes Mitra Keluarga, West Java)</i>                          | Febriana Lulu Safitri       |
| 3005 | Appropriate Use Of Oral Antihypertensive Drugs Evaluation In Nondialysis Chronic Kidney Disease Patient Of Private Hospital In East Bekasi 2018-2020<br><i>(Sukma Widayani, Wahyu Nuraini Hasmar - STIKes Mitra Keluarga, West Java)</i>  | Sukma Widayani              |

### 4<sup>th</sup> SESSION (15.00-16.00 UTC+7/ Western Indonesia Time)

- |      |  |                   |
|------|--|-------------------|
| 3006 | Oral Antidiabetic Usage Evaluation In Type 2 Diabetes Mellitus In Patients Of Hospital X At East Bekasi Region Using Observational Description Method In 2019 – 2020<br><i>(Dilawati, Wahyu Nuraini Hasmar - STIKes Mitra Keluarga, West Java)</i> | Dilawati          |
| 3007 | Analysis Of Outpatient Satisfaction With Pharmaceutical Services At A Private Hospital Pharmacy Installation In East Bekasi<br><i>(Raju Sumanto, Dede Dwi Nathalia - STIKes Mitra Keluarga, West Java)</i>   | Raju Sumanto      |
| 3008 | Synergism Test Of Dates ( <i>Phoenix Dactylifera L.</i> ) And Raw Tempeh On Antioxidant Activity<br><i>(Aynna Sufana Rani, Intan Kurnia Putri - STIKes Mitra Keluarga, West Java)</i>  | Aynna Sufana Rani |
| 3009 | The Potency of Binahong Leaves Ethanolic Extract ( <i>Anredera cordifolia</i> ) as Inhibitor of <i>Staphylococcus aureus</i><br><i>(Mega Cahyani, Reza Anindita – STIKes Mitra Keluarga)</i>   | Mega Cahyani      |

## LIST OF ORAL PRESENTATION

### ROOM 4

Code	Abstract Title	Presenter
<b>1<sup>st</sup> SESSION (11.00-12.00 UTC+7/ Western Indonesia Time)</b>		
1010	The Effect Of Group Education Using Online Media On Self Care For Obese Among Students In Faculty Of Nursing Muhammadiyah Jakarta 2021 <i>(Fitrian Rayasari, Dhea Ananda Nur Afifah - Muhammadiyah University Of Jakarta)</i>	Dhea Ananda Nur Afifah
4001	Yoghurt Drinks Formulation With The Extract Of Avocado Seeds ( <i>Persea Americana</i> Mill) As A Functional Drink Source Of Antioxidants <i>(Christy Permata Putri, Afrinia Eka Sari - STIKes Mitra Keluarga, West Java)</i>	Christy Permata Putri
4002	The Relationship Between The Application Of The Gluten Free Casein Free Diet And The Physical Activity Of Children With Autism Spectrum Disorder <i>(Salma Faradhilla, Noerfitri - STIKes Mitra Keluarga, West Java)</i>	Salma Faradhilla
<b>2<sup>nd</sup> SESSION (13.00-14.00 UTC+7/ Western Indonesia Time)</b>		
4003	Dekazi Games As Interactive Nutrition Education Media For School-Age Children In Era 4.0 <i>(Sarah Alfiah, Bella Arinda Putri, Friesca Ayudya Aryanti, Rayhan Adam Savero, Vivi Yudha Nigrum, Nunung Cipta Dainy - Muhammadiyah University Of Jakarta)</i>	Sarah Alfiah
4004	Knowledge On Soft Drinks, Mass Media And The Peers Role And Its Relationship With The Habitual Consumption Of Soft Drinks Among High School Students In Bekasi <i>(Widya Merdika Liani, Guntari Prasetya - STIKes Mitra Keluarga, West Java)</i>	Widya Merdika Liani
4005	Relationship Between Knowledge On Soft Drinks And Consumption Of Iron Source-Containing Foods With Learning Achievement Of School Going Adolescent Girl In Bekasi <i>(Suci Putri Rahmadanti, Guntari Prasetya - STIKes Mitra Keluarga, West Java)</i>	Suci Putri Rahmadanti
4006	The Correlation Between Fat Intake And Stress Level Toward Menstrual Cycle Cycle On Female Students At Sman 107 Jakarta <i>(Juliana Sri Rejeki, Arindah Nur Sartika - STIKes Mitra Keluarga)</i>	Juliana Sri Rejeki
<b>3<sup>rd</sup> SESSION (14.00-15.00 UTC+7/ Western Indonesia Time)</b>		
4007	The Relationship Between Stress Levels And The Risk Of Eating Disorders With Eating Behavior Among Adolescents At Sma Islam Pb Soedirman Bekasi During The Covid-19 Pandemic <i>(Vebyana Aulia, Arindah Nur Sartika - STIKes Mitra Keluarga, West Java)</i>	Vebyana Aulia
4008	Effect Of Oral Nutrition Supplement Containing Tapioca Resistant Maltodextrin On Satiety, Hunger And Appetite In Healthy Adult <i>(Junaida Astina, Suwimol Sapwarobol - Chulalongkorn University,</i>	Junaida Astina

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Indonesia, September 14-15 2021



## CONFERENCE PROGRAM

### THE 1<sup>ST</sup> INTERNATIONAL ALLIED HEALTH STUDENT CONFERENCE (IAHSC)

September 14-15<sup>th</sup>, 2021

#### Program Schedule

Tuesday September 14<sup>th</sup> 2021

Time*	Program
08.00-08.30	Registration
08.30-09.00	<p>Opening and Welcome Remarks:</p> <ol style="list-style-type: none"> <li>Singing National Anthem: Indonesia Raya</li> <li>Committee Chair's Report</li> <li>Welcoming Message from the Head of Center of Research and Community Engagement of STIKes Mitra Keluarga.</li> <li>Opening by the Head of STIKes Mitra Keluarga.</li> </ol>
09.00-09.30	<p><b>“Future of Health Policy in Indonesia”</b>            Ir. <i>Budi Gunadi Sadikin</i>, CHFC, CLU.            (Indonesian Minister of Health)</p>
09.30-09.45	Q&A Session
09.45-10.15	<p><b>“Future of Research and Community Engagement in Indonesia”</b>            Nadiem Anwar Makarim, M.B.A            (Indonesian Minister of Education and Culture)</p>
10.15-10.30	Q&A Session
10.30-11.00	<p><b>“Trend &amp; Issues on Interprofessional Health Research Collaboration”</b>            Dr. dr. Yuda Turana, Sp.S.            (Atma Jaya Catholic University)</p>
11.00-11.15	Q&A Session
11.15-11.45	<p><b>“The Role of Nurses in Interprofesional Collaborations on Education and Research in NCD as a COVID-19 Comorbid”</b>            Prof. Datuk Dr. Hj. Bibi Florina            (Lincoln University College, Malaysia)</p>
11.45-12.00	Q&A Session

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12.00-13.00	Lunch Break
13.00-13.30	<b>“Current Dietary Patterns in Diabetes Mellitus Management”</b> Assistant Professor Dr. Suwimol Sapwarobol, RDN (Chulalongkorn University, Thailand)
13.30-13.45	Q&A Session
13.45-14.15	<b>“Detections and Hematological Impact in COVID-19 Patients in Taiwan”</b> Assistant Professor Jungshan Chang Ph.D. (Taipei Medical University, Taiwan)
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15.00-15.15	Q&A Session

**\*Program will be held at UTC+7/ Western Indonesia Time**

### Program Schedule

Wednesday September 15<sup>th</sup> 2021

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08.30-09.00	Registration (On Breakout Room) Room 1: (Nursing)
09.00-11.00	<b>1. “The Role of Nurses on Interprofessional Collaboration in the 4th Industrial Revolution Era”</b> Dr. Arwani, SKM., BN.Hons., MN. (Politeknik Kesehatan Kemenkes Semarang)
	<b>2. “The Role of Higher Education in Enhancing Interprofessional Collaboration”</b> Dr. Susi Hartati, S.Kp., M.Kep., Sp.Kep.An. (Head of STIKes Mitra Keluarga, Indonesia)

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Room 2: (Nutrition)

09.00-11.00

1. **“Perspective and Strategy in the Food and Nutrition towards Prevention in Triple Burden Malnutrition in Indonesia”**

Prof. drh. M Rizal. M. Damanik, MRep.Sc, Ph.D

(IPB University/ Deputy of Research, Training, and Development of BKKBN)

2. **“A Review of Diet Quality Assessment in Nutrition Through Lifecycle”**

Arindah Nur Sartika, S.Gz., M.Gizi.

(Coordinator of STIKes Mitra Keluarga Nutrition Bachelor Program)

Room 3: (Pharmacy)

09.00-11.00

1. **“Development and Integration of Pharmacy Clinical Services in Indonesia”**

Prof. Dr. apt. Zullies Ikawati

(Gadjah Mada University)

2. **“High Performance Liquid Chromatography in Pharmaceutical Analysis”**

apt.Melania Perwitasari, M.Sc.

(Coordinator of STIKes Mitra Keluarga Pharmacy Bachelor Program)

Room 4: (Medical Laboratory)

09.00-11.00

1. **“Challenges, Opportunities, and Prospects for Medical Laboratory Competencies in Post COVID-19 Molecular Examinations”**

Dr. Miswar Fattah, M.Si.

(Vice-Chief of PATELKI)

2. **“Enzymes as Disease Diagnostic Tools”**

Siti Nurfajriah, S.Pd., M.Si.

(Coordinator of STIKes Mitra Keluarga Medical Laboratory)



Diploma Program)

<b>11.00-12.00</b>	Oral Presentation 1 <sup>st</sup> session:
	Room 1: Nursing
	Room 2: Nutrition
	Room 3: Pharmacy
	Room 4: Medical Laboratory Technology
<b>12.00-13.00</b>	Lunch Break
<b>13.00-14.00</b>	Oral Presentation 2 <sup>nd</sup> session:
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	Room 2: Nutrition
	Room 3: Pharmacy
	Room 4: Medical Laboratory Technology
<b>14.00-15.00</b>	Oral Presentation 3 <sup>rd</sup> session:
	Room 1: Nursing
	Room 2: Nutrition
	Room 3: Pharmacy
	Room 4: Medical Laboratory Technology
<b>15.00-16.00</b>	Oral Presentation 4 <sup>th</sup> session:
	Room 1: Nursing
	Room 2: Nutrition
	Room 3: Pharmacy
	Room 4: Medical Laboratory Technology
<b>16.00-16.30</b>	Closing Ceremony & Award for Best Presenter

**\*Program will be held at UTC+7/ Western Indonesia Time**

## LIST OF ORAL PRESENTATION

### ROOM 1

Code	Abstract Title	Presenter
<b>1<sup>st</sup> SESSION (11.00-12.00 UTC+7/ Western Indonesia Time)</b>		
1001	The Effectiveness Of Hypnosis In Nursing Implementation <i>(Anggun Afriyanti, Iftitakhun Ni'mah, Nur Maini, Yeni Suryani, Yuli Irma, Anung Ahadi Pradana – STIKes Mitra Keluarga)</i>	Anggun Afriyanti
1002	Improving Public Awareness On Peritoneal Dialysis Through Public Health Nurses In Aceh: A Swot Analysis <i>(Ridha Afzal, Syaifoel Hardy, Isak J.H.Tukayo - Indonesian Nursing Trainer; Poltekkes Kemenkes Jayapura)</i>	Ridha Afzal
1004	Students' Knowledge Of Covid-19 Positive Postpartum Mothers' Care <i>(Suryani Hartati - Akademi Keperawatan Hermina Manggala Husada, Jakarta)</i>	Suryani Hartati
1005	The Effectiveness Of Autogenic Relaxation On Patient's Anxiety <i>(Noviyana Prasasti, Welmi Solihat, Rani Waily, Ruth Alferina, Diana Solla, Anung Ahadi Pradana - STIKes Mitra Keluarga, West Java)</i>	Diana Solla Skriptura
<b>2<sup>nd</sup> SESSION (13.00-14.00 UTC+7/ Western Indonesia Time)</b>		
1006	Factors Affecting Family Knowledge On Hypertension Disease: A Narrative Review <i>(Eka Rachmawati, Fitria Rahmadhani, Mahfuhatur Rizqi Ananda, Shifa Salsabillah S., Anung Ahadi Pradana - STIKes Mitra Keluarga, West Java)</i>	Eka Rachmawati
1007	Giving Commitment Acceptance Therapy And Family Psychoeducation In Caring For Clients With Ineffective Health Care Using Watson Theory Approach <i>(Suyatno, Herni Susanti, Giur Hargiana - Dr. Arif Zainudin Psychiatric Hospital, Central Java)</i>	Suyatno
1009	The Factors That Affect Of Sleep Quality For Nursing Students Bachelor Of Nursing At The Faculty Of Nursing Science Muhammadiyah University Jakarta In 2021 <i>(Naryati, Ramdhaniyah - Muhammadiyah University Of Jakarta)</i>	Ramdhaniyah
1013	Risk Of Post-Stroke Pneumonia During Hospitalization <i>(Juliana G.E.P Massie, Ratna Sitorus, I Made Kariasa, Yunisar Gultom, Maya Khairani, Noor Wulandari - Universitas Indonesia Hospital, West Java)</i>	Juliana G.E.P Massie
<b>3<sup>rd</sup> SESSION (14.00-15.00 UTC+7/ Western Indonesia Time)</b>		
1016	Relation Between Physical Activity And Blood Pressure In Patients With Hypertension <i>(Melani Shaputri, Solha Elrifda, Kaimuddin, Ismail Fahmi - Polytechnic Health Minister Of Jambi, Jambi)</i>	Melani Shaputri
1017	Can Zinc Consumption Reduce Dysgeusia Symptoms In Covid-19 Patients ? : A Narrative Review <i>(Lasro Theresia Siburian, Regina S.Turnip, Ismail Fahmi - Polytechnic Health Minister Of Jambi, Jambi)</i>	Lasro Theresia Siburian
1018	Mental Health Nursing Practice In Supporting The Task Of Indonesian National Army : Literature Review <i>(Alfunafi' Fahrul Rizzal, Miftakhul Ilmi, Yudha Wastu Wicaksono, Indari - Itsk Rs Dr. Soepraoen, Malang, East Java)</i>	Miftakhul Ilmi

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2006	Overview Of Bacterial Cause Urinary Tract Infections And Resistance Antibiotics A Hospital In Depok ( <i>Dedeh Indriyani, Maulin Inggraini, Reza Anindita - STIKes Mitra Keluarga, West Java</i> )	Dedeh Indriyani
2007	Comparison Between Musca sp. And Chrysomya sp. As Carriers of Pathogenic Parasites in TPA Bantar Gebang, Indonesia ( <i>Alma Latipah, Reza Anindita, Maulin Inggraini - STIKes Mitra Keluarga, West Java</i> )	Alma Latipah
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2009	Potential Test Of Momordica Charantia Extract As Larvicidal Against Culex Sp Larvae ( <i>Rido Aji Alamsyah, Elfira Maya Sari, Reza Anindita - STIKes Mitra Keluarga, West Java</i> )	Rido Aji Alamsyah
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## LIST OF ORAL PRESENTATION

### ROOM 3

CODE	ABSTRACT TITLE	PRESENTER
<b>1<sup>st</sup> SESSION (11.00-12.00 UTC+7/ Western Indonesia Time)</b>		
1008	The Effect Of Bay Leaf ( <i>Syzygium Polyanthum</i> ) In Reducing Uric Acid Levels ( <i>Ghitza Darisa Rizkia Ramadani, Sri Mintarsih, Anik Enikmawati - ITS PKU Muhammadiyah Surakarta, Central Java</i> )	Anik Enikmawati, S.Kep.,Ns.,M.Kep
1012	The Effectiveness Of Oral Sucrose On Pain During Invasive Procedures In Premature Infants: Scoping Review ( <i>Kamilah Hayatun Nufus, Adinda Salsabilah, Nurul Aeni, Zakiyyah Arief Athsillah, Casman - STIKes Rs Husada, Jakarta</i> )	Kamilah Hayatun Nufus
1021	Family Support Of Youth With Thalassemia ( <i>Dewi Rejeki, Yuli Utami, Sari Narulita, Nani Asna Dewi - Binawan University, Jakarta</i> )	Yuli Utami

The 1st International Allied Health Student Conference (IAHSC) 2021  
Indonesia, September 14-15 2021



## LIST OF ORAL PRESENTATION

### ROOM 4

Code	Abstract Title	Presenter
<b>1<sup>st</sup> SESSION (11.00-12.00 UTC+7/ Western Indonesia Time)</b>		
1010	The Effect Of Group Education Using Online Media On Self Care For Obese Among Students In Faculty Of Nursing Muhammadiyah Jakarta 2021 <i>(Fitrian Rayasari, Dhea Ananda Nur Afifah - Muhammadiyah University Of Jakarta)</i>	Dhea Ananda Nur Afifah
4001	Yoghurt Drinks Formulation With The Extract Of Avocado Seeds ( <i>Persea Americana</i> Mill) As A Functional Drink Source Of Antioxidants <i>(Christy Permata Putri, Afrinia Eka Sari - STIKes Mitra Keluarga, West Java)</i>	Christy Permata Putri
4002	The Relationship Between The Application Of The Gluten Free Casein Free Diet And The Physical Activity Of Children With Autism Spectrum Disorder <i>(Salma Faradhilla, Noerfitri - STIKes Mitra Keluarga, West Java)</i>	Salma Faradhilla
<b>2<sup>nd</sup> SESSION (13.00-14.00 UTC+7/ Western Indonesia Time)</b>		
4003	Dekazi Games As Interactive Nutrition Education Media For School-Age Children In Era 4.0 <i>(Sarah Alfiah, Bella Arinda Putri, Friesca Ayudya Aryanti, Rayhan Adam Savero, Vivi Yudha Nigrum, Nunung Cipta Dainy - Muhammadiyah University Of Jakarta)</i>	Sarah Alfiah
4004	Knowledge On Soft Drinks, Mass Media And The Peers Role And Its Relationship With The Habitual Consumption Of Soft Drinks Among High School Students In Bekasi <i>(Widya Merdika Liani, Guntari Prasetya - STIKes Mitra Keluarga, West Java)</i>	Widya Merdika Liani
4005	Relationship Between Knowledge On Soft Drinks And Consumption Of Iron Source-Containing Foods With Learning Achievement Of School Going Adolescent Girl In Bekasi <i>(Suci Putri Rahmadanti, Guntari Prasetya - STIKes Mitra Keluarga, West Java)</i>	Suci Putri Rahmadanti
4006	The Correlation Between Fat Intake And Stress Level Toward Menstrual Cycle Cycle On Female Students At Sman 107 Jakarta <i>(Juliana Sri Rejeki, Arindah Nur Sartika - STIKes Mitra Keluarga)</i>	Juliana Sri Rejeki
<b>3<sup>rd</sup> SESSION (14.00-15.00 UTC+7/ Western Indonesia Time)</b>		
4007	The Relationship Between Stress Levels And The Risk Of Eating Disorders With Eating Behavior Among Adolescents At Sma Islam Pb Soedirman Bekasi During The Covid-19 Pandemic <i>(Vebyana Aulia, Arindah Nur Sartika - STIKes Mitra Keluarga, West Java)</i>	Vebyana Aulia
4008	Effect Of Oral Nutrition Supplement Containing Tapioca Resistant Maltodextrin On Satiety, Hunger And Appetite In Healthy Adult <i>(Junaida Astina, Suwimol Sapwarobol - Chulalongkorn University,</i>	Junaida Astina

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Indonesia, September 14-15 2021





## PROCEEDINGS

**THE 1<sup>st</sup> INTERNATIONAL ALLIED HEALTH STUDENT CONFERENCE 2021**  
**'THE ROLE OF CIVITAS ACADEMICA THROUGH RESEARCH AND**  
**COMMUNITY ENGAGEMENT RESULTS IN THE ENHANCEMENT OF**  
**MULTIDISCIPLINARY COLLABORATION ON GLOBAL HEALTH SCIENCE'**

**SEPTEMBER 14-15, 2021**

**BEKASI, INDONESIA**

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**The 1st International Allied Health Student Conference (IAHSC) 2021**  
**Indonesia, September 14-15 2021**





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*Mitra Keluarga has successfully built a hospital network that is trusted by Indonesian families today. After more than thirty-two years of serving Indonesian families, we have dealt with the dynamics of providing healthcare services that challenge us to continuously improve ourselves. We believe, our commitment to 'touch' and bring a life 'family' in Mitra Keluarga, made us beyond just a hospital.*

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- Neurosurgery ● Orthopedic Center ● Pain Clinic ● Aesthetic Plastic Surgery
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- Laser Surgery ● Allergy ● Immunology ● Breast Surgery ● Interventional Cardiovascular
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- Gastroenterology & Hepatology ● Geriatrics ● Hemato & Oncology ● Interventional Radiology
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Kalideres | Kelapa Gading | Kemayoran | Kenjeran | Jatiasih | Pondok Tjandra | Surabaya | Tegal | Waru



## Welcome Message from the Organising Chair



Greetings to all, on behalf of the organizing committee, I am delighted to welcome you to the 1<sup>st</sup> International Allied Health Student Conference (IAHSC) 2021 from September 14-15 2021. I hope you will enjoy our two days of virtual experiences on the theme “The Role of Civitas Academica through Research and Community Engagement Results in the Enhancement of Multidisciplinary Collaboration on Global Health Sciences”.

In the past decade, Indonesian Higher Education has become a center for the development of science and technology. As written in Indonesian Law no.12 of 2012 about Higher Education that higher education has an academic responsibility to the community through the implementation of the Tri Darma of Higher Education which includes education, research, and community engagement. Higher Education need to pay attention to the quality of the implementation of the Tri Darma that is carried out by the academic communities of each university. The academic community as a scientist is tasked with developing a branch of science and/or technology through scientific research and disseminating it. As individuals or groups, the academic community is obliged to write articles/ textbooks published by universities and/or scientific publications as a source of learning, for the development of academic culture and writing activities for other academicians and members of society.

The lack of a forum that can accommodate the various ideas of the academic community in the form of research results and community engagement results is one of the reasons for the not optimal scientific output produced by students. Based on this, the team of the Center for Research & Community Engagement (P3M) STIKes Mitra Keluarga aims to organize the 1st international Allied Health Student Conference (IAHSC) which can accommodate the results of scientific results from the health academics in particular.

As the organizing chair, I humbly acknowledge the dedication and commitment of many people who have worked together in making this event a success. Most of all, I appreciate the participants and our distinguished speakers for enriching this conference with your presence. Thank you very much.

Best Wishes,

Ns.Anung Ahadi Pradana, M.Kep., Sp.Kep.Kom.

Organizing Chairperson The 1<sup>st</sup> IAHSC 2021

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## Welcome Message from the Head of Center of Research & Community Engagement

Dear Colleagues,

On behalf of Center of Research and Community Engagement STIKes Mitra Keluarga, it is our great pleasure to welcome you to the 1<sup>st</sup> International Allied Health Students Conference (IAHSC) 2021 that will be held in virtual meeting from 14-15 September 2021. The aims of this conference are to delivery output of scientific research from student researcher and lecturer in the field of health.



Nowadays the coronavirus pandemic has caused many problems in the world especially in health problem, economi, etc. All over the world we are seeing the devastating impact of the invisible killer.Unfortunately technology can help lecture,student and researcher sharing knowledge from virtual.The sharing of knowledge is just as important as receiving it because without sharing knowledge has no value.In this Occasion we like to say thank you for the presenter who have submitted their article and for the participant who join in this conference. We also like to say thanks to keynote speaker and speaker.In this conference there are four areas of health will be present : nutrition.phamacist,nursing and technology laboratory of medic. There will be many result of research that can be listened and watched in this event which will certainly add our knowledge and insight.

It is an honor to our colleagues that has been able to join this event, we are hope this event can give information that useful for the public and this annual can trigger collaboration between higher education institution, especially in the field of research.


We welcome all of you to this meeting where you can share knowledge, friendship and leave an unforgettable memory in your life.

Kind Regards,

Afrinia Eka Sari, S.TP., M.Si.

Head of Center of Research and Community Engagement STIKes Mitra Keluarga

## Welcome Message from the Head of STIKes Mitra Keluarga



It is my great pleasure to welcome you to the 1<sup>st</sup> International Allied Health Student Conference. In these unprecedented times, nothing is more important to us than the health and safety of our members, families and the communities we serve. While we regret that the COVID-19 pandemic prevent us from holding the conference in Bekasi, Indonesia, we are excited about the opportunities of holding an innovative virtual conference. For our first conference, holding it virtually will

be a great opportunity for us to explore **‘The Role of Civitas Academica through Research and Community Engagement Results in the Enhancement of Multidisciplinary Collaboration on Global Health Science’** as well as using digital and social media during pandemic to reach a wide audience across the world.

I believe this conference will be continuously serves as a meeting platform for researchers, academician, health practitioners and students from around the world. I also credit this conference to be one of the media to discuss and share current topics in scientific development, especially in the area of Nursing Science, Nutrition Science, Medical Laboratory Technology and Pharmaceutical science. It presents a remarkable opportunity to exchange knowledge in many aspects and to create and renew a global network of colleagues. Our committees are already at work to find ways to create an exceptional virtual experience like no other through this challenging period.

Furthermore, I would also like to thank all the authors, keynote speakers and panellists for making great effort of sharing innovative minds and research results, and to all the participants, academic and industry communities.

Last but not least, I would like to express many sincere and special thanks to the IAHS 2021 Organizing Committee for their devotion, vision, courage, passion and constant effort to make this conference a success.

We are looking forward to warmly welcome you to the IAHS 2021 Conference.

Best Regards,

Dr. Susi Hartati, S.Kp., M.Kep., Sp.Kep.An.

Head of STIKes Mitra Keluarga

## THE BOARDS

### Advisory Board

- 1) **Head of STIKes Mitra Keluarga, Dr. Susi Hartati, S.Kp., M.Kep., Sp.Kep.An.**
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- 8) **Reyna Mayang (Nutrition Bachelor Program)**
- 9) **Mia Zulfa Safitri (Nursing Bachelor Program)**



## THE SPEAKERS



**Dr. Sugiyanto, S.Pd., M.App.Sc.**  
(Head of Center of HRH Education, Indonesian Ministry of Health)



**Prof. Dr. Agus Setyo Budi, M.Sc.**  
(Head of the Agency for Higher Education Services of Region III Jakarta)



**Prof. Datuk Dr. Hjh. Bibi Florina**  
(Lincoln University College Malaysia)



**Associate Prof. Jungshan Chang Ph.D**  
(Taipei Medical University, Taiwan)



**Prof. Jan-Willem Alffenaar, PhD, PharmD**  
(The University of Sydney)



**Assistant Prof. Dr. Suwimol Sapwarobol, RDN**  
(Chulalongkorn University, Thailand)



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(IPB University, Deputy for Training, Research and Development BKKBN)



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**Dr. Susi Hartati, S.Kp., M.Kep., Sp.Kep.An.**  
(Head of STIKes Mitra Keluarga)



**Dr. Arwani, SKM, BN, Hons. MN.**  
(Poltekkes Semarang)



**apt. Melania Perwitasari, M.Sc.**  
(Pharmacy Bachelor Program, STIKes Mitra Keluarga)



**Siti Nurfajriah, S.Pd., M.Si.**  
(Medical Laboratory Technology Diploma Program, STIKes Mitra Keluarga)



**Arindah Nur Sartika, S.Gz., M.Gizi**  
(Nutrition Bachelor Program, STIKes Mitra Keluarga)

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Indonesia, September 14-15 2021

## ABOUT ORGANIZER

### SEKOLAH TINGGI ILMU KESEHATAN (STIKES) MITRA KELUARGA

Mitra Keluarga Education Foundation is under the auspices of the Mitra Keluarga Hospital Group which has a hospitals network spread across DKI Jakarta, West Java, Central Java, and East Java. To meet the needs of health workers in the Mitra Keluarga Hospital Group, in 1993 the Mitra Keluarga Education Foundation proposed the establishment of higher education in the health sector to the Ministry of Health with a license to provide a Diploma III Nursing education called the Mitra Keluarga Nursing Academy (AKMK).

In 2014, AKMK has changed its form to the School of Health Sciences (STIKes) which organizes 3 study programs, namely: Nursing Study Diploma Program, Health Analyst Diploma, and Nutrition Science Bachelor Degree. In further development, STIKes obtained a permit for the addition of a Bachelor of Pharmacy study program in 2016, and in 2017 obtained a permit to administer a Bachelor of Nursing + Nursing Profession (Ners) study program. So that until now there are 6 (six) study programs owned by STIKes Mitra Keluarga.

The values and culture of the work environment that are applied in the form of actions and behavior of every STIKes Mitra Keluarga human resource are Honesty, Integrity, Tolerance, Scientific, Innovative, Responsibility, and Obedience to the Principles. STIKes Mitra Keluarga has a motto: "The Best Health Education for Your Bright Future".



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## CONFERENCE PROGRAM

### THE 1<sup>ST</sup> INTERNATIONAL ALLIED HEALTH STUDENT CONFERENCE (IAHSC)

September 14-15<sup>th</sup>, 2021

#### Program Schedule

Tuesday September 14<sup>th</sup> 2021

Time*	Program
08.00-08.30	Registration
	Opening and Welcome Remarks:
	a. Singing National Anthem: Indonesia Raya
	b. Committee Chair's Report
08.30-09.00	c. Welcoming Message from the Head of Center of Research and Community Engagement of STIKes Mitra Keluarga.
	d. Opening by the Head of STIKes Mitra Keluarga.
	<b>“Future of Health Policy in Indonesia”</b>
09.00-09.30	Dr. Sugiyanto, S.Pd., M.App.Sc. (Center for Human Resource for Health Education, Ministry of Health)
09.30-09.45	Q&A Session
	<b>“Future of Research and Community Engagement in Indonesia”</b>
09.45-10.15	Prof. Dr. Agus Setyo Budi, M.Sc. (Head of the Agency for Higher Education Services of Region III Jakarta)
10.15-10.30	Q&A Session
	<b>“Trend &amp; Issues on Interprofessional Health Research Collaboration”</b>
10.30-11.00	Dr. dr. Yuda Turana, Sp.S. (Atma Jaya Chatolic University)
11.00-11.15	Q&A Session
	<b>“The Role of Nurses in Interprofesional Collaborations on Education and Research in NCD as a COVID-19 Comorbid”</b>
11.15-11.45	Prof. Datuk Dr. Hjh. Bibi Florina (Lincoln University College, Malaysia)

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11.45-12.00	Q&A Session
12.00-13.00	Lunch Break
13.00-13.30	<p><b>“Current Dietary Patterns in Diabetes Mellitus Management”</b></p> <p>Assistant Professor Dr. Suwimol Sapwarobol, RDN (Chulalongkorn University, Thailand)</p>
13.30-13.45	Q&A Session
13.45-14.15	<p><b>“Detections and Hematological Impact in COVID-19 Patients in Taiwan”</b></p> <p>Assistant Professor Jungshan Chang Ph.D. (Taipei Medical University, Taiwan)</p>
14.15-14.30	Q&A Session
14.30-15.00	<p><b>“Therapeutic Drug Monitoring in Infectious Diseases”</b></p> <p>Prof. Jan-Willem Alffenaar, PhD, PharmD. (The University of Sydney, Australia)</p>
15.00-15.15	Q&A Session

**\*Program will be held at UTC+7/ Western Indonesia Time**

### Program Schedule

Wednesday September 15<sup>th</sup> 2021

Time	Program
08.30-09.00	<p>Registration</p> <p>(On Breakout Room)</p> <p>Room 1: (Nursing)</p> <p><b>1. “The Role of Nurses on Interprofessional Collaboration in the 4th Industrial Revolution Era”</b></p> <p>Dr. Arwani, SKM., BN.Hons., MN. (Politeknik Kesehatan Kemenkes Semarang)</p>
09.00-11.00	<p><b>2. “The Role of Higher Education in Enhancing Interprofessional Collaboration”</b></p> <p>Dr. Susi Hartati, S.Kp., M.Kep., Sp.Kep.An. (Head of STIKes Mitra Keluarga, Indonesia)</p>

Room 2: (Medical Laboratory Technology)

09.00-11.00

1. **“Challenges, Opportunities, and Prospects for Medical Laboratory Competencies in Post COVID-19 Molecular Examinations”**

Dr. Miswar Fattah, M.Si.  
(Vice-Chief of PATELKI)

2. **“Enzymes as Disease Diagnostic Tools”**

Siti Nurfajriah, S.Pd., M.Si.  
(Coordinator of STIKes Mitra Keluarga Medical Laboratory Diploma Program)

Room 3: (Pharmacy)

09.00-11.00

1. **“The Role of Clinical Pharmacy in Precision Medicine”**

Prof. Dr. apt. Zullies Ikawati  
(Gadjah Mada University)

2. **“High Performance Liquid Chromatography in Pharmaceutical Analysis”**

apt.Melania Perwitasari, M.Sc.  
(Coordinator of STIKes Mitra Keluarga Pharmacy Bachelor Program)

Room 4: (Nutrition)

09.00-11.00

1. **“Perspective and Strategy in the Food and Nutrition towards Prevention in Triple Burden Malnutrition in Indonesia”**

Prof. drh. M Rizal. M. Damanik, MRep.Sc, Ph.D  
(IPB University/ Deputy of Research, Training, and Development of BKKBN)

2. **“A Review of Diet Quality Assessment in Nutrition Through Lifecycle”**

Arindah Nur Sartika, S.Gz., M.Gizi.  
(Coordinator of STIKes Mitra Keluarga Nutrition Bachelor Program)

<b>11.00-12.00</b>	Oral Presentation 1 <sup>st</sup> session:	
	Room 1: Nursing	
	Room 2: Medical Laboratory Technology	
	Room 3: Pharmacy	
<b>12.00-13.00</b>	Room 4: Nutrition	
	Lunch Break	
	<b>13.00-14.00</b>	Oral Presentation 2 <sup>nd</sup> session:
		Room 1: Nursing
Room 2: Medical Laboratory Technology		
Room 3: Pharmacy		
<b>14.00-15.00</b>	Room 4: Nutrition	
	Oral Presentation 3 <sup>rd</sup> session:	
	Room 1: Nursing	
	Room 2: Medical Laboratory Technology	
<b>15.00-16.00</b>	Room 3: Pharmacy	
	Room 4: Nutrition	
	Oral Presentation 4 <sup>th</sup> session:	
	Room 1: Nursing	
<b>16.00-16.30</b>	Room 2: Medical Laboratory Technology	
	Room 3: Pharmacy	
	Room 4: Nutrition	
	Closing Ceremony & Award for Best Presenter	

**\*Program will be held at UTC+7/ Western Indonesia Time**



# ABSTRACTS

The 1st International Allied Health Student Conference (IAHSC) 2021  
Indonesia, September 14-15 2021



## ANALYSIS OF THE PHYSICAL HOME ENVIRONMENT AND COMMUNITY BEHAVIOR TOWARDS INCIDENCE OF DENGUE HEMORRHAGIC FEVER IN RIAU PROVINCE

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### Abstract

Dengue Hemorrhagic Fever (DHF) is still a health problem in Meranti Islands Regency. There has been an increase of 15-25% of cases every year since 2017-2019. Determine the correlation between the physical home environment and community behavior towards DHF incidence which include: ventilation, air temperature, water reservoirs, knowledge, and attitudes. It was observational analytic with a cross-sectional design. This research was conducted for three months (February-April 2020). The research subject was 94 samples were selected by the purposive sampling technique. The research instrument was a structured questionnaire and observation sheet. Data analysis using Chi-square test. There were 49 (53.3%) cases of DHF with the physical home environment that was not following the health standards, namely: ventilation (bad=70.7%), air temperature (bad=77.2%), water reservoirs (bad=59.8%), knowledge (low=55.4%), and attitude (negative=55.4%). There was a significant correlation between ventilation ( $p=0,002$ ), air temperature ( $p=0,020$ ), water reservoirs ( $p=0,027$ ), knowledge ( $p=0,008$ ), and attitudes ( $p=0,000$ ) toward incidence of DHF ( $p$ -value  $<0.05$ ). The physical home environment and community behavior are related to DHF incidence. Good coordination between health promotion team, local government in providing health education and socialization of healthy homes by empowering local communities.

Keywords: Community behavior, Dengue Hemorrhagic Fever, Physical home environment

### Reference

- Departemen Kesehatan R.I. 2007. Direktorat Jenderal Pengendalian Penyakit dan Penyehatan Lingkungan (DIT.JEN. PP & PL). Survei Entomologi Demam Berdarah Dengue, Jakarta
- Dinas Kesehatan Provinsi Riau. 2019. Profil Kesehatan 2019.
- Fauji, R.R. 2020. Hubungan Sanitasi Lingkungan Dan Perilaku Masyarakat Terhadap Kejadian Penyakit Demam Berdarah Dengue di Wilayah Kerja Puskesmas Dirgahayu Kabupaten Kotabaru Tahun 2020. Fakultas Kesehatan Masyarakat Banjarmasin. UNISKA. 1-8
- Ghina, D.F, Anwar, C. 2017. Hubungan Faktor Lingkungan Fisik Rumah Dengan Kejadian Penyakit Demam Berdarah Dengue (DBD) Di Wilayah Puskesmas Cilacap Selatan di Kabupaten Cilacap Tahun 2016. *Buletin Kesehatan Lingkungan Masyarakat*. 36(1); 35-41
- Gupta N, Srivastava S, Jain A, Chaturvedi UC. 2012. Dengue in India. *Indian J Med Res*. 136(3):373-390.
- Ipa M. Laksono. A.D.2014. Analisis Potensi Promosi Pengendalian Penyakit Demam Berdarah Dengue Melalui Youtube. *Buletin Penelitian Sistem Kesehatan*. 2014; 17(1) 97-106
- Etc.



## ANALYSIS OF THE PHYSICAL HOME ENVIRONMENT AND COMMUNITY BEHAVIOR TOWARDS INCIDENCE OF DENGUE HEMORRHAGIC FEVER IN RIAU PROVINCE

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### Abstract

**Introduction:** Dengue Hemorrhagic Fever (DHF) is still a health problem in Meranti Islands Regency. There has been an increase of 15-25% of cases every year since 2017-2019. The purpose of this study is to determine the correlation between the physical home environment and community behavior towards DHF incidence which include: ventilation, air temperature, water reservoirs, knowledge, and attitudes.

**Method:** It was observational analytic with a cross-sectional design. This research was conducted for three months (February-April 2020). The research subject was 92 samples were selected by the purposive sampling technique. The research instrument was a structured questionnaire and observation sheet. Data analysis using Chi-square test.

**Results:** There were 49 (53.3%) cases of DHF with the physical home environment that was not following the health standards, namely: ventilation (bad=70.7%), air temperature (bad=77.2%), water reservoirs (bad=59.8%), knowledge (low=55.4%), and attitude (negative=55.4%). There was a significant correlation between ventilation ( $p=0,002$ ), air temperature ( $p=0,020$ ), water reservoirs ( $p=0,027$ ), knowledge ( $p=0,008$ ), and attitudes ( $p=0,000$ ) toward incidence of DHF ( $p\text{-value} < 0.05$ ).

**Conclusion:** The physical home environment and community behavior are related to DHF incidence. Good coordination between health promotion team, local government in providing health education, socialization of healthy homes by empowering local communities.

**Keywords:** Community behavior, Dengue Hemorrhagic Fever, Physical home environment.

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### INTRODUCTION

Dengue Hemorrhagic Fever (DHF) is an infectious disease caused by the dengue virus and is transmitted through the bite of the *Aedes aegypti* (Ghina, 2017). Dengue is an acute viral infection with potentially fatal complications. The first clinically recognized epidemics of dengue occurred almost simultaneously in Asia, Africa, and North America in the 1780s. (Gupta, 2012). This DHF disease was first reported in Indonesia in 1968 in Jakarta and Surabaya with 48 sufferers and a mortality rate of 41.3% (Gina, 2017).

Almost all regions in Indonesia suffer from DHF. In Indonesia, the number of dengue cases reported in 2019 was 138,127 cases with an Incident Rate of 51.48 cases per 100,000 population, while the target was < 49 cases per 100,000 population. Riau Province is still at an incidence of 59.9 cases per 100,000 population and is one of the 23 provinces in Indonesia that did not meet the target. Meranti Islands is one of the regencies in Riau province that experiences an increase in dengue cases every year. In 2013 there were 98 cases, in 2014 it was 118 cases and in 2015 it increased to 254 cases (Dinkes, 2019, Ministry of Health 2019)

This disease is related to environmental conditions and people's behavior. Environmental conditions greatly affect the spread of the *Aedes aegypti* mosquito around us. Risk factors associated with DHF include behavior, temperature, humidity, rainfall, altitude, the presence of water reservoirs, and mosquito

breeding places. DHF is naturally influenced by ecological status with several physical environmental factors. The related physical environment is the type of water reservoir, altitude, rainfall, wind speed, air temperature and humidity, biological environment, and social environment (DIT.JEN. PP & PL, 2007), Prasetyani, 2015

The results of the initial survey conducted in Banglas Village, Meranti Regency, found that the houses looked damp, the garbage was not managed properly, rainwater collections used jars made of cement and were not closed, the ventilation of the house was not good, the lighting in the house was not good, and the environment their house looks very dirty. This condition is caused by the lack of public knowledge about the importance of keeping the environment clean, besides that, the attitude of the people who are less concerned also illustrates that the behavior of the people in the area is still lacking. Based on the initial survey, the researchers wanted to know the relationship between the physical environment of the house and the behavior of the community with the incidence of DHF.

**METHOD**

It was an observational study with a cross-sectional design. This research was conducted for three months (February-April 2020). The population was 1645 heads of household. 92 respondents participated selected by purposive sampling technique. The research location is in Banglas Village, Meranti Regency, Riau. The dependent variable is the incidence of DHF, the independent variables are the physical environment of the house and the behavior of the community, namely: ventilation, air temperature, water reservoirs, knowledge, and attitudes. For the physical environment of the house, researchers conducted field observations. Ventilation indicator with an eligible category if ventilation >15%. The air temperature with a good category of 25<sup>0</sup>C-28<sup>0</sup>C. Water reservoirs good category if they are available and closed. As for the variables of knowledge and attitudes using a structured questionnaire that has been tested for validity and reliability. A total of 20 questions using an ordinal scale. Data were analyzed by univariate and bivariate with chi-square test with 95% confidence interval. The Ethics Committee for Health Research, STIKes Hang Tuah Pekanbaru, issued ethical clearance for this study (No. 0209/KEPK/STIKes-HTP/V/2020). Each participant signed written informed consent.

**RESULTS**

Characteristics of respondents seen from the education level. The majority of low education 57(61.9%), namely Elementary School 20 (21.7%) and Junior High School 37(40.2%). Meanwhile, only 35 (37.1%) have higher education, with 33 (35.9%) senior high school and college 2(2.2%). The frequency distribution of univariate analysis between the independent variable and the dependent variable can be seen in Table 1 below.

Tabel 1. Frequency Distribution of Home Physical Environment, Community Behavior, and DHF Incident in Alahair Village, Meranti District, Riau 2020

No	Variable	Category	Frequency	Percent
1	DHF incident	Yes	49	53,3
		No	43	46,7
2	Ventilation	Good (>15%)	27	29,3
		Bad (≤ 15%)	65	70.7
3	Air Temperature	Good (25 <sup>0</sup> C-28 <sup>0</sup> C)	21	22,8
		Bad (< 25 <sup>0</sup> C >28 <sup>0</sup> C)	71	77,2
4	Water reservoirs	Yes	27	40,2
		No	55	59,8
5	Knowledge	High (66-100%)	41	44,6
		Low (≤ 65 %)	51	55,4
6	Attitude	Positive	41	44,6
		Negative	51	55,4
<b>Total</b>			<b>92</b>	<b>100</b>

Table 1 showed that there is 53.3% incidence rate of DHF. Bad ventilation 70.7%, bad air temperature 77.2%, water reservoirs that do not meet standards 59.8%, low knowledge, and negative attitude is 55.4%.

The results of the bivariate analysis of the significant correlation between the physical home environment, community behavior, and the incidence of dengue fever can be seen in Table 2 below.

Table 2. Summary of Bivariate Analysis the physical home environment and community behavior related to DHF incidence in Alahair Village, Meranti District, Riau 2020

Variable	DHF incidence		p-value	POR	95% CI	
	Yes	No			Lower	Upper
Ventilation						
Bad ( $\leq 15\%$ )	42 (64,6 %)	23 (35,4%)	0,002*	5,217	1,920	14,178
Good ( $>15\%$ )	7 (25,9 %)	20 (74,1%)				
Air Temperature						
Good 25 <sup>0</sup> C-28 <sup>0</sup> C	43 (60,6%)	28 (39,4%)	0,020*	3,839	1,331	11,078
Bad $\leq 25^0\text{C} >28^0\text{C}$	6 (28,6%)	15 (71,4%)				
Water reservoirs						
Good	35 (63,6%)	20 (36,4%)	0,027*	2,875	1,214	6,808
bad	14 (37,8%)	23 (62,2%)				
Knowledge						
High	15 (36,6%)	26 (63,4%)	0,008*	3,467	1,464	8,208
Low	34 (66,7%)	17 (33,3%)				
Attitude						
Positive	42 (82,3%)	9 (17,6%)	0,000*	22,667	7,649	67,166
Negative	7 (17,1%)	34 (82,9%)				

Abbreviations: CI = Confident Interval (95%)

Table 2 reveals that the results of statistical tests show that the five independent factors are related to the incidence of DHF with p-value  $<0.05$ . ventilation (p-value 0.002, POR 5.217), air temperature (p-value 0.020, POR 3.839), water reservoirs (p-value 0.027, POR 2.875), knowledge (p-value 0.008. POR 3.467), and attitudes (p-value 0.028, POR 22.667). POR value  $> 1$  means that the head of the family whose physical home environment and behavior are bad/ low/ negative are at risk of developing DHF disease. The negative attitude of respondents is at the highest risk of DHF.

## DISCUSSION

### Home Physical Environment

In this study, the physical environment of the house is focused on three variables, namely: ventilation, air temperature, and water reservoirs. The results of statistical analysis of these three factors were a significant correlation with the incidence of DHF ( $p < 0.05$ ).

#### 1. Ventilation

Ventilation in this study is the exchange of air in the house with the surrounding environment which serves to supply oxygen in to the room to maintain humidity. In this study, 70.7% of respondents had poor ventilation and were a significant correlation with the incidence of DHF (p-value = 0.002). Sholihah (2014) said that ventilation has a significant effect (p-value = 0.026). The study showed that ventilation is eligible if the size is  $>10\%$  of the floor area. A good measure of ventilation is the most basic DHF prevention effort because it relates to the condition or construction of the house that is occupied daily. Therefore, to avoid the community from DHF, it is necessary to educate the public about the prevention, symptoms, and management of DHF.

#### 2. Air Temperature

Temperature categories that can affect the development of Aedes Egypt are divided into 2, namely good (25oC-28oC) and not good ( $< 25\text{oC}$  and  $> 28\text{oC}$ ). Temperature is an important environmental parameter in increasing vector breeding, mosquito gonotrophic cycle, bite rate, shortening the incubation period of pathogens, and prolonging the lifespan of adult mosquitoes. In addition, higher temperatures also increase the rate of larval development (Fitriana and Yudhastuti, 2018). In Banglas Village, the humidity of the house temperature is between 60-75%. The home environment is in a swampy area and the air circulation is not good. There are also puddles in the front and back of the house. Ideally, the humidity should be kept in

the range of 45%-64% (RH or Relative Humidity). The average temperature in the Banglas Village area during 2019 - 2020 is 29.20 C with a temperature range of 27.60C - 31.70C. This temperature is the optimum temperature for mosquito breeding.

### **3. Water Reservoir**

In Banglas Village, Meranti Islands Regency, residents collect rainwater as a source of needs for drinking and cooking. On average, the residents have rainwater reservoirs in the form of barrels made of cement, large plastic buckets, drums, and plastic tubs. But most of these water reservoirs are not covered and there are mosquito larvae. There is a relationship between water reservoirs and the incidence of DHF, this study is in line with researchers Mubarokah (2012), Andini (2013) who said that water reservoirs are a risk factor for mosquito breeding and affect the incidence of DHF. In addition, from the results in the field, there are also many houses of residents who do not suffer from DHF but the condition of the water is not closed and the water is left open, this certainly increases the risk of DHF occurrences in these residents. However, they claim to use mosquito repellent which is applied to their skin every morning and night, so that even if their water area is not covered, they are still protected from mosquito bites.

### **Community Behavior**

In this study, people's behavior is focused on two variables, namely: knowledge and attitudes. The results of statistical analysis of these two factors were associated with the incidence of DHF ( $p < 0.05$ ).

#### **1. Knowledge**

In this study, the majority of people's knowledge is still low (55.4%). The results of this research are different from the research of Syarif (2013) which states that the knowledge of the community in Maen Village about DHF as a whole gets a score of 72.2% (good category). Another study by Wandasari (2014) said that the higher the knowledge, the better the behavior of preventing DHF ( $p < 0.05$ ). The results of this study are in line with Rianasari's research (2016) in Mustikajaya Village, Bekasi City. Knowledge related to the incidence of DHF, the results of the chi-square test obtained  $p$ -value = 0.015 ( $p \leq 0.05$ ). Sholihah (2014), the test results with multiple logistic regression test stated that knowledge had a significant effect with  $p$ -value=0.015 and an exponential value of 0.214 times for suffering from DHF. Health education efforts for the prevention of DHF have not been optimal, public awareness of the environment in which they live is still low.

#### **2. Attitude**

In this study, the majority of respondents were still negative (55.4%) and significantly correlated to DHF incidence ( $p < 0.05$ ). In line with research conducted by Rahmaditia (2011), Lontoh (2016), and Macpal (2011) that there is a correlation between respondents' attitudes towards dengue prevention ( $p < 0.05$ ). The behavior will be sustainable if it is based on awareness and a positive attitude. Attitudes are not brought from birth, but attitudes can be formed from the respondent's social interactions. There is a reciprocal relationship that influences individuals to influence behavior in interacting with the environment (Notoatmodjo, 2005). It's just that in this study the majority of respondents were negative. There were still respondents who did not keep their home environment clean, they still found clothes hanging in their rooms, did not close the water reservoir tightly. Public awareness and motivation are needed to improve a clean and healthy lifestyle.

### **CONCLUSION**

The physical home environment (ventilation, air temperature, water reservoirs) and behavior community (knowledge and attitudes) are significantly correlated to the incidence of DHF. The community of Banglas Village, Meranti Regency, Riau is expected to be able to apply a clean and healthy lifestyle in their daily lives, especially in the rainy season. Health workers must coordinate in monitoring the clean and healthy lifestyle of the community sustainably. District health officers can prioritize efforts to prevent and control dengue disease, especially in dengue endemic areas, dominant with people with low education, and areas vulnerable to dengue disease infection.

### **ACKNOWLEDGEMENT**

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## REFERENCE

- Andani, 2011. *Ilmu Kesehatan Masyarakat*. Yogyakarta: Nuha Medika
- Departemen Kesehatan R.I. 2007. Direktorat Jenderal Pengendalian Penyakit dan Penyehatan Lingkungan (DIT.JEN. PP & PL). Survei Entomologi Demam Berdarah Dengue, Jakarta
- Dinas Kesehatan Provinsi Riau. 2019. Profil Kesehatan 2019.
- Fauji, R.R. 2020. Hubungan Sanitasi Lingkungan Dan Perilaku Masyarakat Terhadap Kejadian Penyakit Demam Berdarah Dengue di Wilayah Kerja Puskesmas Dirgahayu Kabupaten Kotabaru Tahun 2020. Fakultas Kesehatan Masyarakat Banjarmasin. *UNISKA*. 1-8
- Fitriana, B.R, Yudhastuti. R. 2018. Hubungan Faktor Suhu Dengan Kasus Demam Berdarah Dengue (DBD) Di Kecamatan Sawahan Surabaya. *The Indonesian Journal of Public Health*, 13(1); 83-94. doi: 10.20473/ijph.v113il.2018
- Ghina, D.F, Anwar, C. 2017. Hubungan Faktor Lingkungan Fisik Rumah Dengan Kejadian Penyakit Demam Berdarah Dengue (DBD) Di Wilayah Puskesmas Cilacap Selatan di Kabupaten Cilacap Tahun 2016. *Buletin Kesehatan Lingkungan Masyarakat*. 36(1); 35-41
- Gupta N, Srivastava S, Jain A, Chaturvedi UC. 2012. Dengue in India. *Indian J Med Res*. 136(3):373-390.
- Ipa M. Laksono. A.D.2014. Analisis Potensi Promosi Pengendalian Penyakit Demam Berdarah Dengue Melalui Youtube. *Buletin Penelitian Sistem Kesehatan*. 2014; 17(1) 97-106
- Lontoh, R.Y. Rattu, A.J.M. 2016. Kaunang.W.P.J. Hubungan Antara Pengetahuan Dan Sikap Dengan Tindakan Pencegahan Demam Berdarah Dengue (DBD) DI Kelurahan Malalayang 2 Lingkungan III. *Pharmakon Jurnal Ilmiah Farmasi – UNSRAT*. 5(1); 382-389
- Macpal, S. D. et al. 2011. Hubungan Antara Pengetahuan dan Sikap dengan Tindakan Pencegahan Penyakit Demam Berdarah Dengue (DBD) pada Masyarakat di Kelurahan Batu Kota. *Fakultas Kesehatan Masyarakat Universitas Sam Ratulangi Manado*.
- Mubarokah. 2013. Upaya Peningkatan Angka Bebas Jentik (ABJ) BDB Melalui Penggerakan Jumantik. *Unnes Journal of Public Health*. 2(3); 1-9
- Notoatmodjo, S. 2005. *Promosi Kesehatan Teori dan Aplikasi*. Jakarta: Rineka Cipta
- Peraturan Menteri Kesehatan Republik Indonesia Nomor 1077/Menkes/Per/V/2011 Tentang Pedoman Penyehatan Udara Dalam Ruang Rumah.
- Prasetyani, R.D. 2015. Faktor-Faktor yang Berhubungan dengan Kejadian Demam Berdarah Dengue. *Majority*.7(2); 61-66
- Rahmaditia, T. 2011. Hubungan Pengetahuan dan Sikap Ibu Terhadap Tindakan Pencegahan Demam Berdarah Dengue pada Anak di Wilayah Kerja Puskesmas Tlogosari Wetan Kota Semarang.
- Rianasari, Suhartono, Dharminto. 2016. Hubungan Faktor Risiko Lingkungan Fisik Dan Perilaku Dengan Kejadian Demam Berdarah Dengue Di Kelurahan Mustikajaya Kota Bekasi. *Jurnal Kesehatan Masyarakat (e-Journal)*. 4(5); 151-159
- Sholihah. Qoriatus. 2014. Hubungan Kondisi Sanitasi Lingkungan, Pengetahuan dan Tingkat Pendidikan Terhadap Kejadian Demam Berdarah Dengue (DBD) di Kelurahan Lontar Kecamatan Sambikereb Kota Surabaya. Universitas Negeri Surabaya. 219-228
- Syarif. I.S, Siagian. I, E, T. Kaunang. W. P. J. 2013. Pengetahuan Masyarakat Tentang Demam Berdarah Dengue Di Desa Maen Kecamatan Likupang Timur Kabupaten Minahasa Utara. *Jurnal e-Biomedik (eBM)*. 1(1); 349-356
- Uno N, Ross TM. 2018. Dengue virus and the host innate immune response. *Emerg Microbes Infect*. 7(1):167. Published 2018 Oct 10. sdoi:10.1038/s41426-018-0168-0
- Wandasari. N. 2014. Hubungan Pengetahuan Masyarakat Tentang Penyakit Demam Berdarah Dengue (DBD) dengan Perilaku Pencegahan Demam Berdarah Dengue (DBD) di Wilayah Kerja Puskesmas Kelurahan Tegal Alur I Jakarta Barat Tahun 2014. *Forum Ilmiah*.12(2); 146-155



STIKES MITRA KELUARGA

# CERTIFICATE

No.: 1003/STIKes.MK./P3M/IC/IX/2021

This certificate is awarded to

**Dr. Hetty Ismainar, SKM, MPH**

as Oral Presenter

## The 1<sup>st</sup> International Allied Health Student Conference (IAHSC) 2021

*"The Role of Civitas Academica through Research and Community Engagement Results in the Enhancement of Multidisciplinary Collaboration on Global Health Sciences"*

Zoom Cloud Meeting, Jakarta 14<sup>th</sup> -15<sup>th</sup> September 2021

STIKes MITRA KELUARGA

**PPNI Accreditation No.:1116/DPP.PPNI/SK/K.S/VIII/2021**

Participant 3 SKP, Speaker 4 SKP, Moderator/Committee 3 SKP

**PERSAGI Accreditation No.:773/DPP-PERSAGI/SK/IX/2021**

Participant 1 SKP, Speaker 2 SKP, Moderator/Committee 1 SKP

**IAI Accreditation No.:Kep-117/SKP/PD.IAI/DKI.JKT/1822/VI/2021**

Participant 6 SKP, Speaker 3 SKP, Moderator/Committee 1 SKP



Dr. Susi Hartati, S.Kp., M.Kep., Sp.Kep.An.

Director



Afrinia Eka Sari, S.TP., M.Si.

Head of Center for Research and Community  
Engagement