#### The first International Conference on Health Sciences and Biotechnology (ICHB)— Padang, West Sumatera, Indonesia.

- 1. Title:1<sup>st</sup> ICHB Program Book
- Author: Valendriyani Ningrum, Nofri Edi, Sri Wahyuni, Sevilla Ukhtil Huvaid, Rheta Elkhaira, Dita Hasni, Yefri Reswita, Harry Wahyudi
- 3. Cover : Taufiq Ramadhani Arif
- 4. Book : 297mmx210mm (A4)

November 2021

#### TABLE OF CONTENTS

TABLE OF CONTENTS	2
ABOUT 1st ICHB 2021	3
WELCOMING REMARKS BY THE CHAIRMAN OF 1st ICHB 2021	4
WELCOMING REMARKS BY THE DIRECTOR OF THE STIKES WIDYA DHARMA HUSADA	6
WELCOMING REMARKS BY THE RECTOR OF THE UNIVERSITAS BAITURRAHMAH	8
CONFERENCE PROGRAM COMMITTEE	10
SCHEDULE AND PROGRAM	11
KEYNOTE SPEAKERS	15
INVITED SPEAKERS	16
LIST OF ORAL PRESENTERS	18
LIST OF POSTER PRESENTERS	27

#### ABOUT 1<sup>st</sup> ICHB 2021

The first International Conference on Health Sciences and Biotechnology (ICHB) is annual event hosted by Baiturrahmah University Padang, and in collaboration with College of Health Sciences Widya Darma Husada Tangerang Indonesia. This year (2021), the first ICHB will be held on November 3-4, 2021 through virtual meeting. "The role of health sciences and biotechnology innovation in the new normal era" has been designated as the conference's main theme, with an emphasis on the most current research and trends, as well as future perspectives in health science and biotechnology, in order to prepare a global sustainable approach for human well-being in the new normal period. This International Conference will serve as an excellent international forum for sharing information and research findings in theoretical and practical aspects of health science and technology, as well as their applications in the new normal era. More than 1900 university academics, scholars, practitioners, and professionals are registered to attend the conference, which is delegates from across Indonesia, the Asian region, and beyond.

## WELCOMING REMARKS BY THE CHAIRMAN OF 1<sup>st</sup> ICHB 2021



drg. Abu Bakar, MMedEd, PhD

Ladies and Gentlemen,

Welcome and a very warm remark to everyone present their studies in First International Conference on Health Science and Biotechnology (1<sup>st</sup> ICHB-2021). The first International Conference on Health Sciences and Biotechnology (ICHB) is annual event hosted by Baiturrahmah University Padang, and in collaboration with College of Health Sciences Widya Darma Husada Tangerang Indonesia. This year (2021), the first ICHB will be held on November 3-4, 2021 through virtual meeting. "The role of health sciences and biotechnology innovation in the new normal era" has been designated as the conference's main theme, with an emphasis on the most current research and trends, as well as future perspectives in health science and biotechnology, in order to prepare a global sustainable approach for human wellbeing in the new normal period. This International Conference will serve as an excellent international forum for sharing information and research findings in theoretical and practical aspects of health science and technology, as well as their applications in the new normal era.

I am very much aware of the fact that the delegates attending today's conference are from diverse healthcare fields such as medicine, dentistry, nutrition, public health, midwifery, nursery, biotechnology, pharmacy, hospital management, healthcare administration, health economic, and radiology. We have gathered here together for a common purpose, i.e. for the development of innovation in health science and biotechnology and I am glad that we have

seized this excellent opportunity. The COVID-19 pandemic has affected our lives included socioeconomic, education, research, religions and others. Following social distancing recommendations, we have moved our conferences to this virtual meeting. Though we cannot meet face-to-face, the purposes we have met here is to present and learn about research, to gain professional skills and to interact with each other. 1.998 participats which 79 oral presenters and 41 poster presenters will join this virtual meeting.

## WELCOMING REMARKS BY THE DIRECTOR OF THE STIKES WIDYA DHARMA HUSADA



Ns. Riris Andriati, S. Kep., M. Kep

Ladies and Gentlemen,

I give thanks to God so that we can attend here in "International Conference on Health Sciences and Biotechnology (ICHB)": The Role of Health Sciences and Biotechnology Innovation In The New Normal Era" by Virtual/Zoom.

I would like to welcome in this conference by Virtual/Zoom to participants both lecturers and students, especially from Widya Dharma Husada Tangerang School Of Health Science. Hopefully attending in this conference will motivate us to be more able to create better research works also publications. I hope this conference will succes.

We are now together witnessing in 2021 "International Conference on Health Sciences and Biotechnology (ICHB)". Members of the Organizing Committee and staff have been working very hard. I would like to thank them for their dedication, time and efforts. I wish also to thank our patrons, individual and organization partners also volunteers. Without their generousity we would not be able to create a total environment to support your full participation.

Widya Dharma Husada Tangerang School Of Health Science adress in Padjajaran Raya Street No. 1 Pamulang City, South Tangerang, Provence Banten, Indonesia. There are six major, including Undergradute Nursing Major Associate's degree of Midwifery Major, Associate's degree of Pharmacy Major, Associate's Degree of Medical Record & Health Information Major, Undergradute Public Health Major, Undergraduate Clinical and Community Pharmacy Major.

Also We are Have Research and Community Service Center also Open Acces and Intelectual Property Right center for Journal Publication so we are open to Other Institutions to collaborate in study, internship, exchange students also lecturer, collaborate in research and publication also. Thank you all for your presence and participation. And you are the very important part of the Conference success.

Thank you and enjoy the conference and your stay in here.

## WELCOMING REMARKS BY THE RECTOR OF THE UNIVERSITAS BAITURRAHMAH



Prof. Dr. Ir. Musliar Kasim, MS

Ladies and Gentlemen,

First of all let us praise be to Allah, king of the king, the merciful, the beneficiant who creates us as well as bless us to live in this world. May sholawat and salam be with our prophet Muhammad. Peace be upon him.

I am pleased to welcome you all to the first International Conference on Health Sciences and Biotechnology. I'd like to thank the keynote and invited speakers of this conference for their willingness to share their knowledge on the theme of the conference. This is such a blessing for us because the speakers are prominent figures from leading universities in the world in the fields of research and education especially in health sciences and biotechnology. They are Prof. Bambang Permadi Soemantri Brodjonegoro, SE., M.U.P., Ph.D, Prof. dr. Ali Ghufron Mukti, M.Sc., Ph.D, AAK, Dr. Yin-Hwa Shih Asia University, Prof. Hidetaka Arimura from Kyushu University, Prof. Anchali Krisanachinda, Ph.D from Chulalongkorn University, Prof. Dr. Sandeep Poddar from Lincoln University College, Valendriyani Ningrum, Ph.D from Baiturrahmah University

My deep appreciation also goes to Prof. Dr. Herri, MBA, the head of LLDIKTI X for attending the opening ceremony of the conference this morning. I also would like to extend my sincere appreciation to the participants of the conference for taking part in this event at

the time where all countries are seriously affected by the global COVID 19 pandemic. The COVID-19 pandemic has led to the economic and social disruption. The world is struggling with the immediate requirements of this public health crisis. COVID-19 has compounded existing development challenges and had led to the fragility of sustainable development on so many fronts.

The first International Conference on Health Sciences and Biotechnology (ICHB) is an annual event hosted by Baiturrahmah University Padang, and in collaboration with College of Health Sciences Widya Darma Husada Tangerang Indonesia.

I'd like to bring to the attention of those who do not reside in Padang and those who are not originally from Sumatera Barat that Baiturrahmah university is the only university that has the faculty of dentistry within the four coverage areas of LLDIKTI Wilayah, West Sumatera, Riau, Riau Islands and Jambi. Eight out of ten majors available are in the field of health sciences. Since the university was first developed, we always focus our effort on achieving health for the community.

The first ICHB is going to be held virtually from the 3<sup>rd</sup> until the 4<sup>th</sup> of November, 2021 with the theme of **The role of health sciences and biotechnology innovation in the new normal era**. The emphasis of the theme is on the most current research and trends, as well as future perspectives in health science and biotechnology, in order to prepare a global sustainable approach for human well-being in the new normal period. This International Conference will serve as an excellent international forum for sharing information and research findings in theoretical and practical aspects of health science and technology, as well as their applications in the new normal era. More than thousands universities, scholars, practitioners, and professionals are expected to attend the conference which are open for delegates from Indonesia, the Asian and other countries in the world.

I would like to end my speech by encouraging the delegates to participate in all activities and discussions via the digital platforms for the next two days. I wish everyone a successful, safe and fruitful conference.

Wa billahittaufuq wal hidayah

Wassalamu'alaikum warohmatullahi wa barokaatuh

#### **CONFERENCE PROGRAM COMMITTEE**

#### **Organizing Committee**

Abu Bakar, DDS, M.Med.Ed, Ph.D (Chair) Dr. Leni Aziyus Fitri, M.Si (Secretary) Ira Suryanis, S.SiT, M.Keb (Secretariat) Mya Yuwanita Suhanda, SE, MM (Treasurer) Valendriyani Ningrum, DDS, M.P.H, Ph.D (Program Chair) Vitri Yuli Afni Amran, S.SiT, M.Keb (Registration) dRinita Amelia, M.D, M.Biomed (Scientific Program) Jemkhairil, M.Ag (Public Relation)

#### **Scientific Committee**

Prof. Dr. Ir. Musliar Kasim, MS (Coordinator)
Prof. Shi-Chieh Lee (Dayeh University)
Prof. Ming-Shun Tsai (Dayeh University)
Prof. Dr. Koshy Philip (University of Malaya & UCSI Cheras Malaysia)
Prof. Dr. dr. Rizanda Machmud, M.Kes (Andalas University)
Dr. rer. nat. Ir. Syafrimen Yasin, M.S, M.Sc (Andalas University)
Prof. Dr. Amri Bakhtiar, M.S., DESS, Apt (Baiturrahmah University)
Prof. Dr. Ir. Novirman Jamarun, M.Sc (Andalas University)
Ns. Rita Dwi Pratiwi, S. Kep., M.Sc (College of Health Sciences Widya Darma Husada)
Fenita Purnama Sari Indah, SKM, M.Kes (College of Health Sciences Widya Darma Husada)

#### SCHEDULE AND PROGRAMS

#### Day 1, 3rd November 2021

Time (WIB)	Activities
W	elcome Speech and Opening ceremony of the Conference
08.30-08.37	Indonesia Raya (Indonesian National Anthem)
08.37-08.45	♣ Welcome Dance "Tari Persembahan"
08.45-08.50	Reciting Qur'an
08.50-08.57	Chairman of 1 <sup>st</sup> ICHB 2021 Speech Abu Bakar, DDS, M.Med. Ed, Ph.D
08.57-09.07	Director of Stikes Widya Dharma Husada Speech Ns. Riris Andriati, S.Kep., M.Kep
09.07-09.17	Rector of Baiturrahmah University-Opening Speech Prof. Dr. Ir. Musliar Kasim, MS.
09.17-09.27	Head of LLDIKTI X Speech Prof. Dr. Herri, MBA
09.27-09.30	Opening 1 <sup>st</sup> ICHB
09.30-09.35	Placard handover for the Head of LLDIKTI X and Stikes Widya Dharma Husada
09.35-09.40	Twibbon Challenge Announcement
09.40-09.44	Performing Art
09.44-09.45	1 <sup>st</sup> ICHB Video
09.45-10.15	Keynote Speaker: Minister of Research and Technology 2019-2021 <b>Prof. Bambang Permadi Soemantri Brodjonegoro, S.E., M.U.P.,</b> <b>Ph.D.</b>
10.15-10.25	Ethic and Patient Safety dr. Mutiara Annisa, Sp. KJ
10.25-11.05	Invited Speaker: Topic: Oral Health Research of Community Older Adults <b>Dr. Yin Hwa Shih</b> Asia University, Taiwan

11.05-11.15	<u>Sponsorship Presentation</u> Yakult
11.15-11.35	1 <sup>st</sup> e-Poster Display
11.35-11.55	2 <sup>nd</sup> e-Poster Display
11.55-12.15	3 <sup>rd</sup> e-Poster Display
12.15-13.00	Lunch Break
13.00-15.00	Oral Presentation (Paralles Session-Breakout Room)

#### Day 2, 4th November 2021

Time (WIB)	Activities
08.15-08.25	The Museum of Aromatherapy Showing
08.25-08.30	MC Opening
08.30-09.30	<ol> <li>Baiturrahmah University, Indonesia drg. Valendriyani Ningrum, M.P.H, Ph.D</li> </ol>
	<ol> <li>Lincoln University, Malaysia</li> <li>Prof. Sandeep Poddar</li> </ol>
	Discussion
09.30-10.15	Keynote Speaker: President Director of Indonesia's Public Health Insurance Provider <b>Prof. dr. Ali Ghufron Mukti, M.Sc., Ph.D, AAK</b>
10.15-10.25	Performing Art (Stikes Widya Dharma Husada)
10.25-11.30	<ul> <li>Invited Speakers:</li> <li>1. Chulalongkorn University, Thailand Prof. Anchali Krisanachinda</li> <li>2. Kyushu University, Japan Prof. Hidetaka Arimura</li> <li>Discussion</li> </ul>
11.30-11.40	Sponsorship Presentation Bening's
11.40-12.02	4 <sup>th</sup> e-Poster Display
12.02-12.15	Closing ceremony of the Conference: Closing video Award announcement MC Closing

#### **Conference Sessions**

#### **Oral Sessions**

Oral sessions include eight to ten speakers, who will each give a 10-minute presentation, followed immediately by 3 minutes for questions and answers. Please refer to the conference schedule to view detailed information about presentation titles, authors, and speakers.

#### **Poster Sessions**

Scientific and programmatic posters will be on e-display during the conference. Authors will staff posters in four sessions:

- Wednesday November 03, 2021: Poster Session (1st, 2nd 3rd), 11:15 noon to 12:15 WIB.
- Thursday, November 04, 2021: Poster Session (4th), 11:40 noon to 12:02 WIB

Please refer to the Posters section to view presentation information.

#### **Keynote Speaker**



#### Prof. Bambang Permadi Soemantri Brodjonegoro, S.E., M.U.P., Ph.D

Minister of Research and Technology, Republic of Indonesia 2019 - 2021



Prof. dr. Ali Ghufron Mukti, M.Sc., Ph.D, AAK

President Director of Indonesia's Health Coverage Program

Dr. Yin-Hwa Shih Asia University, Taiwan





**Prof. Hidetaka Arimura** Kyushu University, Japan



Prof. Anchali Krisanachinda, Ph.D Chulalongkorn University, Thailand



Prof. Dr. Sandepp Poddar Lincoln University College Malaysia



Valendriyani Ningrum, Ph.D Baiturrahmah University

#### LIST OF ORAL PRESENTERS

#### Room A

No	Name	Email	Title
1.	Tinda Afriani	tindaafriani@ansci.unand.ac. id	Associations Of Pit-1 Gene Polymorphism with Average Daily Gain and Body Measurement in Pesisir Cattle
2.	Galih Endradita	galihendradita@gmail.com	Post Mortem Swab Antigen in Indonesian Forensic Autopsy: Case Study
3.	Hidayati	hidayati@dent.unand.ac.id	Estimation of New Equation for Triangle Anterior Dental Arch Form in Sub-Race Deutro Malay
4.	Novirman Jamarun	novirman55@gmail.com	Nutrition Evaluation Of Etawa Crossbreed Dairy Goat's Milk As Human Food To Increase Immunity During
5.	Harry Fauzi	fauziharry@gmail.com	Complementary Feeding For Infants Aged 6-24 Months With Stunting In Southeast Asia
6.	Malika Qohhareli Swanda	qohharelimalika@gmail.co m	Factors That Influence Incidence Of Neonatal Jaundice In The Health Center Area Of Lubuk Buaya 2019
7.	Desi Elvhira Rosa	verricca@gmail.com	The Role of Micronutrients in Oral Mucosa Disease: a Systematic Review
8.	Revivo Rinda Pratama	dr.revivorinda@gmail.com	Prenatal Diagnosis of Omphalocele with Normal Chromosomes: Case Report
9.	Amira Shafuria	mirashafuria@gmail.com	Evaluation of Serum and Salivary Antibody Responses during SARS-CoV- 2 Infection: A Systematic Review
10.	Meiridha Mutiara Andania	meiridhamutiara@gmail.co m	Chemical Constituents of Essential Oil of the Leaves, Stems, and Rhizomes of Zingiber alba from Simanau, West Sumatra

#### Room B

No	Name	Email	Title
1.	Ayamah	ayamah1975@gmail.com	The Effect Of Giving Left Lateral Position With Elevation Of 30 Degrees Head On Increasing Oxygen Saturation In Patient With Ventilator In Intensive Care Unit Of Tangerang District Hospital
2.	Embun Suci Nasution	embun@usu.ac.id	Characterization and Treatment Overview of Type 2 Diabetes Mellitus Patients in Universitas Sumatera Utara Hospital Medan in September-October 2021
3.	Alief Dhuha	alief.dhuha@univrab.ac.i d	Predicting Outcome of Traumatic Brain Injury (TBI) Patients with EEG
4.	Sri Siswati	srisiswati@yahoo.co.id	Implementation of E-Health from Medical Confidential View
5.	Heri Setiawan	Heri.Setiawan49@yahoo. com	The Effect of Graptophylum Pictum For hemoroid Disease In Setia Insani Clinic Tangerang City
6.	Humaira Fadhilah	humaira@masda.ac.id	Determinant Analysis of Sociodemographic Factor with Knowledge of Getting, Using, Keeping and Throwing Drug
7.	Mahaza	mahaza1972@gmail.com	Gambaran Kepemilikan Dan Akses Jamban Dengan Aplikasi Spasial Di Kelurahan Kalumbuk Wilayah Kerja Puskesmas Kuranji Tahun 2020
8.	Refilda	refilda@sci.unand.ac.id	Edible Coating Technique with A Mixture of Aloe vera Gel and Psidium guajava L. Leaf Extract to Maintain Physichochemical Properties of Guava Fruit
9.	Okmes Fadriyanti		Thermal Changes And Transversal Strength Of Acrylic Resin Coated With Bidara Leaf Extract (Ziziphus Mauritiana Lam) Related To Growth And Formation Of Candida Albicans Biofilm
10.	Fahni Haris	evashih@gm.asia.edu.tw	The development of a satisfaction assessment inventory of OSCE examiners

#### Room C

No	Name	Email	Title
1.	Ida Listiana	idalistiana@wdh.ac.id	The Relationship Of Parents 'Parenting And Stress With Smoking Behavior In Students In Smk Ruhul Bayan Tangerang District
2.	Nur Hasanah	nurhasanahbik51@gmail.co m	Active Compounds Of Indonesian Medicine Plants That Potentially Reduce Blood Sugar Levels
3.	Ikada Septi Arimurti	ikadaseptiarimurti@wdh.ac.i d	The Correlation Of Mother's Knowledge About Baby Massage On Mother's Behavior In Doing Baby Massage
4.	Tria Monja Mandira	triamonjamandira@wdh.ac.i d	The Correlations Between Level Of Knowledge And 3m Protective Behavior (Wearing Masks, Washing Hands, Physical Distancing) In Elderly Suffering From Diabetes Mellitus In Working Area Of Kedaung Public Health Center
5.	Betty	betchy_cew@ymail.com	The Effect Of Balance Exercise On Balance And Muscular Strength With The Risk Of Falling In The Clinic Of Bapelkes Ks Cilegon City In 2021
6.	Agustika Antoni	Agustikaantoni2@gmail.co m	Effect of Apple Guava Juice on Magrophage Level in Mice Wound on Fifth Day
7.	Siti Novy Romlah	sitinovyromlah@wdh.ac.id	The Effect of Audio Visual Media Application on Women's Knowledge of Childbearing Age About Early Detection of Cervical Cancer in RW 03 West Pamulang Village South Tangerang City
8.	Fenita Purnama Sari Indah	fenita.purnama@masda.ac.id	Analysis Determinant The Prevention Atitude Of Opportunistic Infections In People Living With Hiv A

#### Room D

No	Name	Email	Title
1.	Lela Kania Rahsa Puji	lila.kania@gmail. com	The Association Of Individual Factors, External Factors To Work Fatigue In Workers At Pt. Hutama Karya Building Division Project Integrated Bsuilding Soekarno Hatta Airport Train Station
2.	Gita Ayuningtyas	gitaayuningtyas@wdh. ac.id	Correlation Of Family Support With Self- Esteem For Diabetic Ulkus Patients In Inpatient Room Of Banten General Hospital
3.	Frida Kasumawati	fridakasumawati@wdh. ac.id	Self Esteem and Gender Perceptions with Dating Violence among Adolescence in Duren Mekar Bojongsari District, Depok
4.	Neneng Sri Purwaningsih	neneng@masda.ac.id	Analysis Of Diabetes Mellitus Drug Planning Using ABC and VEN Methods in Insan Permata General Hospital
5.	Gina Aulia	ginaaulia@wdh.ac.id	The Level Of Outpatient Satisfaction To Pharmaceutical Services In The Pharmacy Installation Of The RSUD Banten
6.	Melizsa	melizsa0205@gmail.co m	Description Of The Competence Of Human Resources (Hr) Pharmaceutical Personnel In Pharmaceutical Services In Berkat Pamulang And Palm Semi Pharmacies
7.	Dewi Fitriani	dewifitriani@wdh.ac.id	Determinant Factor Of Post Operative Hypothermic Factors With General Anesthesia At Central Surgical Installation Of Banten Regional Public Hospital
8.	Nurwulan Adi Ismaya	nurwulanadiismaya@w dh.ac.id	The Correlation Between Level Of Knowledge On Self- Medication Behavior Of Over-The-Counter Medicine And Limited Over-The-Counter Medicine At Rw 016 Bojong Nangka Village

#### Room E

No	Name	Email	Title
1.	Utmi Arma	utmiarma@unbrah.fkg.ac.id	A New Approach To The Treatment Of Oral Cancer With Cempedak Sea Cucumber (Bohadschia Marmorata) Men
2.	Debie Anggraini	debieanggraini@unbrah.ac.i d.com	Characteristics Of Anemia In Elderly Patients At Siti Rahmah Hospital, Padang, Indonesia
3.	Rinita Amelia	rinitaamelia@fk.unbrah.ac.i d	The Role of probiotic in Dadiah to alleviate hyperglycaemia, the expression of TGF-□1 and glomerulosclerosis in nephropathy diabetes rat model
4.	Anandia Putri Yuni	anandia_putriyuni@yahoo.c om	Potential Forkhead Box O 3a As Prognostic Biomarker In Prostate Cancer
5.	Amira Shafuria	mirashafuria@gmail.com	Evaluation of Serum and Salivary Antibody Responses during SARS-CoV-2 Infection: A Systematic Review
6.	Novia Zulfa Hanum	noviafkmunbrah@gmail.co m	Implementation of Occupational Health and Safety Management System (OHSMS) at Siti Rahmah Islamic Hospital
7.	Dian Ayu Hamama Pitra	dianayuhamamapitra@fk.un brah.ac.id	Higher Serum Glial Fibrillary Acidic Proteinlevel Is Associated With Outcome of Traumatic Brain Injury: A Cohort Study
8.	Riris Andriati	ririsandriati@wdh.ac.id	The Effect Of Education On The Understanding And Nurse Attitude About Needle Stick Injury (Nsi) In Applying The Universal Awareness

#### Room F

No	Name	Email	Title
1.	Dini Hanifa	dinihnf@gmail.com	Formulation and Evaluation Of Peel-Off Mask From Avocado Oil (Persea americana)
2.	Abu Bakar	abuba.mmed@gmail.com	Oral and Clinical Manifestation Experince among Covid-19 Patients in Kampung Nelayan, Padang, Indonesia
3.	Hilda Hidayat	Hildahidayat15@gmail.com	Factors Related To The Preference Of Hormonal Contraception Methods In The Working Area Of Puskesmas Lubuk Buaya, Padang City In 2021
4.	Yulianita	yulianita2478@gmail.com	Neurological Analysis Of Brain Wave Disorders Of Speech Delayed Child
5.	Sevilla Ukhtil Huvaid	sevilla.kesmas@gmail.com	Policy Analysis of One House One Jumantik Movement in Padang City
6.	Oktavia Puspita Sari	Oktaviapuspitasari@atro.un brah.ac.id	The Relationship of individual Characteristics with Radiographer Compliance in Using Protective Equipment on Radiographers at Dr. M.Djamil Hospital
7.	Lydia Susanti	lydiasusanti99@gmail.com	The Association of Serum Neuron Specific Enolase With Functional Outcome And Severity Of Traumatic Brain Injury
8.	Rhandykarafli	rhandykarafli@fk.unbrah.ac. id	The emerging cancer support system in traditional and religious values: a qualitative study of the cancer community in West Sumatera, Indonesia

#### Room G

No	Name	Email	Title
1.	Citra Lestari	citralestari@fkg.unbrah.ac.id	The Mangosteen Effect On Expression Of Runt-Related Transcription Factor 2 And Tartrate-Resistant
2.	Nurmaines Adyka	nurmaines.adhyka@staff.un brah.ac.id	Manager Role in Health Protocol Compliance in Health Officers
3.	Erni Maywita	ernimaywita@fkm.unbrah.a c.id	Factors Related to The Utilization of The BPJS Health Chronic Disease Management Program (PROLANIS) in The Andalas Padang Health Centre
4.	Sri Mindayani	srimindayani@fkm.unbrah.a c.id	Factors Associated with Eye Fatigue in Tailors in Lubuk Alung District, Padang Pariaman Regency in 2021
5.	Fitria Mailiza	fitriamailiza_drg@yahoo.co m	Oral Manifestation of Systemic Lupus Erythematosus : A Review
6.	Intan Batura Endo Mahata	mahataintan@gmail.com	Indonesian Dentists Psychological Wellbeing During Covid 19 Pandemic
7.	Elsa Marsellinda		Evaluation of Drug Therapy for Diabetes Patients with Hyperlipidemia Treated at Siti Rahmah Islamic Hospital
8.	Nova Arikhman	arikhmannova73@gmail.co m	The Effectiveness of Health Counseling Using Video Media in Increasing Adolescent Knowledge About Prevention of Early Marriage at SMAN 2 Pasaman Kabupaten Pasaman Barat year 2021

#### Room H

No	Name	Email	Title
1.	Leni Aziyus	leniaziyusfitri@atro.unbrah. ac.id	Comparison of Imaging Quality in The Non-Contrast and Contrast Computed Tomography (CT) Scan
2.	Ira Suryanis	irasuryanis@jurkeb.unbrah.a c.id	Determinants Of Toddler Development Factors In Terms Of Biological, Psychosocial, Family And Customary Aspects In Padang City
3.	Yulia Rahmad	yrahmadmtr@staff.unbrah.a c.id	Maintenance Of Dental Health And Utilization Of Dental Health Services
4.	Viti Yuli Afni Amran	vitriyuliafniamran@jurkeb.u nbrah.ac.id	Premarital care needs in the city of Padang
5.	Sukmayenti	sukmayenti@jurkeb.unbrah. ac.id	Risk Factors and Probability Of Breast Cancer In Women In West Sumatera
6.	Nirmala Sari	nirmalasari@jurkeb.unbrah. ac.id	Differences In Average Estradiol Hormone Levels Based On The First Pregnant Age In Breast Cancer Women And Non Breast Cancer
7.	Hendri Devita	hendridevita@gmail.com	Analysis of Characteristics Associated with Cervical Precancerous Lesions in Women of Reproductive Age
8.	Putri Engla Pasalina	putripasalina@yahoo.co.id	The Effect of Types of Storage Containers on Colonization of Lactic Acid Bacteria in Breast Milk
9.	Zufrias Riaty		Analysis Of Hemoglobin Levels And Hematocrite Value In Stunting Children In Bukit Sileh, Solok Regency
10.	Dian Eka Nursyam	dianekanursyam9@gmail.co m	The Picture Affecting Early Marriage in KUA Kuranji District, Padang City in 2020.

#### Room I

No	Name	Email	Title
1.	Dicky Stevano Zukhri	dr.dickystevanozukhri@gma il.com	Differences In Anticardiolipin Antibodies Level Between Systemic Lupus Erythematosus Patient With Lupus Retinopathy And Uveitis Posterior
2.	Sri Wahyuni	Sriwahyunizukhri31@gmail. com	Medical Students' Problems Of Learning English In The Covid-19 Pandemic
3.	Sagita Yuda		
4.	Elsa Marsellinda		Evaluation of Drug Therapy for Diabetes Patients with Hyperlipidemia Treated at Siti Rahmah Islamic Hospital
5.	Dian Rahmi (video presentation)	dianrahmi284@gmail.com	The Effectiveness of Five Finger Hypnosis in Overcoming Anxiety in Pregnant Women During the Covid 19 Pandemic At Permata Bunda Clinic, Padang City
6.	Hanim Khalida Zia	hanim@fkg.unbrah.ac.id	Human Resources (Hr) Addition Planning For The Marketing Division Development And Marketing Strategy In Siti Hawa Padang Mother And Child Hospital
7.	Monica Fradisha		The Relationship between Amount of Monitor Screen Usage and Computer Vision Syndrome in Sinarmas Bank Employees.
8.	Dhia Diana Fitriani	dhiadianafitriani@wdh.ac.id	The Relationship Of Family Support With Patient's Anxiety Level In Pre- Anesthetic, Regional Anesthesion, At Banten Regional Public Hospital
9.	Rita Dwipartiwi	ritadwipratiwi@wdh.ac.id	Correlation Between Parents And Family Social Support With Parenting Self-Efficacy Parenting (Pse) In Early Marriage Mother At The Village Of Warung Menteng Bogor, West Java

#### LIST OF POSTER PRESENTERS

#### 1st Session

ID	Nama	Email	Title
<b>DD</b> 01			
PP-01	Fahni Haris	evashih@gm.asia.edu.tw	The development of a satisfaction assessment inventory of OSCE examiners
PP-02	Akub Selvia	akubselvia21@gmail.com	The Relationship Between Using Mask And Implementing The Health Protocol To Preventing Behavior Of T
PP-03	Valendriyani Ningrum	valend@fkg.unbrah.ac.id	Geriatric Oral Health Issues: A Cross Sectional Study in Dumai City, Indonesia.
<b>PP-04</b>	Rinita Amelia	riniaamelia@fk.unbrah.ac.id	An in silico approach to the
			inflammatoryresponse of L. fermentum bacteria and its metabolites iso
PP-05	Rinita Amelia	riniaamelia@fk.unbrah.ac.id	The Effect of Giving probiotics in Dadiah sample Increasing Immunoglobulin A (IgA) of Intestinal Tissue in Rats Model of Diabetic Nephropathy
PP-06	Rinita Amelia	riniaamelia@fk.unbrah.ac.id	Relationship between Ankle Brachial Index (ABI) and Cognitive Functions at the Geriatrics Polyclinic, RSI Ibnu Sina Bukittinggi
PP-07	Dita Hasni	ditahasni@fk.unbrah.ac.id	Menstrual Disorders in Female Patients with Schizophrenia who received Antipsychotic therapy at HB Saanin Mental Hospital Padang.
PP-08	Ira Suryanis	Irasuryanis@jurkeb.unbrah. ac.id	Determinants Factor of Exclusive Breastfeeding at Kemumu District Health Centers North Bengkulu
PP-09	Dessy Abdullah	dessyabdullah@fk.unbrah.a c.id	Utilization Of Wild Plant Suruhan Extracts (Peperomea Pellucida L.Kunth) Against The Amount Of Fibroblasts In The Healing Process Of Wounds In Mice (Mus Musculus)
PP-10	Rendri Bayu Hansah	rendri.hansah@gmail.com	Correlation Between Glomerulus Filtrations And Plasma Bicarbonate Condittion In Kidney Diase Chronic Stadium 5 With Metabolic Acidosis

#### 2<sup>nd</sup> Session

ID	Nama	Em ail	Title
PP-11	Yulia Rahmad	yrahmadmtr@staff.unbrah.a	Utilization of Dental Health
	T unu Rummuu	c.id	Services In Pregnant Women
PP-12	Oktavia Puspita Sari	oktaviapuspitasari@atro.unb rah.ac.id	Evaluation of Occupational Health and Safety Implementation at Rs X Padang; In The Perspective Of Strategic Leadership And Systems Thinking
PP-13	Herwanda Amartya	wandaamartya@gmail.com	The Relationship Between High Tension Technique And Standard Tension To Image Quality In Adult Thorax Examination
PP-14	Rinita Amelia	riniaamelia@fk.unbrah.ac.id	The Relationship between Nutritional Status and Hypertension Incidence in ProlanisElderly Working Area of LubukPinang Public Health Center, Kab. Muko-Muko, North Bengkulu in 2018
PP-15	Hendri Devita	hendridevita@gmail.com	Family Planing Safari As An Effort To "Planning Is Cool"
PP-16	Rikayoni	rika.yoni88@gmail.com	The Effect Of Pursed Lip Breathing Exercise On Reducing AnxietyLevel Of Pregnant Mothers In Facing The Covid-19 Pandemic In The Clinic Gems Of The Mother Of Padang City In 2021
PP-17	Tilawatil Ciseta Yoda	tilawatilcisetayoda@gmail.c om	The Effect of Managerial Ownership, Liquidty and Company Size on Financial Disterss-Case Study on Hospitality, Restaurant and Taourism Enterprises Listed on The Indonesia Stock Exchange During Pandemic Covid-19
PP-18	Yefri Reswita	yefrireswita9090@gmail.co m	The Effect of Ownership, Independent Board and Firm Size on The Financial Performance of Bank Listed on The Indonesia Stock Exchange
PP-19	Mutiara Annisa	mutiaraanissa@fk.unbrah.ac .id	Profile of Self-Harm Behavior in Adult Mental Disorder Patients
PP-20	Sri Pandu Utami	panduutamidrg@fkg.unbrah .ac.id	Psychological Conditions among Undergraduate Dentistry Students in Indonesia during the COVID- 19 Outbreak

#### 3r<sup>d</sup> Session

ID	Nama	Em	Title
		ail	
PP-21	Sevilla Ukhtil Huvaid	sevilla.kesmas@gmail.com	The Impact of Social Media Use on Adolescent Health
PP-22	Wulan Anggestia	wulan.anggestia@fkg.unrah. ac.id	Antibacterial activities of Moringa oleifera freeze dried extract on Staphylococcus aureus
PP-23	Howardi Visza Adha	howardi.visza@gmail.com	The Influence of Brand Personality on Brand Loyalty (Survey: Customers Samsung Smartphone in Padang City during the Covid-19 pandemic)
PP-24	Nanda	nandaismizal@gmail.com	Dynamic Momentum Strategy on The Indonesia Stock Exchange
PP-25	Anisa Febristi	anisafebristi@gmail.com	Effect of Progressive Muscle Relaxation Therapy Against Anxiety Rate in Pre-Operation Patients With General Anesthesia in the Era of the Covid-19 Pandemic At Siti Rahmah Hospital, Padang.
PP-26	Nurhamida h Rahman	nurhamidahrahman1976@ gmail.c om	Pengaruh Relaksasi Benson Terhadap Penurunan Stress Pada Lansia Di Wilayah Kerja Puskesmas Kuranji Padang Tahun 2021
PP-27	Rheta Elkhaira	rhetaelkhaira@fkg.unbrah.a c.id	PsychologicalDistress among Dental Internship Students in Indonesia during COVID-19
PP-28	Alief Dhuha	alief.dhuha@univrab.ac.id	Predicting Outcome of Traumatic Brain Injury (TBI) Patients With EEG
PP-29	Sarah Nabila Luqyana	sarahnblluqyana@gmail.co m	Factors That Influenced The Occuration Of Geographic Tongue And It's Management
PP-30	Anita Darmayanti	anitadarmayanti@fk.unbra h.ac. id	Serial Monitoring Intra Abdomen Pressure Determines Out Come Of Blunt Abdominal Trauma Patients That Perfomed Damage Control Surgery

#### 4<sup>th</sup> Session

ID	Nama	Em ail	Title
PP-31	Dina Auliya Amly	dinaauliyaamly@gmail.com	Enhancement of Pyocyanin Production by Subinhibitory Concentration of Royal Jelly Extract in Pseudomonas aeruginosa
PP-32	Yulihardi	yulihardibobzna@gmail.co m	Entrepreneurship in Mediaate The Effect of Mianang Kabau Leadership, and Organizational Culture on The Performance of Small Medium Bussiness (SMEs) Woven Songket Songket Silungkang, Sawah Lunto Regency in West Sumatera
PP-33	Sari Setiarini	sarisetiarinibaiturrahmah@ gma il.com	Effectiveness of Prehospiotal Care Management Counseling on Emergency Problems in The Kuranji Padang Public Health Center Work Area
PP-34	Meta Zulyato Oktora	Metazulyantioktora@fk.un brah. ac.id	Matrix Metalloproteinases 9 Expression Of Thyroid Follicular Neoplasm FNAB and Its Relationship with Thyroid Malignancy Histopathology
PP-35	Sri Wahyuni	sriwahyunizukhri31@gmai 1.co m	Online Learning Problems of Medical Students in Learning English
PP-36	Nicen Suherlin	nicenceen.525@gmail.com	Analysis of The Implementation of Bundle Care Management Hais Srgical Site Infection at Siti Rahmah Hospital
PP-37	Bun Yurizali,	bunyurizali@fk.unbrah.ac.id	The Relationship Of Patient Satisfaction With The Waiting Time And Fast Track Services: Structural Equation Modelling Test
PP-38	Melya Susanti	melyasusanti@fk.unbrah.ac. id	The Modifiable and Non- Modifiable Risk Factors For Breast Cancer Patients at RSAM Medan
PP-39	Nadia Purnama Dewi	nadiapurnamadewi@fk.unb rah. ac.id	Identification Of Quarcetine With Tlc And Hplc Techniques At Aloe Vera Barbadensis Miller
PP-40	Monica Fradisha		Cerebral Toxoplasmosis in an Immunocompetent Patient With Confirmed Positive COVID-19
PP-41	Siska Ferilda		Correct Drug Management Training for Outpatients at Siti Rahmah Hospital, Padang City, West Sumatra



#### Assessment of Gender, Role Model, Patient Involvement and Knowledge on Compliance Using Personal Protective Equipment (PPE) among Dental Students: A Cross-Sectional Study

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#### ABSTRACT

Objective: The assessment of compliance with using personal protective equipment among a group of dental students. Methods: A non-participatory observation and self-administered questionnaire was distributed to a total of 72 dental student with cross sectional study design. Results: Of the total 72 questionnaires, the response rate was 100%. The majority of the participants were female students (76.4%). PPE compliance was also observed by 66 (91.7%) of the dentistry students, according to our findings. Only 18 (25%) of the participants had patient participation control, 56 (77.8%) had role model effect, and 60 (83.3%) had solid understanding of how to use PPE, according to the findings of this study. Gender, role model, patient involvement, and knowledge associated significantly with PPE compliance (p<0.05). Conclusion: Dental students show good compliance with the use of personal protective equipment. To minimize the risk of cross infection in dental clinics, continual education and adequate supplies of personal protective equipment are required.

Keywords: PPE Compliance, dental student, gender, role model, patient involvement.

#### **1. INTRODUCTION**

Nosocomial infections or Healthcare Associated Infections often called (HAI's) is an important issue around the world and becomes an interesting problem to be investigated, especially concerning the prevention of infection. HAI's does not only occur in patients but occurs also in health workers or medical personnels. The dentist is one profession that is susceptible to HAI's. Transmission of HAI's that occurs at the dentist can be caused by the action of dental performed often in contact with blood, tissue and fluid secretion that could potentially transmit the infection. Infection cannot be separated by the role of pathogenic microorganisms such as viruses and bacteria<sup>1</sup>. A study conducted at one medical school in Glasgow reported high dental clinic students epstein barr virus-infected compared with preclinic students<sup>2</sup>. Other viral infections based on WHO estimates in 2002 occurred 16,000 cases of hepatitis C, 66000 cases of hepatitis B and 1000 HIV cases due to needle stick happened to health professionals throughout the world<sup>3</sup>.

HAI's impact increasing the length of time of treatment, complications and costs that were all

implicated in the pain management. Impacts can be reduced by preventive measures. Otherwise in 2003, the Centers for Disease Control and Prevention (CDC) published the Guidelines for Infection Control in Dental Health-Care Settings as a guide to dental practices in the prevention and management of infection control and personal safety in the draft. Indonesian state as part of the world also increased prevention efforts through the Ministry of Health to establish the Director General of Health Efforts Number: HK.02.04/II/1179/2012HK about "Standard Infection Prevention and control of Dental and Oral Health Care in Health Care Facilities".

Additionally, guidebook "Infection Control Update"<sup>5</sup> mentions three keys of infection prevention that must be obeyed by the dentist immunization, hand hygiene and use of Personal Protective Equipment (PPE). Rules on the use of PPE standard guidelines of infection control in dental care facilities in 2012 the Ministry of Health describes personal protective equipment in health care facilities that dental and oral masks, gloves, goggles and protective clothes<sup>6</sup>. Dental Education Hospital, Muhammadiyah University of Yogyakarta (DEH MUY) as one facility dental health care in the province of Yogyakarta had a role in the prevention and control of infection with the use of standard operating PPE procedures set. Prevention efforts succeess undertaken by management DEH will be greatly influenced by individual adherence to the rules, or better known as compliance.

Many studies show low compliance with the use of PPE. Research data Aarabi *et al.* in 2008 suggested only 33.9% of the 250 medical personnel that adhere to standard operating procedures of mask usage<sup>7</sup>. Ganczak research results and describe Szych in 2007 only 5% are obedient in using routinly gloves, masks, protective clothing and goggles8. An American study conducted by Akdukman et al. in 1999 found compliance glove use only 28%9. The data indicate the low level of compliance in the use of PPE. Low adherence to standard operating procedures for the use of PPE is a complex issue because it is influenced by multifactorial both individual factors and factors of hospital management.

#### 2. METHODS

The method of this study was quantitative with cross sectional design. In this study, the first phase analyzed the level of adherence to the use of PPE students through non-participatory observation and self-administrated survey using a structured questionnaire. Sampling in this study used a total sampling technique.

Observations on the pilot study were conducted for 2 weeks to assess compliance in the students' use of PPE, performed by 2 numerators and 1 researcher. The results of observations made by the numerator and the researchers then conducted to test the common perception Interrater reliability through Kappa statistic analysis. The results of the analysis obtained Kappa coefficient of 0.91 and a p value of 0.00 (p <0.05) showed significant Kappa test results, there was no difference in perception between the numerator and the researchers observed aspects.

Distribution of the questionnaire of a pilot study conducted at the student clinic to then be filled at one time. A total of 15 questionnaires were returned completed. Data were collected and then tested the validity. All 21 questions were for r results> r table (0.488). Validity test results followed by a reliability test. Reliability test results Alpha value of r (0.990) is greater than r table (0.488), the 17 questions above stated reliable. Subsequent studies followed by 72 students in the two wards DEH MUY, Multazam ward and Arafah room of the whole first year clinical/clerkship students.

Statistical analysis was performed with Fisher's Exact Test that showed the relationship between the gender, role model, patient involvement and knowledge with adherence to the use of PPE.

#### 3. RESULTS

Total sample of 72 dental students responded to the questionnaire. Data regarding gender, PPE compliance, role model, patient involvement, and knowledge are presented in Table I, which shows that the majority of the participants were female students. Our results also show that the PPE compliance was recorded by 66 (91.7%) of the dental students. The results of this study also show that only 18 (25%) participants had patient involvement control, 56 (77.8%) participants had role model effect and 60 (83.3%) had good knowledge regarding use PPE.

**Table 1.** Distribution of participants regarding their gender, ppe compliance, role model, patient involvement, and knowledge.

Variable	Total	
	Ν	%
Gender		
Female	55	76,4
Male	17	23,6
PPE Compliance		
Yes	66	91,7
No	6	8,3
Role Model		
Yes	56	77,8
No	16	22,2
Patient Involvement		
Yes	18	25
No	54	75
Knowledge		
Good	60	83,3
Moderate	12	16,7
Poor	0	0

The results revealed that the PPE compliance differences of participants regarding gender, role model, patient involvement and knowledge statically significant with p value less than 0.05.

**Table 2.** The PPE Compliance differences of Gender,Role Model, Patient Involvement and Knowledge.

Variable		p value
Gender	Female	0.002**
	Male	
Role Model	Yes	0.002**

	No	
Patient	Yes	0.031*
Involvement	No	
Knowledge	Good	0.000***
	Moderate	
	Poor	

**Fisher's exact test Analysis** \**p*<0.05, \*\**p*<0.005, \*\*\**p*<0.001

#### 4. DISCUSSIONS

Observations indicated a high level of compliance (91.7% of the 72 total subjects). Small amounts of the non-compliance due to reasons "in a hurry", "forget", and felt that the action was not a problem without the use of PPE in full. Use of PPE noncompliance in this study that some students did not use a mask and look there are students who do not wear gloves, while the use of protective clothing for all students at the time of observation always use it, it is associated DEH policy that requires each student to wear any protective clothing are wards in DEH.

The level of compliance of PPE use in high MUY DEH can reduce the impact of nosocomial infection. This is supported by no evidence of nosocomial infections in the hospital. High levels of adherence in hospitals is influenced by multifactorial. The factors identified in this study are gender, role models, patient involvement, and knowledge towards the use of PPE is a variable in this study.

Availability had a positive impact on the use of PPE. Availability means is the role of management in DEH MUY. The ingredients are always very easy to access of the availabilities and that there is every ward entrance PPE storage space and are close to their workspace facilitates operators to acquire and use PPE. The availability of appropriate PPE and provide comfort is a factor that can potentially affect compliance. Availability of PPE covers the number and the size and quality in accordance with facilities need. That need to be considered not only for the doctor or clinical students but a means of patient protection is also in a concern.

#### **5.CONCLUSIONS**

All variables associated with the use of PPE, although from observation, it is still a temporary nature of compliance due to these factors. Efforts need to be improved in the future is how to instill a sense of responsibility to wear PPE are derived from selfefficacy, so that each individual wherever they are felt to be using PPE. DEH as an education-based health care providers can work together in a comprehensive section on undergraduate education in curriculum design related control and prevention of nosocomial infections in a comprehensive and structured. In addition, support organizations and a culture of safety regulation are emphasized also very necessary.

#### **AUTHORS' CONTRIBUTIONS**

V.N conceived of the presented idea and developed the theory and performed the computations. A.B verified the analytical methods. V.N and A.B discussed the results and contributed to the final manuscript.

#### **ACKNOWLEDGMENTS**

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# CERTIFICATE

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