EU-ICHS

ESA UNGGUL INTERNATIONAL CONFERENCE OF HEALTH SCIENCES (EU-ICHS)

UEU-ICHS 2024

PROGRAM BOOK

EU-ICHS 2024

Natural Resources Management, Health Management and Regulation to Support Sustainable Development

15-16 OCTOBER 2024

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UEU-ICHS 2024

WELCOME MESSAGE FROM
RECTOR OF UNIVERSITAS ESA UNGGUL

Dr. Ir. Arief Kusuma A.P., ST., MBA., IPU, ASEAN Eng

Distinguished guests, esteemed speakers, participants of the conference, and all attendees,

Ladies and gentlemen, Good morning.

First of all, let us express our gratitude to the Almighty for allowing us to gather here today at the **International Conference of Health Science**s. It is an honor to welcome you to this significant event, centered on the theme **"Natural Resource Management, Health Management, and Regulation to Support Sustainable Development."**

This theme is not only relevant to global challenges but also aligns with important national regulations such as **Kepmenkes No. 375/Menkes/SK/V/2009**, which emphasizes strengthening health systems through effective regulations. This decree underscores the need for a comprehensive approach to health management, ensuring access to quality healthcare, environmental health, and strong public health regulation. These principles resonate with the broader vision of sustainable development, where health and environmental sustainability work in harmony.

Throughout this conference, we will explore a wide range of crucial topics. **Environmental Law** will play a vital role in ensuring that our natural resources are managed sustainably, supporting both human health and ecological balance. The fields of **Nursing and Biological Medicine** are indispensable in delivering care that aligns with both technological advancements and the fundamental principles of health. Discussions on **Nutrition** will delve into how proper dietary management can lead to better health outcomes and contribute to the overall goal of sustainable development.

We will also examine how **Public Health** plays a crucial role in preventing diseases, promoting healthy lifestyles, and addressing the health challenges of populations on a broad scale. The integration of **Artificial Intelligence in Healthcare Services** is another exciting frontier, where technology can enhance diagnostic accuracy, personalize treatment plans, and improve overall healthcare efficiency.

Lastly, the role of **Pharmacy** will be explored in terms of developing new medications and ensuring the safe and effective use of pharmaceutical products. This is essential to addressing both current and emerging health challenges while ensuring sustainable health solutions.

The integration of these topics—environmental law, nursing, biological medicine, nutrition, public health, AI in healthcare, and pharmacy—reflects the holistic and interdisciplinary nature of the sustainable development agenda. We hope that this conference will be a platform for sharing innovations, best practices, and regulatory frameworks that enhance the management of health and natural resources in line with **Kepmenkes No. 375/2009** and other national and global policies.

In closing, I would like to express my gratitude to all of the speakers and participants for their contributions. I hope the discussions today inspire new strategies for integrating health and environmental sustainability for a brighter, healthier future.

Thank you for your attention and participation.

Natural Resources Management, Health Management and Regulation to Support Sustainable Development

WELCOME MESSAGE FROM
DEAN OF FACULTY OF
HEALTH SCIENCES

Prof.Dr.apt.Aprilita Rina Yanti Eff,M.Biomed

Assalamualaikum Warrahmatullah Wabarakatuh

The honorable Ministry of Health Indonesia, Ir. Budi Gunadi Sadikin

The Honourable of Rector Esa Unggul University, Dr. Arief Kusuma Among Pradja, ST, MBA, IPU, ASEAN Eng.

The Honourable Conference chair, Prita Dhyani Swamilaksita, S.P.M.Si

The Honourable of Head of Study Centre, Devi Angeliana Kusumaningtyar, SKM, MPH

The Honourable all of the Invited speakers

The honorable all of the organizing committee

The honorable all of the participant

It is with great pleasure and honor that I welcome you all to the Esa Unggul International Conference on Health Sciences. Your presence here is a commitment to advancing the field of health sciences and promoting sustainable development.

The theme of this conference, "Natural Resource Management, Health Management, and Regulation to Support Sustainable Development," is not just timely but urgent. As we face increasing challenges posed by climate change, environmental degradation, and emerging health threats, we must find innovative solutions to ensure our planet's and its inhabitants' health and well-being.

Our faculty of health sciences is dedicated to producing graduates equipped with the knowledge and skills to address these complex issues. Through our research and teaching, we strive to foster a deep understanding of the interconnectedness between human health and the environment.

This conference provides an invaluable opportunity for us to share our research findings, exchange ideas, and forge new collaborations. Please actively participate in the discussions and presentations that will take place over the next days.

I want to express my sincere gratitude to our sponsors and partners for their generous support, which has been instrumental in making this conference possible. I also want to thank our organizing committee for their hard work and dedication. Once again, welcome to Esa Unggul University. I hope you will find this conference both stimulating and rewarding.

Thank you.

WELCOME MESSAGE FROM
HEAD OF LEARNING STUDY

Devi Angelina Kusumaningtiar, SKM,.MPH

Ladies and gentlemen,
Distinguished guests, colleagues and friends,

It is an honor for me to be here with you today to discuss a theme of great importance to the future of our world: NATURAL RESOURCE MANAGEMENT, HEALTH MANAGEMENT AND REGULATION TO SUPPORT SUSTAINABLE DEVELOPMENT. This theme not only addresses the well-being of individuals and communities, but also reflects the growing recognition of the interconnectedness between human health and the environment.

Amidst new challenges and opportunities, it is imperative that we develop strategies to use natural resources responsibly. These natural resources, whether water, land or biodiversity, provide the foundation for life itself. However, without careful management, depletion of natural resources can cause adverse impacts on public health, damage the environment, and undermine the progress we have made towards a healthier society.

In this era of sustainable development, the health sector plays an important role. Effective health management that incorporates environmental awareness and responsible resource use is key to ensuring that current and future generations can lead healthy lives. From the reduction of pollution-related illnesses to the promotion of green healthcare systems, the integration of sustainable practices into health services is vital to achieving long-term resilience.

Moreover, the synergy between natural resource management and public health can help address some of the world's most pressing issues—such as climate change, food security, and disease prevention—through collaborative efforts. By focusing on this relationship, we can build health systems that not only heal but also protect our environment.

Today, let us engage in meaningful discussions on how we can harness our resources wisely, improve health outcomes, and create sustainable solutions that benefit both people and the planet. This activity aims to disseminate research results in the field of health sciences and enhance interdisciplinary cooperation in the field of health. Thank you to the Rector of Esa Unggul University, committee organizations, sponsors and media partners so that conference activities can be carried out smoothly.

Thank you to the Rector of Esa Unggul University, the organizing committee, sponsors and media partners and all participants, and I look forward to our collaborative efforts toward a healthier, more sustainable future.

WELCOME MESSAGE FROM
CHAIRWOMAN OF
EU-ICHS 2024

Prita Dhyani Swamilaksita, S.P,. M.Si

Greetings,

It is our pleasure to welcome you to the 1st International Conference on Sustainable Health Development (EU-ICHS 2024), organized by the Faculty of Health Sciences, in collaboration with the Faculty of Law, Esa Unggul University. The theme of this conference is "Natural Resources Management, Health Management and Regulation to Support Sustainable Development" with presenting National and International Resource Persons and Health Experts, Prof. Sophia Huey-Lan Hu, Assoc. Prof. Dr. Kanittha Chamroonsawasdi, Ph.D., Prof. Dr. Hasniza Zaman, Dr. Tammara Soma, Ph.D., Dr. Laely Nur Hidayah, Dr. Riza Arief Putranto, S. Si, M.Sc.

Health is a fundamental aspect of sustainable development. With increasing global health challenges, such as climate change and public health crises, it is important for researchers and practitioners to share innovative findings and strategies. This conference is expected to serve as a platform to explore different approaches in sustainable health management, as well as the wise utilization of natural resources. This activity aims to disseminate research results in the field of health sciences and natural resources, increase interdisciplinary collaboration in the field of health, produce health-based policy recommendations, produce evidence-based policy recommendations for sustainable health development and provide a forum for young researchers to present their work.

A big thank you to all parties who have contributed, including the Rector of Esa Unggul University, the Organizing Committee, Speakers, Media Partners and all conference participants. Hopefully the information in this activity can be useful for researchers, academics and the community in making a significant contribution to the development of health science and public policy in Indonesia.Through the exchange of ideas and experiences, this conference will be a step forward in achieving sustainable global health goals.

STEERING COMMITTEE

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4. Dr Titta Novianti, S.Si, M.Biomed
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2. Febriana Dwi Wahyuni, S.Pd, M.Si
3. Tyas Putri Utami, S.Pd, M.Biomed
4. Kurnia Dwi Juliani, S.Gz., M.Gz

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2. Inherni Marti Abna S.Si, M.Si

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INFORMATION FOR ONLINE ORAL PRESENTERS

Instructions for Online Oral Presentation

Equipment Provided by the Presenters
1. A computer with an internet connection (wired connection recommended)
2. USB plug-in headset with a microphone (recommended for optimal audio quality)
3. Webcam (optional): built-in or USB plug-in

Environment Requirement
1. Quiet location and proper lighting
2. Stable internet connection
3. Suitable background
Duration Oral Presentation: 10 – 12 minutes of presentation and 3 – 5 minutes of question and answer

How to use ZOOM
Step 1: Download Zoom from the link: https://zoom.com.cn/download
Step 2: Sign up an account.
Step 3: Set up the languages and do some basic test.
Step 4: Get familiar with the basic functions: Rename, chat, etc
- Rename: Before you enter the conference room, please change your name to Registration code_Name
- Chat: If you have any technical problems during the meeting, you can let us know by using the chat room to communicate with the meeting secretary.
- You can use the chat room to view questions sent by other participants during the Q&A session.

Step 5: How to join the conference online
1. Open the ZOOM application on your device, click Join, enter your meeting ID and passcode, and you are able to join the conference.
2. Participants should stand with the camera turned on.
3. This will be followed by a live Q&A session, please pay attention to questions from the audience.
- Please pay attention to the time difference, and all schedules are arranged based on West Indonesian Time (WIB/GMT+7).
- Please try to find a quiet environment.
- Please arrive 15 minutes early and stay for the entire session.
- Please create your PowerPoint presentations, the template provided may be used.
- Only the organizer can record the zoom session. Please do not record the zoom session during the meeting.

RUNDOWN EU-ICHS EVENT
DAY 1

Time	Activity
07.00-08.00	Registration
08.00-08.10	Opening Ceremony Wonderland Nusantara Traditional Dance by UKM Tari UEU
08.10-08.15	Singing Indonesia National Anthem "Indonesia Raya"
08.15-08.20	**Ahmad Irfandi, S.K.M., M.K.M** Prayer
08.20-08.25	<u>**Prita Dhyani Swamilaksita, S.P., M.Si.**</u> Welcome Speech By Chairman of EU-ICHS 2024
08.25-08.30	**Prof. Dr. Apt. Aprilita Rina Yanti Eff., M.Biomed.** Welcome Speech By Dean of Health Sciences Faculty
08.30-08.35	**Dr. Ir. Arief Kusuma A.P., ST., MBA., IPU, ASEAN Eng.** Welcome Speech By Rector of Universitas Esa Unggul
08.35-08.45	Opening
08.45-09.10	**dr. Etik Retno Wiyati, MARS, MH (Speaker)** **"Keynote Speaker from Ministry of Health"** **Ahmad Irfandi, S.K.M., M.K.M (Moderator)**
09.10-10.05	**Assoc. Prof. Dr. Kanittha Chamroonsawasdi (Speaker)** **"Good Health & Well-being: The Roles of Public Health in Strengthening Sustainability Development Goal"**
10.20-11.20	**Prof. Dr. Hasniza Binti Zaman Huri (Speaker)** **"Precision Medicine : What's Next?"** **Apt. Nadiya Nurul Afifah, M.Farm.Klin (Moderator)**
11.20-12.10	**Prof. Sophia Huey-Lan Hu, PhD, RN (Speaker)** **"Safe Medication Use"** **Adam Astrada, Ns., MHS, CNS, DHSc., FACCWS (Moderator)**
12.10-12.20	**ISHOMA (Break) and POSTER SESSION**
13.00-14.00	**Dr. Laely Nur Hidayah (Speaker)** **"Climate change, air pollution and the challenges of sustainability in Indonesia"** **Dr. Annisa Fitria, SH, MH, M.K.n, C.Med. (Moderator)**
14.00-15.00	**Riza Arief Putranto, PhD, DEA (Speaker)** **"Bioinformatics you cannot ignore: The vital role on health and biodiversity research in Indonesia"** **Dr. Henny Saraswati, S.Si, M.Biomed. (Moderator)**
15.00-15.10	Closing

Natural Resources Management, Health Management and Regulation to Support Sustainable Development

RUNDOWN EU-ICHS EVENT
DAY 2

Time	Activity				Link
08.40 - 08.50	Participant start joining Zoom				
08.50 - 09.00	Opening speech by MC				
09.00 - 10.00	Rachmanida Nuzrina, S.Gz, M.Gizi & Associate Professor, Tammara Soma, PhD, MSc.PI Sustainable food system				
10.00 - 10.15	Break Room and Plenary Session Preparation				
	Breakout Room 1 : Oral Presentation 1	Breakout Room 2 : Oral Presentation 1	Breakout Room 3 : Oral Presentation 1	Breakout Room 4 : Oral Presentation 1	
10.15 - 10.25	Participants Joining Breakout Room 1	Participants Joining Breakout Room 2	Participants Joining Breakout Room 3	Participants Joining Breakout Room 4	Join Zoom Meeting https://zoom.us/j/95957410442?pwd=X3UjqLGVfrtfaaRwpZ94hoBizmNOLu.1
10.25 - 10.30	Moderator (**Rachmanida Nuzrina, S.Gz, M.Gizi**) deliver the rule of oral presentation	Moderator (**Kurnia Dwi Juliani, S.Gz., M.Gz**) deliver the rule of oral presentation	Moderator (**Assoc. Prof. Dr. Kanittha Chamroonsawasdi, Ph.D**) deliver the rule of oral presentation	Moderator (**Mieke Nurmalasari, S.Si., M.Si., M.Sc**) deliver the rule of oral presentation	Meeting ID: 959 5741 0442 Passcode: 216600
10.30 - 10.40	1. **Alya sekarningrum** - The Relationship Of Food Preparation And Food Processing Behavior To Food Waste Behavior In Households In Tanah Sareal District	1. **Rizkansa Insyira Putri** - Relationship between Knowledge, Attitude and Behavior related to Food Ecology on Food Waste Generation and Household Economic Loss in Bogor City	1. **Reqgi First Trasia** - Evaluation of Intestinal Helminth Infection among Stunting Children Under Five Years of Age in Bendung Village, Kasemen District, Banten: A Cross-Sectional Study	1. **Iwan Ariwiyadi** - Analysis of the Implementation of the Fire Emergency Response Program at Ciputra Hospital CitraGarden City in 2024	
10.40 - 10.50	2. **Nur Ahzaini Laili** - The Relationship Between Food Preferences And Food Processing Behavior With Food Waste In Households In Bogor City	2. **Syifa Nur Fadhilla** - The relationship between socioeconomic and food storage behavior on food waste generation and household in bogor City	2. **Muchammad Reza Ghozaly** - The Effect of Ultrasound-Microwave Assisted Extraction (UMAE) Method on the Antioxidant Activity of Ethyl Acetate Extract of Bajakah Roots (Spatholobus Littoralis Hassk.) Using DPPH Method	2. **Rizka Hasnianti** - Factors Related to Compliance with Health Protocols among Workers at the Koja District Health Center North Jakarta	

RUNDOWN EU-ICHS EVENT
DAY 2

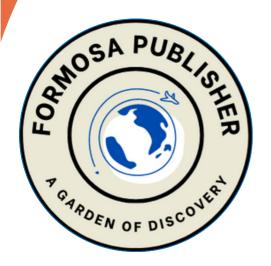|					
10.50 - 11.00	3. **Urziatul Fikri** - The Relationship Between Consumption Patterns And Eating Behavior Of Toddlers To Food Waste Behavior In Households With Toddlers In Bogor City	3. **Anisa Aulia** - The Relationship Between Husband Support and Protein, Fat, and Vitamin B Intake with the Occurrence of Nausea and Vomiting (Emesis Gravidarum) in Pregnant Women in Parung Panjang District, Bogor Regency	3. **Ade heryana** - Length of Stay Analysis of Hospital Emergency Services	3. **Sandita Rachma Latansa** - Relationship Between Binge Watching Korean Dramas, Sleep Quality, And Food Consumption Patterns With The Nutritional Status	
11.10 - 11.20	4. **Euis Ratna Komala** - The Influence of Nutrition Education Using the Digital Buku Saku Halal dan Gizi Balita (BUSHAGITA) on the Knowledge and Attitudes of Mothers with Toddlers in Widarasari Village, Kuningan Regency	4. **Annisa Amaliya** - Comparison of Hand Portion and Household Size (URT) Methods in Estimating Household Meal Portion in Bogor City	4. **Anugrah Novianti** -Effect Of Enteral Formula On Blood Glucose Levels And Body Weight Of Type 2 Diabetes Mellitus Patients	4. **Laela indawati** - Injury Patterns Among Earthquake Victims During the 2022 Cianjur Disaster: An Epidemiological Study Using ICD-10 Classification and Frequency Analysis	Join Zoom Meeting https://zoom.us/j/95957410442?pwd=X3UjqLGVfrtfaaRwpZ94hoBizmNOLu.1
11.30 - 11.40	5. **Titis Retno Sawitri** - Quantity Amount of Food Recording Expenditures on Food Waste Behavior in Households	5. **Siti Rizkina Mahrorani** - Anemia Education Using Smartphone Applications for Adolescent Girls: A Scoping Review	5. **Fitriyan Sesar Sugiharto** - Factors Associated with Occupational Fatigue of Health Worker Auxiliary Personnel in Health Services in North Jakarta 2024	5. **Yuri Pratiwi Utami** - Potential of Etlingera elatior Jack R.m.Smith Leaf Extracts and Fractions. from Tana Toraja As Anticancer against Several Cell Lines	Meeting ID: 959 5741 0442 Passcode: 216600
11.40 - 11.50	6. **Allisa Rufaedah** - The relationship between socio-economic and food management knowledge on food waste behavior to household food security	6. **Meisya Talahaturuson** - Aerobic exercise low impact, Psychological Distress, Diabetes Mellitus Tipe 2, Puskesmas, Kalideres	6. **Santi Anggraini** - Model Of The Influence Of Attitude And Motivation On Safety Culture With Compliance As An Intervening Variable On Healthcare Professionnal	6. **Aprilita Rina Yanti** - Patient Adherence to Insulin Therapy in Type 2 Diabetes Mellitus at X Hospital in North Jakarta: an Analysis Based on Patient Characteristics and Knowledgetitle	

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11.50 - 12.00	7. **Nadiyah** - Consumption Of Prebiotic Sources Significantly Affects Children Height In A Stunting Locus Village In Bogor Regency Indonesia	7. **Gracia** - The effect of low impact aerobic exercise on improving the quality of life of patients with type 2 diabetes mellitus at kalideres health center	7. **Nuruli Putri Melati** - Quasi experimental study on the level of knowledge of fire emergency response to health workers at tanah abang community health center 2023	7. **Sri Teguh Rahayu** -Effect of Temperature and Storage on Cefixime trihydrate Levels of Dry Syrup Preparations After Reconstitution Using Spectrophotometer UV-Vis	Join Zoom Meeting https://zoo m.us/j/9595 7410442?p wd=X3UjqL GVfrtfaaRw pZ94hoBizm NOLu.1 Meeting ID: 959 5741 0442 Passcode: 216600
12.00 - 12.05	Participants moving to main room				
12.05 - 13.00	ISHOMA (Break)				
13.00 - 14.00	Announcement of Best Participant for Oral and Poster Session				

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LIST OF SUMMARIES

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POSTER SESSION

THE RELATIONSHIP OF FOOD PREPARATION AND FOOD PROCESSING BEHAVIOR TO FOOD WASTE BEHAVIOR IN HOUSEHOLDS IN TANAH SAREAL DISTRICT

Alya Sekarningrum, Prita Dhyani Swamilaksita, Putri Ronitawati, Yuli Wahyuni, Anugrah Novianti

Department of Nutrition, Faculty of Health Sciences, Esa Unggul University, Jakarta

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ABSTRACT

Food waste behavior (FWB) is behavior related to food waste that is wasted but is still fit to eat, due to damage or expiration due to human negligence. Food waste (FW) is currently a global problem that has a serious impact on the food security, environmental and economic sectors. As much as 1.3 billion tonnes of food is wasted every year, accounting for around a third of all food for human consumption. Households are the largest source of FW contributors compared to several other sectors. This research contributes to increasing information regarding factors related to household food management on FWB. The number of samples in this study was 110 respondents. Data collection techniques used interviews with correlation test research instruments and quantitative approaches and cross-sectional designs (Cross Sectional Study). The research results show that food management in households has a relationship with FWB. The food management variables that show a relationship are food preparation behavior which includes planning, purchasing and storing, then food processing behavior which includes processing and handling leftovers. Three efforts that can be made to reduce FWB in households are by increasing knowledge and training regarding good and appropriate food management in households, as well as carrying out campaigns regarding the importance of reducing FW.

Keywords: Behavior, Food Waste, Food Management, Household

FOOD PREFERENCES AND FOOD PROCESSING BEHAVIOR TOWARDS HOUSEHOLD FOOD WASTE IN BOGOR CITY

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ABSTRACT

Indonesia is recorded to produce 13 million tons of food waste per year, equivalent to 300 kilograms per individual. This makes Indonesia the second highest country with food waste after Saudi Arabia. The data is also supported by the results of a study from the Ministry of National Development Planning (Bappenas) which examines food waste in Indonesia reaching 23-48 million tons per year or the equivalent of 115-184 kilograms per capita per year from 2000 to 2019. This cross-sectional study with a sample size of 88 housewife respondents in Bogor City aims to determine the relationship between food preferences and food processing behavior with food waste in households in Bogor City. Data analysis in this study used Spearman rank correlation test because the data was not normally distributed. The results showed that there was a relationship between respondents' food preferences and household food waste (p-value < 0.05) and there was no relationship between food processing behavior and household food waste (pvalue > 0.05).

Keywords: Food Preference, Food Processing Behavior, Food Waste, Household Food Waste

CONSUMPTION PATTERNS AND EATING BEHAVIOR OF TODDLERS TO FOOD WASTE BEHAVIOR IN HOUSEHOLDS WITH TODDLERS IN TANAH SAREAL SUB-DISTRICT, BOGOR CITY

Urziatul Fikri, Prita Dhyani Swamilaksita, Lintang Purwara Dewanti

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ABSTRACT

According to a study by Kementrian Perencanaan Pembangunan Nasional (Bappenas) Indonesia is known to produce 115-184 kg of FW per capita per year in the years from 2000 - 2019. Age affects FW behavior because adults produce less FW than children. Especially in children under five years old because at that age children like to explore new things then the increasing development of children affects their diet so that the emergence of picky food. The study, which was conducted using a cross-sectional study method with a total sample of 72 respondents aged 12-59 months in Bogor City, aims to determine the relationship between consumption patterns and eating behavior in toddlers with the FW behavior of families who have toddlers in Bogor City. Data analysis in this study used chi-square test. The results of this study showed that there was no association between the frequency, diversity and level of energy, protein and carbohydrate intake in toddler consumption with the FW behavior of households with toddlers (p-value > 0.05). However, there was a relationship between the level of fat intake and the behavior of difficult to eat toddlers on the FW behavior of households that have toddlers (p-value <0.05).

Keywords: Consumption Patterns, Difficult Eating Behavior, Food Waste Behavior, ToddlersIntroduction

THE INFLUENCE OF NUTRITION EDUCATION USING THE DIGITAL BUKU SAKU HALAL DAN GIZI BALITA (BUSHAGITA) ON THE KNOWLEDGE AND ATTITUDES OF MOTHERS WITH TODDLERS IN WIDARASARI VILLAGE, KUNINGAN REGENCY

Euis Ratna Komala, Zakia Umami, Andi Muh Asrul Irawan, Andi Mukramin Yusuf, Elma Alfiah

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ABSTRACT

The toddler period is crucial for a child's growth and development. However, the limited knowledge and awareness of mothers with toddlers about balanced nutrition often contribute to nutritional problems in toddlers. Nutrition education is one of the key efforts to address these nutritional issues. This study aims to analyze the influence of nutrition education using the digital Buku Saku Halal dan Gizi Balita (BUSHAGITA) on the knowledge and attitudes of mothers with toddlers in Widarasari Village, Kuningan Regency. This research employs a quantitative method with a quasi-experimental approach and a one-group pretest-posttest research design. The sample used in this study consisted of 50 mothers with toddlers selected through purposive sampling based on inclusion and exclusion criteria. Data were collected through knowledge and attitude questionnaires. Data analysis was conducted using the Wilcoxon test for knowledge and the Paired T-Test for attitudes. The results showed a significant increase in knowledge (p-value $0.000 < 0.05$) and attitudes (p-value $0.000 < 0.05$) before and after nutrition education. This indicates that nutrition education using the digital Buku Saku Halal dan Gizi Balita (BUSHAGITA) affects the knowledge and attitudes of mothers with toddlers in Widarasari Village, Kuningan Regency. This research is expected to serve as a means to enhance the knowledge and attitudes of mothers with toddlers, thereby contributing to efforts to address nutritional problems in toddlers in Indonesia.

Keywords: Attitudes, Digital Pocket Book, Education, Knowledge, Mothers with Toddlers, Nutrition

QUANTITY AMOUNT OF FOOD RECORDING EXPENDITURES ON FOOD WASTE BEHAVIOR IN HOUSEHOLDS.

Titis Retno Sawitri[1], Mertien Sa'pang[2], Anugrah Novianti[1], Prita Dhyani Swamilaksita[1], Putri Ronitawati[2]

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ABSTRACT

Both developed and developing countries face the inevitable problem of waste in the food supply chain. In the household sector, almost every day, both other waste and food waste are thrown away. Foods with high moisture content are more prone to spoilage. Foods with high water content, such as fruits and vegetables, hold a significant position among the types of food waste discarded by households. The amount of food waste depends on several circumstances. Food waste that has already reached the landfill will undergo anaerobic decomposition, producing methane gas (CH_4). This type of gas can accelerate the thinning of the Earth's ozone layer, resulting in global warming. In addition to the food waste environment, this can also waste energy in meeting daily needs. This research found that the daily disposal of household food waste cumulatively over a year can provide food for 6-7 active adults, while the disposal of food waste during food storage activities cumulatively over a year can provide food for 2-3 active adults. The aim of this study is to understand the magnitude of waste from food waste behavior generated by households in urban areas. The method used is a cross-sectional approach, and the research target is households. The results showed that out of 100 respondents in the study, the average age was 44 years. Based on the data results in daily waste disposal, it was found that vegetables constitute a significant portion of food waste. Meanwhile, in the waste generated from food storage, fruits were found to be the largest contributor. This disposal can occur due to the process of declining freshness in food, which leads to spoilage and ultimately ends up in the trash. The conclusion of this analysis found that there is a relationship between food purchasing and food storage with the occurrence of food waste.

Keywords: Food waste, households, behavior, daily energy needs, environment.

THE RELATIONSHIP BETWEEN SOCIO-ECONOMIC AND FOOD MANAGEMENT KNOWLEDGE ON FOOD WASTE BEHAVIOR TO HOUSEHOLD FOOD SECURITY

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ABSTRACT

Food security and food waste (FW) are complex global issues. It can lead to many side effects such as malnutrition and hunger as well as several diseases when it occurs for a long time. Several studies have looked at the relationship between FW and food security. Among other things, socio-economic and FW generation reflected in community food management can be used to assess food security in a place. The objective of this study is to determine the relationship between socioeconomic and food management knowledge on FW behavior and household food security. This study used a cross-sectional research design conducted from December 2023 to January 2024 in Kedung badak, Tanah Sareal, Bogor using survey and interview methods. Sampling used random sampling method with respondents totaling 61 housewives. Analysis of research data using Pearson and Spearman correlation tests. There was no relationship between socioeconomic, namely the proportion of food expenditure (p=0.107), the length of maternal education (p=0.376), and food management knowledge (p=0.304) on FW behavior. And there is no relationship between FW behavior (p=0.088) to household food security. There is no relationship between socioeconomic and food management knowledge on FW behavior and no relationship between FW behavior and household food security.

Keywords: Food Security, Food Waste, Food Management, Proportion of Food Expenditure.

CONSUMPTION OF PREBIOTIC SOURCES SIGNIFICANTLY AFFECTS CHILDREN HEIGHT IN A STUNTING LOCUS VILLAGE IN BOGOR REGENCY INDONESIA

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ABSTRACT

Stunting is a condition of growth failure in children that occurs due to chronic nutrient deficiencies for a long time, especially during the first 1000 days of life. Children are classified as stunted if the length/height z-score-for-age is <-2 SD. Stunting can occur due to poor gastrointestinal conditions. Prebiotics and probiotics play an important role in helping to maintain gastrointestinal health. The purpose of this study was to analyze the relationship between the consumption of prebiotic and probiotic food sources and the z-score of height/length for age. This cross sectional study included 100 children aged 6-59 months in the stunting locus village of Bogor Regency. Height/length data were obtained using a stadiometer and infant to meter.Assessment of food consumption of prebiotic and probiotic sources was conducted through interviews using the Semi Quantitative-Food Frequency Questionnaire form. Bivariate test used Pearson correlation test and multivariate test used multiple linear regression test. The data showed that 48% of children were stunted, and 52% were normal. Bivariate test showed correlations of food consumption of prebiotic sources (r =0.274, p=0.006) and probiotics (r=0.264, p=0.008) with height/length z-score. Multivariate test results showed that consumption of prebiotic sources influenced length/height z-score for age (β=0.007, 95%CI: 0.002-0.011, p=0.003). Consumption of prebioticfood sources in children can improvethe z-score of height-for-age.

Keywords: consumption, height, probiotics, prebiotics, stunting

RELATIONSHIP BETWEEN KNOWLEDGE, ATTITUDE AND BEHAVIOR RELATED TO FOOD ECOLOGY ON FOOD WASTE GENERATION AND HOUSEHOLD ECONOMIC LOSS IN BOGOR CITY

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ABSTRACT

Food waste (FW) is a major globalfood problem. FW can causemany losses in terms of economy, environment, nutrition and health, which includes food ecology. One way to see the impacts of FW is by measuring people's knowledge, attitudes and behaviors towards FW. The objective of this study is to determine the relationship between knowledge, attitude and behavior related to food ecology on food waste generation and household economic losses in Bogor City. This study was conducted from December 2023 to January 2024 in Kedungbadak Village, Tanah Sareal Subdistrict, Bogor City using survey and interview methods with a cross sectional research design. Sampling using the total sampling method with 110 respondents. Analysis of research data using the Spearman correlation test. It was found that there was no relationship betweenknowledge ($p=0.799$), attitude ($p=0.482$), and behavior ($p=0.604$) towards household FW generation in Bogor City. There is no relationship between knowledge, attitude and behavior towards FW generation and household economic loss.

Keywords: Food Waste, Economic Loss, Food Ecology, Household, Nutrition Knowledge, Food Waste Knowledge, Attitude, Awareness, Consumption Behavior, Shopping Behavior.

THE RELATIONSHIP BETWEEN SOCIOECONOMIC AND FOOD STORAGE BEHAVIOR ON FOOD WASTE GENERATION AND HOUSEHOLD IN BOGOR CITY

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ABSTRACT

Food Waste (FW) has become a global problem in recent years. FW will have an impact on the environment due to inappropriate food storage behavior and socioeconomic conditions which can effect the quality and quantity of food ingredients or wasted food. The objective of this study is to determine the relationship between socioeconomic and food storage behavior to household food waste generation in Bogor City. The research used was quantitative analytics with a cross-sectional design, carried out in December 2023-January 2024 at Kedungbadak Village, Tanah Sareal District, Bogor City, with 50 households as samples selected using simple random sampling techniques and spearman correlation test. It was found that there was no socioeconomic relationship; education (p=0,39), income (p=0,89), and food storage behavior (p=0,40), on the incidence of household FW in Bogor City. There is no significant relationship between socioeconomic and food waste behavior of household FW generation in Bogor City.

Keywords: food waste (FW), food storage behavior, household, socioeconomic

THE RELATIONSHIP BETWEEN HUSBAND SUPPORT AND PROTEIN, FAT, AND VITAMIN B INTAKE WITH THE OCCURRENCE OF NAUSEA AND VOMITING (EMESIS GRAVIDARUM) IN PREGNANT WOMEN IN PARUNG PANJANG DISTRICT, BOGOR REGENCY

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ABSTRACT

Emesis gravidarum was partly caused by dietary history and psychological factors. Nutritional problems in Parung Panjang, particularly among pregnant women, were still quite high, with one contributing factor being the limited consumption of nutritious food. This study aimed to determine the relationship between husband support and the intake of protein, fat, and vitamin B with the occurrence of nausea and vomiting in pregnant women using a cross-sectional approach. Fifty-nine pregnant women in this study were selected through purposive sampling and analyzed using correlation analysis. The analysis results showed no significant relationship between husband support and nausea and vomiting in pregnant women (p=0.637). There was no significant relationship between protein intake (p=0.605) and fat intake (p=0.956) with nausea and vomiting in pregnant women, but there was a significant relationship between vitamin B intake and nausea and vomiting in pregnant women (p=0.013).

Keywords: pregnant women, husband support, protein intake, fat intake, vitamin B intake, nausea and vomiting.

COMPARISON OF HAND PORTION AND HOUSEHOLD SIZE METHODS (URT) IN ESTIMATING HOUSEHOLD MEAL PORTIONS IN BOGOR CITY.

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ABSTRACT

Balanced nutrition is an important foundation in maintaining health, but in Indonesia there are still many challenges in achieving it. One of the main obstacles is lack of understanding about the right portion of food. Food portion measurement is essential to prevent health problems such as obesity and food waste (food waste). The Household Size Method (URT), which uses utensils such as cups and spoons as a reference, is often used to estimate food portions at the household level. In addition, the Hand Portion method, which uses hand size as a guide, offers a simpler and more practical way to control portions. While both methods are widely used, each has its own advantages and disadvantages. URT is more accurate as it uses a concrete tool, but it requires specialized equipment, while Hand Portion is more flexible and can be used at any time, although it can be less consistent due to differences in hand size between individuals. This study aims to compare the effectiveness of the Hand Portion and URT methods in estimating portions of estimation in households in Bogor City, so that it is expected to provide more precise and practical guidance to help the community to help people achieve balanced nutrition. Objective: to compare the hand portion method and household size (URT) in estimating of household meal portions in Bogor City. Experimental research with a quantitative approach with a cross sectional design. Which was conducted in August 2024. In kedung badak, Tanah Sareal, Bogor. With a total sample of 30 housewife respondents. Data analysis the study used the Shapiro-Wilk or Kolmogorov-Smirnov test. Based on the results there is a significant difference in the weight of food ingredients measured using the Hand Portion and URT methods with ($p<0.05$). The carbohydrate group in Rice and noodles got p values <0.001 and 0.005. The animal protein group of chicken and tuna got p values of 0.008 and <0.001. The vegetable protein group of tofu, tempeh and green beans had a p value of <0.001 and red beans had a p value of 0.002. Vegetable group Carrots, kale, beans, and tomatoes received a p value of <0.001. The fruit group of mango, banana, and oranges got p values of 0.002, <0.001, 0.003. The margarine fat group got a p value of 0.003. Based on the results of the above study, there is a significant difference in the weight of food ingredients measured using the Hand Portion and URT methods with ($p<0.05$).

Keywords: Hand Portion, Household Size, Meal Portion Estimation, Household Meal Portion, Method Comparison.

ANEMIA EDUCATION USING SMARTPHONE APPLICATIONS FOR ADOLESCENT GIRLS: A SCOPING REVIEW

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ABSTRACT

Anemia is a common public health issue that affects adolescent girls worldwide, significantly impacting their physical health and development. Smartphone applications have emerged as promising tools for health education, potentially enhancing knowledge and management of anemia. This review aims to systematically examine and summarize the available literature on mobile applications for anemia education among adolescent girls. The review follows PRISMA-ScR guidelines to ensure a systematic approach. A total of ten journals were reviewed, showing that smartphone-based interventions significantly increased the knowledge of adolescent girls compared to the control group ($p<0.005$) and were effective in preventing anemia. Anemia education using smartphone applications has proven effective in improving nutritional knowledge and preventing anemia among adolescent girls.

Keywords: Adolescent Girls, Anemia, Health education, Smartphone applications

AEROBIC EXERCISE LOW IMPACT, PSYCHOLOGICAL DISTRESS, DIABETES MELLITUS TIPE 2, PUSKESMAS, KALIDERES

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ABSTRACT

The incidence of diabetes in the world continues to increase. The International Diabetes Federation (IDF, 2021) reports that a total of 536.6 million people are estimated to be living with diabetes, representing 10.5% of the global adult population (20–79 years) with a total of 536.6 million deaths from diabetes. 6.7 million people. The aim of this research is to determine the effect of Physical Activity on Reducing Psychological Distress in Type 2 Diabetes Mellitus Patients at the Kalideres District Health Center. The research design uses research methods with a quasi-experimental pre-post test design with control group. The sample in this study were patients who visited the Kalideres Community Health Center and were diagnosed with Type 2 Diabetes Mellitus and had not experienced any complications. The research instrument used the DASS-42 questionnaire. data in the form of univariate analysis and for bivariate analysis. To see the comparison between the post test of the intervention group and the control group in the data, the researcher used a non-parametric test, namely the Kruskal Wallis test. As a result, there was a reduction in stress, anxiety and depression levels in the intervention group after doing aerobic exercise. The research results show that there is an influence of physical activity through aerobic exercise. proven by a decrease in levels of stress, anxiety and depression in terms of frequency and percentage.

Keywords: Aerobic exercise low impact, Psychological Distress, Diabetes Mellitus Type 2, Community Health Center, Kalideres

THE EFFECT OF LOW IMPACT AEROBIC EXERCISE ON IMPROVING THE QUALITY OF LIFE OF PATIENTS WITH TYPE 2 DIABETES MELLITUS AT THE KALIDERES HEALTH CENTER

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ABSTRACT

The incidence of diabetes mellitus in Indonesia is still an unresolved problem. The increase in diabetes cases is a sign of the importance of appropriate and rapid treatment to reduce the adverse effects of diabetes. Diabetes mellitus is a chronic disease that affects all aspects of the sufferer's life, including the possibility of a decrease in quality of life. One of the treatments that can be done is by doing physical activity to be able to control blood sugar levels so as to improve quality of life. Various kinds of physical activities that can be done, one of which is aerobic exercise. Therefore, the importance of providing physical activity to be able to control the health conditions of type 2 diabetes mellitus patients who can maintain a good quality of life. The purpose of this study was to determine the effect of providing low impact aerobic exercise interventions on improving the quality of life of patients with type 2 diabetes mellitus. This type of research is quantitative with a quasi-experimental design conducted in November and December at the Kalideres Health Center, West Jakarta. This study was attended by 14 respondents in each research group with purposive sampling technique, data collected by questionnaire and analyzed using the Paired T-test test, it was found that the sig value. (2-tailed) of 0.000 or smaller than 0.05 so it can be concluded that there is an effect of providing low impact aerobic exercise intervention on improving the quality of life of patients with type 2 diabetes mellitus at the Kalideres Health Center.

Keywords: Type 2 Diabetes Mellitus, Quality of Life, Disease Prevention, Quasi Experimental, Low Impact Aerobic Gymnastics

EVALUATION OF INTESTINAL HELMINTH INFECTION AMONG STUNTING CHILDREN UNDER FIVE YEARS OF AGE IN BENDUNG VILLAGE, KASEMEN DISTRICT, BANTEN: A CROSS-SECTIONAL STUDY

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ABSTRACT

Stunting is a disorder of growth and development of children due to chronic malnutrition and repeated infections, which are characterized by below standard length or height. One of the risk factors for stunting is intestinal helminth infection. Soil-Transmitted Helminth (STH) is the most common worm that infects the human intestine. Research on intestinal helminth infection as a risk factor for stunting in children under five years is still limited and debated. Evaluation of the relationship between intestinal helminth infection and other factors (immunization status and socioeconomic status) and stunting in children under five years will be carried out in Bendung Village, Kasemen District, Banten. This research is a cross-sectional study conducted in Bendung Village, Kasemen District, Banten. Intestinal helminth infections were examined using the Kato-Katz method. Socioeconomic status is measured based on the Kuppuswamy's socioeconomic scale. Immunization status is obtained from the Mother & Child Card (KIA). The statistical analysis used was bivariate Chi-Square and Fisher's Exact tests. The prevalence of stunting among 12-59 months children in Bendung Village, Kasemen District, Banten was 48.6%. The prevalence of intestinal helminth infection was 41.7% (each species A. lumbricoides 33.3%, T. Trichiura 1.4%, hookworm 1.4%, mixed infections of A. lumbricoides and T. Trichiura 1.4%, mixed infections of A. lumbricoides and hookworm 1.4%). Intestinal helminth infection were significantly associated with stunting in children under five years. The results of this study indicate a high rate of stunting and intestinal helminth infection in children under five years in Bendung Village. Intestinal helminth infection has a negative impact on the growth of children under five years.

Keywords: Helminthiasis, Parasite infection, Stunting, Children, Tropical Disease

THE EFFECT OF ULTRASOUND-MICROWAVE ASSISTED EXTRACTION (UMAE) METHOD ON THE ANTIOXIDANT ACTIVITY OF ETHYL ACETATE EXTRACT OF BAJAKAH ROOTS (SPATHOLOBUS LITTORALIS HASSK.) USING DPPH METHOD

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ABSTRACT

The roots of the tampala bajakah plant (Spatholobus littoralis Hassk) obtained from North Barito district, Central Kalimantan were extracted using the ultrasound-microwave assisted extraction (UMAE) method. extraction using ethyl acetate solvent with an ultrasonic extraction time of 60 minutes then followed by the microwave method for 30 minutes with a power of 750 watts. The antioxidant activity of the extract was investigated using the DPPH method using vitamin C as a comparison. The results it was found that the IC50 was 43.18 µg/mL, while the IC50 vit C was 2.71 µg/mL. This value is directly proportional to the total flavonoid content value of 26.85 ± 0.059 mgQE/g and the total phenol content value of 145.152 mgQE/g. From these results it was concluded that the roots of the Bajakah Tampala plant (Spatholobus littoralis Hassk) have very strong activity as an antioxidant candidate.

Keywords: Bajakah root, Spatholobus littoralis Hassk, UMAE, DPPH, antioxidant.

LENGTH OF STAY ANALYSIS OF HOSPITAL EMERGENCY SERVICES

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ABSTRACT

IPatient's time span of receiving Emergency Room (ER) services mostly take time since they arrived until went home or was transferred to an inpatient room or other services. Length of Stay (LOS) is one of hospital services indicator that fully attention by management. The longer time of LOS causes accumulation of patients in the ER that potentially resulting in a high risk of adverse events, delayed services, increased length of treatment days, and high mortality rates. This study aims to analyze the LOS and investigate the association with ER services characteristics including patient's month of visit, gender, age, shift of arrival, shift of departure, triage, referral status, type of service, payment method, and departure status. This is quantitative research that analyze the 30,710 records of ER visit data at class B West Jakarta regional government hospital period January to December 2022. We applied the total sampling to investigate the association between LOS and ER visit characteristics. Binary logistic regression was arranged in bivariate and multivariate analysis model. This study finding that the median of LOS is 4 hour and 32 minutes per ER service visit, and LOS > 8 hours as ER service standard is 22,7%. Multivariate analysis showed that LOS has significant association with month of visit, patient's gender, shift of arrival, shift of departure, triage, referral, payment method, and departure status. Bivariate analysis finding all ER visit characteristics significantly associate with LOS. This study proofed that LOS of ER service in hospital have significant association with visit characteristics. We suggest that the "8 hours cut-off" as minimum standard of ER LOS is appropriate parameter, and almost one third ER visit exceed to 8 hours. Management should hardly attention for ER visit that refer from primary health services, and also departure status as own request go home and refer to inpatient service.

Keywords: Length of Stay, Hospital, Emergency service

EFFECT OF ENTERAL FORMULA ON BLOOD GLUCOSE LEVELS AND BODY WEIGHT OF TYPE 2 DIABETES MELLITUS PATIENTS

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ABSTRACT

Type 2 diabetes mellitus pathients with complications such as stroke usually have difficulty eating so they are given enteral formula to control blood glucose levels and avoid excessive weight loss. Objective: To determine the effect of enteral formula on blood glucose levels and body weight of type 2 DM patients at Tarakan Hospital. This research was a quasi-experimental study with a pre post test control group design using a sample of 40 patients who were divided into 2 groups. The control group was given Hospita-basedl Enteral Formula (HEF) and the treatment group was given Commercial Enteral Formula (CEF). The pretest data were obtained when the patient was admitted to the hospital and the posttest data were obtained after the patient had consumed enteral formula for seven days. The results of the Wilcoxon and Dependent T-test found significant differences in blood glucose levels before and after consuming HEF (p = 0.0001) and CEF (p = 0.0001), the Mann-Whitney test results showed no. differences in blood glucose levels between groups (p = 0.117). Whereas for body weight before and after consuming both enteral formulas, there was no significant difference (p = 0.401) (p = 0.773). Independent T-test results showed no difference in body weight between groups (p = 0.871). HEF and CEF can affect the increase of blood glucose levels to normal blood glucose levels. However, after receiving both formulas after 7 days there was no change in body weight.

Keywords: enteral formula; hospital-based formula; commercial formula; blood glucose level

FACTORS ASSOCIATED WITH OCCUPATIONAL FATIGUE OF HEALTH WORKER AUXILIARY PERSONNEL IN HEALTH SERVICES IN NORTH JAKARTA 2024

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ABSTRACT

Work fatigue is not uncommon in various situations while working. Work fatigue can cause mild to severe disorders such as getting tired easily, dizziness, nausea, aches, disturbed concentration at work, easily experiencing work accidents, and a tendency to increase absenteeism. Work fatigue is generally caused by low quality and quantity of sleep as well as working at abnormal times. Work fatigue can certainly have a negative impact on work, such as decreased work performance, decreased physiological motor and neuronal function, the body feeling unwell and decreased work morale, so controlling work fatigue needs to be prioritized. And it turns out that work fatigue contributes more than 60% to work accidents. The aim of this research is to determine the factors associated with fatigue in assistant health workers in health services in North Jakarta in 2024. This type of research is quantitative research with a cross sectional study design. Univariate and bivariate data analysis using the chi square test. The sampling technique was obtained through interviews based on questionnaires directly to respondents using an instrument in the form of an Industrial Fatigue Research Committee (IFRC) questionnaire. The research results showed that 29 respondents experienced high fatigue of (72.5%) then 11 other respondents experienced moderate fatigue of (27.5%). The research results show that there is a relationship between work fatigue and age with a value of $p=0.020$ ($p<0.05$), work shift $p=0.029$ ($p<0.05$). And there is no relationship between work fatigue in gender and the value of $p=1,000$ ($p>0.05$), length of service, value of $p=1,000$ ($p>0.05$). Based on the research results, management needs to consider age at risk and work shifts that are at risk of experiencing fatigue so that the performance of officers does not decrease.

Keywords: Work fatigue, age, work shift

MODEL OF THE INFLUENCE OF ATTITUDE AND MOTIVATION ON SAFETY CULTURE WITH COMPLIANCE AS AN INTERVENING VARIABLE ON HEALTHCARE PROFESSIONAL

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ABSTRACT

The importance of Safety Culture is to reduce incidents and injuries in the workplace and is a major concern both globally and locally. The five dimensions in the implementation of Safety Culture at Dr. D Hospital have not been achieved, there are poor attitudes and motivations based on the results of the pre-survey. This study aims to determine the influence of attitudes and motivations on safety culture, with incident reporting compliance as an intervening variable on Healthcare Professional at Dr. D Hospital, Serang, Banten. Using a quantitative approach with a cross-sectional design, this study involved 105 respondents selected through purposive sampling. Data were analyzed using Structural Equation Modeling - Partial Least Square (SEM-PLS). Simultaneous influence analysis with the F Test value showed a strong positive relationship. The direct and indirect influence analysis test through the intervening variables of all hypotheses tested with this analysis has a value that indicates acceptable. The results also showed that the attitude and motivation of Healthcare Professional had a positive and significant effect on safety culture through incident reporting compliance as an intervening variable. The results of the study showed that the influence of attitude and motivation on safety culture was more direct than through compliance as an intervening variable, although reporting compliance had a significant impact as an intervening variable on safety culture. Other results also found that the influence of motivation on safety culture was more direct than through incident reporting compliance variables. This model can be used to build a safety culture in hospitals with attitude and motivation variables directly or indirectly through incident reporting compliance. High attitudes, motivation, and compliance can improve safety culture. From the results of this study, it is suggested that it is necessary to develop an incident reporting compliance system so that Healthcare Professional are not afraid to report unexpected events so that a safety culture is built.

Keywords: Safety Culture, Attitude, Motivation, Intervening Variable, Incident Reporting Compliance, Healthcare Professional.

QUASI-EXPERIMENTAL STUDY ON THE LEVEL OF KNOWLEDGE OF FIRE EMERGENCY RESPONSE TO HEALTH WORKERS AT TANAH ABANG COMMUNITY HEALTH CENTER 2023

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ABSTRACT

Based on the results of interviews with the health and occupational safety coordinator Tanah Abang Community Health Center, there was one fire in 2022 which was caused by the explosion and burning of a cellphone while charging the battery. This study aims to analyze the difference in average knowledge scores before and after providing fire emergency response training to health workers at the Tanah Abang Community Health Center in 2023. This type of research is quantitative research with a quasi-experimental study design using the one group pretest-posttest design method. The research was conducted from November 2023 to January 2024. The sample size in this study was 30 people. The Wilcoxon sign test was used as a statistical test in this study. Univariate results found that the mean knowledge scores before and after the training were 59.337 and 84.447. The results of the bivariate analysis found the average knowledge score before and after the training was given with a p-value of 0.000. There is a significant difference between the average knowledge score before and after the training. Puskesmas are advised to carry out training, socialization and fire emergency response simulations on a regular basis, carry out safety induction for new employees, make media posters for flammable materials and fire emergency response symbols, attach symbols in places where flammable materials are stored, and when providing further training and socialization can provide more time.

Keywords: Training, Emergency Response, Fire.

ANALYSIS OF THE IMPLEMENTATION OF THE FIRE EMERGENCY RESPONSE PROGRAM AT CIPUTRA HOSPITAL CITRAGARDEN CITY IN 2024

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ABSTRACT

An emergency response is an undesirable event that can endanger and damage the surrounding environment. An emergency is a condition that arises outside of the normal conditions normally faced by a community and can cause disruption in activities. Fire hazard is a danger caused by the threat of potential and the degree of pressure from the fire emission from the time the fire begins until the fire spreads, smoke and toxic gases appear. Hospitals are one of the activities that provide services and have the potential to experience emergency events such as fires. The efforts that can be made are to take precautions to minimize risks that could occur by creating an emergency response program. The aim of this research is to analyze the extent to which the fire emergency response program at Ciputra Hospital Citra Garden City in 2024 is running well or not. This research was carried out using qualitative research methods with an observational research design. The research results show that Ciputra Hospital Citra Garden City already has a fire emergency response program, but there are still several things that still do not meet standards, such as one of the evacuation routes that is still wrong, training and simulations that are still not routinely carried out. The advice that can be given is that Ciputra Hospital Citra Garden City needs to carry out regular improvements to evacuation facilities and simulation training so that all employees can understand if a fire disaster occurs at any time so that employees understand what actions must be taken.

Keywords: Emergency Response Program, Fire, Hospital

FACTORS RELATED TO COMPLIANCE WITH HEALTH PROTOCOLS AMONG WORKERS AT THE KOJA DISTRICT HEALTH CENTER NORTH JAKARTA

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ABSTRACT

Health protocol is a rule that must be obeyed by the entire community. Health protocol contains a series of activities that we need to do to prevent and reduce the transmission of Corona Virus Disease 2019 (COVID-19) so that people can carry out activities safely. Based on data from the World Health Organization (WHO), as of April 26, 2023, the number of COVID-19 cases globally was 764,474,387 confirmed cases, including 6,915,286 deaths. Based on data from the Indonesian Ministry of Health as of December 31, 2020, there were 743,198 confirmed positive cases, including 22,138 deaths. As of December 31, 2021, the number of positive cases in Indonesia was 4,262,720 confirmed cases with 144,094 deaths. The number of confirmed cases as of December 31, 2022 was 2,457,095 cases with 160,612 deaths. As of December 31, 2023, the number of confirmed positive cases was 92,312, so that the total was 6,812,127 confirmed positive cases since the first case was announced by President Joko Widodo on March 2, 2020. This study aims to determine the factors related to compliance with health protocols among workers at the Koja District Health Center, North Jakarta. The type of research is quantitative research with a cross-sectional research design. The population in this study was 83 workers and the sample used was 48 workers with a simple random sampling technique. The data will be analyzed using Chi Square (Fisher's Exact Test) with the results showing that there is a significant relationship between knowledge (p-value = 0.003), attitude (p-value = 0.001), and supervision (p-value = 0.000) with compliance with health protocols. Meanwhile, variables that do not have a significant relationship include age (p-value = 1,000) and education (p-value = 1,000) with health protocol compliance.

Keywords: Health protocol compliance, age, education, knowledge, attitude, supervision

RELATIONSHIP BETWEEN BINGE WATCHING KOREAN DRAMAS, SLEEP QUALITY, AND FOOD CONSUMPTION PATTERNSWITH NUTRITIONAL STATUS

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ABSTRACT

The sophistication of smartphones and the ease of accessing the internet make it possible to binge watching Korean dramas even to the extent of neglecting sleep, which can have a negative impact on sleep quality. Both of these can have an impact on food consumption patterns, thus affecting nutritional status. This studyaims to determine the relationship between binge watching Korean dramas, sleep quality and food consumption patterns with nutritional statusin college students. This study uses a quantitative approach with a cross-sectional design. The research sample was selected using a snowball sampling technique, resulting in 49 participants. Data were collected through questionnaires of binge watching habits of Korean dramas, Pittsburgh Sleep Quality Index (PSQI) questionnaire, Semi-Quantitative Food Frequency Questionnaire (SQ-FFQ) and nutritional status was assessed through anthropometric measurements using microtoise and digital scales. The collecteddata were analyzed using the chi-square statistical test.The results showed no significant relationship between binge-watching Korean dramas and food consumption patterns ($p = 0.547$), no relationship between sleep quality and food consumption patterns($p = 0.626$), and no relationship between food consumption patterns and nutritional status ($p = 0.367$).

Keywords: Binge watching, Korean dramas, Sleep Quality, Food Consumption Patterns, Nutritional Status.

INJURY PATTERNS AMONG EARTHQUAKE VICTIMS DURING THE 2022 CIANJUR DISASTER: AN EPIDEMIOLOGICAL STUDY USING ICD-10 CLASSIFICATION AND FREQUENCY ANALYSIS

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ABSTRACT

This study aims to analyze the injury patterns among victims of the 2022 Cianjur earthquake by employing the International Classification of Diseases, 10th Revision (ICD-10) for systematic injury classification. The earthquake, which occurred on November 21, 2022, resulted in 327 fatalities and over 7,700 injuries. Data were collected from 482 patients treated at RSUD Sayang Cianjur between August and December 2023. The findings reveal that head injuries (S00-S09) were the most prevalent, accounting for 26.75% of recorded cases, followed by injuries to the limbs and joints. Demographic analysis indicated a higher prevalence of injuries among females (54.82%) and individuals aged 20–44 years (30.70%). A significant proportion of patients had a short length of hospital stay, with 85.96% discharged within two days, indicating effective injury management. These insights are expected to enhance medical response strategies in earthquake-prone regions and contribute to the scientific understanding of earthquake-related injuries, providing a foundational reference for future research.

Keywords: Cianjur earthquake, demographics, emergency management, head injuries, ICD-10, injury patterns, length of stay.

POTENTIAL OF ETLINGERA ELATIOR JACK LEAF EXTRACTS AND FRACTIONS. R.M.SMITH FROM TANA TORAJA AS ANTICANCER AND AGAINST SEVERAL CELL LINES

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ABSTRACT

Cancer is a disease that arises due to abnormal cell growth with a continuous or uncontrolled growth rate. Patikala (Etlingera elatior (Jack) R.M.Smith) is known to contain several compounds, one of which is flavonoids which are reported to have strong anticancer activity against various cancer cells. This study aims to test the anticancer potential of Patikala leaf extracts and fractions (E. elatior (Jack) R.M.Smith from North Luwu) on several cell lines using the MTT method based on IC50 values. The extract was obtained from maceration method using 70% ethanol solvent and extract partition using liquid - liquid extraction method (ECC) with n-hexane and ethyl acetate solvents obtained 3 fractions namely n-hexane fraction, ethyl acetate fraction and water fraction. Anticancer activity test was conducted on WiDr, MCF-7, Hela and Vero cells using MTT method. The results of the anticancer activity of patikala leaf extract from Tana Toraja against WiDr, MCF-7, Hela and vero cells are 81,1 µg/ml, 218,14 µg/ml, 311 µg/ml and 699µg/ml respectively. Anticancer activity was continued against Widr and Vero cells using 3 fractions (n-hexane fraction, ethyl acetate fraction and water fraction), the results of anticancer activity against Widr cells were 321,4 µg/ml, 212,8 µg/ml, and 2472,2 µg/ml, respectively. While against vero cells 4464,1 µg/ml, 686,5 µg/mL and 13624 µg/mL, respectively. The study concluded that patikala leaf extract has anticancer activity against several cell lines with cytotoxic categories (moderate to weak), ethanol extracts are selective against Widr cells with moderate cytotoxic categories and for vero cells are not toxic. While patikala leaf fractions have anticancer activity against Widr cells in the category (weak to not toxic), the most selective ethyl acetate and n-hexan fraction with week cytotoxic category and all fractions are not toxic to vero cells.

Keywords: Cancer, Extract, Fraction, Anticancer, MTT Assay.

PATIENT ADHERENCE TO INSULIN THERAPY IN TYPE 2 DIABETES MELLITUS AT X HOSPITAL IN NORTH JAKARTA: AN ANALYSIS BASED ON PATIENT CHARACTERISTICS AND KNOWLEDGETITLE

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ABSTRACT

Insulin adherence is crucial for achieving reasonable blood glucose control and preventing diabetes complications. Other factors related to patients' attitudes and behaviors include knowledge about diabetes and insulin use. This study investigated factors associated with insulin adherence among type 2 diabetes mellitus (T2DM) patients at X Hospital inNorth Jakarta. A cross-sectional survey was conducted with 80 participants to assess the relationship between insulin adherence and patient characteristics, including demographics, socio-economic factors, and knowledge. Chi-square tests revealed significant associations between insulin adherence and age ($p=0.005$), gender ($p=0.002$), education ($p=0.039$), occupation ($p=0.037$), family history of disease ($p=0.014$), smoking status ($p=0.032$), duration of illness ($p=0.038$), self-administration of insulin ($p=0.012$), comorbidities ($p=0.007$), and diabetes education ($p=0.042$). While insurance ownership showed no significant association, knowledge about diabetes ($p=0.019$) was a crucial factor influencing insulin adherence. These findings underscore the importance of tailored interventions to enhance insulin adherence, considering individual patient characteristics and providing comprehensive diabetes education.

Keywords: Compliance, Diabetes Mellitus, Insulin Use, Knowledge

EFFECT OF TEMPERATURE AND STORAGE ON CEFIXIME TRIHYDRATE LEVELS OF DRY SYRUP PREPARATIONS AFTER RECONSTITUTION USING SPECTROPHOTOMETER UV-VIS

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ABSTRACT

The stability of the preparation must be considered during storage, including suspension preparations so that no degradation is influenced by the length and temperature of storage that research is needed related to the effect of the size and temperature of suspension storage on physical stability and drug levels. The physical stability test of the suspension includes organoleptic tests, pH, sedimentation, redispersion, and viscosity on suspensions stored in cold, room, and car temperatures. The levels of Cefixime trihydrate in the suspension were measured using the UV-Vis spectrophotometry method at a wavelength of 288 nm, which was validated following the ICH parameters, namely linearity, accuracy, and precision. LOD and LOQ, and specificity. The linearity of the method has a correlation coefficient value (r) of 0.9999, accuracy (% recovery) of 100.83 - 101.36%, precision (%RSD) of 0.15 - 0.89%, LOD and LOQ results of 0.30 µg / mL and 0.92 µg / mL. Cefixime levels in suspension preparations were measured for 21 days (Day 0, 1, 3, 5, 7, 9, 11, 13, 14, and 21) at cold temperatures (2 - 8 ° C), room (15 - 30 ° C), and car temperature. The study's results on samples from pharmacy X after reconstitution at all storage temperatures showed a decrease starting on the 5th day (<90%). In comparison, those from Pasar Pramuka experienced a decrease starting on the 3rd day (<90%). Statistical data processing using IBM SPSS statistics showed that the calculated r value (P value) produced was > r table 0.632, which means that there is an effect of storage time and temperature on cefixime levels.

Keywords: Sepsim trihydrate, reconstitution, method validation, ICH, UV-Vis spectrophotometry

POSTER

Natural Resources Management, Health Management and Regulation to Support Sustainable Development

QUASI EXPERIMENTAL STUDY ON THE LEVEL OF KNOWLEDGE OF FIRE EMERGENCY RESPONSE TO HEALTH WORKERS AT TANAH ABANG COMMUNITY HEALTH CENTER 2023

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ABSTRACT

Based on the results of interviews with the K3 coordinator of the Tanah Abang Community Health Center, there was one fire in 2022 which was caused by the explosion and burning of a cellphone while charging the battery. This study aims to analyze the difference in average knowledge scores before and after providing fire emergency response training to health workers at the Tanah Abang Community Health Center in 2023. This type of research is quantitative research with a quasi-experimental study design using the one group pretest-posttest design method. The research was conducted from November 2023 to January 2024. The sample size in this study was 30 people. The Wilcoxon sign test was used as a statistical test in this study. Univariate results found that the mean knowledge scores before and after the training were 59.337 and 84.447. The results of the bivariate analysis found the average knowledge score before and after the training was given with a p-value of 0.000. There is a significant difference between the average knowledge score before and after the training. Puskesmas are advised to carry out training, socialization and fire emergency response simulations on a regular basis, carry out safety induction for new employees, make media posters for flammable materials and fire emergency response symbols, attach symbols in places where flammable materials are stored, and when providing further training and socialization can provide more time.

Keywords : Training, Emergency Response, Fire

BENEFITS OF NUTRITION IN SPORTS

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ABSTRACT

This poster shows how good nutrition improves overall athletic performance, specifically focusing on recovery, energy levels, injury prevention, and overall physical health. The goal of this poster is to show how a balanced diet helps the body repair muscles, build protein, and reduce inflammation after exercise. Key nutrients play specific roles, such as carbohydrates provide energy for muscle recovery, proteins help repair and build tissues, and fats support energy and nutrient absorption. The study shows that proper nutrition can increase energy levels by about 10%, improving performance during intense activities. Eating enough vitamins and minerals also helps prevent injuries by strengthening bones and supporting tendons and ligaments. In conclusion, a healthy diet is essential for athletes to recover quickly, avoid injuries, and perform at their best. This poster suggests that nutrition is a key part of any successful training plan.

Keywords: Athletic performance, Carbohydrates, Injury prevention, Muscle Recovery, Proteins

FORMULATION AND EVALUATION OF MEFENAMATE ACID TABLETS WITH PORANG UMBI (AMORPHOPHALLUS MUELLERI BLUME) TABLETS AS A BINDING MATERIAL

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ABSTRACT

Tablets are preparations that have undergone many developments in terms of formulation and technology development. In making tablets, auxiliary materials are needed, including a binder that provides cohesiveness, durability, adhesion, and increased cohesion. Porang (Amorphophallus muelleri Blume) has a high glucomannan content that can be used as a binder in tablet making. This study aims to determine the effect of pouring tuber flour as a binder on the physical properties of mefenamic acid tablets by the wet granulation method. This study used three binder formulas was used, namely 5%, 7.5%, and 10% Amylum isolated from pouring tubers. Evaluation was carried out on granules, and the physical properties of tablets included weight uniformity test, size uniformity test, hardness test, disintegration time test, and tablet friability test. The data obtained were compared with tablet requirements and analyzed statistically using the ANOVA method. It can be concluded that from the three formulas of porang tuber amylum, there is no significant difference from the tablet evaluation test conducted, so porang tuber amylum can be used as a tablet binder.

Keywords: Formulation, Wet granulation, Isolation, Binder, Tablet, Porang tuber (Amorphophallus muelleri Blume).

BUILDING PATIENT LOYALTY THROUGH SERVICE RELIABILITY, PRICE, BRAND IMAGE, AND INTEGRITY

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ABSTRACT

Business Aspects In the current era of globalization, hospital management is inevitable, this is also faced by PMI Bogor Hospital which is a class B private hospital located in the middle of Bogor City. Assessing the results of Google reviews until January 2024, PMI Hospital Bogor received a Rating rating of 3.7 out of 5.0, which means that the level of trust and patient satisfaction with PMI Bogor Hospital's services is still low. data on repeat visits of old patients at the Afiat polyclinic which reflects a cumulative decrease in patient loyalty, which is around 1-2% in 2023 compared to the previous year. The reliability of the service, brand image and price as well as integrity are suspected to be the causes. The research method used is quantitative descriptive with a cross sectional approach. The number of samples in this study was taken using a convenient sampling technique with a sample of 170 respondents. The data collection tool used used a questionnaire with a linkert scale. It was found that the increase in patient loyalty was indirectly positively influenced by brand image through service integrity as an intervention (indirect > direct estimation value; 0.284 > 0.171), The conclusion of this study is that there is a significant positive influence between brand image variables that are influenced by integrity.

FORMULATION OF LIP CREAM DOSAGE FORMS USING ETHANOLIC RED ANDONG LEAVES (CORDYLINE FRUTICOSA (L.) A. CHEV.) EXTRACT AS COLORANT

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ABSTRACT

Lip cream is a decorative cosmetic used to color the lips, enhancing the aesthetic value of facial makeup. The colorants in lip cream can be natural or synthetic. (Cordyline fruticosa (L.) A. Chev.), known as andong merah, is a plant that produces color through its leaves, which contain anthocyanins, making it a potential natural dye for lip cream. The study involved extracting the plant using maceration with 70% ethanol, yielding a 34.90% extract with a reddish-brown color amounting to 90.75 grams. Lip creams were formulated with various concentrations of the extract (1.25%, 2.5%, and 5%) and a control formula without extract (F0). Characterization, irritation testing, and physical stability testing were performed. The characterization results showed color variation corresponding to extract concentration, rose oil scent, and a semisolid form. The pH was around 7, with good homogeneity, acceptable spreadability and adhesion, but varying viscosity, with F0 not meeting the standard. Physical stability tests over 3 cycles showed slight oil phase separation at 40°C and pH reduction over time. Viscosity increased, spreadability decreased, and adhesion increased. The cream type remained W/O. Only F3 met the criteria after 3 cycles of stability testing, while F0, F1, and F2 did not meet the viscosity standards. All three formulas were found to be safe with respect to irritation.

Keywords: red andong leaves, lip cream, dye, formulation, irritation

PRESCRIBING PATTERNS FOR PEDIATRIC PATIENTS WITH CHRONIC KIDNEY DISEASE AT RSAB HARAPAN KITA IN 2022-2024

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ABSTRACT

Penyakit ginjal kronik (PGK) merupakan kondisi ketika ginjal telah mengalami kerusakan dalam waktu lebih dari 3 bulan secara permanen. Pasien anak dengan PGK memiliki risiko komplikasi berbagai penyakit sehingga terjadinya polifarmasi yang dapat berpotensi terjadi interaksi obat. Penelitian ini bertujuan menganalisa pola peresepan pasien anak dengan PGK di poli nefrologi dan dialisis anak RSAB Harapan Kita tahun 2022-2024. Penelitian non eksperimental deskriptif retrospektif dengan melihat rekam medis elektronik. Terdapat 89 pasien anak yang memenuhi kriteria inklusi dan eksklusi. Hasil penelitian menunjukkan bahwa pasien anak PGK didominasi oleh laki-laki (51,7%), usia terbanyak yaitu rentang 13-16 tahun (32,6%) dan stadium PGK terbanyak adalah G5 (65,2%). Golongan obat yang paling banyak diresepkan antara lain vitamin D yaitu cholecalciferol (11%) dan calcitriol (7,9%), kemudian suplemen kalsium yaitu calcium carbonate (9,7%) dan calcium lactate (8,2%), kemudian obat Calcium Channel Blocker yaitu Amlodipine (8,9%), kemudian obat glukokortikoid yaitu methylprednisolone (5,9%), dan obat diuretik yaitu furosemide (5,7%). Kejadian interaksi obat yang terjadi sebanyak 321 kasus dengan tingkat keparahan terbanyak adalah moderat/sedang (89,4%). Dan stadium PGK tidak memiliki hubungan antara polifarmasi maupun kematian pada anak PGK

Kata Kunci: Penyakit ginjal kronik, Anak, Pola Peresepan, Interaksi Obat

HEALTH STUDENTS' LEARNING MOTIVATION AND ITS EFFECT ON POST-PANDEMIC MENTAL HEALTH

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ABSTRACT

Motivation is a movement within a person, one of which is in learning. High motivation will create good results and mental health as well. Mental health is a psychological condition that affects a person's feelings, thoughts, and behavior. Students who are highly motivated in their lives experience less stress, depression, and anxiety which will impact their learning outcomes. The purpose of this study was to determine the description of health students' learning motivation and its influence on mental health in the post-pandemic through six indicators, namely intrinsic, extrinsic, task value, learning control, self-efficacy, and anxiety. This study used a quantitative descriptive method. The sample of this study was 82 students with three different classes. The results of this study showed that based on the intrinsic indicator 75.2%, extrinsic 81.4%, task value 76.5%, learning control 76.5%, self-efficacy 80.3%, and anxiety 73.4%). External encouragement affects students' learning efficiency because it reduces students' pressure from challenges that will have an impact on mental health. Encouraging yourself to learn and show the personal branding to many people will also reduce anxiety so it can increase self-confidence to get good results because high anxiety can affect learning motivation. This research show that the learning motivation of medical record students in the post-pandemic period is 51.2% high motivation and 48.8% low motivation.

Keywords: health students, learning motivation, mental health

THE INFLUENCE OF INTEREST AND MOTIVATION TO LEARN ON LEARNING OUTCOMES AND MENTAL HEALTH EFFECTS ON STUDENTS

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ABSTRACT

Mental health plays a significant role in influencing student motivation, interest and learning outcomes. A positive mental condition encourages high motivation and interest, and contributes to achieving satisfactory learning outcomes. Therefore, the aim of this research is to influence learning interest and motivation on learning outcomes and mental health effects on students. The research method used was quantitative inferential using the independent T-test, the sample size was 99 students. The sample in this study was calculated using the Slovin formula, a stratified random sample sampling technique. From the research results on the variable interest in learning, the results obtained were significant with a value of (p-value = 0.020), which means that there is an influence of student interest in learning on learning outcomes and on the variable of learning motivation, a value was obtained (p-value = 0.004), which means that there is an influence of student motivation to learn. on learning outcomes, therefore students' mental health is in good condition, this will encourage high motivation and interest in learning. On the other hand, poor mental health can reduce motivation and interest in learning, causing feelings of laziness and lack of enthusiasm in the learning process. Key words: mental health, interest in learning, motivation to learn, learning outcomes

Keywords: mental health, interest in learning, motivation to learn, learning outcomes

EVALUATION OF FIELDWORK PRACTICE ACTIVITIES AND THEIR IMPACT ON STUDENT MENTAL HEALTH IN THE MEDICAL RECORDS AND HEALTH INFORMATION STUDY PROGRAM

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ABSTRACT

Fieldwork Practice Activities is an implementation activity that is carried out systematically and synchronously between educational programs at schools or universities with the mastery of expertise obtained through direct work activities. Mental health is a condition in which individuals are free from all forms of mental disorders. The purpose of this study is to find out the overview of the implementation of Fieldwork Practice Activities and their impact on student mental health students. This study uses the CIPP (Context, Input, Process, Product) evaluation method by Stufflebeam. The object of this research is active students of the 2021 and 2022 batches of the Medical Records and Health Information study program at Esa Unggul University. The sampling technique uses stratified random sampling with a sample of 75 students. The data collection method uses a questionnaire consisting of 31 question items. This research includes quantitative descriptive research. The overall results of the study show that the implementation of Fieldwork Practice Activities is in the good category with a percentage of 54.7% and not good at 44.3%. The Context indicator is in the good category with a percentage of 68% and not good at 32%, where the thing that needs to be considered is the mental health of students due to stress due to the distance of street vendors that are less strategic. The Input Indicator is in the good category with a percentage of 50.7% and Not Good at 49.3%, where the thing that needs to be considered is related to high street vendor funds which results in higher living costs which result in mental pressure due to stress. The Process indicator is in the good category with a percentage of 58.7% and Not good at 41.3%, where things that must be considered are related to unbalanced group cooperation that causes an increasingly high workload on certain parties. The Product indicator is in the good category with a percentage of 57, 3% and not good with a percentage of 42.7%.

Keywords :
Mental Health, PKL, Medical Records and Health Information

COST ANALYSIS OF TWO OR THREE FORMS OF N-ACETYLCYSTEINE THERAPY IN PATIENTS WITH COMORBID PNEUMONIA ON CLINICAL IMPROVEMENT IN THE INTENSIVE CARE UNIT OF THE PUSAT OTAK NASIONAL PROF. DR. MAHAR MARDJONO HOSPITAL IN 2023.

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ABSTRACT

Pneumonia is an acute infection or inflammation in the lung tissue caused by various microorganisms such as bacteria, viruses, parasites, fungi, chemical exposure or physical lung damage. Pneumonia patients in the Intensive Care Unit (ICU) can come from the emergency room, inpatient room, operating room with various underlying diseases. Pneumonia uses N-Acetylcysteine mucolytic as an additional therapy for intensive care patients. This study aims to analyze the cost-effectiveness of N-Acetylcysteine therapy with two or three preparations in patients with comorbid pneumonia in the ICU based on pharmacoeconomic clinical improvement using a cost-effectiveness analysis approach. The study was conducted observationally with a retrospective data collection method. Samples were obtained from medical records of patients with comorbid pneumonia in the ICU who met the inclusion and exclusion criteria, totaling 88 patients. The results showed that 2 dosage forms of N-Acetylcysteine therapy had a clinical improvement effectiveness value of 16% with a total cost of Rp. 883,553, and an ACER value of Rp. 20,932,- so that 2 dosage forms of therapy were more cost effective than 3 dosage forms of N-Acetylcysteine therapy because it was more efficient in requiring the lowest cost for treatment results in the form of clinical improvement.

Keywords: Pneumonia, N-Acetylcysteine therapy, cost-effectiveness analysis

EVALUATION OF DRUG LOGISTICS PLANNING IN THE PHARMACEUTICAL INSTALLATION OF RSUD TARAKAN JAKARTA WITH THE VEN-ABC METHOD FOR THE PERIOD 2023

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ABSTRACT

Instalasi Farmasi Rumah Sakit bagian yang tidak dapat dipisahkan dari pelayanan kesehatan Rumah Sakit bertanggung jawab pengadaan obat dan penyajian informasi. Obat termasuk dalam sediaan farmasi rumah sakit, maka diperlukan manajemen perencanaan logistik dalam pengaturannya obat ini tidak terjadi Stock Out. Salah satu metode untuk mengukur penggunaan obat di rumah sakit dengan menggunakan metode kombinasi VEN – ABC. Penelitian ini merupakan penelitian kualitatif dengan pendekatan penelitian retrospektif dan prospektif yang menggunakan metode deskriptif. Penelitian ini bertujuan untuk mengevaluasi perencanaan logistik obat di Instalasi Farmasi di RSUD Tarakan Jakarta tahun 2023 dengan metode VEN - ABC. Data yang diperoleh dengan menggunakan data primer (Kuisioner) dan data sekunder (Dokumen). Untuk sediaan yang paling banyak digunakan adalah sediaan padat (53%), Hasil dari analisis ABC dengan nilai investasi tertinggi yaitu kategori A dengan nilai presentase 70%, B dengan nilai presentase 20%, C dengan nilai presentase 10% sedangkan untuk nilai investasi VEN dengan kategori V dengan nilai presentase pendapatan 32%, kategori E dengan nilai presentase pendapatan 12% dan kategori N dengan nilai presentase pendapatan 56% yang tersedia di RSUD Tarakan Jakarta. Perencanaan yang dilakukan di instalasi farmasi dengan menggunakan metode ABC⊠VEN di RSUD Tarakan Jakarta Tahun 2023 telah sesuai dan memenuhi kebutuhan pasien. Dari 1180 item obat yang direncakana oleh rumah sakit diketahui bahwa obat⊠obat yang masuk ke dalam kategori kelompok Prioritas sebanyak 237 item obat, obat dengan kelompok Utama sebanyak 759 obat dan kelompok Tambahan sebanyaak 184 obat.

Kata Kunci : Obat, Perencanaan Obat, Metode Kombinasi VEN – ABC

FORMULATION AND DETERMINATION OF SUN PROTECTION FACTOR (SPF) VALUE SUNSCREEN CREAM PREPARATION OF 70% ETHANOL EXTRACT OF BAY LEAF (SYZYGIUM POLYANTHUM (WIGHT) WALP.) IN VITRO

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ABSTRACT

Sunscreen is a protective cosmetic preparation that plays a role in protecting the skin from exposure to ultraviolet rays. The protective capacity of sunscreen is indicated by the SPF (Sun Protecting Factor) value. Flavonoid compounds found in plants can be used as natural sunscreens. Bay leaves (Syzygium polyanthum (Wight) Walp.) Have been identified to contain flavonoids, alkaloids, terpenoids and saponins, so they have the potential as sunscreen preparations. This study aims to determine whether 70% ethanol extract of bay leaves can be formulated as a sunscreen cream preparation according to the requirements and whether 70% ethanol extract cream of bay leaves has the potential as a sunscreen based on the in vitro SPF value test. In this study, bay leaves were extracted by the maceration method using 70% ethanol solvent. 70% ethanol extract of bay leaves was formulated in the form of a cream preparation with an extract concentration of 1%, 5%, 10% then a physical evaluation was carried out. Furthermore, the SPF value was determined in vitro referring to the Mansur equation. The results of physical evaluation showed that all cream formulas were in the form of semi‐solid preparations with the type of O/A cream and the increasing concentration of 70% bay leaf ethanol extract could affect the color and odor and had met the requirements in the pH, homogeneity, viscosity, spreadability and adhesion tests. The SPF value of 70% bay leaf ethanol extract cream was F1 (1%) 9.27 ± 0.04, F2 (5%) 40.68 ± 1.029 and F3 (10%) 82.82 ± 0.32. In this study, it can be concluded that 70% bay leaf ethanol extract can be formulated as a sunscreen cream preparation and has met the requirements. 70% bay leaf ethanol extract cream can potentially be used as a sunscreen.

Keywords: Bay leaf, formulation, SPF value, sunscreen

OVERVIEW OF NON-ACADEMIC SERVICE QUALITY AND ITS IMPACT ON STUDENT MENTAL HEALTH

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ABSTRACT

Non-Academic Services are services provided by the campus and are not related to the curriculum in the form of supporting resources (responsiveness, neatness and politeness of officers), campus atmosphere, campus facilities, and soft skill development. According to WHO, Mental Health is a condition where an individual is aware of his/her ability to cope with stress, work productively, and always establish social relationships with those around him/her. The purpose of this study was to determine the description of the quality of non-academic services and its effect on mental health in students using the servqual method introduced by Zeithaml, Parasuraman and Berry. The sample in this study were 74 active students from the 2019-2023 intake. The method in this study is descriptive quantitative. The results of the study that have been carried out as a whole using the servqual method are that students have felt "Satisfied". Based on the tangible dimension, students have felt satisfied with a percentage of 56.8% and dissatisfied with a percentage of 43.2% where things that need to be considered are increasing open spaces such as sports facilities, parks and green areas, comfortable rest areas so that they can be used by students to reduce mental stress due to stress due to fatigue from studying and piling up college assignments. Based on the reliability dimension, students are satisfied with a percentage of 59.5% and dissatisfied with a percentage of 40.5% where the thing that needs to be considered is expanding the wifi network in all campus areas so that students can access the internet and social media because internet use within reasonable limits has a significant impact on mental health which can be used as entertainment, a source of information and useful social connections. Based on the assurance dimension, students are satisfied with a percentage of 82.4% and dissatisfied with a percentage of 17.6% where the thing that needs to be considered is the form of mental awareness efforts owned by students by providing non-academic services in the form of counseling services that are ready to help students who experience mental health problems. Based on the empathy dimension, students are satisfied with a percentage of 62.2% and dissatisfied with a percentage of 37.8% where the thing that needs to be considered is that non-academic service officers such as counseling services can show concern for students by accepting complaints openly, providing motivation for the development of mental health and psychology due to personal pressure both academic and non-academic experienced by the student. Based on the responsiveness dimension, students have felt satisfied with a percentage of 55.4% and dissatisfied with a percentage of 44.6% where things that need to be considered are especially in non-academic services, namely counseling and health clinic officers can provide fast service, provide definite answers and always prioritize student interests first. Although it was found that the Satisfied category is more, it is advisable to continue to pay attention to aspects that still have low values for the next Campus Image.

Keywords : Non-Academic Services, Mental Health, Servqual Method

ANALYSIS OF POLYPHARMACY AND POTENTIAL DRUG INTERACTIONS IN PEDIATRIC PRESCRIPTIONS AT THE RSAB HARAPAN KITA OUTPATIENT CLINIC FOR THE OKTOBERDECEMBER YEAR 2023

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ABSTRACT

Drug interaction refers to the change in the effectiveness or toxicity of a drug when it is administered together with another drug. The more drugs prescribed, the higher the potential for drug interactions. Some of the drugs prescribed to pediatric patients need to be monitored to avoid harmful drug interactions. This study aims to determine the relationship between the characteristics of pediatric patients with polypharmacy and the potential for drug interactions in the Outpatient Department of RSAB Harapan Kita during the period of October-December 2023. This study is a non-experimental research with a descriptive design, conducted retrospectively. The sampling technique used was stratified random sampling. The instruments in this study were electronic prescription sheets and pediatric patient medical records, using the Lexicomp®. application.The results of this study showed that out of 385 pediatric patient prescriptions, 337 prescriptions experienced drug interactions, with 213 (55.2%) male patients and 172 (47.8%) female patients. Based on the age categories: <1 year old with 11 (2.9%) prescriptions, 1 year to <5 years old with 196 prescriptions, 5-6 years old with 90 (23.4%) prescriptions, and >6-18 years old with 88 (22.9%) prescriptions. The level of drug interaction by category was minor in 88 patient prescriptions (14.5%), moderate in 394 patient prescriptions (68.5%), and major in 95 patient prescriptions (16.2%). Based on the mechanism, pharmacodynamic interactions accounted for 509 (88%), followed by pharmacokinetic interactions with 66 (11.5%).

Keywords : Pediatrics, Drugs Interaction, Prescribing

ANALYSIS OF POLYPHARMACY AND POTENTIAL DRUG INTERACTIONS IN PEDIATRIC PRESCRIPTIONS AT THE RSAB HARAPAN KITA OUTPATIENT CLINIC FOR THE OKTOBERDECEMBER YEAR 2023

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ABSTRACT

Cefotaxime is a cephalosporin class antibiotic that is widely used in hospitals to treat various infectious diseases.The use of cefotaxime injection preparation in children is generally given in divided doses implemented by the UDD system, where the injection powder preparation is reconstituted and divided into several doses in a syringe and then stored for 1 day use. The aim of this study was to investigate the feasibility of UV-Vis spectrophotometric method in measuring the decrease in levels of reconstituted cefotaxime sodium injection powder during storage as an easier and more economical alternative to the KCKT method. The UV-Vis spectrophotometric method was validated to measure the concentration of cefotaxime sodium. Samples in the form of cefotaxime sodium injection powder were reconstituted into a solution with a concentration of 16 µg/mL, put into a 10 cc syringe, then stored in cold and room temperature conditions. Level measurement and physical evaluation of cefotaxime sodium samples were carried out for 7 days. Cefotaxime sodium samples that had been reconstituted and stored in cold temperature showed a decrease in levels below 90% which occurred above the 24th hour, while in samples stored at room temperature it occurred above the 6th hour. The UV-Vis spectrophotometric method was found to be suitable for measuring the concentration of cefotaxime sodium. Cefotaxime sodium is said to be stable up to 24 hours at cold temperature and 6 hours at room temperature after reconstitution.

ANTIOXIDANT ACTIVITY TEST OF CORN (ZEA MAYS L) SEED AND HAIR EXTRACT BY ULTRASOUNIC ASSISTED EXTRACTION (UAE) METHOD

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ABSTRACT

Corn seeds and hair (Zea mays L) is one type of plant that belongs to the Poaceae family. The content of bioactive compounds in corn plants in the form of alkaloids, saponins, terpenoids, tannins and flavonoids as a source of antioxidants in reducing free radicals based on hydroxy groups; in its molecular structure. These antioxidant compounds will react with free radicals in DPPH, antioxidant activity is determined based on the IC50 value obtained. This study aims to determine the total flavonoid content and antioxidant activity of seed extract and corn hair extracted by UAE (Ultrasounic Assisted Extraction) method using 96% ethanol. Testing of total flavonoid content was carried out using the colometric method with the AlCl3 reagent using a UV-Vis spectrophotometrer and antioxidant activity testing using the DPPH (2,2- Diphenyl-1picryl Hydrazyl) method with results expressed in Inhibition Concentration 50% (IC50). The test results showed that total flavonoids in corn seed extract amounted to 19.04 ± 0.015 mgQe/g and in corn hair extract amounted to 26.18 ± 0.016 mgQe/g. Antioxidant activity testing showed that the IC50 value obtained in corn seed extract was 96.65 µg/mL, corn hair extract was 85.36 µg/mL, indicating that the extracts had weaker antioxidant activity compared to vitamin C at 17.25 µg/mL.

Keywords: Antioxidant Activity, Corn Seeds and Corn Hair (Zea mays L), DPPH, Flavonoids Total, IC50.

ANTIOXIDANT ACTIVITY TEST AND DETERMINATION OF TOTAL PHENOL AND FLAVONOID CONTENTS OF 80% ETHANOL EXTRACT OF SUNGKAI LEAVES (PERONEMA CANESCENS JACK).

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ABSTRACT

Sungkai (Peronema canescens Jack) is a plant that has potential as a medicinal plant. Sungkai belongs to the Lamiaceae family and is geographically distributed in several areas. Sungkai leaves have bioactive compounds in the form of alkaloids, flavonoids, phenolics, and saponins (Pindan et al., 2021) which are believed to have antioxidant activity. This study aims to determine the total flavonoid content, total phenols and antioxidant activity of 80% ethanol extract of Sungkai leaves (Peronema canescens Jack). Total flavonoid content testing was carried out using the colometry method with AICI3 reagent. Total phenol testing was carried out with Folin Ciocalteu reagent. Meanwhile, antioxidant activity testing uses the DPPH (2,2-Diphenyl-1picryl Hidrazil) method with results expressed in Inhibition Concentration 50% (IC50). The test results showed that the total flavonoids in the thick extract of sungkai leaves were 40,08 mgQE/g, while the total phenol test in the thick extract of sungkai leaves was 67,41 mgGAE/g. Antioxidant activity testing showed that the IC50 value obtained was 54,37 µg/mL, and the antioxidant value for vitamin C was 17,22 µg/mL. This shows that sungkai leaves have strong antioxidant activity >50 µg/mL and are rich in flavonoid and phenolic compounds.

Keywords: Sungkai leaves (Peronema Canescens Jack), Total Flavonoids

THE LEVEL OF LOCAL KNOWLEDGE OF THE COMMUNITY IN UNGKAL VILLAGE CONGGEANG SUB-DISTRICT SUMEDANG DISTRICT WEST JAVA TOWARDS THE UTILIZATION OF MEDICINAL PLANTS

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ABSTRACT

Judging from the potential of plant diversity, Indonesia has a great opportunity in the development of drugs made from nature. Ungkal Village is still dominated by indigenous people or local residents so that the knowledge that exists and develops in the community, especially regarding the management and utilization of medicinal plants, is still based on local knowledge. This study aims to determine the level of local knowledge of the people of Ungkal Village, Conggeang District, Sumedang Regency about medicinal plants, types and parts of medicinal plants used, how to process, obtain, and use plants into efficacious drugs. This research method was selected randomly with probability sampling technique using cluster random sampling. The instrument in this study used a local knowledge test sheet about medicinal plants with an assessment score category $x > 75$ (high knowledge), $55 < x \leq 75$ (moderate knowledge), and $x \leq 55$ (low knowledge). The results of the study from 85 respondents, overall it is known that both in Dusun Sukaluyu and Dusun Sukahaji, the level of community knowledge about medicinal plants is included in the high category, each with a percentage in hamlet 1 as many as 31 respondents (55.36%) and hamlet 2 as many as 13 respondents (44.83%). There are 31 types of medicinal plant species used by the community in Ungkal Village. The most widely used part of the plant is the leaves as many as 12 species (38.71%). The people of ungkal village mostly process medicinal plants by boiling, namely 13 species of medicinal plants (41.94%). A total of 15 species of medicinal plants (48.39%) can be obtained easily, because many plant medicinal plants in their yards. A total of 20 species of medicinal plants (64.52%) are often used by drinking.

Keywords: Cluster Random Sampling, Ethnopharmacology, Knowledge Level, Medicinal Plants, Traditional Medicine

LEVEL OF SATISFACTION OF BPJS KESEHATAN PARTICIPANTS' OUTPATIENT COMPANIONS WITH PHARMACEUTICAL SERVICES IN THE PHARMACY INSTALLATION OF RSAB HARAPAN KITA FOR THE PERIOD OF JULY – AUGUST 2024

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ABSTRACT

Pharmaceutical services are one of the health services that have an important role for hospitals in realizing quality health. The quality of pharmaceutical services in hospitals can be assessed by looking at the level of satisfaction of respondents. This study aims to determine the characteristics and relationship between satisfaction of outpatient companions of BPJS Health participants, and analyze the level of satisfaction of outpatient companions of BPJS Health participants with pharmaceutical services in the Pharmacy Installation. This research is a type of non-experimental research with a descriptive observational design with a quantitative research type and a prospective approach, the number of respondents in this research was 369 people. The percentage results obtained from the characteristics of the patient's companion are 83.7% female, average age in the adult range (>17 - 44 years) is 77.2%, secondary education (SMA/SMK) is 58.8%, housewife employment was 54.5% and income (Rp. 1,000,000 – Rp. 5,000,000) was 45.3%. Based on the level of patient satisfaction in the reliability dimension, it got 94.69% (very satisfied), responsiveness got 95.37% (very satisfied), assurance got 95.57% (very satisfied), tangibles got 95.45% (very satisfied), empathy got 96.620% (very satisfied), and the average score on the five dimensions of satisfaction obtained was 95.50% (very satisfied). There is a relationship between education and the characteristics of patient companions and the level of satisfaction with pharmaceutical services at the RSAB Harapan Kita Pharmacy Installation.

Keywords: Satisfaction Level, BPJS Health, Pharmaceutical Service, Hospital

THE EFFECT OF NADES SOLVENT CHOLINE CHLORIDE - CITRIC ACID ON THE TOTAL PHENOL AND FLAVONOID CONTENT OF OLD LONTAR FRUIT FIBER EXTRACT (BORASSUS FLABELLIFER L.)

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ABSTRACT

LLontar is a multipurpose tree and almost all parts of this type of plant are used for various purposes. The red and purple skin of the lontar fruit indicates the presence of anthocyanin dyes and phenolic compounds. UAE is an extraction method, to optimize extraction parameters, RSM (Response Surface Methodology) was carried out. Dry samples of old palm fruit fibers were extracted using lactic acid: glucose solvent in comparison with UAE extraction conditions with time variations of 30 minutes, 45 minutes and 60 minutes using sample ratios. and solvent 1:10 g/ml. The extract solution obtained was then carried out to determine the total phenol test using the Folin-Ciocalteu method. Based on the optimization results, it can be concluded that the optimum conditions for the extraction of phenolic compounds from old palm fruit fibers of Borassus flabellifer L. were using the NADES ratio Lactic acid: glucose solvent ratio 1:1 20% with an extraction time of 30 minutes with UAE. The highest total phenol content obtained was 0.983 mg GAE/g with a desirability of 0.842. The effect of the UAE-assisted extraction method with NADES solvent (Lactic acid: glucose) on the phenolic compound content of mature palm fruit fiber (Borassus flabellifer L.) at an extraction time of 30 minutes can increase the value of total phenol content when compared with an extraction time of 60 minutes for total phenol content. obtained actually decreased.

Keywords :
Old Palmyra Fruit Fiber (Borassus flabellifer L), Total Phenol, RSM, Lactic Acid: Glucose, UAE

FRUIT FIBER (BORASSUS FLABELLIFER L.) WITH NADES SOLVENT (LACTIC ACID: GLUCOSE) ON TOTAL PHENOLIC COMPOUND CONTENT

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ABSTRACT

Lontar (Borassus flabellifer Linn.) is a palm widespread in the tropics and has various health benefits, mainly due to its antioxidant content. This study aims to extract phenol and flavonoid compounds from old lontar fruit fibers using choline chloride-citric acidbased Natural Deep Eutectic Solvent (NADES) by Ultrasonic Assisted Extraction (UAE) and Microwave Assisted Extraction (MAE) methods. This study also compared the efficiency of these two extraction methods on the total phenol and flavonoid content produced. The results showed that the MAE method with NADES 1:1 ratio produced the highest total phenol content, which was 6,1289 mg GAE/g extract, while the UAE method with NADES 1:1 ratio produced the highest flavonoid content, which was 3,8262 mg QE/g extract. Meanwhile, the results for total phenol content obtained from the UAE method with NADES ratio 1:1 amounted to 0,8751 mg GAE/g extract, and for flavonoid content, the lowest results were achieved by the UAE method with NADES ratio 2:1 at 0,6744 mg QE/g extract. This study shows that the MAE method is more effective in extracting phenol and flavonoid compounds. The combination of MAE and UAE methods with NADES as an environmentally friendly green solvent provides optimal results in the extraction process of bioactive compounds from old lontar fruit fibers (Borassus flabellifer L.).

Key words :
Old Lontar Fruit Fibers (Borassus flabellifer L.), Total Phenols, Total Flavonoids, NADES, Choline Chloride - Citric Acid.

OPTIMIZATION OF MICROWAVE-ASSISTED EXTRACTION METHODS WITH NADES (LACTIC ACID-SUCROSE) ON THE PHENOLIC COMPOUND CONTENT OF OLD PALMYRA PALM FRUIT FIBER (BORASSUS FLABELLIFER L.)

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ABSTRACT

Palmyra palm (Borassus flabellıfer L.) is a type of palm that contains active compounds such as phenols, flavonoids and tannins. These compounds can be useful as anti-inflammatory, antimicrobial and antioxidant. This research aims to develop and optimize a microwaveassisted extraction method using NADES lactic acid-sucrose solvent to extract phenolic compounds from old palm fruit fibers (Borassus flabellıfer L.). Dry samples of old palm fruit fibers were extracted using various extraction conditions (three factors), namely the NADES lactic acid-sucrose ratio of 1:1-3:1 g/g, microwave power of 30-50%, and extraction time of 5- 15 minutes. Determination of total phenol content was carried out using the Folin-Ciocalteau method and measured at a wavelength of 739 nm. The total phenolic content of mature palm fruit fiber extract was 0,9591 mgGAE/g-1,9812 mgGAE/g simplicia. Based on optimization results using Response Surface Methodology (RSM), the optimum conditions for the total phenolic content of old palm fruit fiber extract were obtained at a NADES lactic acid-sucrose ratio of 1:1 g/g, microwave power of 50%, and extraction time of 15 minutes with predicted total content. phenol of 1,9500 mgGAE/g simplicia

Key words :
Old Palmyra Palm Fruit Fiber (Borassus flabellifer L), Total Phenol Content, Microwave-Assisted Extraction, Natural Deep Eutectic Solvent, Response Surface Methodology.

EFFECT OF NADES SOLVENT COMBINATION (CHOLINE CHLORIDEGLYCEROL) ON TOTAL PHENOL AND FLAVONOID CONTENT OF OLD LONTAR FRUIT FIBER EXTRACT (BORASSUS FLABELLIFER L.).

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ABSTRACT

Lontar is a plant from the Aracaceae family that contains secondary metabolite compounds, such as flavonoids, phenols, and has antioxidant activity. Solvents that are usually used in extracting bioactive compounds such as phenolics and flavonoids are ethanol solvents which have highly volatile properties and have high toxicity properties that can harm the environment and health. Natural Deep Eutectic Solvent (NADES) or called natural deep eutectic solvent is one of the solvents that tend to be environmentally friendly. This study aims to determine the effect of choline chloride - glycerol ratio in extracting total phenol and flavonoid content in old lontar fruit (Borassus flabellifer L.) fiber extract with the help of Microwave Assisted Extraction (MAE) and Ultrasound Assisted Extraction (UAE). The dried lontar fibers were extracted using NADES choline chloride - glycerol solvent with molar ratios of 1:1, 1:2 and 1:3 with extraction conditions in Microwave Assisted Extraction (MAE) and Ultrasound Assisted Extraction (UAE) using a sample and solvent ratio of 1:10 g/mL. The extract solution that has been obtained is then determined by the total phenol test using the Folin-Ciocalteu method and the favonoid test using the $AlCl_3$ addition method. The results of MAE and UAE extracts with different molar ratios show different content values. The highest value in total phenol and flavonoid content was shown in extracts extracted using MAE.

Key words :
Old lontar fruit fibers (Borassus flabellifer L.), NADES, choline chloride-glycerol, total phenols, total flavonoids.

POTENTIAL DRUG INTERACTIONS IN THE PRESCRIPTION PATTERNS OF OUTPATIENT PEDIATRIC PATIENTS WITH ACUTE RESPIRATORY TRACT INFECTION (ARTI) AT RSAB HARAPAN KITA IN 2023

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ABSTRACT

Drug interaction is the process of a drug and other drugs interacting with each other if administered together can affect the activity of increasing or decreasing its effect and cause side effects. The greater number of drugs prescribed will lead to an increase in the occurrence of drug interactions. This study aims to determine the potential for drug interactions in the prescribing patterns of pediatric outpatients with acute respiratory infections (ARI) at RSAB Harapan Kita in 2023. Non-experimental research with descriptive design was taken retrospectively. Sampling using total sampling. The instruments used were medical records of pediatric patients with ARI, using the Lexicomp, drugs.com, Medscape and Stockley applications. The results of this study showed that out of 150 paediatric outpatients, 86 patients (57.33%) experienced drug interactions as many as 128 prescriptions, with male gender 88 patients (58.67%) and female 62 patients (41.33%). Based on the age category, there were 95 patients (63.33%) aged 1-<5 years, 45 patients (30.00%) aged 5-11 years and 10 patients (6.67%) aged <1 year. Drug interactions were divided into severity categories: moderate 74 (57.81%), minor 44 (34.38%), and major 10 (7.81%). The mechanism of interaction consisted of pharmacokinetics 20 (15.62%), pharmacodynamics 71 (55.47%), and unknown 37 (18.41%).

Key words :
ARI, Children, Drug Interaction, Prescribing

CHARACTERIZATION OF 70%, 80% AND 96% ETHANOL EXTRACTS OF RED GINGER (ZINGIBER OFFICINALE ROSCOE VAR.RUBRUM) FROM JAVA

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ABSTRACT

DRed ginger (Zingiber officinale var rubrum) is a plant that has a distinctive aroma containing several active compounds such as gingerol, shogaol, zingerone. This study was conducted to characterize and measure the total phenol and flavonoid content of 70%, 80% and 96% ethanol extracts of red ginger rhizomes from Java. Drying of simplisia was done by dehydrator at 40°C. Extraction was carried out using the maceration method using 70%, 80% and 96% ethanol solvents. Characterization of red ginger includes specific and nonspecific parameters. The resulting extract meets specific parameters such as extract identity parameters, organoleptic tests, and soluble compounds in certain solvents, and nonspecific include drying shrinkage, moisture content, ash content and specific gravity. Referring to the standard parameters of medicinal plant extracts such as extract yield, organoleptic, water- chloroform soluble juice content, ethanol soluble juice content, water content, ash content, and drying shrinkage, it is proven that all tests meet the predetermined requirements. The 70%, 80% and 96% ethanol extracts of ginger positively contained phenol, alkaloid, triterpenoid, saponin and flavonoid compounds.

Key words :
 Red ginger, maceration, characterization.

FORMULATION AND ANTIOXIDANT ACTIVITY TEST OF SOLID SOAP PREPARATION FROM SURUHAN LEAF EXTRACT (PEPEROMIA PELLUCIDA L.)

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ABSTRACT

Skin is an organ that covers the entire surface of the human body which is useful for protecting the body from various physical disturbances and external stimuli. Suruhan leaf (Peperomia pellucida L.) is known to contain flavonoid compounds that have the potential to prevent oxidative stress. This study aims to develop the extract of suruhan leaves in the form of solid soap preparations and determine the potential antioxidant activity produced. The extraction process of suruhan leaves was carried out by maceration method using 70% ethanol until a thick extract was obtained. This extract was then formulated in the form of solid soap with variations in extract concentration, namely F1 (15%), F2 (20%), and F3 (25%). Antioxidant activity tests on soap preparations were carried out using the DPPH (1,1-Diphenyl-2- picrylhydrazyl) method. The results showed that suruhan leaf extract can be formulated in the form of solid soap with physical properties that meet the requirements of the Indonesian National Standard (SNI). The antioxidant activity test shows that the solid soap of suruhan leaf extract has antioxidant activity with varying IC50 values, where F3 has the strongest activity. Based on this study, it can be concluded that suruhan leaf extract is effectively formulated in solid soap and has potential as an antioxidant

Key words :
 Antioxidant Activity, DPPH, Peperomia pellucida L., Solid Soap, Suruhan Leaf

ETHNOPHARMACOLOGY STUDY IN POJOK VILLAGE, PULOKULON DISTRICT, GROBOGAN REGENCY, CENTRAL JAVA

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ABSTRACT

Since ancient times, in daily life, the diversity of plants and animals is utilized for human needs, both primary and secondary needs. Some people in Indonesia have often used medicinal plants as traditional medicine. Pojok Village is rich in biodiversity such as medicinal plants, grasses, teak wood, mahogany, and others, so that the surrounding community utilizes plants in the forest not only as medicinal plants but also to meet their daily needs. This study aims to inventory, know the types of medicinal plants, plant parts, how to obtain them, how to process them, and how to use them as medicinal plants used for community treatment in Pojok Village. This research method was taken by using snowball sampling technique. The instruments in this study used questionnaires and interviews. The results showed that in Pojok Village there are 17 types of medicinal plants with a variety of plants such as binahong, belimbing wuluh, katuk leaves, kersen leaves, moringa leaves, guava leaves, turmeric, galangal, aloe vera, neem leaves, Chinese castor leaves, bay leaves, green betel leaves, cassava leaves, noni fruit, purple leaves, temulawak. The most widely used plant part is the leaf (10 types of plants). A total of 12 types of plants are more often processed by boiling. A total of 11 types of plants are used by drinking. There are 14 types of medicinal plants that are often found in the yard.

Key words :
Ethnopharmacology, Medicinal Plants, Traditional Medicine, Snowball Sampling

THE RELATIONSHIP BETWEEN KNOWLEDGE ABOUT ANTIBIOTICS AND COMPLIANCE WITH ANTIBIOTIC USE IN LAW STUDY PROGRAM STUDENTS AT ESA UNGGUL UNIVERSITY

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ABSTRACT

Knowledge about antibiotics will affect the compliance of antibiotic use in each individual. The higher the knowledge, the higher the compliance with the use of antibiotics and this will reduce the number of cases of resistance to antibiotics. This study aims to determine the relationship of knowledge about antibiotics in law study program students at Esa Unggul University. This research is a quantitative study using a cross sectional design with a sampling of 305 respondents and data respondents who fit the inclusion criteria were 129 respondents. Therefore, the data used were 129 respondents. The results obtained on the level of knowledge of Esa Unggul University law study program students were mostly high 77.5%, followed by moderate knowledge 10.1% and low knowledge 12.4%. At the level of compliance of Esa Unggul University law study program students, the majority is high 57.4%, followed by moderate compliance 17.8% and low compliance 24.8%. The chi square test showed a relationship between knowledge about antibiotics and compliance with antibiotic use with a significance value of 0.001. Respondents with low knowledge had low compliance (100% were in the low compliance category). In contrast, respondents with high knowledge showed a more varied distribution where the majority had high compliance (74.0%), and a small proportion had moderate (20.0%) and low compliance (6.0%).

Key words :
Knowledge, Compliance, Antibiotics, Esa Unggul University Law Study Program

FORMULATION AND ANTIOXIDANT ACTIVITY TEST OF SOLID SOAP WITH ETHANOL EXTRACT OF KAPOK RANDU LEAF (CEIBA PENTANDRA (L.) GAERTN)

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ABSTRACT

Skin is the most important part of the human anatomical structure. Therefore, it is necessary to maintain and care for its health by using cosmetics. One type of cosmetic that can be used to maintain skin health is soap. Kapok Randu leaves (Ceiba pentandra (L.) Gaertn) are one of the natural ingredients that contain antioxidant compounds. This type of research is experimental, namely Formulation and Antioxidant Activity Test of Solid Soap Ethanol Extract of Kapok Randu Leaves (Ceiba pentandra (L.) Gaertn). The antioxidant activity of a plant simplicia can be tested by the DDPH method (1,1-Diphenyl-2-picrylhydrazyl radical) because this method is one of the in-vitro antioxidant activity test methods that can be used to determine the potential of a sample as an antioxidant. The test of solid soap of kapok randu leaf ethanol extract against DPPH obtained the results of F1 with an extract concentration of 10% IC50 value of 77.09 µg/mL, in F2 with an extract concentration of 15% IC50 value of 65.98 µg/mL, in F3 with an extract concentration of 20% IC50 value of 57.73 µg/mL. From the research conducted (F1-F3), it produced ethanol extract of kapok randu leaves which had antioxidant activity in the very strong category between 50-100 µg/mL and an IC50 value of 44.88 µg/mL which was included in the very strong category. The manufacture of solid soap of ethanol extract of kapok randu leaves has passed the requirements. For further research, it is recommended to optimize the formula and test the physical stability of solid soap preparations of ethanol extract of kapok randu leaves..

Key words :
Kapuk randu leaves, solid soap, antioxidant activity test, formulation

FORMULATION AND PHYSICAL STABILITY TEST OF COSMETIC PREPARATIONS BLUSH ON POWDER BEETROOT EXTRACT (BETA VULGARIS L.)

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ABSTRACT

Blush on is available in various shapes, and various colors. Besides synthetic colorants, natural colorants can also be used as blush colorants. In this study, beetroot fruit was used as a natural colorant in blush powder preparations with seven concentration variations. F1-F3 uses beetroot extract with concentrations F1 20%, F2 25%, and F3 35%. In beetroot powder for F4-F6 concentrations are F4 25%, F5 45%, F6 65%. Preparation of beetroot extract was carried out by maceration method using 70% ethanol. Evaluation of the preparation includes organoleptic, homogeneity, pH, smoothness, adhesion, irritation, liking, and physical stability tests. The seven formulas produced a smooth texture and distinctive odor of the extract at each concentration. The color produced varies in F1-F3 producing a brownish beige to brown color, and in F4- F6 producing a purplish white to purple color. The physical stability test produced a preparation that was stable during storage and the color and aroma that were most liked by the panelists were F6, and the adhesion that was most liked by the panelists was F4. The results of the irritation test also showed no irritation reaction in 10 panelists.

Key words :
Beta vulgaris L., beetroot, blush on powder, natural dye, stability.

OPTIMIZATION OF STEARIC ACID AND TRIETHANOLAMINE CREAM PREPARATIONS FROM PARSLEY (PETROSELINUM CRISPUM (MILL.) FUSS) LEAF EXTRACT USING THE SIMPLEX LATTICE DESIGN (SLD) METHOD

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ABSTRACT

The background of this research focuses on developing a cream formulation that contains active compounds in it. Parsley leaf extract (Petroselinum crispum) is known to have antibacterial (Staphylococcus aureus) and anti-fungal (Candida albicans) activities. This study aims to optimize the formulation of cream preparations from a combination of stearic acid and triethanolamine from parsley leaf extract (Petroselinum crispum) using the Simplex Lattice Design (SLD) method. In this study, stearic acid and triethanolamine were used as the main ingredients in the preparation of cream to determine the optimal concentration that produces a preparation with good physical stability and desired cosmetic properties. Formula III was determined as the optimum formula with a composition of 98% stearic acid and 2% triethanolamine, resulting in a desirability value of 0.926. Evaluation of cream preparation includes physical stability test, data analysis using Design Expert software, and biological activity testing. The results showed that the combination of stearic acid and triethanolamine in formula III can produce cream preparations with optimal quality that are safe and effective for use as skin care products.

Key words :
Parsley (Petroselinum crispum), Cream, Simplex Lattice Design, Stearic Acid, Triethanolamine.

ANALYSIS OF RECONSTITUTED CEFTRIAXONE INJECTION PREPARATIONS USING UV-VIS SPECTROPHOTOMETRY

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ABSTRACT

Penelitian ini didasarkan karena tingginya kasus penyakit infeksi di Indonesia sehingga dibutuhkannya penggunaan antibiotic, salah satunya seftriakson. Seftriakson untuk injeksi diformulasikan dalam bentuk sediaan serbuk injeksi karena memiliki stabilitas yang buruk didalam air, sedangkan pada sistem distribusi obat di RS secara Unit Dose Dispensing (UDD) dibutuhkan penyiapan atau dispensing obat dalam bentuk siap konsumsi, yaitu pada sediaan serbuk injeksi harus dilarutkan terlebih dahulu pada pelarutnya sehingga penting untuk mengetahui stabilitas sediaan. Penelitian ini adalah penelitian kuantitatif yang dilakukan untuk mengetahui stabilitas fisik dan kadar sediaan injeksi seftriakson yang telah direkonstitusi dengan penyimpanan pada suhu dingin (4 °C) dan suhu ruang (26-30°C) selama 7 hari. Hal ini juga dilakukan untuk mengetahui hasil optimasi metode analisis dengan parameter yang mengacu pada ICH untuk senyawa seftriakson sodium dalam sediaan injeksi menggunakan spektrofotometer UV-Vis yang meliputi linearitas, spesifisitas, presisi, akurasi, LOD dan LOQ. Dalam penelitian ini peneliti melakukan analisis data dengan menggunakan Microsoft Excel untuk melakukan perhitungan SD, %RSD, LOD dan LOQ, serta SPSS 25 untuk melakukan uji korelasi Pearson antara lama penyimpanan dan kadar sediaan injeksi seftriakson pada dua suhu penyimpanan. Hasil penelitian yang didapat menggunakan uji korelasi Pearson dengan SPSS 25 menunjukkan bahwa adanya korelasi negatif yang kuat dan signifikan antara lama penyimpanan dan kadar sediaan injeksi seftriakson pada penyimpanan di suhu dingin maupun di suhu ruang, yang dapat diinterpretasikan bahwa semakin bertambahnya waktu penyimpanan, maka kadar sediaan injeksi seftriakson semakin menurun. Pengukuran stabilitas fisik dan kadar sediaan menunjukkan hasil bahwa terjadi perubahan warna sediaan dari bening menjadi kuning oranye yang signifikan, khususnya pada penyimpanan di suhu ruang. Adapun hasil pengujian stabilitas kadar sediaan selama penyimpanan di suhu dingin adalah 96 jam, sedangkan pada penyimpanan di suhu ruang, sediaan stabil selama 48 jam. Hasil dilakukannya optimasi metode analisis menunjukkan bahwa parameter linearitas, spesifisitas, akurasi, dan presisi memenuhi persyaratan menurut literatur yang diacu.

ANALYSIS OF RECONSTITUTED CEFTRIAXONE INJECTION PREPARATIONS USING UV-VIS SPECTROPHOTOMETRY

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ABSTRACT

Hipotermia sering terjadi pada pasien pasca operasi, mengakibatkan komplikasi seperti morbiditas jantung dan pemulihan luka yang lambat. Blanket warmer terbukti lebih efektif daripada selimut biasa dalam meningkatkan suhu tubuh dan mencegah hipotermia. Tujuan penelitian ini adalah menganalisis efektifitas pemberian blanket warmer terhadap perubahan suhu tubuh pasien post operasi hemiarthroplasty di Recovery Room RSPAD Gatot Soebroto. Metode penelitian adalah kuantitatif. Jenis Penelitian yang digunakan adalah quasi experiment (pre posttest with control group design) dengan desain penelitian yang digunakan adalah pre-post test control group design. Hasil penelitian menggunakan uji T Independen didapatkan nilai p-value 0,000 ($\alpha < 0,05$) yang membuktikan H1 diterima bahwa ada perbedaan pemberian blanket warmer terhadap perubahan suhu tubuh pasien post operasi hemiarthroplasty di Recovery Room RSPAD Gatot Soebroto. Kesimpulan dari penelitian ini terdapat pengaruh dalam pemberian warmer blanket dan selimut biasa pada pasien post operasi yang mengalami hipotermia di di Recovery Room RSPAD Gatot Soebroto dengan nilai p- value 0,000 ($\alpha < 0,05$)

Key words :
Hipotermi, Recorvery Room, Blanket Warmer, Selimut biasa

ETHNOPHARMACOLOGICAL STUDY OF MEDICINAL PLANTS BY THE LOCALS OF WANASARAYA VILLAGE IN KALIMANGGIS DISTRICT, KUNINGAN REGENCY, WEST JAVA PROVINCE

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ABSTRACT

The understanding and use of medicinal plants depends on the information, beliefs and knowledge that has from generation to generation can be studied in ethnopharmacology to provide very useful information from a particular ethnicity and region. The purpose of this study is to determine the sorts of plants that are still utilized as medicine, and the inventory of medicinal plants and their applications. The snowball sampling method was used to select 50 respondents from three key person for a semi-quantitative descriptive research method with respondent interviews. The questionnaire included the local name of the plant, the part used, the location of the plant, how to make it, and how to use it, as well as the values of SUV, FUV, FL, and PPV. According to the study's findings, the residents of Wanasaraya Village employed 85 different plant species from 36 families. Turmeric is the most commonly utilized plant. The basellaceae family is the most commonly utilized family. Use medicinal plants to treat the 12 most frequent illness systems, including the musculoskeletal system. The most commonly utilized medicinal plants grow in the yard of the house, leaves are the most often used, medicinal plants are primarily used for boiling and drinking.

Key words :
Ethnopharmacology, Species Use Value (SUV), Family Use Value (FUV), Fidelity Level (FL), Plant Part Value (PPV)..

FORMULATION AND EVALUATION OF BEETROOT (BETA VULGARIS L.) GUMMY CANDIES WITH VARYING RATIOS OF GELATIN AND SORBITOL

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ABSTRACT

Children often face difficulties in consuming various types of medications. Gummy candies offer an attractive solution with their chewy texture and sweet taste, which are liked by children, thus improving medication adherence. This study explores the formulation of gummy candies using beetroot (Beta vulgaris L.), which is rich in phytochemicals and essential nutrients such as folate and iron. The aim of this research is to determine whether beetroot extract can be formulated into gummy candies and to identify the optimal concentrations of gelatin and sorbitol as gelling agents and plasticizers. The experimental research method involved testing various concentrations of gelatin (10%, 15%, 20%) and sorbitol (10%, 20%, 30%) in the production of gummy candies to find the best combination in terms of texture and taste. The tests included organoleptic evaluation, pH, weight uniformity, and elasticity. Results showed that variations in gelatin and sorbitol concentrations affected the texture and taste of the gummy candies. All formulas had a pH of 5. Weight uniformity did not meet Indonesian Pharmacopoeia standards, but the elasticity of certain formulas was close to market-standard gummy candies. In conclusion, beetroot (Beta vulgaris L.) can be formulated into gummy candies with gelatin and sorbitol ratios that meet some of the physical testing criteria

Key words :
Beetroot, Beta vulgaris L., Gummy Candies

THE EFFECT OF ATTITUDE AND MOTIVATION ON COMPLIANCE AS INTERVENING VARIABLES ON SAFETY CULTURE IN NURSE PROFESSIONALS

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ABSTRACT

The importance of Safety Culture is able to reduce incidents and injuries in the workplace and is a major concern both globally and locally. Five dimensions in implementing Safety Culture have not yet been achieved, there are poor attitudes and motivation based on the results of the RSDP PPA pre-survey, 2024. This study aims to build the model of the influence of attitude and motivation on safety culture, with incident reporting compliance as an intervening variable among Healthcare Professionals (HCPs) at DR. D. Methode: a quantitative approach with a cross-sectional design, this research involved 105 respondents selected through purposive sampling. Data were analyzed using Structural Equation Modeling - Partial Least Square (SEM-PLS). Simultaneous influence analysis with f test value performed a strong positive relationship. The direct and indirect Influence analysis has a value that indicate acceptable. The results indicate that HCPs' attitudes and motivation positively and significantly influence incident reporting, compliance, and safety culture. Incident reporting compliance is also proven to have a positive and significant effect on safety culture, as well as serving as an intervening variable in the relationship between attitude and motivation with safety culture. These findings The results of the study showed that the influence of attitude and motivation on safety culture was more direct than through compliance as an intervening variable, although incident reporting compliance had a significant impact as an intervening variable on safety culture. Other results also found that the influence of motivation on safety culture was more direct than through an intervening variable, although incident reporting compliance had a significant impact in mediating the influence of motivation on safety culture. Conclusion: This model can be adopt to build a Safety Culture in Hospitals with Attitude, Motivation and Compliance Variables both directly and indirectly. High compliance can improve Safety Culture in many of literature. Results of this research, it is suggested that there is a need to develop an incident reporting compliance system, so that HCPs is not afraid to report unexpected incidents for Safety Culture improvement.

Key words :
Safety Culture, Attitude, Motivation, Intervening Variable, Incident Reporting Compliance, Healthcare Professional.

ETHNOPHARMACOLOGICAL STUDY OF MEDICINAL PLANTS USED BY THE INDIGENOUS PEOPLE OF THE DAYAK LOSARANG TRIBE, KRIMUM VILLAGE, INDRAMAYU REGENCY

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ABSTRACT

Each plant contains effective compounds and produces efficacy according to the needs of its use. This study aims to inventory plants that have pharmacological activities in relation to the treatment and maintenance of the health of the indigenous people of the Dayak tribe of Krimun Village, Indramayu Regency. The theoretical sampling technique used is snowball sampling. The methods used are interview, observation, questionnaire, and documentation methods. The data validity checking technique (credibility test) used is in the form of source triangulation techniques, techniques, and time. The results show that the indigenous people of the Dayak Losarang tribe have used medicinal plants with efficacy. About 27 types of plants are found divided into 16 different families. The medicinal plants that are most widely used by the indigenous people of the Dayak Losarang tribe are plants from the Zingiberaceae family. The most frequently used parts of the plant consist of rhizomes, stems, leaves, fruits, and more than 1 other part. The processing method used is without processing/eating directly, mashed, boiled, more than 1 way. The way to use medicinal plants is by drinking, bathing, eating directly, more than 1 other way. Medicinal plants can be obtained from various places, namely from the yard of the house, garden, and bought at the market.

Key words :
Dayak Losarang Tribe, Ethnopharmacology, Indramayu, Medical plants.

RELATIONSHIP OF LIFESTYLE BEHAVIOR TO HYPERTENSION CONTROL COMPLIANCE IN THE ELDERLY AT CIKUYA HEALTH CENTER, TANGERANG REGENCY

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ABSTRACT

Hypertension in the elderly is a health problem with an increasing prevalence. Lifestyle behavior is an important risk factor for hypertension in the elderly. Thisstudy aims to determine the effect of lifestyle behavior on hypertension control adherence among the elderly in the working area of Cikuya Public Health Center. This research uses an analytical observational design with a cross-sectional approach. The sample consisted of 50 elderly respondents with hypertension selected using purposive sampling technique. Data collection used questionnaires. Data analysis included univariate and bivariate analysis with Chi-Square test. The results showed no significant relationship between physical activity and hypertension control adherence (p=0.860). There were significant relationships between low-salt diet patterns (p=0.001), smoking habits (p=0.006), and stress levels (p=0.008) with hypertension control adherence in the elderly. Low-salt diet patterns, smoking habits, and stress levels have a significant influence on hypertension control adherence in the elderly. Interventions that promote healthy lifestyles are needed to improve hypertension control adherence in the elderly

Key words :
Hypertension, Elderly, Lifestyle Behavior, Control Adherence

EVALUATION OF THE USE OF QUINOLONE ANTIBIOTICS IN PEDIATRIC PATIENTS IN THE INPATIENT INSTALLATION OF HARAPAN KITA NATIONAL WOMEN AND CHILDREN HEALTH CENTER WITH THE DDD METHOD IN 2023

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ABSTRACT

Fluoroquinolones are a widely used class of broad-spectrum antibiotics with significant antibacterial effectiveness for various bacterial infections, such as respiratory tract infections and urinary tract infections. Quantitative measurement of antibiotics is carried out in a manner recommended by WHO, namely the Defined Daily Dose (DDD) system. The purpose of the study was to determine the quantity of antibiotic use of fluoroquinolone group in pediatric patients in the Inpatient Installation at Harapan Kita Children's and Mother's Hospital based on the DDD system for the period of 2023. This study is an observational study with a cross sectional design conducted retrospectively using medical records of pediatric inpatients. Samples that met the inclusion criteria were 165 samples. From the results of the study, it was found that the most gender, namely male pediatric patients as many as 90 patients (54.55%). Patients with the highest age in the 12-59 month range (39.39%). The most infectious disease classification treated using fluoroquinolones was in the category of respiratory tract infections as many as 76 patients (46.04%). Based on the length of hospitalization of pediatric patients who received fluoroquinolone therapy, the total Length Of Stay (LOS) was 3083 days and total length of stay (LOS) for all pediatric patients at the RSAB Harapan Kita Hospital Inpatient Installation in 2023 amounted to 32,497 days. The quantity of antibiotic use of fluoroquinolone group obtained a value of 1.46 DDD/100 days of care. The antibiotic with the highest use was Levofloxacin Injection as many as 101 patients (61.21%) with a value of 0.98 DDD/100 days of care.

Key words :
enteral formula; hospital-based formula; commercial formula; blood glucose level