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BOOK OF ABSTRACT

“Strengthening Health System and Innovations
To Improve Population Health”

The 5th Asia-Pacific Partnership on Health and Nutrition Improvement Conference

2023
APHNI
CONFERENCE

October 25th, 2023

The Rich Jogja Hotel

Daerah Istimewa Yogyakarta (DIY)-Indonesia

 <https://aphni.almaata.ac.id/>

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The 5th Asia-Pacific
Partnership on Health
System and Innovations to
Improve Population Health

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Welcome Letter from Conference Chair

Assalamualaikum warahmatullahi wa barakatuh.

On behalf of the APHNI Committee, I welcome you to the 5th Asia-Pacific Partnership on Health and Nutrition Improvement (APHNI), held from 25th October 2023 in Yogyakarta, Indonesia. The APHNI is an annual conference organized by the Faculty of Health Sciences at Alma Ata University, Yogyakarta. The APHNI has been held since 2019.

This conference will provide an interactive international forum for sharing and exchanging information on the latest research on Health and nutrition and related sciences, to enhance the capacities for creating innovative systems, to contribute to the formulation of global strategies in advancing health systems as well as developing policy initiatives in the community, to stimulate future collaborations among industries, researchers, governments and other stakeholders who apply science for better live. The speakers and participants of the 5th APHNI are up to 60 coming from various countries from Indonesia, Malaysia, Thailand, and Taiwan.

I would like to take this opportunity to thank you for the endeavor of the committee from the Faculty of Health Sciences – Alma Ata University. In addition, the conference committee acknowledges the technical and financial support from Alma Ata University.

I hope you can enjoy this conference, and I encourage you to engage with those wh are presenting their works as oral presentations. Should you have extra time, I hope you can extend your stay and enjoy the exotic of Yogyakarta.

Thank you for your participation,

Sofyan Indrayana, S.Kep., Ns., MS.
The Chair of 5th APHNI Conference

Welcome Letter from Dean of the Faculty of Health Sciences, Alma Ata University

Assalamualaikum warahmatullahi wa barakatuh.

Ladies and gentlemen, esteemed colleagues, and distinguished guests,

It is with great pleasure and anticipation that we gather here today for the 5th Asia-Pacific Partnership on Health and Nutrition Improvement (APHNI) under the insightful theme of “Strengthening Health System and Innovations to Improve Population Health”. This year, the 5th APHNI is hosted by the Faculty of Health Sciences, and this conference serves as a beacon of intellectual exchange and innovation in the field of chemistry.

In today’s dynamic landscape, characterized by Volatility, Uncertainty, Complexity, and Ambiguity (VUCA), the role of chemistry in shaping a sustainable future is more vital than ever. Our collective pursuit of knowledge and advancements in the field of health sciences holds the potential to redefine industries, reshape ecosystems, and promote responsible stewardship of our planet’s resources.

This conference stands as a testament to the commitment of all participating institutions to address pressing global challenges through the lens of chemistry. The presentations and discussions that unfold throughout the day will undoubtedly inspire new ideas, collaborations, and solutions that contribute to a more sustainable world.

As we embark on this intellectual journey, let us remain open to diverse perspectives, engage in rigorous debate, and forge connections that transcend borders and disciplines. May the insight gained during the conference deepen our understanding of health science’s role in sustainable development and empower us to catalyze positive change within our societies.

I extend my heartfelt gratitude to the organizers, speakers, and attendees who have come together to make this event a reality. Let us embrace the spirit of collaboration and exploration as we navigate the fascinating intersections of health sciences.

Thank you, and let the 5th APHNI commence.

Dr. Yhona Paratmanitya, S.Gz., MPH., RD.
Dean of Faculty of Health Sciences, Alma Ata University

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Conference Program

Time)	Details
07.00 - 08.00	Registration for conference
08.00 - 08.20	Conference Grand Opening
08.20 - 08.35	Opening Speech (Prof. Dr. H. Hamam Hadi, MS., Sc.D., Sp. GK.)
08.35-08.40	Do'a
08.40 - 08.45	Bumpering Break
	Session 1: Maternal and Child Health and Nutrition
	MODERATOR 1 (Hastrin Hositanisita, S.Gz., M.Sc)
08.45-08.50	Moderator 1 introduction
	Prof. Joel Gittlesohn (Bloomberg School of Public Health, John Hopkins University, USA) "School-based and environmental intervention to reduce obesity"
09.10-09.30	Bumpering Break
	Prof. Dr. H Hamam Hadi, MS, Sc.D, Sp.GK. (Director of Center for Global Health, Alma Ata University, Indonesia) "Stunting prevention"
09.30-09.50	Bumpering Break
	Yinuo Wang, MS., PhD (Department of Food Science and Nutrition, Hong Kong Polytechnic University) "Cold adaptation to extend life and improve health"
09.50-10.10	Bumpering Break
	Assoc. Prof. Dr. Sopen Chunuan (Faculty of Nursing, Prince of Songkla University) "Midwifery support for coping strategies of adolescents during childbirth and motherhood"
10.10-10.25	Question and Answer 1
10.25-10.40	Coffee break
	Session 2: Geriatric Health and Nutrition
	MODERATOR 2 (Edi Sampurno Ridwan, BN.,MNurs, PhD.)
10.40-10.45	Moderator 2 introduction
	Dr. dr. Probosuseno, Sp.PD-KGER., SE., MM (RSUP Dr Sardjito) "The current innovations and needs in Elderly care"
11.05-11.25	Bumpering Break
	Prof Pei-Shan Tsai

Time)	Details
	(Taipei Medical University) "Secondary analysis of national survey data to identify determinants of health conditions in older adults: depression and sarcopenia"
11.25-11.45	Bumpering Break
	Prof Chan Yoke Mun (Universiti Putra Malaysia) "Management of Sarcopenia: Perspective of a Dietitian"
11.45-12.00	Question and answer 1
12.00-13.00	Break
13.00-16.00	Parallel Oral Presentation
	Session 3: Health Innovation
	Moderator 3 (M. Ischaq Nabil As Shiddiqi, S.Kep.,Ns.,M.N.S.)
13.00-13.05	Moderator 3 introduction
	Dr. Arif Sabta Aji, S.Gz. (Alma Ata Graduate School of Public Health, Universitas Alma Ata) "Analog Rice Innovation to Support Food Diversification Program"
13.25-13.45	Bumpering Break
	Prof. Asnawi Abdullah, BSc.PH, MHSM, MSc.HPPF, DLSHTM, PhD (Chairman of AIPTKMI) "Health policy on health innovations"
13.45-14.05	Bumpering Break
	Prof. Dr. Jamia Azdina Jamal (Faculty of Pharmacy, Universiti Kebangsaan Malaysia) "Drug innovations"
14.05-14.20	Question and Answer 3
14.20-14.35	Coffee break
16.00-17.00	"Best Presentation" Announcement
	Closing Remark

Parallel Presentation Schedule

Room 1 (Online); Scope: Maternal and Child Health & Nutrition

Moderator: apt. Sundari Desi Nuryanti, M.Sc

No	Title	Name	Institution	Presentation Time
1	Changes in Body Weight and Perception of Healthy Lifestyles During Social Restrictions in the COVID-19 Pandemic in Indonesian Adults	Sorra Milwayani Septiyana, Yhona Paratmanitya, Arif Sabta Aji	Universitas Alma Ata	13.00-13.15 WIB
2	Effectiveness of Education Packages (Edukersa) to Increase Readiness for Exclusive breastfeeding in Prenatal Mothers: Precede-Proceed Models	Priyo Sulistiyono, Hari Santoso, Uun Kunaepah, Dewi Rahayu	Tasikmalaya Health Polytechnic	13.15-13.30 WIB
3	Changes in Knowledge of Mothers who have Stuting and Not Stuting Toddlers using Booklet, Calendar and Poster Media	Sintha F Simanungkalit, Chandrayani Simanjorang, Utami Wahyuningsih, Nur Intania Sofianita	UPN Veteran Jakarta	13.30-13.45 WIB
4	Physical Properties, Acceptability and Nutritional Content of Dumbo Catfish Nuggets	Devillya Puspita Dewi, Kuntari Astriana, Kenik Wahyuni, Lydia Cahyaningrum	Universitas Respati Yogyakarta	13.45-14.00 WIB

No	Title	Name	Institution	Presentation Time
5	Anthropometric knowledge and measurement evaluation among female volunteer community health workers in Depok	Dian Luthfiana Sufyan, Firlia Ayu Arini, Ibnu Malkan Bakhrol Ilmi, Avliya Quratul Marjan, Iin Fatmawati	UPN Veteran Jakarta	14.00-14.15 WIB
6	Exclusive Breastfeeding Practices Among Women in Kei Besar Island: A Descriptive Study	Jessica Gloria Mogi, Sylvia Winnie Melinda, Henry William Burhan	Yayasan Dokter Peduli, Kei Besar Island Southeast Maluku, & Prof. dr. R. D. Kandou General Hospital, Manado, North Sulawesi	14.15-14.30 WIB
7	Factor Associated with Zinc Intake Among Children Aged 6-11 Month Old in Sambas District, West Kalimantan	Wanda Iasepa, Fitriana Nugareheni, Dwi Nastiti Iswarawanti, Evi Ermayani, Indriya Laras Pramesthi, Aziz Jati Nur Ananda	Universitas Pahlawan Tuanku Tambusai, Universitas Negeri Surabaya, SEAMEO RECFON	14.30-14.45 WIB
8	The Relationship Between Dialysis Adequacy and Nutritional Status of Hemodialysis Patients at RSUD Ibnu Sina Gresik	Irma Wesprimawati, Hamam Hadi, Arif Sabta Aji, Edi Sampurno Ridwan	KSM Internal Medicine, RSUD Ibnu Sina, Gresik, Alma Ata Graduate School of Public Health	14.45-15.00 WIB
9	Characteristics of Mothers with LBW Regarding Readiness to Carry Out Kangaroo Method Treatment at Hermina Hospital, Bekasi Region in 2023	Ernauli Meliyana, Marni Br Karo, Lina Indrawati	Sekolah Tinggi Ilmu Kesehatan Medistra	15.00-15.15 WIB

No	Title	Name	Institution	Presentation Time
10	The vitamin D status during third trimester pregnancy was associated with pregnancy outcomes: a multi-ethnic cohort study among pregnant women in Indonesia and Malaysia	Arif Sabta Aji, Fui Chee Woon, Yit Siew Chin, Yoke Mun Chan, Nur Indrawaty Lipoeto, Siti Nurunnayah, Yhona Paratmanitya, Ria Suci Anggraini, Alfina Ulfah Farhan	Universitas Alma Ata	15.15-15.30 WIB

Parallel Presentation Schedule

Room 2 (Online)

Scope: Natural Medicine-Clinical Pharmacy, Alternative Medicine

Moderator: apt. Latifha Nabila, M. Clin., Pharm.

NO	Title	Name	Institution	Presentation Time
1	Utilization of <i>Mimosa pudica</i> L. in Indonesian Traditional Medicine	Lusi Kristiana	National Research and Innovation Agency	13.00-13.15 WIB
2	The Effect of Porang (<i>Amorphophallus Oncophyllus</i>) Macerated with Ethanolic Extracts Of <i>Strobilanthes Crispus</i> On The Growth Of Metacarpal Bone Of Fetus Rats (<i>Sprague Dawley</i>) In The Teratogenic Study	Vina Awallina Dirroh, Veriani Aprilia, Rizal Fauzi, Nurul Kusumawardani, Moch Saiful Bachri, Daru Estiningsih	Universitas Alma Ata	13.15-13.30 WIB
4	Analyses of Antibiotic Use with Anatomical Therapeutic Chemical / Defined Daily Dose (ATC / DDD) and Drug Utilization 90% (DU90%) in Critically Ill Panembahan Senopati General Hospital	Zada Farhana, Nurul Kusumawardani, Rizal Fauzi ² , Daru Estiningsih, Anafrin Yugistyowati	Universitas Alma Ata	13.30-13.45 WIB

No	Title	Name	Institution	Presentation Time
5	Standardization of Specific and Non-Specific Parameters of Sembung Rambat Leaf Ethanol Extract (Mikania Micrantha)	Arif Ardianto, Daru Estiningsih, Annisa Fatmawati ^a	Universitas Alma Ata	13.45-14.00 WIB
6	Irritation Test and Dermal Acute Toxicity for Gel Formulation of Cinnamon Oil and Red Betel Leaf	Septi Yussinta Sari, Emelda Emelda, Nurul Kusumawardani, Savara Purnama Lara, Moch Saiful Bachri, Wahyu Yuliana Solikah, Adhi Gunawan, Rizal Fauzi, Lisa Amelia Rahmi	Universitas Alma Ata	14.00-14.15 WIB
7	Factors Influencing Implementation of Antibiotic De-escalation in Critically Ill Patients at Panembahan Senopati General Hospital	Susiyah, Nurul Kusumawardani, Rizal Fauzi, Daru Estiningsih, Anafrin Yugistyowati	Universitas Alma Ata	14.15-14.30 WIB
8	Factors Related to The Radiodermatitis of Patients with Breast Cancer in Dharmas Cancer Hospital	Cicirosnita Jayadi Idu, Dhea Ananda, Dhea Restika Wahyu Pramesty, Dewi Syafriani, Dewi Wulandari	Universitas Yatsi Madani	14.30-14.45 WIB
9	The Effects of Telehealth and Robotic Intervention in Post-Stroke Patients: A Literature Review	Catur Kurniawan, LP Agstri, Ika Mustika Dewi Brune Indah Yulitasari	Universitas Alma Ata	14.45-15.00 WIB

No	Title	Name	Institution	Presentation Time
10	The Relationship of Facilities Conditions with The Willing to Use Electronic Medical Records at Puskesmas Sidomulyo, Samarinda City	Nurvia Andani, Ferry Fadzlul Rahman	Mulawarman University	15.00-15.15 WIB
11	Factor Determinants Analysis of Anaemia Status Among Adolescent Girls in Cigalontang, Tasikmalaya	Nenden Ayu Mutiara Fauziyah, Hamam Hadi, Arif Sabta Aji, Effatul Afifah	Universitas Alma Ata	15.15-15.30 WIB

Parallel Presentation Schedule

Room 3 (Online)

Scope: Public Health and Clinical Practice

Moderator: Feti Rahmawati, S. Farm., MS

No	Title	Name	Institution	Presentation Time
1	Health-related quality of life of pregnant and lactating women and its socio-demographic and perceived psychological distress determinants	Erni Samutri, Akbar Satria Fitriawan, Anaftrin Yugistiyowati, Wiwit Ananda Wahyu Setyaningsih, Bayu Fandhi Achmad, Dedi Kurniawan, Fatimah Fatimah, Ayu Asfrestyanti	Universitas Alma Ata	13.00-13.15 WIB
2	The Effectiveness of the Training for Trainers (TfT) Method for Facilitators in Preparing to Form First Aid Cadres	Indah Rizky, Meyka Budi Rachmawati, Fajrul Falah Farhany, Fathirani Mutiara, Naili Zahrotun Arifah, Hanggoro Tri Rinonce, Happy Indah Kusumawati, Rahadyana Muslichah	Universitas Gadjah Mada Yogyakarta	13.15-13.30 WIB
3	Health Promotion of Childbearing Age Women in Improving Reproductive Planning: a Global Scoping Review	Wahyuningsih, Sulistiyowati, Setyowati, Mulyani,	Universitas Sebelas Maret	13.30-13.45 WIB

No	Title	Name	Institution	Presentation Time
4	Comparisons between the Role of Working Mothers and Housewives in the Development of Children Aged 3-5th Years in the Gamping 1st Public Health Center Working Area	Lia Dian Ayuningrum, Muafiqoh Dwi Arini, Ngidoti Musonah	Universitas Alma Ata	13.45-14.00 WIB
5	Diabetes Family Behavior Could Predict Dietary Adherence Among Older Adults with Type 2 Diabetes Mellitus: A cross-sectional predictive study	M. Ischaq Nabil As Shiddiqi, Yhona Paratmanitya, Veriani Aprilia, Ratih Devi Alfiana, Anafrin Yugistyowati, Ani Murti Sari, Laila Nurkhasanah	Universitas Alma Ata	14.00-14.15 WIB
6	The Relationship Between the Length of Labor and The Incidence of Postpartum Hemorrhage Among Laboring Women in the Special Region of Yogyakarta Province	Siti Nurul Komalasari, Dyah Pradnya Paramita, Isti Chana Zuliyati	Universitas Alma Ata	14.15-14.30 WIB
7	Nutritional Status and Lipid Profile of Office Workers: A Formative Study in Jakarta	Rosyanne Kushargina, Rimbawan Rimbawan, Mira Dewi, Evy Damayanthi, Andi Eka Yunianto	IPB University, Universitas Lampung	14.30-14.45 WIB

No	Title	Name	Institution	Presentation Time
8	The Effectiveness of Vaginal Hygiene Health Education on The Knowledge and Attitudes of Adolescents in Bantul Health Vocational Schools	Baiq Rina Wulandari, Fatimah Restu Pangestuti, Dyah Pradnya Paramita, Fani Kartika	Universitas Alma Ata	14.45-15.00 WIB
9	The Factors Related to the Utilization of Youth Care Health Service (YCHS) by Adolescents Aged 15-19 Years of Topoyo Public Health Care (PHC) Central Mamuju Regency, West Sulawesi Province	Juwita Anggraeni, Nurwahyidillah, Annisa Nurrachmawati, Nur Rohmah, Ratih W. Wisnuwardhani	Mulawarman University	15.00-15.15 WIB
10	Android-Based Health Promotion Influences Motivation Pregnant Women Take Iron Tablets in Bantul	Susiana Sariyati, A.A. Subiyanto, Sapja Anantanyu, Supriyadi Hari Respati	Universitas Alma Ata	15.15-15.30 WIB
11	The Effect of Marriage Age Maturity Education E-Module on Self Efficacy Youth Cadres in Conducting Education in PIK-R, Bantul District	Ufairoh Salma Pratiwi, Wahyuningsih, Anafrin Yugistyowati	Universitas Alma Ata	15.30-15.45 WIB
12	Correlation Between Physical Activity and Gestational Diabetes Mellitus In Primary Health Services (Puskesmas) Bantul District Yogyakarta	Effatul Afifah, Selvi Novita Sari, Prasetya Lestari	Universitas Alma Ata	15.45-16.00 WIB

Parallel Presentation Schedule

Room 4 (Offline): Cendana 1 Floor 9

Scope: Public Health and Clinical Practice; Nursing Education, Policy, and Clinical Practice

Moderator: Dr. Muhammad Abdurrahman Munir, M. Sc.

No	Title	Name	Institution	Presentation Time
1	The Effect of Work Experience on Nurse Performance in Providing Nursing Care	Mahfud Mahfud, Hartono Hartono, Subiyanto Subiyanto, Sapja Anantayu, Heru Irianto, Sofyan Indrayana, Fatma Siti Fatimah	Universitas Alma Ata	13.00-13.15 WIB
2	Hypoglycemia in Type 2 Diabetes Mellitus Patients Receiving Antidiabetic Medications in Sleman	RA Dewinta Sukma Ananda, Woro Rukmi Pratiwi, Erna Kristin	Universitas Alma Ata	13.15-13.30 WIB
3	The Effect of Gelatin on The Texture Profile and The Content of Water, Ash, and Protein of Porang	Imroatul Anifa, Arif Sabta Aji, Nurul Kusumawardani, Rizal Fauzi, Daru Estiningsih, Effatul Afifah, Veriani Aprilia	Universitas Alma Ata	13.30-13.45 WIB
4	Cost Effectiveness Analysis of Lowering Blood Glucose in Dm Nephropathy Patients	Putri Sumiati, Eva Nurinda, Sofyan Indrayana, Eliza Dwinta	Universitas Alma Ata	13.45-14.00 WIB

No	Title	Name	Institution	Presentation Time
5	“Diabetes Risk Calculator Mobile Application (DiaCal)” Smartphone Application-based education: Development and Usability Testing	Dita Hanna Febriani, Scholastica Fina Aryu Puspasari	Panti Rapih School of Health Sciences	14.00-14.15 WIB
6	A Case Control Study on Risk Factors Associated with Intentions in Preventing Low Birth Weight Babies in Indonesia	Anafrin Yugistyowati, Helpa Widya Putri, Erni Samutri, Arantika Meidya Pratiwi, Darsih, Bunga Astria Paramashanti	Universitas Alma Ata	14.15-14.30 WIB
7	Analysis of BPJS Kesehatan Patient Satisfaction on Service Quality in Inpatient Installation of Panembahan Senopati Hospital Bantul	Peggy Veronica Utami, Fatma Siti Fatimah, Imram Radne Rimba	Universitas Alma Ata	14.30-14.45 WIB
8	Determinants of maternal in stunting among children aged 0-60 month: Scoping Review	Restu Pangestuti, Baiq Rina Wulandari, Sundari Mulyaningsih	Universitas Alma Ata	14.45-15.00 WIB

No	Title	Name	Institution	Presentation Time
9	Teratogenic Effect of Porang (<i>Amorphophallus oncophyllus</i>) Macerated with <i>Strobilanthes crispus</i> Ethanolic Extract in Sprague Dawley Rats: Coccygeal Observation	Mutiarah Wahyu, Veriani Aprilia, Rizal Fauzi, Nurul Kusumawardani, Moch Saiful Bachri, Daru Estiningsih	Universitas Alma Ata	15.00-15.15 WIB
10	The Relationship Between Knowledge and The Application Of Health Protocols By Pharmacists During The Covid-19 Pandemic In Several Pharmacies In Bantul Regency	Feni Fitriani, Ari Susiana Wulandari, Eva Nurinda, Fatma Siti Fatimah	Universitas Alma Ata	15.15-15.30 WIB

Parallel Presentation Schedule

Room 5 (Offline): Cendana 2 Floor 9
 Scope: Maternal and Child Health & Nutrition
 Moderator: Dr. Veriani Aprilia, STP, M.Sc.

No	Title	Name	Institution	Presentation Time
1	Relationship between Sociodemographic Characteristics and the Readiness of Prospective Brides to Meet the Nutritional Adequacy of the First 1,000 Days of Life in Pajangan District	Fina Dewi Sundari, Sintha Dewi Purnamasari, Wahyuningsih	Universitas Alma Ata	13.00-13.15 WIB
2	The Relationship of Characteristics with Knowledge Among Pregnant Women About Breastfeeding And Complementary Feedings in The Stunting Focus Location Area of Pajangan District	Laksita Pingkan Narulita, Sintha Dewi Purnamasari, Yulinda Kurniasari	Universitas Alma Ata	13.15-13.30 WIB
3	The Relationship of Knowledge about Iron Supplements with Haemoglobin Levels in Trimester II and III among Pregnant Women in Pajangan Subdistrict	Farah Annisa Mardhiyah, Sintha Dewi Purnamasari, Hastrin Hositanisita	Universitas Alma Ata	13.30-13.45 WIB
4	The Effect of Breast Massage With Breastfeeding And Baby Nutritional Status	Fatimah fatimah, Muafiqoh Dwiarini, Prasetya Lestari, Lia Dian Ayuningrum	Universitas Alma Ata	13.45-14.00 WIB

No	Title	Name	Institution	Presentation Time
5	Physical Activity Level of Rural Adolescents: Based on Socio-Demographic Factors and Their Relationship with Nutritional Status	Cica Yulia, Delita Septia Rosdiana, Muktiarni, Deni Alamsah	Universitas Pendidikan Indonesia	14.15-14.30 WIB
6	The Relationship of Providing Stimulation to The Development of Infants Aged 6-12 Months	Isnaini Latifah Al-Fahriah, Prasetya Lestari, Claudia Banowati Subarto	Universitas Alma Ata	14.30-14.45 WIB
7	Comprehensive Midwifery Care for Pregnant Women with Preeclampsia at the Kasihan I Public Health Center, Bantul, Yogyakarta	Amelia Hasna Rullita, Fatimah, Taufik Rahman	Universitas Alma Ata	14.45-15.00 WIB
8	Gardening-Cooking Based Intervention for Improving Fruit and Vegetables Intake in Preschool Childen	Herni Dwi Herawati, Herwinda Kusuma Rahayu, Anggita Isvianti, Novaeni Sri Susilowati, Saimarrasoki Batubara, Putri Sonia	Universitas Alma Ata	15.00-15.15 WIB
9	Complementary feeding practice by maternal employment status during COVID-19 pandemic	Herwinda Kusuma Rahayu, Nadhea Alriessyanne Hindarta, Yhona Paratmanitya, Herni Dwi Herawati, Rindi Nuryani	Universitas Alma Ata	15.15-15.30 WIB

No	Title	Name	Institution	Presentation Time
10	Relationship between Nutrition Knowledge, Attitudes, and Peers with Fast Food Consumption Patterns in Adolescents at SMAN 6 Depok	Cahya Wulandari Pusp Ningrum, Sintha Fransiske Simanungkalit	Universitas Pembangunan Nasional Veteran Jakarta	14.00-14.15 WIB

Presentation Guideline

- Each parallel room will have one moderator, with one or more committee members in attendance
- Oral presentations for the APHNI 2023 have been allocated 15 minutes of effective presentation time, including a question-and-answer session
- Oral presentations must be in English. One article can only be presented by a presenter, the other authors can register as non-presenters who help in the discussion sessions
- The moderator will remind you 2 minutes left for the presentation time
- During the presentation, participants are required to maintain a conducive situation
- In the Q&A session, participants who want to ask questions are expected to use a raised hand. After that, the moderator will invite participants to speak.



ABSTRACT OF PARTICIPANTS

The Effect of Work Experience on Nurse Performance in Providing Nursing Care

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ABSTRACT

Background: The phenomenon of nurse performance in providing nursing care in Indonesia is still relatively low, below 50% of the average. One of the factors that influence the performance of nurses in providing nursing care is work experience.

Objectives: The purpose of this study was to identify the effect of work experience on the performance of nurses in providing nursing care to determine the quality of nursing care in carrying out their tasks that refer to the nursing process with performance indicators that include (1) Assessment (2) Identification (3) Planning (4) Implementation (5) Evaluation.

Methods: This type of quantitative research was conducted at RSKIA PKU Muhammadiyah, Kotagede, Yogyakarta, with a sample of 31 respondents using the Kendal Tau statistical test. The research was conducted on nurses working in inpatient wards who had work experience of more than 1 year.

Results: The results of the study illustrate that work experience significantly affects the performance of nurses in providing nursing care with a p-value of 0.000. In addition, the relationship between nurse performance and work experience showed that the good work category is a nurse who works in a hospital with an experience of service of more than 10 years, meaning that work affects the performance of nurses in a hospital.

Conclusions: There is an influence of work experience on the performance of nurses in providing nursing care with a p-value of 0.000. The average performance of nurses in the good category is those who have worked for more than 10 years. Advice for Nurses to improve nursing performance for inpatients at home sick by attending education and training or continuing further education. Advice for hospitals, the hospital did service improvement or nurse performance is necessary. There is training, knowledge development, and further studies for student nurses. Arrange work time for employee nurses who have time long-standing work in each job change so In every department, there are nurses who have long periods of work to provide knowledge to new nurses.

Keywords: Work Experience; Nurse Performance; Nursing Care; Health Science; Indonesia.

Effectiveness of Education Packages (Edukersa) to Increase Readiness for Exclusive Breastfeeding in Prenatal Mothers: *Precede-Proceed Models*

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ABSTRACT

Background: Indonesia still faces big challenges related to exclusive breastfeeding. The proportion of exclusive breastfeeding has only reached 37.3%. A study in Indramayu Regency-West Java in 2020 showed that the incidence rate of exclusive breastfeeding failure was very high, namely 96.6% per year. Mother considers failure of exclusive breastfeeding, not a health problem. The comprehensive Prenatal Education Method (Edukersa) is an approach to three aspects of behaviour *predisposing* (mother's knowledge and skills), *reinforcing* (support from family/closest people), and *enabling* (assistance from breastfeeding educators and counsellors) is expected to be able to overcome mothers' problems in breastfeeding.

Objective: knowing the influence of the model edukersa regarding the readiness of knowledge, mother's abilities and readiness of family support for exclusive breastfeeding.

Method: Quasi-experimental research with model interventions Edukersa. The research was conducted in Lemahwungkuk District, Cirebon City. Population of all Pregnant Women in Trimester II-III. The sample is the total population that meets the criteria of 80 pregnant women. Data collection using standard breastfeeding and lactation management counsellor instruments to assess the readiness of knowledge, skills and support of those closest to you. Readiness measurements were carried out before and after the intervention. Data analysis was descriptive and paired data T-Test.

Results: The research results show that in the initial conditions, the average score for the knowledge aspect was still low (1.88). The mother's desire for exclusive breastfeeding is very high (2.99). Skills readiness is still low (1.56) and family support readiness is quite good (2.39). All aspects of readiness at the end of educational activities almost reached the maximum score (3.00). Model Edukersa significantly (95%CI) proven to increase maternal knowledge readiness ($p=0.000$), maternal skills readiness ($p=0.000$) and support readiness from family/husband/closest person ($p=0.023$) for mothers to realize exclusive breastfeeding.

Conclusion: Method edukersa is part of the solution for the prenatal preparation of mothers as a step towards successful mothers with exclusive breastfeeding.

Keywords: Exclusive breastfeeding (EBF), Pregnant Women, Model-edukersa, prenatal, *Precede-Proceed Models*.

The effect of gelatin on the texture profile and the content of water, ash, and protein of porang (*amorphophallus oncophyllus*) based jelly candy

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ABSTRACT

Background: Porang (*Amorphophallus oncophyllus*) macerated with *Strobilanthes crispus* (PMS) proved to have an antihyperglycemic effect due to the presence of glucomannan porang and antioxidant of *Strobilanthes crispus*. Glucomannan can also be utilized as a gelling agent. Its addition alone yielded too soft a texture, so it needs to be combined with another gelling agent, like gelatin.

Objectives: This study aimed to determine the effect of gelatin addition on texture profile (hardness, cohesiveness, gumminess, springiness, chewiness) and water, ash, and protein content in porang-based jelly candy.

Methods: This was an experimental study with a completely randomized design. The treatments were concentrations of gelatin, namely 0%, 7.5%, 10%, and 12.5%. A texture analyzer analyzed texture profiles.

Results: The addition of gelatin affected increasing the texture profile of jelly candy like hardness, cohesiveness, gumminess, springiness, and chewiness with the values from 40.38 to 64.54 N; 0.41 to 0.65 Ns; 17.25 to 42.59 N; 0.74 to 0.93 mm; 12.99 to 39.66 N, respectively. The protein nutritional values of jelly candy increased from 1.30 to 12.10%, but the ash and moisture content decreased from 1.54 to 1.41% and from 67.99 to 61.52%, respectively.

Conclusions: The addition of gelatin influenced the improvement of the texture profile of PMS-based jelly candy. This candy has the potential to be developed as a functional local food.

Keywords: jelly candy; gelatin; texture; porang; functional food

Irritation Test and Dermal Acute Toxicity for Gel Formulation of Cinnamon Oil and Red Betel Leaf

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ABSTRACT

Background: The wound in the urogenital diaphragm and levator ani muscle is the initial occurrence of perineal injuries during labour. Cinnamon and red betel have anti-inflammatory, antibacterial, and antiseptic effects, which are expected to increase pharmacological activity and synergistically accelerate wound healing. Still, until now, there has yet to be any research reporting the safety of this combination of plants.

Objectives: This study aims to determine skin irritation and acute dermal toxicity of a gel preparation of a combination of cinnamon oil and red betel leaf in female Wistar rats

Methods: The research was designed as an experimental study using a completely randomized (CRD) with a unidirectional pattern. The study was conducted on female rats of the Wistar strain. Animal models used 34 female Wistar rats and were divided randomly into two large groups, each divided into 3 (n=9) for irritation testing and five in each group (n=25) for acute dermal toxicity. The observations were made for 14 days regarding signs of irritation, erythema, and edema, as well as sensitive toxicity parameters related to body weight and toxic symptoms, to the death of the test animals.

Results: Statistical analysis used Repeated measures analysis of variance with a significant result of $p=0.012$. There were differences between two or more groups when measuring the body weight of test animals. Signs of irritation were reported descriptively based on the irritation score of 0 and the primary skin irritation index (PDII) of 0.00. While the statistical analysis used for the acute dermal toxicity test was a two-way ANOVA value ($p = 0.825$), the time and dose variables did not significantly affect changes in body weight. Administration of formulations up to a dose of 2000 mg/kg body weight did not cause toxic symptoms or death in the test animals.

Conclusions: The gel preparation of the combination of cinnamon oil and red betel extract is safe. It can be developed into a gel preparation because it does not cause irritation and symptoms of toxicity.

Keywords: acute dermal toxicity, cinnamon oil, gel, irritation test, red betel leaf

The Relationship of Providing Stimulation to the Development of Infants Aged 6-12 Months

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ABSTRACT

Background: During the period of infancy, a baby undergoes a crucial phase that significantly influences its development. Often referred to as the "golden period," this stage is critical in shaping a person's character. It is called a critical period because, during this time, the baby can respond to its environment, and it is referred to as the golden period because the development during infancy occurs rapidly and cannot be reversed. According to the screening tests conducted by the Indonesian Ministry of Health across 30 provinces, it was found that 45.12% of infants had developmental delays, mainly caused by insufficient stimulation.

Objectives: This study aims to determine the relationship between providing stimulation and the development of infants aged 6-12 months.

Methods: The design in this study a quantitative research with a cross-sectional approach. The study population consisted of 147 babies in the working area of Gamping 1 Health Centre in Yogyakarta, and a total sampling technique was used with a sample of 120 respondents. The research instrument used was a questionnaire on stimulation variables and KPSP on infant development variables aged 6-12 months. The Chi-Square test was used for bivariate data analysis techniques.

Results: The results of this study showed that most mothers provided good stimulation (93.3%) and 84.2% of infants aged 6-12 months had normal development. There was a significant relationship between providing stimulation and the development of infants aged 6-12 months in the working area of Gamping 1 Health Centre in Yogyakarta with a p-value of 0.000.

Conclusion: There is a relationship between providing stimulation and the development of infants aged 6-12 months in the working area of Gamping 1 Health Centre in Yogyakarta.

Keywords: Stimulation, Infants aged 6-12 months, Infants Development, mother of the baby.

Changes in Body Weight and Perception of Healthy Lifestyles During Social Restrictions in the COVID-19 Pandemic in Indonesian Adults

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ABSTRACT

Background: Social restrictions during the COVID-19 pandemic have had an impact on lifestyle changes in society. Changes in eating patterns and psychological status during a pandemic can lead to changes in body weight and perceptions of a healthy lifestyle in society.

Objectives: To investigate the effect of social restrictions on weight changes and perceptions of a healthy lifestyle in adults during the COVID-19 pandemic in Indonesia.

Methods: The design of this study was cross-sectional refers to the IndoNutriLifeCOVID-19 online survey with 143 samples. Sampling method with convenience sampling technique. Data collection was carried out from June to August 2020. Data was analysed using the chi-square test and logistic regression analysis.

Results: There was no effect of social restrictions on weight changes and perceptions of lifestyle in adults ($p > 0,05$). However, the majority of respondents had positive perceptions or supported adopting a healthy lifestyle during the COVID-19 pandemic (78,3%). Multivariable logistic regression demonstrated that adults ages 36-45 years had a 3,6 times higher risk of weight changes compared to young adults ages 25-35 years (P value = 0,004, OR = 3,65, 95% CI = 1, 51-8,85).

Conclusions: There was no effect of social restrictions on weight changes and perceptions of a healthy lifestyle in adults during the COVID-19 pandemic in Indonesia. Positive perceptions of a healthy lifestyle during the COVID-19 pandemic must be supported by individual awareness to adopt a healthy diet, active lifestyle, maintain quality sleep, and regular weight to prevent excessive weight gain.

Keywords: COVID-19; social restriction; weight changes; perceptions of healthy lifestyle; Indonesia.

Anthropometric knowledge and measurement evaluation among female volunteer community health workers in Depok

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ABSTRACT

Background: At the community level, assessment of children nutritional status is measured by female volunteer community health workers (FVCHW) through a monthly integrated health post (Posyandu). Based on initial observation, volunteers have sufficient understanding on anthropometric measurement in knowledge basis, however, to put it into practice, several common pitfalls remain shown up. As they are not formally trained, refreshment on basic knowledge and practical training on anthropometric assessment is needed.

Objectives: As part of Kampung Caraka Project that attempts to empower locals to be deliberately aware of community health and well-being, this particular study aims to evaluate knowledge of FVCHW as well as their accuracy and precision on anthropometric assessment.

Methods: Thirty nine women participated in this intervention study. Total sampling was performed to involved thirteen integrated health post in Kedaung Depok. Further, voluntary sampling was applied to select three participants who were FVCHW in their respective post. The inclusion criteria were women who at least had been a cadre for a year and exclude those who did not committed till the end of the program. Education on anthropometric assessment was given prior to the evaluation. Knowledge evaluation was conducted by validated and reliable pre and post test questionnaires consisting of 10 questions. Accuracy and precision were evaluated for length, height, mid upper arm circumference (MUAC) and head circumference measurements. Two rounds of independent measurements were carried out to evaluate precision, while accuracy was observed by comparing measurement results to the gold standard. Emergency Nutrition Assessment (ENA) SMART was used to evaluate measurement precision and accuracy. Descriptive analysis was performed to present the level of precision and accuracy. Paired t-test was carried out to test knowledge mean score difference.

Results: Final analysis involved thirty two participants. The measurement results showed women with good precision for MUAC, height, head circumferences and length measurement were 23.1%, 23.1%, 53.8% and 33.3%, respectively. In contrast, most women had poor accuracy for height, length and head circumference measurement, and only 7.7% of women had good accuracy on MUAC measurement. There is a significant different of knowledge score before and after the education given (p-value 0.02, CI 95%).

Conclusions: Women participating in this study had good precision yet poor accuracy, implying the necessity of standardized procedure and regular equipment calibration prior to anthropometric measurement. There is a difference in mean scores before and after the education given, yet still denoted as low capacity. Further and more comprehensive education is highly required.

Keywords: Accuracy; Anthropometric; Emergency Nutrition Assessment; Female Volunteer Community Health Workers; Posyandu

The Factors Related to the Utilization of Youth Care Health Service (YCHS) by Adolescents Aged 15-19 Years of Topoyo Public Health Care (PHC) Central Mamuju Regency, West Sulawesi Province

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ABSTRACT

Background: Adolescent health problems and risks require a program that aims to increase the knowledge and skills of adolescents about health and healthy living behavior and provide quality health services for adolescents. At the global level, the success rate of the Youth Friendly Health Services (YFHS) program is 95%, in Indonesia has achieved the national target of 40% in the utilization of YCHS, but the province which is still below the national target in achieving YCHS implementation is West Sulawesi Province, which is around 30%.

Objectives: This study was to determine the factors associated with the utilization of Youth Care Health Service by adolescents aged 15-19 years of the Topoyo Health Center. This study was quantitative with a cross sectional approach. The sample in this study were 92 samples taken purposively sampling technique with online data collection using a google form link questionnaire. Data were analyzed using Chi-Square test and Kolmogorov-Smirnov test.

Methods: The results showed that 63% of respondents do not use PKPR, 67.4% of respondents have sufficient knowledge, 65.2% of families do not support and respondents need health services 70.7% of respondents. The bivariat analysis showed that there were correlation between knowledge (p -value = <0.001), family support (p -value = <0.001), and needs (p -value = <0.001) with the utilization of PKPR.

Conclusions: Conclusions and suggestions in this study are factors of knowledge, family instrumental support and the need for health services have a significant relationship in the use of PKPR by adolescents aged 15-19 years. For Topoyo Health Care, it is better to publish and increase socialization related to the existence and benefits of PKPR.

Keywords: Family Support 1; Needs 2; Utilization Knowledge 3; PKPR 4

The Relationship of Facilities Conditions with The Willing to Use Electronic Medical Records at Puskesmas Sidomulyo, Samarinda City

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ABSTRACT

Background: The information technology system has a good impact on humans, the Minister of Health Regulation no.24/2022 concerning medical records was launched. One of the factors for this regulation to work requires human resources who have the desire to make the transition from conventional medical records to electronic medical records.

Objectives: To determine the relationship between the condition of the facility and the willingness to use electronic medical records at the Sidomulyo Health Center, Samarinda City

Methods: This quantitative study was conducted for Health Officers at the Sidomulyo Health Center in Samarinda City who are in charge of filling out medical records. This study used a cross-sectional design, which means it was done one at a time. It also used univariate and bivariate analysis, which meant it used the Chi-Square statistical test with a confidence level of 95 percent.

Results: Research on the relationship between facility conditions and willingness to use electronic medical records at the Sidomulyo Community Health Center, Samarinda City using the Chi Square statistical test obtained a value of $asymp.sig (0.011)$.

Conclusions: There is a relationship between facility conditions and willingness to use electronic medical records at the Sidomulyo Community Health Center, Samarinda City.

Keywords: Facility Conditions, Willingness, Electronic Medical Records

Physical Activity Level of Rural Adolescents: Based on Socio-Demographic Factors and Their Relationship with Nutritional Status

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ABSTRACT

Background: Adolescents' physical activity was an essential factor in preventing overweight and obesity at their age. Physical activity factors during adolescence could determine work productivity in the future. The growth process during adolescence will experience a growth spurt. Apart from that, today's teenagers are more likely to do light activities with the significant development of digitalization, which can influence low physical activity and allow the occurrence of over-nutritional status or obesity in teenagers.

Objectives: This study aims to determine the level of physical activity of adolescents in rural areas related to socio-demographic factors and the nutritional status of adolescents based on gender.

Methods: This baseline research was conducted using a cross-sectional method. The research was conducted from August – September 2023 in Sumedang district. The research subjects were teenagers aged 13-15 years, 152 adolescents, healthy and willing to become research respondents. The data collected included socio-demographic data, nutritional status (BMI), and physical activity 2x24 hours, which was then categorized as light, sedentary, and heavy activity.

Results: Respondents consisted of 72 people (47%) young men and 82 (53%) young women. Nutritional status is categorized into underweight, normal, overweight, and obese; data showed that the nutritional status of teenagers by sex underweight 6.9% in young men, normal status 69,4%, overweight 23,6%, and among young girls nutritional status were underweight 8,5%, normal status 68,3% and overweight 23,2%. The distribution of all subjects' physical activity was categorized as light, 1.40-1.69, among young men (98.9%) and sedentary activity (1,4%), and all young girls were light activity (100%). Mann-Whitney test among nutritional status and physical activity among adolescents by sex showed there was no correlation between variables $p < 0,005$ (0,049).

Conclusions: the average physical activity description of teenagers in rural areas is categorized as light, and most of the subjects have a normal nutritional status. This could be influenced by sitting for a long time, playing with gadgets, and other activities, one of which is that physical activity that is quite heavy is not significant.

Keywords: adolescents, nutritional status, physical activity

Factors Related to the Radiodermatitis of Patients with Breast Cancer in Dharmais Cancer Hospital

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ABSTRACT

Background: Breast cancer is still the second highest cancer trend in the world globally. Patients with breast cancer who undergo radiation therapy often experience radiodermatitis. Related factors have been studied as predictors in several countries.

Objectives: The study aimed to determine factors related to the radiodermatitis of patients with breast cancer in Dharmais Cancer Hospital

Methods: This is a quantitative study with a cross-sectional research design. Data was collected from June to July 2023. The sampling technique was a purposive sampling of 276 patients with breast cancer who underwent radiotherapy and met the study criteria in the form of patients with breast cancer who receive radiation therapy in the form of fractionation. Data was obtained through patient medical records containing socio-demographics and clinical health status.

Results: The analysis used multivariate logistic regression. Overall, topical use (OR=0.00, 95%CI:0.00), comorbidities (OR=0.49, 95%CI:1.19-1.28), and cancer stage (OR= 0.24, 95%CI:0.07-0.81), total fractionation (OR=0.57, 95%CI:0.21-1.49) was identified as a significant factor associated with the incidence of radiodermatitis in patients with breast cancer undergoing radiotherapy. Cancer stage (OR=0.24, P-value=0.022) is the dominant factor associated with the incidence of radiodermatitis in patients with breast cancer, and the risk of experiencing radiodermatitis is 0.24 times higher than others.

Conclusions: We found that BMI smoking history was not related to the incidence of radiodermatitis, while topical use, comorbidity, and amount of fractionation were related factors but did not have a dominant influence.

Keywords: factor related; breast cancer; radiotherapy; radiodermatitis

Health-related quality of life of pregnant and lactating women and its socio-demographic and perceived psychological distress determinants

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ABSTRACT

Background: Pregnancy and lactating periods are a women life cycle that requires adaptation both physically, psychologically, and socially and may impact their quality of life. Low quality of life during perinatal will increase maternal risk of psychological distress and psychotic condition.

Objective: to identify the associations between demographic, socio-economic, obstetric, and perceived psychological distress variables and health-related quality of life among pregnant and lactating women in Java Indonesia.

Methods: This study was an online cross-sectional study conducted in February-March 2022 to identify the quality of life in pregnant and lactating women and its determinants. The inclusion criteria for the study were: a) women of reproductive age (15-49 years) in Java, Indonesia, and b) currently pregnant at any trimester or lactating within the last two years. Data collection used a snowball sampling technique. Linear regression was conducted to determine the association between socio-demographic and perceived psychological distress and health-related quality of life. Perceived psychological distress was measured using the Depression Anxiety Stress Scale, and health-related quality of life was measured using the 36-Item Short Form Health Survey

Results: The total respondents in this study were 410 women, consisting of 249 pregnant and 161 lactating women. The overall mean score of quality of life between pregnant (65.63+13.74) and lactating women (66.95+15.36) had a slight difference and showed no significant differences. The highest sub-scale experienced by pregnant and lactating women was social function, and the lowest was the role limitation due to physical health. A multiple linear regression analysis revealed that a significant factors predicting quality of life among pregnant women included perceived anxiety, perceived depression, and occupation. While the significant factor predicting quality of life among lactating women included perceived stress, perceived anxiety, the length of breastfeeding, and ethnic group.

Conclusion: Maternal socio-demographic and their perceived psychological distress have predicted the health-related quality of life of both pregnant and lactating women. Strategic intervention to modify socio-demographic factor and lowering perceiver psychological distress may increase quality of life among pregnant and lactating women.

Keywords: quality of life, pregnant women, lactating women, socio-demographic, perceived psychological distress

Factors Influencing Implementation of Antibiotic De- Escalation in Critically Ill Patients at Panembahan Senopati General Hospital

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ABSTRACT

Background: The use of antibiotics in critically ill patients with life-threatening infections must be done because delaying it will increase the risk of mortality. It is not uncommon to find cases of multiple-drug-resistant bacteria, and many things need to be considered when determining antibiotic therapy in this condition.

Objectives: The study aims to know which risk factors influence the implementation of antibiotic de-escalation in patients critically ill at Panembahan Senopati Regional Hospital, including age, gender, length of stay, duration of antibiotic therapy, use of mechanical ventilation, multidrug-resistant (MDR), and history of antibiotic use.

Methods: This type of research is retrospective, using sampling techniques total sampling with a population of 72 patients. Data collection used medical records from 01st January 2021 to 31st May 2023. Data analysis in this study used the Chi-Square with a significance value of $p < 0.050$ to determine the relationship between variables—overview of the implementation of antibiotic de-escalation in critically ill patients.

Results: Results of the study show that the III generation cephalosporin group is the most widely used, with 25 antibiotics (92%) and the highest use of antibiotics for indications of pneumonia in as many as nine patients (33%). Outcome Clinically, 25 patients (92%) died with an average hospitalisation of 8 days. Factors that influence the implementation of de-escalation are the use of mechanical ventilation with value $p = 0,010$ ($p < 0.050$), history of antibiotic use with values $p < 0,001$ ($p < 0.050$), and patients with MDRs with values $p = 0,049$ ($p < 0,050$).

Conclusions: Implementing antibiotic de-escalation in critically ill patients at Panembahan Senopati General Hospital is mainly implemented for conditions in the respiratory tract with a change in the use of antibiotics from broad spectrum to narrow spectrum. Factors influencing implementation are mechanical ventilation, a history of inpatient antibiotic use, and patients with MDRs.

Keywords: antibiotics; critically ill patient; de-escalation.

Exclusive Breastfeeding Practices Among Women in Kei Besar Island: A Descriptive Study

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ABSTRACT

Background: Exclusive breastfeeding, a culturally acceptable practice, has shown evidence of effectiveness in reducing stunting and promoting long-term growth in Indonesia, as well as preventing infectious diseases such as diarrhea. As part of stunting reduction acceleration strategies, the Indonesian government aims to achieve an 80% exclusive breastfeeding rate for infants under 6 months by the year 2024. However, as of the first quarter of 2023, only seven provinces had reached the 75% target for that period, and Maluku, one of the top 10 provinces with the highest stunting prevalence, had not achieved it.

Objectives: This study aims to delineate the profiles of women engaged in exclusive breastfeeding and those who do not, within the context of Kei Besar Island.

Methods: This descriptive study employed a cross-sectional design. A questionnaire was administered to 23 pregnant women and 8 breastfeeding mothers of infants aged 0-5.9 months to assess demographic characteristics, breastfeeding practices, and knowledge. Findings are presented using descriptive statistics.

Results: Among pregnant women, 52% lacked knowledge of early breastfeeding initiation. 95.7% received antenatal care from midwives, with 39.1% attending four or more times. Notably, 60.9% reported exclusively breastfeeding their previous child. Among breastfeeding mothers, 75% reported exclusive breastfeeding, but 62.5% provided incorrect definitions of breastfeeding and admitted to formula milk use within the past day. Additionally, misconceptions included beliefs that thinner women produce less breast milk and that formula milk's nutritional content resembles that of breast milk.

Conclusions: Addressing knowledge gaps and misconceptions through health education on exclusive breastfeeding is essential. Midwives have the potential to serve as effective agents in promoting exclusive breastfeeding during ANC appointments for Kei Besar mothers.

Keywords: Exclusive breastfeeding; Kei Besar; Maluku

“Diabetes Risk Calculator Mobile Application (DiaCal)” Smartphone Application-based Education: Development and Usability Testing

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ABSTRACT

Background: Type 2 diabetes mellitus could be prevent through screening and early detection approach. Despite the growing up the mobile health application, the application which addressed to calculated diabetes risk still limited

Objectives: The objective of this study is to develop and examine the usability of DiaCal smartphone application based education

Methods: Twenty respondents were recruited in this study. The inclusions criteria of the respondents were age 18-65 years, android-smartphone user, agree to be respondents in thus study. The framework of this application based on American Diabetes Association diabetes risk screening instrument to determine the diabetes risk of the respondents. Development of the Dialcal was divided into three phases-preparation, design and piloting. System Usability Testing (SUS) instruments used to examine the user level acceptance of this application.

Results: Dialcal app developed in android platform core modules: a) data entry, b) conversion and calculating, c) output of the risk assessment, d) education. The score will displayed in green icon which categorized as “low risk” and red icon as “high risk”. The average adjective range score is 85.25 which indicates that the Dialcal application in the “excellent” category and the grade level scale in “A+”.

Conclusions: Dialcal application can be a potential application that assists people in calculating their type 2 diabetes mellitus risk and helps them modify their behaviors.

Keywords: Dialcal; mobile application; type 2 diabetes mellitus; prevention

The Effect of Porang (*Amorphophallus Oncophyllus*) Macerated with Ethanolic Extracts of *Strobilanthes Crispus* on The Growth of Metacarpal Bone of Fetus Rats (Sprague Dawley) in the Teratogenic Study

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ABSTRACT

Background: *The use of porang (Amorphophallus oncophyllus) as a nutraceutical is still limited because of the calcium oxalate content which may damage the kidney. Porang macerated with Strobilanthes crispus (PMS) was developed as a low calcium oxalate product. However, the safety must be proven.*

Objectives: *The aim of this study was to evaluate the teratogenic effect of PMS on the growth of metacarpal bone of rats.*

Methods: *The study was experimental with post-test with control group design. Forty female Sprague dawley rats were divided into four treatment groups, namely control group (KN) and treatment groups that used the dosage of 500 mg/Kg BW (DI), 1000 mg/Kg BW (DII), and 2000 mg/Kg BW (DIII). PMS was administered orally to the pregnant rats for ten days during organogenesis periods (6th-15th day of gestation). At the end of study, 20th day of gestation, the pregnant rats were dissected and the fetuses were observed for the normality of metacarpal bones qualitatively and quantitatively.*

Results: *The results showed that morphologically, the metacarpal bones of fetuses were normal with the number of bones were 4 for all groups.*

Conclusions: *Based on the research results, it can be concluded that PMS did not affect the growth of the metacarpal bones of fetuses.*

Keywords: *Amorphophallus oncophyllus, metacarpal, Strobilanthes crispus, teratogenic study.*

The Effect of Breast Massage with Breastfeeding and Baby Nutritional Status

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ABSTRACT

Background : The successful of breastfeeding process is not due to the mother's biological factors but rather due to difficulties for the mother in her first role so that this affects improper attachment techniques during breastfeeding and the feeling that milk production is not enough and not smoothly. The benefits of breastfeeding are very important to reduce nutritional imbalances and reduce stunting rates. One of the factor failure of breastfeeding is because breast milk does not come out after mother delivery their baby. Breast massage is another important factor in how the mothers can success breastfeed their baby.

Objectives : This study aims to determine the effect of breast massage with breastfeeding and baby nutritional status.

Methods: This study analyzes the effect of breast massage in third trimester pregnant women with exclusive breastfeeding and infant nutritional status. A cross-sectional study was carried out with 80 pregnant women with gestational age 38 weeks using purposive sampling methods. The research instruments were the breast massage checklist, breastfeeding behavior, and body weight observation sheet. Bivariate analysis used the Wilcoxon test.

Results : The results showed that there was a significant difference in mothers who did breast massage with breastfeeding only ($p = 0.035$). Furthermore result showed a significant difference between breast massage with baby nutritional status ($p = 0.000$).

Conclusions: Breast massage was significant influenced in supporting mother to breastfeed and make a better baby's nutritional status. Breast massage should be implemented during pregnancy on 38 weeks to support the success of exclusive breastfeeding. The earlier preparation for breastfeeding during pregnancy, the sooner mother can breastfeed their babies smoothly and better nutritional status.

Keywords: *Breast Massage, Breastfeeding, Baby Nutritional Status*

Utilization of *Mimosa pudica* L. in Indonesian Traditional Medicine

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ABSTRACT

Background: Traditional medicine and traditional healers (*battr*a) have a long history of treating disease. One of the plants widely used by *battr*a is *Mimosa pudica* (MP). This plant is easy to find throughout Indonesia.

Objectives: To document traditional herbal medicine containing MP by *battr*a.

Methods: This study analyzes secondary data on Ethnomedicine research in Indonesia (RISTOJA). RISTOJA was carried out for three periods (2012 to 2017) by the Ministry of Health Indonesia. Descriptive analysis was used to analyze the use of herbs, the parts used, and the composition of the herbs, including the preparation and distribution. A literature study of the pharmacological activity of MP for the last five years (2019-2023) was carried out to validate the analysis results.

Results: Ninety *battr*a used MP in 106 concoctions (48 as a single plant and 70 as a multi-plant) to treat 39 diseases. The diseases that have the most concoctions are skin diseases (10), followed by rheumatism and gout (9), tumors/cancer and coughs (8 each), hemorrhoids (7), diabetes (6), low back pain (4), and jaundice (4). The most common administration is orally (65.1%). However, the issue of the effectiveness and efficiency of concoctions with more than six ingredients needs to be studied further, as well as the preparation and administration concerning hygiene. A literature study of the pharmacological activity of MP proves and supports its use in traditional herbs. The results confirm that MP has various activities in line with its use in traditional medicine, for example, wound healer, antibacterial, antimicrobial, antidiabetic, sedative, anticancer, and many more.

Conclusions: This study provides information on using MP in herbal concoctions used by *battr*a to treat patients. Literature studies from MP research prove that its pharmacological activity is similar to *battr*a's. Documented herbs containing MP may contribute to future research.

Keywords: *Mimosa pudica*; traditional herb; *battr*a

The Relationship of Knowledge about Iron Supplements with Haemoglobin Levels in Trimester II and III among Pregnant Women in Pajangan Subdistrict

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ABSTRACT

Background: Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) are indicators of public health status. One of the efforts to accelerate the reduction of MMR and IMR is by administering iron supplements to pregnant women. Pregnant women who are iron deficient can cause anaemia which has an impact on increasing the risk of Low Birth Weight (LBW) and results in stunting. Pregnant women can be defined as anaemic if their haemoglobin levels is below 11 g/dL.

Objective: To determine the relationship between knowledge of iron supplements with haemoglobin levels among pregnant women in the second and third trimesters in Pajangan Subdistrict.

Method: The research conducted is a quantitative study. This study was designed with a cross sectional design. The type of sampling used was the total sampling technique with a total sample of 121 pregnant women in the second and third trimesters. The data was collected by a validated questionnaire. Processing and data analysis was done using the Spearman correlation test.

Results: Most pregnant women are 20-35 years old (82,6%), in the second trimester of pregnancy (57%), highly educated (85,1%), and have an income under city minimum wage (50,4%). The results showed that the average knowledge score of pregnant women in the second and third trimesters was 12.63 ± 1.427 with maximum score is 15 and an average haemoglobin level (g/dL) of 11.83 ± 0.802 . Spearman test results obtained p-value = 0.029 ($p < 0.05$) then H_0 is rejected.

Conclusion: There is a significant relationship between knowledge about iron supplements with haemoglobin levels among pregnant women in the second and third trimesters in Pajangan Subdistrict. It is hoped the public health centre can create a program to increase pregnant women knowledge regarding iron supplements.

Keywords: Knowledge, iron supplements, haemoglobin levels, pregnant woman

The Relationship of Characteristics With Knowledge Among Pregnant Women About Breastfeeding And Complementary Feedings In The Stunting Focus Location Area Of Pajangan District

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ABSTRACT

Background: The prevalence of exclusive breastfeeding in Indonesia is 74.5%, which is below the Ministry of Health's target of 80%. In the Province of the Special Region of Yogyakarta, based on RISKESDAS data from 2018, the breastfeeding rate was 22.92%. In Bantul Regency, the rate was even lower at 19.53%, which is below both the national and provincial averages. Sensitive nutrition interventions such as increasing knowledge and care regarding health nutrition for both mothers and children so that it is hoped that it can improve the practice of providing breast milk and complementary foods in specific nutrition interventions.

Objective: This study aims to examine the relationship between the characteristics and knowledge of pregnant women regarding breastfeeding and complementary foods in the stunting focus area of Pajangan District.

Methods: A quantitative approach with a cross-sectional research design was used for this study. The sample consisted of 126 pregnant women. Data processing and analysis included univariate and bivariate Chi Square analysis tests to describe the relationship between characteristics and the knowledge of pregnant women regarding breastfeeding and complementary feeding. The data was collected by a validated questionnaire.

Results: Pregnant women's knowledge about breastfeeding is good (53.2%) and there is no significant relationship with age (p -value=0.413), last education (p -value=0.337), and family income (p -value=0.156) and knowledge about MPASI (52.4%) and there was no significant relationship with age (p -value=0.173), highest level of education (p -value=0.475), and family income (p -value=0.587).

Conclusion: The study found no significant relationship between the characteristics and knowledge of pregnant women regarding breastfeeding and complementary foods in the stunting focus area of Pajangan District. Furthermore, it is hoped that research can be carried out in the same field by developing research methods to find out the factors that influence the knowledge of pregnant women.

Keywords: Breastfeeding, Characteristics, Complementary Feeding, Knowledge, Pregnant Women

Complementary feeding practice by maternal employment status during COVID-19 pandemic

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ABSTRACT

Background: Appropriate complementary feeding practice during the COVID-19 pandemic is challenging due to government policies such as changing of employment status. The changes of employment status, especially working mothers, were related to the quality of complementary feeding practice. This study aimed to analyze the impact of maternal employment status on complementary feeding practice during COVID-19 pandemic.

Objective: This study aimed to analyze the impact of maternal employment status on complementary feeding practice during COVID-19 pandemic, and factors associated with minimum dietary diversity of complementary feeding practice.

Methods: A cross-sectional study was conducted and online self-administered questionnaires were used to collect data on mothers of children ages 6-23 months who lived in Java, Indonesia.

Result: Overall 91.1% of the children met the criteria for Minimum Dietary Diversity (MDD), with 23.7% children with mothers who work away from home, 13.1% children with mothers who work from home, and 63.2% children with unemployed mothers. Consumption of breastmilk, eggs, flesh foods groups, and MDD on complementary feeding were significantly decreased in children with mothers who work outside home than housewives. Furthermore, the factors related to the MDD on complementary feeding practice were maternal employment status, area of residence, child's age, and maternal ages.

Conclusion: Complementary feeding practice was impacted by maternal employment status during pandemic. However, other strategies to increase dietary diversity of complementary feeding are needed to prevent child malnutrition by increasing maternal knowledge related to child nutrition, especially for working mothers.

Keywords: complementary feeding; COVID-19; food group; minimum dietary diversity; maternal employment status

The Effectiveness of the Training for Trainers (TfT) Method for Facilitators in Preparing to Form First Aid Cadres

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ABSTRACT

Background: Training for Trainers (TfT) is a training program provided to facilitators of the First Aid Cadre service team. The TfT program aims to increase competency, capacity, and performance so they become professional facilitators in forming cadres. This is important to ensure the quality of cadre formation in accordance with expectations and needs.

Objectives: This study aimed to determine the effect of Training for Trainer (TfT) in increasing knowledge about first aid for Facilitators in preparing first aid cadres.

Methods: This research is experimental research using a one-group pretest-posttest design. The intervention was presenting first aid material by experts and practice based on cases that had been prepared. It used a total sample consisting of 14 medical faculty students who were facilitators for the preparation of the formation of first aid cadres at Assalafiyah II Mlangi Islamic Boarding School (IBS).

Results: The study population was 14 facilitators consisting of medical, nursing, and nutrition students. Based on a comparison of pre-test and post-test scores, it was found that the average score increased from 77.3% to 94.0%. Based on the Wilcoxon test, it was found that the p value <0.05, which means that TfT increases the Facilitator's knowledge regarding First Aid significantly

Conclusions: TfT is an effective method for increasing knowledge for facilitators who are health students. Cadres need facilitators who are not only able to accompany them but must also have competence and understand the topics being taught.

Keywords: training for trainer; facilitator; first aid cadre; knowledge; medical student;

The Effect of Marriage Age Maturity Education E-Module on Self Efficacy Youth Cadres in Conducting Education in PIK-R, Bantul District

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ABSTRACT

Background: Lack of knowledge of maturation education about marriage age self efficacy in adolescent cadres resulted in early marriage resulting in pregnancy at a young age so that the risk of experiencing death in the mother. Youth cadres as peer group and agen of change This can be done by using modules that have been proven effective.

Objectives: This study aims to determine The Effect of Marriage Age Maturity Education E-Module on Self Efficacy Youth Cadres in Conducting Education in PIK-R, Bantul District. plain the context of the study

Methods: This research uses as if experimentally not equivalent with a plan pre-test and post-test with control group design. By using test t-test. Sampling technique using total sampling. Respondents totaling 50 respondents were divided into 2 groups, namely 24 respondents in the intervention group in Ngireng ngireng Hamlet (PIK-R Fresh) and 26 respondents in the control group in Padokan Lor Hamlet (PIK-R Pelangi). The instrument in this study was carried out by validity, namely the e-module with a result of 0,73 and using a questionnaire self efficacy youth cadres with a result of 0,70. The results of the reliability of the e-module were obtained 0,960 and the reliability of the self efficacy questionnaire was 0,971.

Results: Test results statistic paired sample t test obtained a significant value that is p-value 0.000 ($p < 0.05$).

Conclusions: The educational e-module for maturing the age of marriage has an effect on increasing self efficacy youth cadres. Expected that youth cadres can use the e-module to educate their peers.

Keywords: E-Module; Marriage Age Maturity; Youth Cadres; Self Efficacy

The vitamin D status during third-trimester pregnancy was associated with pregnancy outcomes: a multi-ethnic cohort study among pregnant women in Indonesia and Malaysia

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ABSTRACT

Background: Vitamin D deficiency is frequent in pregnant women. While low 25(OH)D levels were found to lead to adverse pregnancy outcomes in other populations, such data is sparse among pregnant women in Southeast Asian countries, where vitamin D deficiency is evident.

Objectives: This study investigated the associations between maternal vitamin D status and pregnancy outcomes among pregnant women in Indonesia and Malaysia.

Methods: This study was a prospective cohort design. A total of 775 mothers-neonate pairs from West Sumatra, Indonesia and Selangor and Kuala Lumpur, Malaysia were recruited from selected public health clinics. Serum 25(OH)D was sampled in gestational weeks ≥ 28 (Trimester 3 (T3), $n=775$) and classified according to the Institute of Medicine (IOM) recommendations. Associations between maternal vitamin D status and pregnancy outcomes were analyzed using linear regression.

Results: The mean of 25(OH)D concentration during pregnancy was 18.04 ± 9.97 ng/ml. The prevalence of the vitamin D deficiency, insufficiency, and sufficiency status were 30.50%, 40.10%, and 29.40%, respectively. Infants born with mothers with higher 25(OH)D concentration had higher birth weight and head circumference, respectively ($p < 0.05$). However, no association were found between vitamin D status and birth length.

Conclusions: A high prevalence of vitamin D deficiency was found among pregnant women in Indonesia and Malaysia. Maternal vitamin D status associated with newborn anthropometric measurements in birth weight and head circumference. Further studies are needed to confirm the role of the associated factors before possible intervention programs can be implemented.

Keywords: Vitamin D Status, Pregnancy Outcomes, Indonesia, Malaysia

Android-Based Health Promotion Influences Motivation Pregnant Women Take Iron Tablets in Bantul

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ABSTRACT

Background: Maternal mortality is a global public health challenge. Maternal and child health is one of the problems that must receive attention in Indonesia. This is because the maternal mortality rate in Indonesia is still high, and has not yet reached the target expected in the Sustainable Development Goals (SDGs), namely below 70 per 100,000 live births in 2030. Providing education will result in changes and increased knowledge in a short time, so It is hoped that pregnant women can behave according to health values.

Objectives :The research aims to determine the effect of Android-based health promotion on the motivation of pregnant women to consume iron tablets.

Methods:The research method uses an experimental design. The research subjects were pregnant women in Bantul Regency with a research sample of 42 respondents with a sampling technique using purposive sampling. Data collection uses a questionnaire that has been tested for validity. Statistical tests use a nonparametric test because the data is not normally distributed, namely the Mann-Whitney test.

Results: The research results based on statistical tests showed that the motivation of pregnant women between the intervention and control groups was <0.05 .

Conclusions: In conclusion, there is an influence of motivating Android-based health promotion to take iron tablets. Every health service is expected to provide health promotion to increase motivation to take iron tablets.

Keywords: Motivation, Health promotion, Iron tablets

Maternal factors in stunting children aged 0-60 month: Scoping Review

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ABSTRACT

Background: Stunting has been identified as one of the major proximal risk factors for poor physical and mental development of children aged 0-60 month. Previous studies have reported the complexities associated with understanding the determinants of stunting. Mother plays an important role in providing nutrients for children; however, no review specifies this aspect for identifying mother characteristics related to stunting.

Objectives: This study aimed to identify maternal characteristics related to stunting among children aged 0-60 month.

Methods: This literature review was carried out to identify studies published from January 2012 to December 2022 by searching four electronic databases (PubMed, Science Direct, Scopus, and BMC). Studies were included if they reported determinants of maternal in stunting children. All studies involved determinants of maternal in stunting and maternal characteristics with stunting children. The scope of this study are population of pregnant women, conducting antenatal care in health facilities, having children aged 0-60 months with stunting. Information regarding study design, population, intervention, comparator, outcome measures and findings were extracted.

Results: The results obtained from searching 4 database 1934 articles and there was duplication of articles so that 1778 articles were obtained. After screening and extraction based on inclusion and exclusion criteria, 20 articles were obtained. The results of 20 articles analyzed showed that maternal factors that determine the incidence of stunting in children aged 0-60 months are educational level, antenatal care visit, short maternal stature <145 cm, and wealth index quintile.

Conclusions: In conclusion, maternal factors have a significant impact on stunting in children 0-60 month. The results of the literature study show that the most significant maternal factor in the incidence of stunting in children aged 0-60 months is maternal education level. A multidimensional, multi-stakeholder approach should address all issues simultaneously, such as improving maternal education, spacing births, planning pregnancies well, providing access to adequate nutrition for growing underweight or stunted children, and providing affordable healthy food for those of low socioeconomic status.

Keywords: Maternal; Stunting; Children aged 0-60 month

Standardization Specific and Non-Specific Parameters of Sembung Rambat Leaf Ethanol Extract (*Mikania micrantha*)

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ABSTRACT

Background: Previous studies have reported that *M. micrantha* has several pharmacological effects that can be used to prevent and cure various diseases, so further tests need to be carried out, namely the standardisation of extract preparations. Standardisation of medicinal raw materials from natural ingredients such as extracts of medicinal plants is a series of parameters, procedures, and methods of measurement, the results of which are elements related to the paradigm of pharmaceutical quality.

Objectives: The aim is to standardise the 96% ethanol extract of *M. micrantha*, which is expected to be a reference in setting standard quality parameters for *M. micrantha* because *M. micrantha* standardisation has not been listed in the *Materia Medika Indonesia* and the *Indonesian Herbal Pharmacopoeia*.

Methods: The *M. micrantha* extract obtained from the maceration method extraction process was standardised.

Results: The results of this study obtained an extract yield of 15.23%. The results of standardisation of specific parameters included the identity of the extract, namely the name of the extract (*Mikania extract/sembung rambat leaf extract*), the Latin name (*Mikania micrantha* Kunth), the name in Indonesia (single membrane grass, sembung rambat, and caputuheun) and the part of the plant used (leaves). Organoleptic extract form (viscous extract), colour (dark green), odour (typical) and taste (astringent and bitter), water-soluble extract content 27.67±1.70%, ethanol soluble extract content 54.33±6.16%, the content of secondary metabolites (alkaloids, flavonoids, tannins, and saponins), drying shrinkage 20.83±0.79%, specific gravity 1.01±0.05, moisture content 5.87±1.22%, total ash content 16.70±0.96%, acid insoluble ash content was 4.32±0.84% and total flavonoid content was 38.99±2.70 mgQE/g.

Conclusions: The 96% ethanol extract of sembung rambat leaves (*Mikania micrantha* Kunth) fulfills the requirements of specific and non-specific parameters.

Keywords: Experimental, Raw materials, Extracts, Standardization, *M. micrantha*

Gardening-Cooking Based Intervention for Improving Fruit and Vegetables Intake in Preschool Children

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ABSTRACT

Background: Currently, fruit and vegetable intake in preschool children is still lacking and there is a high intake of calories. Nutrition education taught from an early age will affect changes in habits and behavior, especially getting used to the consumption of fruits and vegetables.

Objectives: This study aims to determine the effect of gardening-cooking based intervention on attitude, fruit and vegetable preference, fiber, and high calorie food consumption.

Methods: This type of research is quasi-experimental with pre and post-test with control group design. The sample of this study was preschool children aged 4-6 and as many as 33 children consisting of intervention and control groups, and selected by purposive sampling. Interventions were given in the form of nutrition education, gardening and cooking programs for 3 weeks. Data was analyzed using Independent T-Test, Paired T-Test, Wilcoxon, and Mann Whitney.

Results: There was an increase in attitude, fruit and vegetable preference, fiber intake, and decreased intake of high calorie foods ($p < 0,05$) before and after treatment in the intervention group. In contrast, there was no significant change in the control groups.

Conclusions: Gardening-cooking based intervention affects attitude, preference and intake of fruit and vegetables.

Keywords: *cooking; gardening; food preference; eating habits; preschool children.*

Factor Associated with Zinc Intake Among Children Aged 6-11 Months Old in Sambas District, West Kalimantan

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ABSTRACT

Background: Indonesia is currently facing a triple burden of malnutrition, including micronutrient deficiencies such as zinc (1). Children between the ages of 6 and 24 months are prone to zinc deficiency, which can lead to anorexia, affecting food intake and growth, as well as the immune system (2).

Objective: This study aimed to identify factors associated with zinc intake among children aged 6 to 11 months old in Sambas district, West Kalimantan.

Methods: This study was a cross-sectional study with 428 subjects of children aged 6 to 11 months old that conducted on February until March, 2017. The data were collected using single 24-hr recall, repeated 24-hr recall among the sub samples and validated questionnaires. Food security was assessed using US Household Food Security (US-FSSM). Chi square and binary logistic regression were used to analyze the data.

Results: The median intake of zinc among children aged 6 to 11 was 1.5 mg. Income, food security, food diversity and meal frequency were found significantly association with zinc intake (p value < 0.05). After adjusted by several variables using logistic regression, food security and meal frequency were shown to be factors associated with zinc intake among children aged 6 to 11 months old in Sambas district, West Kalimantan.

Conclusion: Overall, it might be said that most of the children aged 6 to 11 months old had inadequate zinc intake. Promoting nutrition balanced guidelines among the mothers could be an alternative to increase food diversity and meal frequency. Moreover, the prevention of food insecurity at the household level should be a concern for governments.

Keywords : zinc deficiency, micronutrient deficiency, food security

The Effects of Telehealth and Robotic Intervention in Post-Stroke Patients: A Literature Review

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ABSTRACT

Background: Post-stroke management can be done with medication and rehabilitation. Generally, stroke patients will depend on the help of others in fulfilling their Activities of Daily Living. The reduced independence of stroke patients affects the quality of life and can reduce the patient's life expectancy.

Objectives: To determine the impact of technology use in improving health status and quality of life in post-stroke patients.

Methods: We conducted a literature search using three electronic databases: PubMed, Ebsco, and ClinicalKey. Using the terms "stroke and mobile health applications m-health or mobile apps, stroke and mobile health technology or mobile health education and quality of life". Selecting articles that have RCT design, published in the last 10 years, free full text, technology-based interventions, conducted in patients with stroke, post-stroke. Selecting articles according to predetermined criteria. Quality assessment of articles uses the Critical Appraisal Skills Program Tools/CASP RCT Checklist.

Results: Technology has an impact, assisting physical exercise in post-stroke patients, as a solution for post-stroke patients who have limited access to therapy, improving quality of life in post-stroke patients, and increasing medication compliance and patient care.

Conclusion: Technology has a positive impact on improving quality of life, assisting stroke patients' physical exercise, providing easy access to therapy, and improving medication adherence. The technology used is in the form of robots, and mobile applications with audio. In carrying out care for post-stroke patients, technology can be used in the form of telerehabilitation and robots to optimize patient care at home.

Keywords: Technology, Post-Stroke Patients, Quality of Life.

Cost Effectiveness Analysis of Lowering Blood Glucose in DM Nephropathy Patients

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ABSTRACT

Background: Diabetes mellitus is a group of metabolic diseases characterized by increased blood glucose. Diabetes mellitus can cause various chronic complications, one of which is diabetic nephropathy. The number of uses of treatment will cause differences in the effectiveness and cost of therapy.

Objective: to estimate the economic efficiency of lowering blood glucose in nephropathy DM inpatients in regional public hospital.

Methods: This research is retrospective where data collection is carried out by looking at medical records and administrative data. A total of 63 inpatients were observed and analyzed. Cost-effectiveness analysis was obtained by comparing the average direct medical costs per three days of treatment A (Insulin) and treatment B (Non-Insulin) with the effectiveness of achieving a blood sugar level of <200 mg/dL (outcome or effectiveness).

Results: The results showed that the effectiveness of treatment B (non-insulin) was 88%, while treatment A (insulin) was 85%. The average total cost of anti-diabetic drug B (non-insulin) is Rp. 839,563, and drug A (insulin) Rp. 1,163,473. Drug group B (non- insulin) is more cost effective with an ACER value of Rp. 954,048, compared to drug A (insulin) of 1,368,791, in nephropathy DM patients at regional public hospital Panembahan Senopati Bantul.

Conclusion: Treatment B (non- insulin) can be used as a cheaper and more effective treatment option for nephropathy DM patients because patients have to pay Rp. 954,048 to reach the blood sugar target of <200mg/dL while drug A has to pay a higher cost to reach the same target.

Keywords: Cost, DM nephropathy, Effectiveness, Outcome, Treatment

Physical Properties, Acceptability, and Nutritional Content of Dumbo Catfish Nuggets

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ABSTRACT

Background: Stunting is a condition of chronic nutritional deficiency caused by a lack of food intake over a long period of time due to insufficient food intake to meet nutritional needs. Efforts to prevent stunting are by increasing intake of food sources of protein. Freshwater fish is a high-protein food ingredient that is easy to obtain and cheap.

Objectives: To determine the physical, organoleptic and nutritional properties of catfish nuggets.

Methods: In this study with quasi experimental design to shown knowledge cadres, physical properties, acceptability and nutritional content of freshwater fish, training in processing freshwater fish into catfish nuggets. Processed fish products are tested for organoleptic properties and nutritional content. The target of this activity is 30 posyandu cadres in Baturetno Village.

Results: Results of pre test The highest score is 7 with a mean of 5.6 and results of post test The highest score is 10 with a mean of 8.67. The results of the organoleptic characteristics of the panelists liked catfish nuggets by 75% and shredded catfish by 83%. Proximate test results for catfish nuggets: water content 53.11%, ash 2.14%, fat 12.43%, protein 14.02%, carbohydrates 22.41%; and catfish nugget fiber 2.54%.

Conclusions: There is an increase in knowledge about the benefits and nutritional content of processed freshwater fish among service participants. Respondents like catfish nuggets and catfish nuggets have high nutritional content.

Keywords: physical properties; organoleptic; nutritional content; catfish nuggets

Changes in Knowledge of Mothers who have Stunting and Not Stunting Toddlers using Booklet, Calendar and Poster Media

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ABSTRACT

Background According to 2018 Riskesdas data, the prevalence of stunting in Indonesia increased in 2010 from 35.6% to 37.2% in 2013 and in 2018 it decreased to 30.8% (1). Research in Dakar, Senegal found that 45% of stunted children came from mothers who had insufficient nutritional knowledge in a group of mothers who did not receive nutritional education (2). Mothers who were given nutritional intervention experienced changes in knowledge and practice in providing food sources of protein and calories. Posters as a media for nutrition education provide changes in knowledge for mothers (3,4,5). Booklets, posters and calendars are print media that are often used to convey health education (6).

Objectives: The aim of this research defined the difference mothers' knowledge who have stunted and non-stunting toddlers when given booklets, calendars and posters.

Methods: This research used a quasi-experimental study and the Wilcoxon test. The inclusion criteria in this study were mothers aged 20-35 years, having children under five, actively participating in Posyandu and willing to take part in research activities for 1 year. The mother's research exclusion criteria were moving from Pasir Putih Subdistrict and not attending Posyandu for 3 consecutive months. The sampling technique uses simple random sampling where maternal data is obtained from attendance at the Posyandu in each RW. Before the research was carried out, the research questionnaire went through a validity and reliability testing stage using computer software.

Results: There was a difference in mothers' knowledge before and after being given nutrition education using booklet (pvalue 0.000), using calendar (pvalue 0.000) and using poster media (pvalue 0.000).

Conclusions: Nutrition education effectively used as promotive efforts on mother in the prevention of stunting, it can be seen from the improvement of knowledge and nutritional intake before and after being given education.

Keywords: booklet, calendar, mother, poster, stunting

A Case-Control Study on Risk Factors Associated with Intentions in Preventing Low Birth Weight Babies in Indonesia

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ABSTRACT

Background: Low birth weight (LBW) babies are among the most common causes of infant and neonatal deaths. Developing countries, including Indonesia, are the most significant contributors to LBW cases. This condition will have an impact on children's health problems and growth and development in the future. Efforts to prevent LBW incidents are critical for pregnant women to understand. A good understanding will create an intention to impact changing behavior to avoid LBW incidents. It is crucial to consider maternal factors such as socio-demographic characteristics, knowledge, lifestyle, and traditional pregnancy care behavior in preventing the incidence of LBW.

Objective: The main aim of this study is to assess maternal risk factors associated with intentions to prevent LBW events.

Method: Using a case-control study research design with a retrospective approach. The research was conducted in the Perinatology room at Wates Regional Hospital, Kulon Progo Regency, with 140 respondents. The sampling technique used fixed disease sampling in the case group and simple random sampling in the control group. The research instrument is a questionnaire on socio-demographic data, knowledge, lifestyle, traditional pregnancy care behavior, and intentions whose validity and reliability have been tested. The data normality test uses the Kolmogorov-Smirnov and Spearman Rank correlation tests to see the relationship between the research variables.

Results: Socio-demographic factors that have a relationship with intention to prevent LBW are maternal age (p-value: 0.03); Maternal risk factors have a significant relationship with intentions to prevent LBW incidents, namely knowledge (p-value: 0.00); lifestyle (p-value: 0.00); and traditional pregnancy care behavior (p-value: 0.00).

Conclusion: Maternal risk factors influencing intentions to prevent LBW incidents are age, knowledge, lifestyle, and traditional care behavior. This research recommends that promotive and preventive efforts through a participatory approach for pregnant women and families must continue to be improved to prevent LBW incidents.

Keywords: Low Birth Weight Babies; Intention, Prevention; Health Promotion

Self-Reported Hypoglycemia in Type 2 Diabetes Mellitus Patients Receiving Antidiabetic Medications in Sleman

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ABSTRACT

Background: Hypoglycemia is a common complication in patients with diabetes mellitus, especially those taking antidiabetic medications. Hypoglycemia can affect the management of diabetes, thereby affecting patients' glycemic control.

Objectives: This study aimed to determine the relationship between the type of antidiabetic medications and hypoglycemia symptoms.

Methods: This research was a cross-sectional study conducted among 108 patients with type 2 diabetes mellitus (T2DM) registered in the Sleman Health and Demography Surveillance System (HDSS). The patients were selected based on their treatment with antidiabetic medication. To quantify hypoglycemia's frequency and severity, patients were asked to read a list of hypoglycemia symptoms corresponding to the symptoms mentioned by the American Diabetes Association (ADA). Severity is defined as mild (no interruption of activities), moderate (some interruption of activities), severe (needed assistance of others), or very severe (needed medical attention). Patient demographics and clinical characteristics have also been collected.

Results: About 53 (50.9%) patients with T2DM self-reported hypoglycemia symptoms (27.8% mild, 14.8% moderate, 5.6% severe, and 0.9% very severe). The highest percentage of T2DM patients who self-reported hypoglycemia symptoms were those who received a combination therapy of insulin and oral antidiabetic drugs (OAD). In contrast, the lowest percentage who experienced hypoglycemia symptoms were T2DM patients who only received OAD. There was a significant relationship ($p < 0.050$) between the type of antidiabetic medications and self-reported hypoglycemia symptoms. This study also found that self-reported hypoglycemia symptoms are closely related to diabetes complications ($p < 0.050$).

Conclusions: The type of antidiabetic medications associated with self-reported hypoglycemia symptoms. Therefore, T2DM patients treated with antidiabetic medications were expected to manage their disease better to control the glycemic value and minimise hypoglycemia risk.

Keywords: antidiabetic; hypoglycemia; medications; type 2 diabetes

Relationship between Sociodemographic Characteristics and the Readiness of Prospective Brides to Meet the Nutritional Adequacy of the First 1,000 Days of Life in Pajangan District

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ABSTRACT

Background: Knowledge, attitudes, and practices are the three domains that cause human behavior. Maternal behavior in providing nutrition for the first 1,000 days of a child's life is related to the nutritional status of children under five. So, failures that occur in the period of the first 1,000 days of life will have an impact on the health and future of the child. Therefore, it is necessary to prepare prospective brides to fulfill nutritional adequacy during the first 1,000 days of life in order to reduce health problems related to child nutrition, especially in areas that are one of the main loci for reducing stunting.

Objective: To determine the readiness of the bride-to-be and to determine the relationship between sociodemographic characteristics and the readiness of the bride- to-be based on knowledge, attitudes, and nutritional practices. Methods: This study was a cross-sectional study conducted in Pajangan District with a population of brides-to-be. Samples were taken using purposive sampling and total sampling methods. Data were collected using a questionnaire that included sociodemographic characteristics, knowledge, attitudes, and nutritional practices.

Results: It was found that 95.1% of subjects had high knowledge and 58.5% of subjects had adequate nutritional attitudes and practices. There was a significant relationship between occupation and subject knowledge (p -value < 0.05). In addition, it is also known that prospective brides in Pajangan Subdistrict have insufficient or low knowledge and attitudes related to breastfeeding and complementary feeding.

Conclusion: Prospective brides in Pajangan Sub-district, based on knowledge, mostly have good readiness, based on attitudes and nutritional practices, most have sufficient readiness and there is a significant relationship between work and subject knowledge. Interventions are needed to improve the understanding of prospective brides related to breastfeeding and complementary feeding so that nutritional needs during the 1,000 HPK period of children can be met properly.

Keywords: preconception, the first 1,000 days of life, knowledge, attitude, nutrition practice

Comparisons between the Role of Working Mothers and Housewives in the Development of Children Aged 3-5th Years in the Gamping Ist Public Health Center Working Area

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ABSTRACT

Background: In the first 5 years of children life, the brains develop connections faster. The age of 3-5 years is also known as the golden age of children, where in this period children experience accelerated development in aspects of gross motor, fine motor, language and social independence. At an early age, children need appropriate care to achieve their optimal development. The mother's role is identical to the main caregiver in the family, one of which is a very important role for golden age period. The dual earner family phenomenon is one of the factors that causes the lack of mother's role in child care, including the time in providing stimulation as a support system in child development.

Objectives: This study aims to determine the comparisons in the role of working mothers and housewives in the development of children aged 3-5th years in the gamping Ist public health center working area

Methods: The sampling technique uses a probability sampling method with a cluster random sampling technique with a sample size of 100 respondents. The inclusion criteria in this study were toddlers aged 3-5 years, mothers aged 23-35 years, and toddlers who were still active in posyandu activity. The instruments in this research were a questionnaire sheet on the mother's role in the development of toddlers aged 3-5 years and Developmental Pre-Screening Questionnaire (KPSP). Bivariate analysis uses the T-test.

Results: Results from statistical obtained the $p=0.000$ for the relationship between role of mother's housewives with child development, while relationship between role of working mothers with child development was $p=0.538$. Based on the result, role of mother's housewives showed better child development. This is shown by the majority of results being appropriate or normal for this group of children. While the role of working mothers showed no significant difference with child development

Conclusions: There are differences in the roles of working mothers and housewives. Research shows that housewives have children with better overall development.

Keywords: Work Mothers, Housewives, Role of Mothers, Children Development, Golden Age

Factor Determinants Analysis of Anaemia Status Among Adolescent Girls in Cigalontang, Tasikmalaya

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ABSTRACT

Background: More than 30% of adolescents (15-24 years old) had anemic and experiencing obstacles in growth and development, cognitive abilities and vulnerability to infectious diseases due to anemia. Several factors, including nutrient deficiency, bleeding, haemolytic and socioeconomic status were risk factors of anaemia status.

Objectives: This study aims to describe the incidence of anaemia and analyse the determinant factors such as protein, iron, and vitamin C intake with anaemia status among adolescent girls in Cigalontang, Tasikmalaya, Indonesia.

Methods: This was a cross-sectional study among 150 adolescent girls in SMA/SMK in Cigalontang District. Instruments used in data collection including structured questionnaire for socio-demographic, breakfast habits, nutritional status of respondents, Semi Quantitative Food Frequency Questionnaires (SQ-FFQ) for the last three months to determine the level of protein, vitamin C, and iron intake, and the cyanmethemoglobin method used to check Hemoglobin (Hb) levels. Data were analysed using STATA.

Results: The results showed that 13.33% of adolescent girls were anaemic with a mean haemoglobin level of 13.9 ± 1.7 g/dL. Bivariate analysis showed that protein intake ($p = 0.008$) and iron intake ($p = 0.001$) had a significant relationship with anaemia status, however vitamin C intake was not associated with anaemia status. Multivariate analysis showed that iron intake was the risk factor (OR: 12.59; (95% CI: 1.60 - 99.24)) of anaemia status among adolescents in Cigalontang.

Conclusions: Factors associated with anaemia among adolescent girls are protein intake and iron intake except vitamin C intake. While the most dominant factor associated with the incidence of anemia is iron intake.

Keywords: Anaemia, protein intake, iron intake, vitamin c intake, adolescent girls, determinant factors

Correlation Between Physical Activity and Gestational Diabetes Mellitus in Primary Health Services (Puskesmas) Bantul District Yogyakarta

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ABSTRACT

Background: Gestational Diabetes Mellitus (GDM) is associated with increased perinatal complications and morbidity. Exercise is one of the strategies used to reduce hyperglycemia in GDM. Physical activity is one of management in patients with gestational diabetes mellitus. Physical activity plays a role in controlling the body's bloodsugar by converting glucose into energy.

Objectives: This study aims to determine the correlation between physical activity with gestational diabetes mellitus at pregnant women at Public Health Area Subdistrict Banguntapan, Jetis, and Sewon of Bantul District DIY.

Methods: The research was an observational analytic study with Cross Sectional design. The sampling technique used Purposive Sampling The subject in this research is pregnant women that come to health center of Bantul District DIY. The number of samples in this study is 116 people. Data of blood glucose level using ACCU check Performa and physical activity data using questionnaire of International Physical Activity Questionnaire (IPAQ). Data analysis using Fisher Exact Test with significance level $\alpha < 0,05$.

Results: Based on the characteristics of respondents, there were 108 mothers aged <35 years (79.4%). Respondents with a family history of DM were 82 mothers (60.3%). Most of the respondents had a high school/high school education, 86 mothers (63.2%), the average respondent's occupation was as a housewife, 112 mothers (82.4%). The result of bivariate analysis using the Fisher Exact Test showed that there was a relationship between physical activity and gestational diabetes mellitus with a p-value = 0.042 (<0.05).

Conclusions: lack of physical activity as a risk factor for gestational diabetes mellitus.

Keywords: Physical Activity, Gestational Diabetes Mellitus, Pregnant Women

Comprehensive Midwifery Care for Pregnant Women with Preeclampsia at the Kasihan I Public Health Center, Bantul, Yogyakarta

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ABSTRACT

Background: One of the highest causes of Maternal Mortality Rate (MMR) is the occurrence of preeclampsia. Preeclampsia is characterized by an increase in blood pressure and proteinuria in pregnancy after 20 weeks. This is included in the high-risk pregnancies, so it can cause complications and greater danger to the mother and fetus in the womb, Comprehensive midwifery care is a way to reduce MMR.

Objectives: To provide comprehensive midwifery care for mothers from the third trimester pregnancy with preeclampsia, childbirth, postpartum, newborn and family planning according to the stages of midwifery management.

Methods: The method used is a descriptive observational study on Mrs. E by taking a continuity of care approach by observing, interviewing, and providing midwifery care using research instruments including: mother's book, midwifery care format, examination tools, partograph sheet, patient medical record, hypertension leaflet, third trimester pregnant mother's pocket book, postpartum mother's pocket book, family planning flip sheet, monograph book.

Results: Comprehensive midwifery care for Mrs. E, 32 years old G3P2A0, received assistance from pregnancy to family planning 7 times, in pregnancies with preeclampsia 36+1 and 37+2 weeks, maternity visits at 38+4 weeks of gestation with a diagnosis of IUD, artificial deliveries were made, postpartum visits were carried out at the first and third days when the mother was still at the Panembahan Senopati Hospital with a diagnosis of retained placenta, the postpartum visit was continued on the 13th and 15th day at the Kasihan I Health Center, Ny. E has been using IUD contraception since June 6 2023.

Conclusions: After midwifery care for Mrs. E, 32 years old G3P2A0 pregnancy with preeclampsia with artificial birth outcomes, IUD, postpartum with retained placenta, IUD contraception.

Keywords: Comprehensive, Midwifery, Care, Pregnant Women, Preeclampsia.

Nutritional Status and Lipid Profile of Office Workers: A Formative Study in Jakarta

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ABSTRACT

Background: Nutritional and health status are important inputs to support work productivity and create a healthy, active, and productive society. Office workers are in a job that is vulnerable to health problems such as obesity, which can hamper worker productivity and directly increase the risk of non-communicable diseases.

Objectives: This study aimed to analyze the relationship between nutritional status and the lipid profile of office workers in Jakarta.

Methods: This research used a cross-sectional design using convenience sampling to select research subjects. The research involved workers from Jakarta aged 20–55 who have worked full time, are not yet menopausal women, are not pregnant or breastfeeding, and are not smoking. Nutritional status was evaluated using the Body Mass Index (BMI) (kg/m²). Plasma lipid profile tests include triglyceride (TG), total cholesterol (TC), HDL-cholesterol (HDL-C), and LDL-cholesterol (LDL-C) levels. Pearson correlation was used to analyze the relationship between nutritional status and the dependent variable lipid profile (TG, TC, HDL-C, and LDL-C).

Results: A total of 55 people participated in this research as subjects. The majority of subjects were in the adult category (56.36%), and 3 subjects (5.45%) were pre-elderly, aged 55 years. Most subjects (61.8%) had normal nutritional status; the remaining 21.8% were overweight, and 16.4% were obese. The results of statistical analysis showed that nutritional status was not related ($p > 0.05$) to workers' blood lipid profiles, while TC was significantly related to LDL-C and TG was significantly related to HDL-C ($p < 0.05$).

Conclusions: The authors concluded that nutritional status was not related to blood lipid profiles. It is also known that there is a linear relationship between TC and TG levels, while there is a negative relationship between TG and HDL levels.

Keywords: BMI; Lipid profile; Nutritional status; Office workers

Diabetes Family Behavior Could Predict Dietary Adherence Among Older Adults with Type 2 Diabetes Mellitus: A cross-sectional predictive study

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ABSTRACT

Background: Supportive family behavior can help improve the management of Type 2 Diabetes Mellitus (T2DM) in the older adults especially in term of dietary adherence. Meanwhile, the lack of support from the family could lead to inability to manage T2DM. It also can cause poor clinical symptoms and various advanced physical problems.

Objective: This study aimed to explain the diabetes family behavior received by Indonesian older persons with T2DM and its association with dietary adherence.

Methods: This study was conducted with a cross sectional predictive design. The total 88 participants were recruited with simple random sampling technique from a community in the working area of a primary health center in Bantul, Special Region of Yogyakarta, Indonesia since June 2022. The instruments used were the demographic questionnaire, the diabetes family behavior checklist (DFBC), and The Perceived Dietary Adherence Questionnaire. The data were analyzed with person's correlations and multiple regression.

Results: The results showed that most of the participants (78.4%) received supportive behavior from their family. It also explained that the diabetes family behavior was significantly associated with dietary adherences ($r = .288, p < .01$). Moreover, DFBC 1 ($r = .362, p < .01$), DFBC 2 ($r = .436, p < .01$), DFBC 3 ($r = .371, p < .01$), DFBC 6 ($r = .467, p < .01$), DFBC 7 ($r = .240, p < .05$), and DFBC 12 ($r = .214, p < .01$), were the significant diabetes family behavior related to dietary adherence. Moreover, DFBC 12 was the diabetes family behavior which could predict ($\beta = .332, p < .01$) dietary adherence among older adults with T2DM.

Conclusion: The greater supportive family behavior received by older adults with T2DM were associated with higher score of dietary adherences. Furthermore, reminder to stick to diet could significantly help older adults with T2DM to improve their dietary adherence.

Keywords: diabetes family behavior; dietary adherence; older adults; type 2 diabetes mellitus

Characteristics of Mothers Who Have LBW Regarding Readiness to Carry Out Kangaroo Method Treatment at Hermina Hospital, Bekasi Region in 2023

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ABSTRACT

Background: LBW is baby born with heavy not enough from 2500 grams without looking age gestation. Growth and maturation (maturation) of organs and tools body Not yet perfect, bad prognosis and has risk tall to happen hypothermia, resulting in frequent LBW experience complications that end with death. LBW treatment is supported by complete facilities and infrastructure as well as source Power trained human can lower neonatal death. In Circumstances and indications certain LBW really need it incubator, however maintenance in incubator relatively expensive, besides That use incubator assessed hinder contact between mother-baby, so result Mother not enough believe self and not skilled nurse the baby. Maintenance method kangaroo is one _ effective treatment _ for low birth weight (LBW) babies. Involvement family in maintenance baby required ability to connect connection between parents and babies. For increase ability and mother's self-confidence in caring for LBW.

Research Objectives: Know Characteristics of Mothers Who Have Low Birth Weight (LBW) Babies Against Readiness Do Kangaroo Method Treatment based on age, education. type childbirth and at Hermina Hospital, Bekasi Region, Year 2023. Population study This is mother who has LBW babies who are still treated in the Nicu Room which is cared for by dui

Research Methods: Research methods This is design nature quantitative with use design type study analytic *cross-sectional*. Research instruments used in the research This form questionnaire. Data analysis carried out in a way univariate and bivariate Study done at Hermina Hospital Bekasi Region with use technique *Purposive sampling*. Deep design study This use *Observational Analytic* with design study *Cross Sectional*.

Research Results: Based on results analysis statistics use *chi square* test obtained mark *p value* of $0.01 \leq 0.05$ for age mother, *p value* $0.04 < 0.05$ for education and *p value* $0.00 < 0.05$ for type childbirth. This thing show that H_0 is rejected and H_a is accepted so that there are connection LBW incidents.

Conclusion: There is a relationship Characteristics of Mothers Who Have Low Birth Weight (LBW) Babies Against Readiness Do Kangaroo Method Treatment (LBW) at Hermina Hospital Bekasi Region 2023. Recommendations for power Health workers in particular order nurse Keep going increase IEC services on an ongoing basis effective so that mothers who give birth child with LBW you can do maintenance method kangaroo at home so later condition grow flower baby walk with okay.

Keywords: Maternal Characteristics, Maternal Readiness, Method Treatment Kanguru

Analyses of Antibiotic Use with Anatomical Therapeutic Chemical / Defined Daily Dose (ATC / DDD) and Drug Utilization 90% (DU90%) in Critically Ill Panembahan Senopati General Hospital

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ABSTRACT

Background: Critically ill patients are physiologically unstable and experience complex hypermetabolic responses to trauma and diseases that alter metabolic, hormonal, immunological, and nutritional homeostasis. The use of appropriate antibiotics is one of the determinants of successful treatment of patients affected by infections, including in the intensive care unit, because it impacts patient clinical outcomes.

Objectives: This study aims to analyze the use of antibiotics using Anatomical Therapeutic Chemical / Defined Daily Dose (ATC/DDD) and DU 90% in critically ill patients at Panembahan Senopati Bantul Hospital.

Methods: This type of research is an observational study with a retrospective single-center design. The sampling technique in this study is total sampling with retrospective data collection using medical record data in the period 01 January 2021 - 31 May 2023 critical patients in the ICU with adults (17 years) and elderly (46 years until ≥65 years) using antibiotic therapy as many as 72 medical record samples, the use of antibiotics was analyzed quantitatively using the ATC/DDD method and 90% DU to analyze and determine patterns the use of widely used antibiotics and the use of antibiotics that fall into the 90% segment and the 10% segment.

Result: This study showed the way of antibiotic prescribing in critically ill patients. Namely, Ceftriaxone is mainly indicated to treat pneumonia and Cerebral infarction. The total value of DDD/100 patient-days of all antibiotics was 47.93, with the highest antibiotic value being ceftriaxone of 9.69 DDD/100 patient-days. The highest patient-days DDD/100 values were Ceftriaxone at 9.69, Levofloxacin at 9.37, and Meropenem at 4.82. Antibiotics included in the 90% DU segment are Ceftriaxone, Levofloxacin, Meropenem, Metronidazole, and Fluconazole.

Conclusions: From the results of this study, it can be said that the use of antibiotics at Panembahan Senopati Bantul Hospital from 01 January 2021 to 31 May 2023 has not been selective.

Keywords: *antibiotics; critically ill patients; Defined Daily Dose (ATC/DDD); DU 90%*

Health Promotion of Childbearing Age Women in Improving Reproductive Planning: A Global Scoping Review

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ABSTRACT

Background: Reproductive planning is important for women of childbearing age to create a quality family. Inability to plan reproduction results in mental problems in women of childbearing age and stunting in children. Appropriate health promotion will be able to improve their ability to plan their reproduction.

Objectives: find appropriate health promotion efforts for women of childbearing age to improve reproductive planning

Methods: We searched PubMed, EBSCO, Sage, ScienceDirect, and Google Scholar. The articles reviewed at least use health promotion methods (electronic and non-electronic) in providing education to women of childbearing age aged 19-44 years, and were published in 2019-2023. A total of 23 articles were reviewed. The article review process uses Prisma ScR.

Results: 45% of articles stated that changing behavior through education can be done electronically, while 55% used conventional methods involving volunteers and the community. The group aged < 30 years chose to use electronic media, while those aged > 30 chose to use face-to-face and discussion.

Conclusions: Providing education to women of childbearing age is more effective with conventional face-to-face methods with them. The community and volunteers can help in implementing this activity. Providing education electronically is also not bad. This can be used as a modification in education.

Keywords: Women of childbearing age, reproductive planning, health promotion

The Relationship Between Knowledge and the Application of Health Protocols by Pharmacists During the Covid-19 Pandemic in Several Pharmacies in Bantul Regency

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ABSTRACT

Background: Although the government has sought a vaccine to overcome COVID-19, this is not a guarantee to end the pandemic. This virus still attacks all of us. Everyone potentially gets COVID-19, including health workers. The key to controlling COVID-19 not spreading is to increase awareness and discipline to obey health protocols. The impacts of this pandemic require health workers such as pharmacists working at drug stores to implement health protocols by using Personal Protective Equipment (PPE), such as protective clothing, face shields, and masks, as well as using hand sanitizers.

Objectives: This research aims to determine the relationship between knowledge and the application of health protocols by pharmacists who work at drug stores in Bantul Regency.

Methods: This was a descriptive cross-sectional observational study. The population was 71 pharmacists working at drug stores in Bantul Regency. The study was conducted in July 2022. Random sampling was utilized as the sampling method and the sample size was 42 people. The questionnaires distributed to respondents contain sociodemographic, knowledge-based. Descriptive statistical analysis was used to summarize data, then data was analyzed by Spearman's test.

Results: The results revealed that the level of respondents' knowledge regarding the health protocol was in the fair category (57.1%), the application of health protocols was in the good category (66.7%). According to Spearman's Rank test, the level of knowledge and the application of health protocols showed a correlation coefficient of 0.019, indicating that the direction of the correlation was positive and the correlation strength was very weak. Meanwhile, the significance was 0.904, indicating that there was no significant correlation (p -value > 0.05).

Conclusions: Based on the results, there was no significant correlation between knowledge and the application of health protocols by pharmacists working at several pharmacies in Bantul Regency.

Keywords: Implementation of Health Protocols, Pharmacists, COVID-19 Pandemic

The Effectiveness of Vaginal Hygiene Health Education on the Knowledge and Attitudes of Adolescents in Bantul Health Vocational Schools

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ABSTRACT

Background: WHO states that 5% of teenagers worldwide are infected with sexually transmitted diseases with symptoms of vaginal discharge every year. In Indonesia, as many as 90% of women experience vaginal discharge, and as many as 60% are experienced by teenage girls. Adolescents in a transitional period, accompanied by the maturity of their reproductive organs, need special attention.

Objective: This study aims to determine the effectiveness of vaginal hygiene health education on the knowledge and attitudes of adolescents at the Bantul Health Vocational School.

Research Method: The research was conducted in February – March 2023 at Bantul Health Vocational School. This type of research is Quasi-Experimental research with a Pre-test and Post-test design with a sample size of 30 people consisting of class XII female students. Sampling was taken using the total sampling technique. Data collection was carried out using pre-test and post-test questionnaires. The data analysis used was the Shapiro-Wilk Normality test because the amount of data in each treatment group was lower than 50, and the Wilcoxon test was carried out because the normality test results showed that the data was not normally distributed

Results: 1) Before providing knowledge education to students, the result was 0.061 (significant $p > 0.05$), indicating that the data was normally distributed, and after providing knowledge education to students, the result was 0.007 (significant $p < 0.05$), indicating that the data was not normally distributed. Meanwhile, students' attitudes before being given education obtained a result of 0.028 (significant $p < 0.05$), indicating the data was not normally distributed. After being given education to students, the result was 0.000 (significant $p < 0.05$), indicating the data was not normally distributed. 2) There is a difference in knowledge before and after being given education to students; the result was 0.000 (significant $p < 0.05$). 3) There was a difference in attitude before and after education was given to students; the result was 0.030 (significant $p < 0.05$). So the data shows that there is a correlation between treatment in the form of Vaginal Hygiene Health Education and the knowledge and attitudes of adolescents at the Bantul Health Vocational School.

Conclusion: there are differences in the knowledge and attitudes of Bantul Health High School students before and after being given education. Based on the results of this research, researchers suggest that female students should increase their insight and knowledge regarding reproductive health, including attitudes about vaginal hygiene, to improve reproductive health.

Keywords: Vaginal Hygiene, Reproductive Health, Adolescents

The Relationship Between the Length of Labor and The Incidence of Postpartum Hemorrhage Among Laboring Women in the Special Region of Yogyakarta Province

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ABSTRACT

Background: Postpartum hemorrhage is regarded as a primary contributor to maternal mortality. Postpartum hemorrhage commonly emerges subsequent to the mother's delivery. According to the World Health Organization (WHO), it is responsible for 25% of maternal mortality, with an estimated annual toll of 100,000 occurrences. Based on these fatalities, approximately 80% of the maternal mortality are attributed to escalated complications during pregnancy, labor process, and after delivery.

Objective: This study aims to determine the association between the length of labor and the incidence of labor hemorrhage among laboring mothers in Special Region of Yogyakarta Province.

Methods: This research is a quantitative-research carried out by employing case-control method and retrospective approach. The data were collected from medical records at 2 Regional Public Hospitals in Yogyakarta. Meanwhile, the statistical analysis was performed using the chi-square test.

Results: Of the 196 respondents, 49 underwent precipitate labor and 98 experienced labor hemorrhage. The number of mothers who experienced precipitate labor was lower in comparison to those who faced labor hemorrhage. The findings indicate a significant correlation between the length of labor and the occurrence of labor haemorrhage. This connection was supported by the statistical analysis using the chi-square test, revealing $p = 0,003 > 0,05$.

Conclusion: There is a relationship between the length of labor and incidence of labor hemorrhage in the Special Region of Yogyakarta Province. It is expected that the current study can provide insights that contribute to a better understanding of the factors influencing the length of labor and the occurrence of labor hemorrhage.

Keywords: Length of Labor, Labor Hemorrhage

The Relationship Between Dialysis Adequacy and Nutritional Status of Haemodialysis Patients in RSUD Ibnu Sina Gresik

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ABSTRACT

Background: Patients with chronic kidney disease undergoing haemodialysis often experience nutritional disturbances, partly due to factors such as uremic malnutrition. The determinants of morbidity and mortality include the adequacy of haemodialysis and the nutritional status of patients. Therefore, the analysis of haemodialysis adequacy and nutritional status remains highly relevant to be find out.

Objective: The study aims to identify haemodialysis adequacy and its relationship with the nutritional status of patients undergoing haemodialysis therapy at Ibnu Sina Hospital Gresik.

Methods: The type of research employed in this study is observational analytics, conducted with a cross-sectional research design in the Haemodialysis Unit of RSUD Ibnu Sina Gresik. A total of 96 research subjects participated in this study. Patient nutritional status was measured based on BMI indicators, fat mass, fat-free mass, skeletal muscle mass, extracellular water, and visceral adipose tissue using the Medical Body Composition Analyzer (mBCA). Haemodialysis adequacy was measured using the Kt/V measurement. Bivariate analysis was conducted using ANOVA, and multivariate analysis was performed using MANOVA.

Results: A total of 96 respondents with an average age of 50.28±10.28 years and a distribution of 51.04% males and 48.96% females participated in the study. Haemodialysis adequacy was categorized as >1.8 for 61.46%. There was significant relationship between haemodialysis adequacy status and waist circumference ($P<0.001$) and body water ($P=0.030$). Regarding haemodialysis adequacy and all nutritional status indicators, no significant relationships were found such as BMI status, fat mass, fat-free mass, skeletal muscle mass, extracellular water, and visceral adipose tissue ($P>0.05$ for all comparison). Multivariate analysis results showed no significant relationship between haemodialysis adequacy (Kt/V) and nutritional status after adding confounding variables in the MANOVA analysis model.

Conclusion: There is a significant relationship between haemodialysis adequacy and total body water. Further larger research is needed in future research to confirm this finding.

Keywords: haemodialysis, kidney failure, haemodialysis adequacy, nutritional status

The Relationship of Characteristics with Knowledge Among Pregnant Women about Breastfeeding and Complementary Feedings in The Stunting Focus Location Area of Pajangan District

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ABSTRACT

Background: The prevalence of exclusive breastfeeding in Indonesia is 74.5%, which is below the Ministry of Health's target of 80%. In the Province of the Special Region of Yogyakarta, based on RISKESDAS data from 2018, the breastfeeding rate was 22.92%. In Bantul Regency, the rate was even lower at 19.53%, which is below both the national and provincial averages. Sensitive nutrition interventions such as increasing knowledge and care regarding health nutrition for both mothers and children so that it is hoped that it can improve the practice of providing breast milk and complementary foods in specific nutrition interventions

Objective: This study aims to examine the relationship between the characteristics and knowledge of pregnant women regarding breastfeeding and complementary foods in the stunting focus area of Pajangan District.

Methods: A quantitative approach with a cross-sectional research design was used for this study. The sample consisted of 126 pregnant women. Data processing and analysis included univariate and bivariate Chi Square analysis tests to describe the relationship between characteristics and the knowledge of pregnant women regarding breastfeeding and complementary feeding. The data was collected by a validated questionnaire.

Results: Pregnant women's knowledge about breastfeeding is good (53.2%) and there is no significant relationship with age (p-value=0.413), last education (p-value=0.337), and family income (p-value=0.156) and knowledge about MPASI (52.4%) and there was no significant relationship with age (p-value=0.173), highest level of education (p-value=0.475), and family income (p-value=0.587).

Conclusion: The study found no significant relationship between the characteristics and knowledge of pregnant women regarding breastfeeding and complementary foods in the stunting focus area of Pajangan District. Furthermore, it is hoped that research can be carried out in the same field by developing research methods to find out the factors that influence the knowledge of pregnant women.

Keywords: Breastfeeding, Characteristics, Complementary Feeding, Knowledge, Pregnant Women

Relationship between Nutrition Knowledge, Attitudes, and Peers with Fast Food Consumption Patterns in Adolescents at SMAN 6 Depok

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ABSTRACT

Background: Adolescence is a period when individuals tend to feel unstable and are easily influenced by the environment and the passage of time. One of the impacts is healthy as well as unhealthy eating patterns, such as consumption of fast food. Various factors influence fast food consumption patterns in adolescents, such as nutritional knowledge, attitudes, and peers. Nutritional knowledge can influence attitudes and behaviors toward food choices. Adolescents are vulnerable to peer influence, which may affect their fast-food consumption behaviors.

Objectives: The purpose of this study was to determine the relationship between nutritional knowledge, attitude, and peers with fast-food consumption patterns among adolescents at SMAN 6 Depok.

Methods: This study used a cross-sectional design. Sampling in the study using stratified random sampling technique by taking samples according to their level, namely per class. The sample in this study was 108 participants with an age range of 15 - 18 years. Data was collected by filling out nutritional knowledge questionnaires, attitudes, peer influence scale, and fast-food consumption using the FFQ form. Data analysis in this study used the chi-square test.

Results: The results of bivariate data analysis showed that there is no relationship between nutritional knowledge and fast-food consumption patterns (p -value = 0.286). There is a relationship between attitude (p -value = 0.000), peers (p -value = 0.035), and fast-food consumption patterns.

Conclusions: The majority of adolescents like to consume fast food. This shows a negative consumption pattern, where fast food has unbalanced nutritional content and is not good if consumed excessively. Adolescent knowledge about balanced nutritional food consumption patterns needs to be improved and adolescents need to know the impact of consuming excessive fast food supported by a positive attitude to reduce fast food consumption, and adolescents are able to choose a positive friendship environment to have a good impact, especially in eating consumption patterns.

Keywords: Adolescents, Fast Food, Nutritional Knowledge, Attitude, Peers

Teratogenic Effect of Porang (*Amorphophallus oncophyllus*) Macerated with *Strobilanthes crispus* Ethanolic Extract in Sprague Dawley Rats: Coccygeal Observation

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ABSTRACT

Background: Porang (*Amorphophallus oncophyllus*) contains glucomannan, which is beneficial for health. However, it contains calcium oxalate which is toxic when used excessively. Porang macerated with *Strobilanthes crispus* (PMS) has been developed as a product with lower calcium oxalate.

Objectives: This study aimed to determine the effect of PMS on the growth of the coccygeal tailbone during teratogenic study of Sprague Dawley rats.

Methods: This was experimental study with the post-test only control group design. Forty female rats were used and into four groups, namely: the negative control group, the treatment group of PMS with the dosage of 500, 1000, and 2000 mg/Kg body weight (BW). PMS was administered orally during 15 days. At the end of study (20th day), the rats were sacrificed and observed for the coccygeal.

Result: The results showed that the average number of coccygeal bones in the negative control group was lower than the others, that was 4.30 ± 1.25 segments, yet in the treatment groups with the dosage of 500, 1000, 2000 mg/kg BW were 5.10 ± 0.56 ; 5.60 ± 0.51 ; 5.50 ± 0.70 segments, respectively.

Conclusions: It concluded that PMS did not toxic based on the observation of the coccygeal tailbones.

Keywords: Coxygea bone, *Amorphophallus oncophyllus*, *Strobilanthes crispus*, Sprague Dawley, terratogenic

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