

p-ISSN : 2252-3847
e-ISSN : 2614-350X

STRADA

JURNAL ILMIAH KESEHATAN
INSTITUT ILMU KESEHATAN STRADA INDONESIA



SJK

Vol. 9

No. 2

Page 310-1813

Kediri,
November 2020

STRADA

Jurnal Ilmiah Kesehatan

Editor in Chief

Prima Dewi Kusumawati, S.Kep., Ns., M.Kes
Institut Ilmu Kesehatan STRADA Indonesia, Kediri, Indonesia

Editorial Board Members

DR. Indasah, M.Kes
Institut Ilmu Kesehatan STRADA Indonesia, Kediri, Indonesia

Dewy Haryanti Parman, S.Kep., Ns., M.Kep
Universitas Borneo Tarakan, Indonesia

Dhita Kurnia Sari, S.Kep., Ns., M.Kep
Institut Ilmu Kesehatan STRADA Indonesia, Kediri, Indonesia

Yanuar Fahrizal, S.Kep., Ns., M.Kep
Universitas Muhammadiyah Yogyakarta, Indonesia

Redaksi

Satriyo Krisnanto, S.Kom
Yulianita, SM

Edisi Elektronik : <http://sjik.org>
Email : publikasistrada@gmail.com,

ISSN : 2614-350X (online)
ISSN : 2252-3847 (print)



The [STRADA Jurnal Ilmiah Kesehatan](http://sjik.org), its website, and the articles published there in are licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

The articles of the STRADA Jurnal Ilmiah Kesehatan are published every six months, that is on May and November (2 issues per year), and developed by Institut Ilmu Kesehatan STRADA Indonesia, Kediri, Indonesia.

PREFACE

Praise be to the presence of Allah SWT, to the abundance of His grace and grace so that the STRADA Jurnal Ilmiah Kesehatan (SJK) Institut Ilmu Kesehatan STRADA Indonesia can be organized and resolved in accordance with the schedule in order to become a forum for the activities of the Tri Dharma College Indonesia.

The STRADA Jurnal Ilmiah Kesehatan is a journal published by the Editorial Team of Institut Ilmu Kesehatan (IIK) STRADA Indonesia. This journal serves as a forum for research results for the entire academic community both from within and outside the Institut Ilmu Kesehatan STRADA Indonesia, while the scope of this research focuses on health.

Quality and published research is also able to improve and develop knowledge, especially in nursing science in facing the global challenges of the ASEAN Economic Community (MEA).

We realize that this journal is far from perfection, so we hope for constructive advice and criticism.

Kediri, November 2020

Editor in Chief

STRADA Jurnal Ilmiah Kesehatan

Prima Dewi Kusumawati, S.Kep., Ns., M.Kes

Table of Contents

Cover	i
Editorial Board	ii
Preface.....	iii
Table of Content	iv
Acute Moderate Intensity Exercise Decreases Oxygen Saturation In Obese Women	310
The Role of Head Nurse, Critical Thinking Nurse And Documentation of Integrated Patient Progress Note: Cross Sectional	316
An IGF-1 Levels Decrease in SOPK-RI Model Mice After A Low-Carb Diet ...	325
Reflective Case Discussion (RCD) for Nurses : A Systematic Review	332
The Protective Effect of Solanum betaceum Extract on Spermatozoa Vitality Exposed to Lead Acetate in Mice	338
Secretion Of PGC-1 α By Modulating Physical Exercise To Protect Improving Obesity Prevalence	345
Knowledge of The Health Volunteer Team About Basic Life Support (BLS) At Indonesia University of Education	353
Acute Response Moderate Intensity Treadmill Training On Decrease Malondialdehyde In Obesity Women	358
Growth Hormone Status In Obese Subjects and Correlation With Age	368
Playing Activities Improve Manipulative Skills: a Literature Review	374
Relationship Of Exclusive Breastfeeding Of Frequency Of Illnes Events In Baby Age 6-12 Months In Community Health Centers Banyumas	381
Relationship Of Knowledge Discuss Between Nurses And Leaders In The Effectiveness Of Implementing Nursing Care	392
Effect Of Interval Exercise Versus Continuous Exercise On Increases Energy Expenditure On A Treadmill	399
Giving Banana ‘Raja’ Peel Extract (Musades Paradisiaca Sapientium) After Moderate Intensity Training Reduces MDA Levels In Rats	405
Correlation between Postpartum Traditions and the Process of Uterine Involution	412
Improving Job Satisfaction Employee At Panti Waluya Sawahan Hospital Malang	420
Athletic Games for The Motion of Children with Spesial Needs: a Literatur Review	429

The Relation of Parity and Motivation With Post-Placental IUD Selection	435
Purple Yam Extract (<i>Dioscorea Alata</i> L.) As Adjuvant Antihypertension Medicine for Postpartum Hipertension	443
The Relationship Between Hemoglobin Concentration With Maximum Oxygen Volume Levels In Obese Female	450
Effectiveness Various Physical Exercise to Decrease Glycemic Control in Patient with Diabetes Mellitus : A systematic review	456
Exclusive Breastfeeding With Stunting	471
Factors Affecting Hospital Readiness in Pandemic Situation: A Literature Review	478
Caregiver Burden Associated-Risk Factor of Chronic Kidney Disease Patients with Hemodialysis	481
The Effectiveness of Kids Athletics Games as Motion Stimulation for Elementary School Children: a Literature Review	488
Risk Factor Analysis of Hypertension Occurrence Based on Urban-Rural Location in Indonesia (IFLS Data Study 5)	494
Analysis of Factors Related to The Documentation of Nursing Care	503
Effects of The First 1000 Days of Life Module For Premarital Women Against Knowledge and Attitudes to Prevent Stunting	515
The Influence of In-House Training Towards The Accuracy of Nursing Care Documentation	523
The Effect Of Hand Wash Training On Hand Higyene Behavior In Elementary School Students at SDAI Baznas South Sulawesi	528
Utilization of Back Movement Technique to Intensity of Low Back Pain in Third Trimester Pregnant Women	535
Education Media Videos and Posters on Healthy Snacks Behavior In Elementary Schools Students	543
Role of Resilience to Improving the Performance of Health Workers: A Systematic Review	551
The Effectiveness of Anti-Anemia Teenage Cadre Training On Adolescent Knowledge	561
The Effect of Health Education on the Knowledge and Attitude of Brides and Grooms in the Community Health Center of Duri Pulo Village Gambir Sub-District in 2020.....	567
Factors Related To Delivery Place Selection Among Pregnant Women In Jambi In 2020.....	572
The Effect of Zikr Meditation on Post Operative Pain Among Women Post Cesarean Section	580
The Effect of Perineal Massage on Perineal Tear Case on Primigravida Pregnant Mothers In Their Third Trimester In Public Health Center Care of Morokay 2018.	588

An Analysis of Preschoolers' Motor Development Based on Parenting Styles in Cukanggalih Village, Tangerang, in 2019	593
The Effect of Citrus lemon Aromatherapy on Emesis Gravidarum Patient.....	599
The Risk Analysis of Musculoskeletal Disorders in Pottery Making Workers in Kasongan, Bantul	605
The Feasibility Study of Financial Aspects and Demand of Community to the Construction of the Cempaka Lima General Hospital in Banda Aceh	612
The Analysis of Covid-19 Knowledge of Health Sciences Students Based on Their Characteristics	619
Blood Glucose Influence on Cholesterol and Blood Pressure of Patients with Type II Diabetes Mellitus	629
The Effect of Massage Stimulation on Anthropometric Measures of Preschool Aged Children at Integrated PAUD Merpati Anggrek Surabaya	635
Evaluation of Performance Appraisal Instrument Development for Nurse Based On Self Efficacy at Lavalette Hospital in Malang	644
Massage Therapy for Infants and Toddlers With Acute Respiratory Infections: A Literature Review	656
Domestic Role Of Husband During Pregnancy Wife	664
Analysis Of Factors Related To Anxiety Level In Postpartum Mothers at Citra Insani Maternity Home, Semarang	670
Effectiveness of Beetroot (Beta Vulgaris L) Extracts On Blood Pressure Level Among Postpartum Mothers With Hypertension	678
Competency In Critical Care Nursing With Approach Methods Journal Sharing of Critical Care (JSCC) In Nursing Profession Students	686
Family Support in Management of Lactation Management in Mother With Children During Pandemic Covid-19	694
Effectiveness of Sesame Seeds Cookies (Sesamum Indicum Seeds) Combination of Iron In Increasing Hemoglobine Levels Of Adolescents	700
Effectiveness Of Baby Massage On The Increase Of Baby Weight Aged 6 - 12 Months In Gayaman Village, Mojoanyar District, Mojokerto Regency.....	708
Detection of pregnancy risk: A Literature Review	716
Comparative Analysis between Real Cost and INA-CBG's claims of Service Costs in Chronic Kidney Disease Patients with Hemodialysis	726
The Psychosocial Experiences in Ex-Leprosy Patients: A Qualitative Study	733
Vocational Rehabilitation Based Recovery of Patients With Mental Disorders (ODGJ)	743
The Effectiveness Of Using Text Messages Reminder On Adherence With Tuberculosis Patients: A Systematic Review	751
Effect of Mindfulness-Based Cognitive Therapy on Symptoms of Depression: A Systematic Review	761

Psychological Interventions in Improving Positive Body Image in Adolescents: A Systematic Review	772
Spiritual Care Intervention on Emotional Regulation in Caregivers with Schizophrenic : A Systematic Review	790
Effectiveness of Chayote Extract on Lowering Blood Pressure of Post Partum Hypertension	801
Comparison of the Herbal Care Package and Breast Care Method On Volume Of Breast Milk Among Postpartum Mothers With Breast Engorgement	813
The Effect Of Visual Warning On Cigarette Packs of Intention to Quit Smoking At Online Taxibike Rider In Banda Aceh	820
A Lifestyle Management of Mental Health Decreasing The Stress Level Of Student	826
The Effects of Self Reminder Card to the Successful Treatment of Blood Pressure of Hypertension Patients in Community Health Centers in Surabaya ...	831
The Effect of The Number of Drugs Received On The Level of Adherence to Drug Consumption (Morisky, Green, Levine Adherence Scale Questionnaire) of Hypertensive Patients	840
The Impact Analysis of Fire Disaster at Tamangapa, Makassar.....	848
Relationship between Knowledge, Attitudes and Practices of BPBD Officers with Optimization of Flood Disaster Management in Makassar City.....	861
Determinant Factors On Multidrug Resistant Tuberculosis (MDR TB) Control At RSUD dr. Zainoel Abidin Banda Aceh In 2018	872
Evaluation Of Leprosy Management Program Implementation In Karang Penang Health Center, Sampang District, Madura	879
The Effect Of The Combination Of PMR (Progressive Muscle Relaxation) With Music On Ankle Brachial Index On Type II Diabetes Mellitus Patients.....	886
Effect of Beet Powder (Beta Vulgaris L) with Fe Supplementation on Increasing Hemoglobin, Hematocrit, and Erythrocyte Levels in Pregnant Women with Anemia.	893
The Effect of Positive Affirmations to Anxiety level and 2nd stage of labor length.....	900
The Effects of Stunting And Psychosocial Stimulus On The Development of Children Between The Age Of 2- 6 Years Old	906
Bibliotherapy Strategy: Experimental Study To Reduce Hospitalization Stress In Pre-School Children.....	917
Analysis Of Disability And Stigma On Self-Concept On Leprosy Patients.....	926
Knowledge Of Princess Adoles About Personal Hygiene When Does The Princess Junior High School Students Know.....	936
Effect of Counseling Packages on The Diet of Pregnant Women With Chronic Energy Deficiency.....	944

Enhancing Self Efficacy Of Prolanis Group On Self Assesment Of Diabetic Foot Early Detection Based On Health Belief Model Theory And Bandura's Self Efficacy.....	950
Effect of Single Clove Garlic Extract (<i>Allium Sativum</i> Linn) on Blood Sugar Levels, Malondialdehyde, Insulin Levels and Insulin Resistance (Experiments in Rats (<i>Rattus Novergicus</i>) Induced by Streptozotocin.....	954
The Relation of Hormonal Contraception Use With Obesity in Women of Childbearing Age (WUS) of Public Health Insurance Participants In The Lamongan Clinic.....	964
The Effect Of The Implementation Of Puerperium Intensive Care On Exclusive Breastfeeding.....	970
The Effect Of The Health Belief Model Approach On The Prevention Of Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome In Pregnant Women.....	976
The Effectiveness Of Birthing Ball Therapy On The Duration Of The First Stage Of Labor And The Intensity Of Labor Pain In Primigravid Mothers Giving Births.....	981
Correlation of Nutrition Education Model for Pregnant Women In Industrial Areas To Increase Knowledge of Nutrition, Nutritional Behavior, and Hemoglobin Levels of Pregnant Women	990
Relationship between Mothers' Attitudes with Diarrhea Prevention in Toddlers.....	998
Factors Related to Fruit Vegetable Consumption of Adolescent in Rural and Urban Areas	1006
Characteristics of Acute Myocardial Infarction Patients	1017
Upper Position and Distraction Model Of Bobath Ball Towards Reduction In Immunization Pain Level	1027
Powder Fruit Bit (<i>Beta Bulgaris</i>) To Decrease Of Blood Pressure In Hypertension Patients.....	1033
The Relationship Of Insulin-Like Growth Factor 1 With Bone Mass In Obese Female	1041
Student's Participation In Extracurricular School Sports Has Positive Impact On Executive Functions	1047
The Effect of Chocolate Consumption on The Level of Anxiety in Primigravida Third Trimester Pregnant Women At Jatikalen Health Center Nganjuk District.....	1056
Effect Of Complementary Acupressure Therapy On Emesis Gravidarum In Pregnant Women Trimester I.....	1065
The Effect of Bounding Attachment in Maternal Postpartum Blues Madura Ethnic	1072
Disaster Management In Kelud Community.....	1078

The Effect Of Early Detection Of Growth and Development Training For Posyandu Cadets On Knowledge and Skill Of Motor Stimulation In Darungan Village	1085
The Effect Of Giving Family's Psychosocial Stimulation On Social Development Of Children With Autism Spectrum Disorder (ASD) At ADIP Center Therapy Sumber Bendo Kediri Regency	1092
Homecare Interest For Post Hospitalizing Patient In Pare Region	1101
Psychological Impact Of Mount Kelud Eruption On Children In (Ring 1) Desa Kebonrejo Village, Kepung, Kediri District; Qualitative Research.....	1106
Analysis Of Environmental Effects On Adolescent Dating Patterns In The Pare Sub-District, Kediri Regency	1114
Postnatal Factors Associated With The Risk Of Stunting In Toddlers.....	1121
Analysis Of Counsel Support With The Time Of Disclosure Of Personal Status Of People with HIV/AIDS (ODHA) Against His Partners In Sumenep District .	1128
The Effect of Acupressure on Decreasing Nausea and Vomiting in Pregnant Women in Midwives Independent Practice Sidoarjo.....	1134
Comparison Of Effectiveness Benefits Of Providing Young Papaya Fruit Extract And Breast Care For Normal Postpartum Mother's Breast Milk Production: Systematic Review	1141
Determinants of Early Initiation of Breastfeeding in Lamongan Public Health Center	1151
Engaging Community Participation for a Sustainable Smoke Free Initiative.	1160
"How Do You Communicate The Non-Communicable Diseases?" A Community Empowerment For Sustained Public Health	1166
The Influence Of Using Android Education Application "Andre" To Adolescent's Knowledge About Drug Abuse In Senior High School 8 Kediri....	1173
The Relationship Of Vulva Hygiene Behavior With Pruritus Vulvae Events When Menstruate In Adolescent Princess In Kalanganyar Village.....	1181
Kangaroo Mother Care and Swaddling Methods In Low Born Weight Babies In Community Settings: A Systematic Review.....	1186
Feasibility Test of Reproductive Health Gymnastics Video Media for Socialization to Adolescent Girls.....	1196
Method (Stimulation Endorphin, Oxytosin and Sugestive) to Increase The Production of Breast Milk and Involution of Uters On Post Partum.....	1207
The Combination Therapy of Self-Surrender Exercise and Distraction Against Osteoarthritis Pain Scale of Elderly In Coastal Area.....	1212
Physical Exercise To Recovery of Consciousness in Post Operative Patients With General Anesthesia.....	1223
The Role of Presenting Exclusive Breastfeeding for The Prevention of Stunting Based on The Culture of Tudang Sipulung.....	1230

The Effectiveness of Simulation Methods to Improve Communication Skill in Clinical Nursing Practice : A Systematic Review.....	1238
Stress of Type 2 Diabetes Mellitus Patients in Implementation Self Care Management.....	1250
Study Ethnomedicine Betimun: The Traditional Steam Bath Herb of Saibatin Sub-tribe, Lampung.....	1258
The Effects of Foot Touch Therapy on Blood Pressure in Hypertension Patients in The Puskesmas Of Dlanggu Mojokerto	1268
Efforts to Prevent Tuberculosis Transmission Based on the Health Belief Model Theory in West Lombok.....	1274
The Effect of Egg White Consumption on the Healing Process of Perineum Wounds	1285
Analysis of Factors That Influence The Incidence of Anemia In Teenager at Al Ma'ruf Islamic Boarding School Kediri	1291
The Influence of Calendar of Health As A Prevention of Stunting In Pre-Marriage Couples	1300
Differences In The Effectiveness Of Massage Tuina And Grant Aromatherapy Oil Lemongrass (Cymbopogon nardus) In Overcoming Difficulties Eating In Children In The Work Area Health Balowerti Kediri City.....	1309
The Implementation Of 3S (SDKI, SIKI, SLKI) to The Quality Of Nursing Care Documentation In Hospital's Inpatient Rooms	1323
Descriptive Analysis Of Maternal Anxiety Before Sectio Caesaria Surgery	1329
The Influence of Social Media About Covid-19 on Handwashing Behavior, Mask Wearing and Physical Distancing of Indonesian Students.....	1338
Analysis of Environmental Health Risk of So ₂ , No ₂ , Nh ₃ , and Dust Exposure In Sentra Industri Surabaya, Gresik And Sidoarjo City.....	1346
Profile of Social Support on The Quality of Life of People With HIV/AIDS (PLWHA).....	1353
Dietary Habit is Associated With Dysmenorrhea Among Adolescent	1359
An Analysis of Maternal Death' Cause in Bandung City (Epidemiology Study in Efforts to Lower Maternal Mortality Rate in West Java Province).....	1370
Analysis How to Practice The Good Corporate Governance Principles of The Health Personnel In Puskesmas Cikukur, Lebak Banten Province	1380
Correlation Between Hemodynamic Status and Survival Rates in Severe Burn Patients During Emergency Phase	1390
Effect of Breathing Nostril and Back Massage On Blood Pressure Reduction in Hypertension Patients in The Working Area of Hospital Pertamina Jaya.....	1396
Zingiber Officinale and Pure Honey in Overcoming The Invisibility Of Back Pain in Trimester III Pregnant Women	1403
The Effect of Dragon Fruit Juice and Honey On The Improvement of Pregnant Women's Hb.....	1409

THE The Application Of E-MTBS To Increase The Quality Of Midwife Service In Giving Midwifery Care For Under Five Years Old Toddler	1415
Potential of Turmeric (Curcuma Longa) in Increasing Hemoglobin Levels: Systematic Literature Review	1422
Analysis of Factors Related To Adolescents Preparedness in The Disaster-Prone Areas In Lempake Village, Samarinda	1434
Instructional Leadership Based On Theory Of Planned Behaviors In Improving Nuring Students 'Commulative Achievement Index.....	1445
Knowledge Level Analysis of Community stigma on ODP, PDP and COVID 19 patients through attitude in Kediri District	1457
Phenomenology Study: Community Perception Of Lush Disease In The Working Area Of Puskesmas Talango, 2020.....	1463
The Effect of Life Review Therapy On The Level of Independence of Elderly at Panti Wredha St. Yoseph Kediri	1474
The Relationship Between Educational Factors and Early Detection Behavior Cervical Ca in Fertile Age Women.....	1481
Mother's Knowledge In The First Management Of Child Fever in North Demangan	1489
The Increase of Drop Out Rate on Contraceptives Usage in Central Sulawesi (Raw Data Analysis of 2017 Indonesian Demographic and Health Survey (IDHS))	1495
Barriers and Facilitators Implementation of Evidence-Based Nursing practice in Hospitals: A Literature Review.....	1504
Therapeutic Hypothermia as Effective Therapy For ROSC Patients With Cardiac Arrest: A Systematic Review	1512
Brain Gym Optimizing Concentration on Elementary Students.....	1524
Therapeutic Exercise for Lower Back Pain Reduction and Posture Improvement In Elementary School Students.....	1533
Cupping Care Effectiveness on Flection Range of Motion	1539
Roy's Adaptation Model Application in Nursing Care for Pregnant Women With Preeclampsia: Literature Review	1545
The Effect of Giving A Compress of Sirih Leaves Boiled Water on The Level of Scabies	1552
The Effectiveness of Physical Activities on Fatigue In The Elderly: A Systematic Review	1558
Giving Breast Milk For Motoric Development For Babies In Karangtalun Village, Kalidawir District, Tulungagung On 2019	1567
Online Support Model For Successful Exclusive Breastfeeding	1575
Changes in Levels of Back Pain in Third Trimester of Pregnant Women Who Do Yoga Exercises.....	1581

The Impact of Marketing-Like-Approach to Medical Specialist's Decision for Giving Patient Recommendation to Palliative Care Unitin Haaj General Hospital Surabaya	1588
Phytochemical Screening and Antioxidant Activity of Strawberry Juice (Fragaria ananassa Duchesse) Against Ureum Level, Creatinin, and Enzyme Catalase Activity In Isoniazid-Induced Wistar Male Rats.....	1595
The Effectiveness of Using Emodemo Methods on Knowledge of Pregnant Women's Nutritional Needs	1605
The Impact of Covid-19 on Pencak Silat Course Process in STKIP PGRI Bangkalan.....	1611
The Effectiveness Of The Apheresis Method On The Quality Of Trombosit Concentrat At UTD PMI Surabaya	1617
Relationship Between Knowledge Levels Donors Age 17-30 Years Old And Routine Blood Donation At UTD PMI Surabaya	1622
The Effect of Autogenic Relaxation on Blood Pressure Changes in Patients with Hypertension: Literature Review	1627
Difference of Het Re Level In Thalassemia β Minor And Iron Deficiency Anemia	1635
Description of Meeting Blood Needs in Negative Rhesus Patients At dr. Zainoel Abidin Aceh.....	1642
Effectiveness of Range of Motion (ROM) Fingers and Spherical grip to Extremity Strength in Non Hemorrhagic Stroke Patients.....	1650
Analysis Of Android-Based Online Message Gateway Towards The Use Of Plastic Bags	1657
Description Parenting Pattern Of Punk Children In District Bojonegoro.....	1665
Quality of Life in The Elderly Viewed from Hope, Friend Support, and Family Support.....	1670
The Effect of Exclusive Breastfeeding on Illness Frequency of The Baby	1676
Relationship of Gadget Use With Sleep Quality in Pandemy Covid-19 In School Age Children in State Elementary School Goa Jereweh District West Sumbawa.....	1680
Relaxation Therapy on The Level of Anxiety of Post Sectio Caesarea: A Literature Review.....	1687
Music Therapy in Post-Stroke Patient Anxiety Problems: Scoping Review	1694
The Effect of Emotional Intelligence on Aggressive Behavior in Late Adolescence	1702
The Benefits of Holistic Therapy for Psychological Disorders in Postpartum Mother: A Systematic Review	1708
Core Stability Exercise For Low Back Pain: A Literature Review	1718
Emotional Intelligence on Peer Conformity in Late Adolescence	1724

The Effect of Gadget Usage on the Social Development of Children Aged 3-5 Years: Literature Review	1732
The Effect of Food Intake on the Incidence of Malnutrition in Toddlers in the Work Area of the Kertosari Health Center, Banyuwangi Regency	1740
Back Massage and Self-Talk Therapy on Anxiety and Breastfeeding Self-Efficacy in Postpartum Mother: Analytic Descriptive	1747
Assessment of The Characteristics of Nurse Scheduling in Hospital Ward	1755
Important Indicators in Increasing Nurse Loyalty in The Covid-19 Pandemic Time	1763
The Effectiveness of Cucumber Suri Juice (Cucumis Sativus) On Blood Pressure In Menopausal Hypertension	1771
Media Digital Literacy Program in Improving Parental Mediation Efficacy with Community Nursing Approach	1779
Development of A Children Worth City Based on Collaborative Governance In Kediri City	1788
Family Empowerment Model in Stunting Prevention Based on Family Centered Nursing	1797
The Role Of The Head Of Public Health Graduate and Non Public Health Graduate Heads In Improving Managerial Abilities: Case Study of Puskesmas Bulu and Puskesmas Polokarto	1807

Analysis of Factors Related To Adolescents Preparedness in The Disaster-Prone Areas in Lempake Village, Samarinda

Dwi Rahmah Fitriani*, Alfi Ari Fakhur Rizal, Milkhatun, Mukhriyah Damaiyanti,
Ni Wayan Wiwin Astiningsih

Universitas Muhammadiyah Kalimantan Timur, Samarinda, Indonesia

* drf397@umkt.ac.id

ABSTRACT

Disaster-prone area can have an impact on changes in the nearby people, both physically and psychologically. The impact of these changes can be minimized by paying attention to the pre-disaster phase, namely preparedness that can be carried out by the productive age adolescence as the stakeholders. The purpose of this study was to determine the relation between anxiety factors, coping mechanisms and social support with the preparedness of adolescents in disaster-prone areas in Lempake Village, Samarinda. This research was a quantitative study using a cross sectional design, with data collection techniques using a questionnaire. Respondents in this study were 606 people. The results of this study indicated that the characteristics of the respondents were mostly in their early adolescence with 408 people (67.8%), 346 women (57.1%) and 317 people with a high school education background (53.4%). Most of the respondents for the anxiety factor having moderate anxiety were 436 people (71.9%), the coping mechanism factor of the respondents having an adaptive coping mechanism were 338 people (55.8%) and the respondents' social support factor having good social support were 319 people (52.6%) and most of the respondents (349 people (57.6%)) had a good preparedness. The results of the bivariate analysis showed that the p value $< \alpha$ ($\alpha = 0.05$, CI; 95%) which indicates that there is a relationship between anxiety factors, coping mechanisms and social support with adolescent preparedness. Then, the results of multivariate analysis using Logistic Regression (OR value: 5.1) found that the anxiety factor was the most significant factor associated with adolescent preparedness. The results of the study suggest that preparedness should be carried out by involving the government and local Health facilities (Puskesmas) as well as the Regional Disaster Management Agency through disaster preparedness training.

Keywords: Social Support, Anxiety, Preparedness, Coping Mechanisms, Adolescents

Received September 18, 2020; Revised September 29, 2020; Accepted October 24, 2020



STRADA Jurnal Ilmiah Kesehatan, its website, and the articles published there in are licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

BACKGROUND

Flood is disaster that often occur every year as a result of high rainfall, where the water limit exceeds the limit of river flows, lakes or reservoirs so that it can disrupt people's lives in many sectors. It can soak the facilities and infrastructure, deter economic activities, hinder teaching and learning systems or even in the extreme cases flood can be deadly. Based on data from the National Disaster Management Agency, there were 1046 flood disasters out of a total of 3999 disasters during the 2018-2019 period and many resulted in casualties and damage to houses and public facilities (BNPB, 2019). The number of the impact of flood in people's lives in the form of deaths was 56%, and the economy was 32% (Mami & Debarati, 2017). The data above shown us that the pre-disaster efforts are needed so it can negate the bad impacts. In this article we will examine one of the pre-disaster phases namely preparedness effort that is essential especially in the disaster-prone area. Preparedness is needed in the disaster-prone areas such as Lempake Village in Samarinda city which is located close to a water reservoir from the rivers.

Preparedness is an activity to develop plans to minimize the risks and reduce negative impacts through coordinated activities, integrated with the ability to respond quickly and appropriately using existing resources and the involvement of various parties (Stikova, 2016). Previous research shows that 575 (95%) respondents in Nigeria who are in flood-prone areas did not carry out preparedness before the occurrence of flood disasters and only 25 (5%) of respondents did preparedness before the coming flood period (Mary & Emeribe, 2014).

Preparedness is the effective steps taken aimed to prevent disaster before a disaster occurs so that people in disaster-prone areas are ready to react to various emergency conditions when a disaster does occur. Efforts to increase preparedness highly require an active participation from the community to strengthen the preparedness of the community in disaster-prone area using the community-based approach especially for the youth groups (Hasrul, Sri, & Armin, 2019). Youth groups are groups of people who fall into the category of adolescence. In this stage, adolescents begin to be able to accept social responsibility and begin to enter an independent phase in their lives so that they can anticipate and handle disaster situations or even contribute in the emergency action such as saving both lives and property.

Adolescents in disaster-prone areas have a higher responsibility to be able to be involved in disaster preparedness and this capability can be increased through knowledge. The previous research shown that knowledge and attitudes had an influence on the preparedness of adolescents aged 15-18 years in facing floods with a determination coefficient of 0.636 or 63.6% (Alif, Sunarko, & Saptono, 2015). The knowledge possessed by adolescents in disaster-prone areas depicted the efforts that had been made to anticipate and adapt in the pre-disaster phase, especially in the preparedness phase. This is a coping mechanism effort that can be done when individuals are in disaster-prone areas.

Living in a disaster-prone area can also cause psychological problems such as anxiety. The prior study of 28 participants living in the volcanic route of Southern Iceland contributed through in-depth interviews revealed that they often thought about the risk of eruptions, the children were sometimes frightened as a respond of living in the area around the eruption route and sometimes the family became anxious (Johannesdottir & Gisladdottir, 2015). Anxiety is a condition that occurs as a result of a response to the unknown or uncomfortable feeling caused by the anticipation of danger and it is a reaction of survival. The feeling of discomfort felt by adolescents in Lempake Village was likely

due to the fact that they are living in a flood-prone area that can affect their way of thinking and their perspective on potential disasters.

In a such disaster-prone area, an adequate social support is needed in preparing the community, especially the youth, so they can carry out preparedness and to minimize the impact that occurs when a flood disaster occurs. This social support can be in the form of information of what things needed to be prepared in the event of a flood, the evacuation routes, the supporting facilities such as the shelter, the evacuation equipments, etc. People living in a flood-risk area also need a good management system through planning, communication, evacuation and preparation in emergency situations (Raikes, Timothy, Christine, & Claudia, 2019). This social support can change adolescent behaviours in preparing for flood disasters in the preparedness phase. Preparedness needs to be carried out appropriately and adequately by taking into account about the factors that can highly impact the preparedness of adolescents in disaster-prone areas of Lempake Village. This study aims to identify the relationship between anxiety factors, coping mechanisms and social support with adolescents preparedness in disaster-prone areas.

METHOD

This research was a quantitative study using a cross sectional design, in which the researcher describes and analyses the relationship between the variables studied. Respondents in this study were adolescents aged 12-25 years at National Junior High School 13 (SMPN 13) and National Senior High School 9 (SMA 9) in the Lempake village area. The village close to a Benanga reservoir which is a reservoir for the Karang Mumus tributary, where the school is only 4-6 km from the reservoir. The last few years, the frequent flood occurred with high depths because of the overflowed reservoir water due to high rainfall. The flood submerged the area around the dam, including schools and the surrounding area of Lempake village. The number of respondents in this study were 606 people with the sampling technique using Stratified Random Sampling and this research was conducted from June to July 2020.

The independent variables in this study were anxiety, coping mechanisms and social support, while the dependent variable was preparedness. Measurements for anxiety variables used the Trait Anxiety Scale questionnaire (Rodrigues, Pandeirada, & Bem-haja, 2018), coping mechanisms used the Cope Brief questionnaire (Tuncay, Ilgen, Engin, & Mustafa, 2014) and social support used the Social Provisions Scale questionnaire. (Orpana & Lang, 2019).

Questionnaire of preparedness, this research used the Flood Preparedness Index (Mishra, Mazumdar, & Suar, 2010). The results of the reliability test conducted by the researcher showed the results for the questionnaire The Trait Anxiety Scale had Cronbach's α 0.701, Brief Cope had Cronbach's α 0.843, The Social Provisions Scale had Cronbach's α 0.883 while the questionnaire Flood Preparedness Index had Cronbach's α 0.877 (Fitriani et al., 2019).

The analysis used was univariate analysis to see the description of the characteristics of respondents with frequency distribution and bivariate analysis to determine the relationship between anxiety variables, coping mechanisms and social support with the adolescent preparedness variable using chi square. In this study, multivariate analysis was also carried out using logistic regression to see which variables were most associated with adolescent preparedness.

Approval of this research has been given by the Ethical Test Committee of Universitas Muhammadiyah Kalimantan Timur with Number: 002/KEPK-UMKT/I/2020

and all the teenagers involved in this research are willing to participate in research and giving consent to be involved in this research.

RESULTS

This study involved a number of 606 respondents in SMP 13 and SMA 9, Lempake Samarinda, which were a flood-prone areas. The characteristics of the respondents in this research are:

Table 1. Distribution of Respondents by Age

No	Age	N	(%)
1.	12 - 16 Year	408	67,8
2.	17 - 25 Year	198	32,2
Total		606	100

Source: Primary Data, 2020

Table 1 showed that of the 606 adolescent respondents, most of them were in the age range 12-16 years, a total of 408 respondents (67.8%) were included in the early adolescence stage and 198 respondents (32.2%) respondents were in the age range 17-25. years that were in the stage of late adolescence.

Table 2. Distribution of Respondents by Gender

No	Gender	N	(%)
1.	Male	260	42,9
2.	Female	346	57,1
Total		606	100

Source: Primary Data, 2020

Table 2 showed that female respondents were higher than male respondents. Female accounted for 346 respondents (57.1) while male respondents were 260 respondents (42.9).

Furthermore, the description of adolescents who experienced anxiety, the coping mechanisms possessed by adolescents and the social support received by adolescents as well as youth preparedness in disaster-prone areas are:

Table 3. Overview of Respondents' Anxiety Level

No	Anxiety Level	N	(%)
1.	Moderate	118	19,5
2.	Mild	436	71,9
3.	Severe	52	8,6
Total		606	100

Source: Primary Data, 2020

Table 3 showed that the anxiety level of adolescents in disaster-prone areas mostly experienced moderate anxiety of 435 respondents (71.9%), 118 respondents had mild anxiety (19.5%) and 52 respondents had severe anxiety levels (8, 6%).

Table 4. Overview of Respondents' Coping Mechanisms

No	Coping Mechanisms	N	(%)
1.	Adaptive	338	55,8
2.	Maladaptive	268	44,2
Total		606	100

Source: Primary Data, 2020

Table 4 showed the results that most respondents used adaptive coping mechanisms which was as much as 338 respondents (55.8%) while in the disaster area and 268 (44.2%) respondents who used maladaptive coping.

Table 5. Overview of Respondents' Social Support

No	Social Support	N	(%)
1.	Well	319	52,6
2.	Bad	287	47,4
Total		606	100

Source: Primary Data, 2020

Table 5 showed the social support felt by adolescents from the surrounding environment, where most of the adolescents received well social support, which was as much as 319 respondents (52.6%) and 287 respondents (47.4%) received bad social support.

Table 6. Overview of Respondents' Preparedness

No	Preparedness	N	(%)
1.	Well	349	57,6
2.	Bad	257	42,4
Total		606	100

Source: Primary Data, 2020

Table 6 showed that the preparedness of adolescents in disaster-prone areas was mostly good which was as much as 349 respondents (57.6%) and 257 respondents (42.4%) was poor.

Analysis of the relationship between anxiety, coping mechanisms and social support with adolescent preparedness can be described as follows:

Table 7. Chi-Square Test Results between Anxiety Level and Adolescents Preparedness

Kecemasan	Preparedness				Total		P Value
	Well		Bad		n	%	
	n	%	n	%			
Low	29	55,8	23	44,2	52	100	0,037
Medium	264	60,6	172	39,4	436	100	
High	56	47,5	62	52,5	118	100	

Source: Primary Data, 2020

Table 7 showed that there were 264 (60.6%) adolescents who experienced moderate anxiety, had good preparedness and 172 (39.4%) adolescents who experienced moderate

anxiety, had poor preparedness. Meanwhile 62 (52.5%) adolescents who experienced severe anxiety had poor preparedness and 56 (47.5%) adolescents who experienced severe anxiety had good preparedness. The statistical test results obtained p value = 0.037 (p <0.05), it can be concluded that there was a significant relationship between anxiety and adolescent preparedness in flood-prone areas, Lempake Village, Samarinda.

Table 8. Chi-Square Test Results between Coping Mechanism and Adolescents Preparedness

Coping Mechanism	Preparedness				Total		P Value
	Well		Bad		n	%	
	n	%	n	%			
Adaptive	207	61,2	131	38,8	338	100	0,041
Maladaptive	142	53	126	47	268	100	

Source: Primary Data, 2020

Table 8 showed that there were 207 (61.2%) adolescents who had adaptive coping mechanisms, displaying good preparedness and 142 (53%) adolescents who had maladaptive coping mechanisms, displaying good preparedness. Meanwhile, 131 (38.8%) adolescents who had adaptive coping mechanisms displaying poor preparedness and 126 (47%) adolescents who had maladaptive coping mechanisms displaying poor preparedness. The statistical test results obtained p value = 0.041 (p <0.05), it can be concluded that there was a significant relationship between coping mechanism and adolescents preparedness in flood-prone areas, Lempake Village, Samarinda.

Table 9. Chi-Square Test Results between Social Support and Adolescents Preparedness

Social Support	Preparedness				Total		P Value
	Well		Bad		n	%	
	n	%	n	%			
Well	200	57,3	119	46,3	319	100	0,009
Bad	149	42,7	138	53,7	287	100	

Source: Primary Data, 2020

Table 9 showed that there were 200 (57.3%) adolescents who got good social support, had good preparedness and 149 (42.7%) adolescents who got poor social support, had good preparedness. Meanwhile, 138 (53.7%) adolescents who received poor social support had poor preparedness and 119 (46.3%) adolescents who received good social support had poor preparedness. The results of statistical tests obtained p value = 0.009 (p <0.05), it can be concluded that there was a significant relationship between social support and adolescent preparedness in flood-prone areas, Lempake Village, Samarinda.

Table 10. Logistic Regression Factors Associated with Adolescents Preparedness in Disaster Prone Areas

No	Variable	B	p value	OR	CI 95%
1.	Coping Mechanism	-7,788	0,003	0,000	0,000-0,070
2.	Anxiety	8,514	0,000	5,135	3,978-5,230
3.	Social Support	-1,219	0,013	0,277	0,085-0,763
	Constant	19,145			

Source: Primary Data, 2020

Table 10 showed that after the final modeling, the most significant variable with the greatest OR value was anxiety factor with a value of 5.1, which means that adolescents

who experience anxiety have a 5.1 times chance of having disaster-prone areas preparedness.

DISCUSSION

A. Relationship between Anxiety Level and Adolescents Preparedness

Adolescents living in disaster-prone areas (around age 12-16 years and 17-25 years), were starting to have physical and emotional maturity levels to be independent and this study described the ability of adolescents to adapt to disaster-prone areas according to their duties and responsibilities at each stage of a disaster. Because in the adaptation process, especially in the preparedness stage, can cause other effects in the form of anxiety because they are in a disaster-prone area.

The results of this study indicated that there was a relationship between anxiety and adolescent preparedness with a value of $p = 0.037$ ($p < 0.05$), where most of the respondents were 264 (60.6%) adolescents who experienced moderate anxiety and had good preparedness. Adolescents who experienced moderate anxiety had a good preparedness in flood-prone areas. Flood is an event that has an impact on an individual's life, where the damage occurs so that it can create depression and fear based on an ongoing anxiety response. Based on Freud's Anxiety Theory, anxiety is a natural state of a person in a state of shock and fear that occurs from environmental conditions that can have an effect on life (Johari & Marzuki, 2013). This was also in line with the results of research conducted at the social service of Aceh Province showing that anxiety in 68 respondents was at a total score of 2,718 in the moderate category and preparedness was at a score of 2,964 in the high category during earthquake readiness (Surbariyanti, Agussabti, & Imran, 2019).

Adolescents living in disaster-prone areas have high preparedness so they show moderate symptoms of anxiety. When the individual is in moderate anxiety, the individual becomes more focused and attentive to the main things so that they can do something more directed. The moderate anxiety experienced by adolescents in this study was caused by unpredictable disasters, being in a disaster-prone location and the frequency of flood each year due to high rainfall. The impact of the moderate anxiety response experienced by adolescents in flood-prone areas had an impact on adolescents' ability to prepare themselves for floods so that adolescents have good preparedness.

B. Relationship between Coping Mechanism and Adolescents Preparedness

The coping mechanism is an effort made by individuals directed at managing stress, which can be constructive and destructive in nature (Stuart GW, 2013). Adolescent coping mechanisms when in disaster-prone areas need to be developed constructively so that they can make efforts in the preparedness stage to reduce stress by taking into account external and internal factors that have a direct impact on adolescents' efforts to have adaptive coping mechanisms. Adolescents living in disaster-prone areas will have an adaptive coping mechanism, as a physiological effort made to survive and take responsibility to be independent in facing stressors in their lives.

The results of this study indicated that there was a significant relations between coping mechanisms and adolescent preparedness in flood-prone areas Lempake Samarinda with a value of $p = 0.041$ ($p < 0.05$), where most of the respondents were 207 (61.2%) adolescents who had the mechanism, adaptive coping, displaying good preparedness. This occurred because the ability of adolescents to adapt to disaster-prone areas, which was formed due to their experiences in dealing with floods. It highly impacted their

preparedness. The prior research also agreed that there was a relations between a past experience toward disaster preparedness with a correlation value of 0.566 (Muhammad & Aziz K, 2014). Other studies also shown that individuals who had experienced a disaster before had 39.6% impact on their ways of thinking and self-awareness, 25% impact on self-awareness as well as the efforts to increase the knowledge of preparedness and 27.1% impact on their efforts to develop preparedness (Becker, Paton, Johnston, Kevin, & John, 2017).

The coping mechanism is also formed through the process of adapting to disaster sources when in disaster-prone areas. With a good coping mechanism, the preparedness efforts made by youth will also be good. This adaptation process can also be pursued by obtaining information about preparedness efforts that need to be carried out when in flood-prone areas, such as making plans, evacuation routes, tools and equipment needed when a flood occurs. In line with this, the results of research shown that there was a significant relationship between knowledge and landslide disaster preparedness ($p = 0.000$, $\alpha = 0.05$) (Setyo, Dima, & Widya, 2019).

Another study of a semistructured survey of respondents had a strategy for dealing with storms, where 43% protected the house by strengthening the roof, 18% of the respondents protected their family by choosing a safe shelter and 32% of respondents stored food when the storm came back (Lalaina et al., 2016) (Shay, Combs, Salvesen, Detrizio, & Horney, 2014).

Good youth preparedness in disaster-prone areas is a form of good coping mechanisms and efforts made by always opening oneself to get good adaptation habits in disaster-prone areas. A constructively developed coping mechanism in disaster areas can make youth responsible to prepare themselves to be ready for disaster whenever needed especially in flood-prone areas. This coping mechanism can be improved through training or providing information in conducting preparedness before a flood occurs.

C. Relationship between Social Support and Adolescents Preparedness

Social support is the feedback received by individuals as a form of attention and appreciation that involves family, friends and the environment around the individual. Social support is one of the sources of individual coping in overcoming stressors that occur in their lives (Stuart GW, 2013). The existence of social support, especially family and peers, is very important in making decisions when you are in a disaster-prone area because you can exchange information, experiences and exchange opinions in preparing for floods.

The results of this study indicated that there was a significant relationship between coping mechanisms and youth preparedness in flood-prone areas Lempake Samarinda with a value of $p = 0.041$ ($p < 0.05$), where most of the 200 respondents (57.3%) got good social support, had good preparedness. The results of a prior research of a qualitative approach to 18 adolescents who were affected by the earthquake in Lombok had the similar research themes, one of which the social support was provided during adaptation after the earthquake in the form of emotional and instrumental support (Nova, Ah, & Dian, 2019), those can be given before a disaster occurs so they can prepare themselves to help others during disaster.

Another study showed that respondents who received emotional and instrumental support prior to a disaster had significantly smaller 1.34 (95% CI: 1.03-1.74) symptoms of depression after a disaster occurs compared to respondents who had less social support 1.70 (95% CI: 1.03-2.76) (Sasaki et al., 2019). The support provided in the

preparedness phase for adolescents can have a huge impact in preparing themselves, especially after a disaster occurs. This social support will improve the ability of adolescents to prepare themselves and increase awareness when in flood-prone areas. This support can be in the form of supporting information related to preparations that need to be done before a disaster strikes, preparedness plans and supporting facilities in the event of a disaster such as evacuation routes and places as well as the availability of transportation equipment used during floods.

D. Anxiety Level is Very Related to Adolescents Preparedness

The results of the logistic regression test on the factors that were likely to be closely related to adolescent preparedness showed that the most significant factor with the greatest OR value anxiety factor with a value of 5.1, which means that adolescents who experienced anxiety have a 5.1 times chance of having preparedness in the disaster-prone areas. Other studies showed that anxiety had a very significant relationship ($P = 0.002$) with self-preparedness to face disasters, the level of perception and the ability of respondents to determine the right strategy (Lee & Haeyoung Lee, 2019).

The results showed that most people who live in flood-prone areas experienced moderate anxiety of 40% (Lamba, Herdy, & Kandou, 2017). The feeling of worry and fear can increase the awareness and self-protection, This negative emotion can be an important factor in the mitigation measures that support preparedness.

Anxiety is a physiological response of an individual in a disaster-prone area because of the many stressors that occur. These stressors can increase the ability of adolescents in their preparedness in disaster-prone areas. It occurs as a result of the narrowing point of view of them so that they are more focus, more alert and solely concentrate on stressors. As a result, some of adolescents are motivate to increase their independence to help themselves and others in disaster preparedness as an effort to prevent a bigger impact during a disaster and to alleviate the consequences after a disaster occurs

CONCLUSION

Preparedness is an action that needs to be taken before a disaster occurs to avoid and prevent negative impacts during the disaster and after the disaster. especially for the youth living in the disaster-prone area who are starting to become independent and responsible for themselves and their families who also live in there. The results of the discussion in this study indicated that there was a relationship between anxiety factors, coping mechanism and social support with youth preparedness in disaster-prone areas of Lempake Village, Samarinda.

Efforts are needed to prevent the occurrence of worsening and prolonged anxiety of adolescents living in disaster-prone areas, the adaptive coping mechanisms and a very good social support are needed so they can improve their disaster preparedness abilities to help themselves himself and his family. The anxiety is actually very related to preparedness efforts because when experiencing the manageable anxiety level, adolescents become more focused on problems when facing stressors. Efforts that needed to be made in preparedness are a good planning, the availability of supporting facilities, and the community-based disaster preparedness training so that when a disaster occurs, the community, especially teenagers, can be resilient and better prepared in facing flood disasters by involving involvement government and local health centers.

REFERENCES

- Alif, P., Sunarko, & Saptono, P. (2015). Pengaruh Pengetahuan Dan Sikap Tentang Resiko Bencana Banjir Terhadap Kesiapsiagaan Remaja Usia 15 – 18 Tahun Dalam Menghadapi Bencana Banjir Di Kelurahan Pedurungan Kidul Kota Semarang. *Jurnal Geografi*, 12(2), 214–221.
- Becker, J., Paton, D., Johnston, D. M., Kevin, R., & John, M. (2017). The role of prior experience in informing and motivating earthquake preparedness. *International Journal of Disaster Risk Reduction*, 22(March), 179–193. <https://doi.org/10.1016/j.ijdr.2017.03.006>
- BNPB. (2019). Data Informasi Bencana Indonesia. Retrieved from 2019 website: <http://bnpb.cloud/dibi/tabel1a>
- Fitriani, D. R., Damaiyanti, M., Milkhatun, Astiningsih, N. W., Fachrurizal, A., & Muflihatin, S. K. (2019). The Relation Between Knowledge and Experience of Facing Flood Toward The Anxiety Level of Head Families in The Flood-Prone Areas. *South East Asia Nursing Research*, 1(3), 120–127. <https://doi.org/https://doi.org/10.26714/seanr.1.3.2019.120-127>
- Hasrul, H., Sri, A., & Armin, S. (2019). Penguatan Kesiapsiagaan Stakeholder Dalam Pengurangan Risiko Bencana Gempa Bumi. *Jurnal Geodika*, 3, 30–40.
- Johannesdottir, G., & Gisladdottir, G. (2015). Vulnerability and Risk Perception People Living Under Threat of Volcanic Hazard in Southern Iceland : Vulnerability and Risk Perception. *Natural Hazards and Earth System Sciences*, 10(February 2010), 407–420. <https://doi.org/10.5194/nhess-10-407-2010>
- Johari, J., & Marzuki, N. A. (2013). Relating Stress , Anxiety and Depression among Flood Victims ' Quality of Life in Malaysia : A Theoretical Perspective. *International Journal of Social Science and Humanity*, 3(6), 543–547. <https://doi.org/10.7763/IJSSH.2013.V3.300>
- Lalaina, Z., Harvey, C. A., Rao, N. S., Dave, R., Chrysostôme, J., Randrianarisoa, J., ... Mackinnon, J. L. (2016). Strategies of smallholder farmers for coping with the impacts of cyclones: A case study from Madagascar. *International Journal of Disaster Risk Reduction*, 17, 114–122. <https://doi.org/10.1016/j.ijdr.2016.04.013>
- Lamba, C. T., Herdy, M., & Kandou, L. F. J. (2017). Gambaran Tingkat Kecemasan pada Warga yang Tinggal di Daerah Rawan Banjir Khususnya Warga di Kelurahan Tikala Ares Kota Manado. *Jurnal E-Clinic (ECI)*, 5(1), 61–65. Retrieved from <http://ejournal.unsrat.ac.id>
- Lee, E., & Haeyoung Lee. (2019). *Disaster awareness and coping: Impact on stress , anxiety , and depression*. (December 2018), 311–318. <https://doi.org/10.1111/ppc.12351>
- Mami, M., & Debarati, G.-S. (2017). Economic Losses, Poverty & Disasters. Retrieved from https://www.preventionweb.net/files/61119_credeconomiclosses.
- Mary, E., & Emeribe, C. (2014). Flood and Household Preparedness in Benin City , Nigeria. *Mediterranean Journal of Social Sciences*, 5(1), 547–553. <https://doi.org/10.5901/mjss.2014.v5n1p547>
- Mishra, S., Mazumdar, S., & Suar, D. (2010). Place attachment and flood preparedness. *Journal of Environmental Psychology*, 30(2), 187–197. <https://doi.org/10.1016/j.jenvp.2009.11.005>
- Muhammad, P. E., & Aziz K, A. (2014). Investigating factors for disaster preparedness among residents of Kuala Lumpur. *Natural Hazards and Earth System Science*, 3683–37809. <https://doi.org/10.5194/nhessd-2-3683-2014>

- Nova, A., Ah, Y., & Dian, T. R. (2019). Pengalaman Adaptasi Remaja Pasca Bencana Gempa Di Lombok Nusa Tenggara barat. *Jurnal Keperawatan Jiwa*, 1(2), 36–42. Retrieved from <https://e-journal.unair.ac.id/PN>
- Orpana, H. M., & Lang, J. (2019). Validation of a brief version of the Social Provisions Scale using Canadian national survey data. *Original Quantitative Research*, (December). <https://doi.org/10.24095/hpcdp.39.12.02>
- Raikes, J., Timothy, S., Christine, J., & Claudia, B. (2019). Pre-disaster planning and preparedness for floods and droughts : A systematic review. *International Journal of Disaster Risk Reduction*, 38(June), 101207. <https://doi.org/10.1016/j.ijdr.2019.101207>
- Rodrigues, P. F. S., Pandeirada, J. N. S., & Bem-haja, P. (2018). The Trait Anxiety Scale for Children : A validation study for European Portuguese children and adolescents. *European Journal of Developmental Psychology Developmetrics*, (November 2017). <https://doi.org/10.1080/17405629.2017.1308249>
- Sasaki, Y., Aida, J., Tsuji, T., Koyama, S., Tsuboya, T., Saito, T., ... Ichiro, K. (2019). Pre-disaster social support is protective for onset of post-disaster depression : Prospective study from the Great East Japan Earthquake & Tsunami. *Scientific Reports*, 1–10. <https://doi.org/10.1038/s41598-019-55953-7>
- Setyo, R. I., Dima, K. N., & Widya, W. (2019). RELATIONSHIP BETWEEN LEVEL OF DISASTER KNOWLEDGE AND ATTITUDE OF LANDSLIDE DISASTER PREPAREDNESS IN VOLUNTEERS "KELURAHAN TANGGUH" IN MALANG CITY. *Journal of Nursing Science*, 7(2), 133–144. <https://doi.org/Doi10.21776/ub.jik.2019.007.02.3>
- Shay, E., Combs, T., Salvesen, D., Detrizio, D., & Horney, J. A. (2014). Assessing disaster preparedness of officials and residents in Two North Carolina Counties. *Geography & Natural Disasters*, 4(October 2015), 1–8. <https://doi.org/10.4172/2167-0587.1000125>
- Stikova, E. (2016). A Global Public Health Curriculum ; 2nd Edition. *South Eastern European Journal of Public Health*. <https://doi.org/doi.org/10.4119/UNIBI/SEEJPH-2015-106>
- Stuart GW. (2013). *Principles and Practice of Psychiatric Nursing* (10 th). St Louis: Mosby Year Book.
- Surbariyanti, Agussabti, & Imran. (2019). Relationship between the Level of Anxiety with Preparedness of Staff of the Social Service of the Province of Aceh in the Disaster. *International Journal of Multicultural and Multireligious Understanding*, 6(2), 619–626. Retrieved from file:///C:/Users/user name/Downloads/Relationship_between_the_Level_of_Anxiety_with_Pre.pdf
- Tuncay, T., Ilgen, M., Engin, G. D., & Mustafa, K. (2014). The relationship between anxiety, coping strategies and characteristics of patients with diabetes. *Health and Quality of Life Outcomes*, (December), 1–9. <https://doi.org/10.1186/1477-7525-6-79>