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| **Article\_Id** | **ArticleTitle** | **Abstract** |
| 1 |  Nurses’Empathy in Providing Nursing Care in Inpatient Rooms in H. Adam Malik Hospital Medan | Empathy is a process of understanding and participating in others’feeling. Empathy is divided into two main components, cognitive and affective. Cognitive empathy is the process of thinking from another person's point of view, while affective empathy is feeling concern for the suffering of another person and a desire to help. Therefore empathy becomes very important for nurses to establish therapeutic relationships and to communicate with patients. Nurses showing empathy to patients will have no difficulty to establish therapeutic relationships because the patients will feel more comfortable to receive the nursing care plan actions. This study aimed to determine the overview of nurses’ empathy in providing nursing care in among inpatient in H. Adam Malik Hospital Medan. This study employed a descriptive research with141 nurses selected by using accidental sampling. For data collection, a questionnaire was used as the study instrument with Cronbach alpha of 0.86. Data were analyzed by using univariate analysis. The results of this study showed that 120 nurses (85.1%) were in good category and 21 nurses (14.9%) were in moderate category in empathy. It is recommended that the hospital nursing management improve the quality of nursing care for patients and evaluate patient satisfaction on regular basis. |
| 2 | Relationship between Personality and Academic Achievement of students at Faculty of Nursing, University of North Sumatra | Personality is a special characteristic possessed by a person that reflects his attitude and behavior. Personality can affect the level of academic achievement. This study employed a correlational design with 234 students of Faculty of Nursing, University of North Sumatra as samples. This study aimed to determine the relationship between personality and academic achievement. The sampling technique used was proportionate stratified random sampling. The results of the Chi-square test determined that there was a relationship between personality trait as independent variable and academic achievement index as dependent variable with p-value of 0.043. Then, a nonparametric spearman’s rho test was conducted and produced correlation relationship strength of the personality variable to the achievement index of 0.050. It is suggested that next research should consider other variables that might affect academic achievement such as interest, motivation, lecturer teaching styles, and environment.  |
| 3 | Knowledge and Attitudes of Community Concerning on the Prevention of Leptospirosis in Pabelan Village, Sukoharjo Regency | Leptospirosis is a zoonotic disease which has a significant effect on human health most commonly found in tropical or sub-tropical countries. Leptospira bacteria is the cause of leptospirosis which can attack animals and humans. Infection in humans is accidental, because the main reservoir or spreader of leptospira is rodents. The urine of infected rodents carried away by floodwaters can enter the human body through broken skin and mucous membranes. All patients with mild leptospirosis (anicteric) can recover completely. It is very different from patients with severe leptospirosis (jaundice) who have a high case fatality rate from 5% to 40%. Preventive measure is one way to reduce the incidence of leptospirosis by developing positive attitudes and improving good knowledge about leptospirosis. The objective of this study was to determine the relationship between knowledge and attitudes of the community concerning on the prevention of leptospirosis in Pabelan village, Sukoharjo Regency. This study employed quantitative research with a cross sectional design in a sample of 212 respondents from Pabelan village selected by using accidental sampling. Majority of respondents demonstrated moderate knowledge (53.3%). However, 80.7% of the them demonstrated good attitude scores. |
| 4 | Family’s Knowledge about Schizophrenia in Prof. Dr. Muhammad Ildrem Mental Hospital Medan | Schizophrenia is one of mental disorder which can decrease human productivity. It becomes a problem for government, community, and families. Family has an important role in the patient's healing process with schizophrenia which can be improved by promoting health education programs. This study employed quantitative research which aimed to determine the level of family’s knowledge about schizophrenia in a sample of 99 respondents selected by using accidental sampling. The research instrument was questionnaires about respondents characteristics and family’s knowledge about schizophrenia. The data were presented in frequency distribution and percentages. The results of the study showed that 57 respondents (57.6%) demonstrated good knowledge, 42 respondents (42.4%) demonstrated moderate knowledge, and no respondent demonstrated poor knowledge. In the last few years, there was a sharp increase in the number of relapse occurance in patients with schizophrenia. The high percentage of moderate knowledge was not a real description for the disease. However, it is expected that nurses be able to increase family’s knowledge about schizophrenia, signs and symptoms, medication management and the family’s role in the treatment of patients with schizophrenia by providing health education.  |
| 5 |  White Turmeric Effectiveness Towards Dysmenorrhea Among Adolescents at SMP Negeri 4 TanjungPura | Dysmenorrhea is a type of pain that is only associated with menstruation. Dysmenorrhea occurs more frequenly in adolescent girls and it can affect their daily lives, such as low concentration in studies, no participation in extracurricular activities, un-ability to attend school. Due to this problem, pharmacological and nonpharmacological treatment of dysmenorrhea are required. Giving white turmeric is one kind of non-pharmacological which thought as alternative treatments. This study employed a quasi Experiment design. This study aimed to determine the effectiveness of white turmeric towards dysmenorrhea among adolescents at SMP Negeri 4 TanjungPura and was conducted from October to June 2016. The data were collected from March to May 2016 and analyzed using independent t-test. The result showed a positive effect of white turmeric towards dysmenorrhea on adolescents with p-value of 0.009 (p <0.05). |
| 6 |  GarciniaMangostana Effectiveness on Organ of Corti of RattusNorvegicus Using Scanning Electron Microscope (SEM) | Exposure to high levels of noise can cause permanent hearing loss. A major damage to the hearing organ occurs when there is a damage to organ of corti in cochlea. Oxidation of free radicals can cause structural change of organ of corti. Antioxidants can prevent damage to organ of corti. This study aimed to determine the effect of Garciniamangostana peel extract as an effective and safe antioxidant to prevent damage to organ of corti in cochlear which can cause GPAB (Noise-Induced Hearing Loss) in terms of its ultrastructural features. This study was a vivo experimental with posttest-only design using 24 laboratory rats, Rattusnorvegicus strain wistar divided into 6 groups. Three groups received aquadest and the other received Garciniamangostanapeel extract for 16 days. All groups were given different sound intensity, 25-50 dB, 55-80 dB, and 85-110 dB for 8 hours a day for 8 days continuously. The ultrastructure were examined using SEM. The results of this study showed that there was a significant difference(p <0.05) of structure damage to organ of corti for all groups. Giving GarciniaMangostana skin extract at a dose of 21.6 mg for 16 days orally did not reduce damage to organ of corti in cochlear, especially in the provision of sound intensity of 85-110 dB for 8 days (p = 0.127). |
| 7 | Correlation between Stress Level and Coping Strategies among Regular Students of Nurses Profession Program at Faculty of Nursing, University of North Sumatra |  Profession Program in Nusing is a process of education fully implemented in clinical practice, such as hospitals, public health centers, maternity clinics, nursing homes, families and communities. Students of of this programme are sensitive to stress because of their life transition from campus to field work. Therefore, students use a number of coping strategies to deal with this stress. This study aimed to identify stress level, coping strategies, and the correlation between stress level and coping strategies among regular students of Nurses Profession Program at Faculty of Nursing, University of North Sumatra. This study employed a correlational design. . The sample was composed of 62 people selected using simple random sampling technique. The research instruments were questionnaires on demographic data , clinical stress and coping strategy . Data were collected from February to April 2016 and analyzed by using Pearson correlation test. The results showed that students who experienced mild stress is 8.1%, 79.0% with moderate stress, and 12.9% with severe stress. Interaction among other health team members caused students feel stressed most(μ = 118.6). 25.8% of students sometimes applied coping strategies, and 74.2% of them always applied coping strategies. Anticipated coping (μ = 86) was applied most. It is suggested that the students be well prepared before and during clinical practice by improving nursing knowledge through literature and field studies, discussions with seniors, nurses, and academic advisors. |
| 8 | Patient’s Perceptions of Customer Service Provided By Nurses at a Private Hospital in Indonesia: A Preliminary Study | Providing customer service is one of hospital effort to achieve patient’s satisfaction. Even though the term of customer service is common in business domain, it can be used in health care industry such as a hospital. Providing customer service in a private hospital leads to increase satisfaction for those who receive the service and creates loyal customers. This study aimed to describe the patient’s perceptions of customer service provided by nurses in a private hospital in Indonesia. This was a preliminary study conducted in in-patient ward in a private hospital in Medan, Indonesia. Ten patients who had been admitted as inpatient for at least three days were involved in this study as participants. in-depth interviews and field notes were used to collect data. Transcript verbatim was made after an in-depth interview and analyzed using content analysis technique. The results of this study showed that there were 5 common themes related to patient’s perceptions of customer service provided by nurses in a private hospital. The themes were (1) the function of customer service based on patients opinion (nurses make the patients feel cared, feel respected, and feel heard, as well as nurses must be communicative in providing services), (2) nurses meet patient needs by providing responsive care (prompt nurses action, fulfilled nursing care for patients), (3) the need to establish a trusting relationship in the interaction between nurses and patients (building a trusting relationship, establishing a good interaction in nursing services, friendly attitude of nurses in providing services), (4) nurses in giving medicines are less communicative (less explanation on the medicine information, less explanation on the change of medications), (5) and, expectations of patients to nurses in providing nursing services (health education provided by nurses, frequent nurses observations). It is recommended that private hospitals in Indonesia pay more attention to customer service provided by nurses in providing nursing care to patients and improve nurses’ knowledge and capabilities on customer service so that the nurses will apply the knowledge and capabilities in providing nursing care for the patients or customers. |
| 9 | Experiences of Patients with End Colostomy in Medan | Colostomy rate increases year by year. Colostomy application is conducted on the presence of colonic and rectal carcinoma. The Indonesian Ostomy Association (InOA) mentioned that the number of cases that use stoma continues to increase, and the most common cause in Indonesia itself is its malignancy. This study used a qualitative design with descriptive phenomenology which aimed to describe the phenomenon and the presence of specific things. The objective of this study was to describe the experiences of patients with end colostomy in Medan. Ten participants were selected using purposive sampling method. Data were collected from several hospitals in Medan. This study was conducted in patients’ houses with subject inclusion criteria is able and willing to communicate . Data were collected from February 2016 to April 2016. The results of in-depth interviews showed that there were 4 themes related to the experiences of patients with end colostomy in Medan, namely: (1) end colostomy treatment (2) suffering psychologically (3) suffering physically (4) making a stoma bag. It is expected that medical staffs provide clear information about 10 end colostomy rights thus can get a better understanding on their rights as end colostomy patients. . |
| 10 | Adolescent Mothers’ Experiences in Caring for Low Birth Weight Babies in Medan: A Phenomenology Study | Low birth weight (LBW) baby is a newborn whose weight is less than 2,500 grams (up to 2,499 grams). LBW is the main cause of mortality, morbidity and disability in neonates, toddlers and children which still affects their health up to their adulthood. This study aimed to explore the experiences of adolescent mothers in caring for low birth weight babies in Medan. This study used a phenomenology study design. The sampling technique used was purposive sampling. Ten mothers were selected as the participants. The criteria of participants were adolescent mothers aged 17-20 years who gave births to low birth weight babies and had experiences in caring for low birth weight babies at home. This study was conducted in a hospital and in a maternity clinic from February 16 to April 30, 2016. Data were analyzed using Colaizzi method. The results of this study showed that there were five themes of experiences of adolescent mothers in caring for low birth weight babies, namely (1) seeking treatment for LBW; (2) providing special care for LBW; (3) having limited time for social activities; (4) suffering physically, psychologically, and emotionally when treating LBW; and (5) getting support from the family and medical staffs. It is expected that nurses provide holistic nursing care to adolescent mothers in caring for low birth weight babies at home. |
| 11 | Effects of Progressive Muscle Relaxation Therapy on Anxiety Levels of Breast Cancer Patients in Haji Adam Malik Hospital Medan | Patient with breast cancer mostly experienced psychological pressure . This condition leads to anxiety and hopeless feeling toward life. One of the therapies which regarded effective to minimize anxiety is progressive muscle relaxation. The objective of this study was to determine the effects of progressive muscle relaxation therapy as intervention in reducing the anxiety level of the patient with breast cancer. This study employed quasi experiment method with a pre-test and post-test control group design. The sample was composed of 26 breast cancer patients; 13 patients with intervention and 13 patients without intervention. The research instrument used to assess the anxiety level was HRS-A (Hamilton Rating Scale-Anxiety) questionnaire. The study was conducted in Haji Adam Malik Hospital Medan from May to June, 2016. Progressive muscle relaxation theraphy was carried out for 3 days, with a frequency of 6 exercises The results showed that t-value was -4.275 and p-value=0.000 indicating that there was an effect of progressive muscle relaxation therapy in reducing the level of anxiety of breast cancer patients. Therefore, nurse can use progressive muscle relaxation as non-pharmacological in coping with breast cancer patients. |
| 12 | Resilience of Patients with Chronic Disease in H. Adam Malik Hospital Medan | Chronic disease is a health problem which is also the main cause of death worldwide. Chronic disease causes severe stress and high anxiety for almost all sufferers because this condition will continue to develop slowly over the years, thus resilience is needed in dealing with the disease. This study aimed to determine the resilience of patients with chronic disease in H. Adam Malik Hospital Medan. The population was 60 patients with chronic disease which recruited using accidetal samplign method . Data were collected using questionnaires and frequency distribution is analyzed. The results showed that 35 of the 60 respondents with high resilience (58.3%). This study concluded that patients with chronic disease at H. Adam Malik Hospital Medan had good resilience in dealing with stress and anxiety. It is expected that nurses provide optimal nursing care to support patient resilience to reduce the patient's negative psychosocial effects. |
| 13 | Nurses’ Knowledge About Wound Care With Moist Wound Healing Method at H. Adam Malik Hospital Medan | Wound care is a series of activities carried out to care wounds with the aim of increasing re-epithelialization of new tissue and restoring physiological function of broken skin. Moist wound healing is the latest wound care method that heals wounds effectively. Nurses are required to have adequate knowledge and skills related to the wound care process so that the patients regain health and independent life optimally. This study used a descriptive design that aimed to determine nurses’ knowledge about wound care using the moist wound healing method in H. Adam Malik Hospital Medan. The sample of this study composed of 60 nurses who were selected using consecutive sampling techniques based on the specified inclusion criteria, i.e. nurses who have worked for at least 1 year in operating room and internal medicine room, and nurses who have at least an associate degree or diploma in nursing. The results showed that 50% of respondents had sufficient knowledge, but there were still 31.7% of respondents who had insufficient knowledge about wound care using the moist wound healing method. It is recommended that H. Adam Malik Hospital Medan facilitate wound care training for nurses so that nurses have better knowledge and skills to improve the quality of nursing care. |
| 14 | Experiences of Hospitalized School-Age Children with Leukemia in Hospitals in Medan: A Phenomenology Study | One type of cancer which is most diagnosed in children and adolescents is leukemia. The treatment of leukemia takes a long time and recurs in the hospital. Most Leukemia sufferers are diagnosed at ages of 0-14. Some of them are school-age children, 6-12 years. The objective of this study was to explore the experiences of hospitalized school-age children with leukemia in hospitals in Medan. This study used a phenomenological qualitative method with in-depth interviews. The sampling technique used was purposive sampling. The participant composed of 7 children who had the following inclusion criterias: 1) school-aged children, 7-12 years, 2) hospitalized for at least 3 days of care with a diagnosis of leukemia, 3 ) communicative, 4) willing to become participants verbally stated or by signing a research agreement letter. The data was analyzed using Giorgi method. There were 5 themes rising, i.e. 1) children suffered physically, 2) children sufferred psychologically, 3) children lost time for activities, 4) children experienced changes in social environment, 5) children got family support. The results showed that all participants with leukemia in hospitals in Medan experienced hospitalization stress caused by treatment measures, disease conditions, and long-term and repetitive treatments. It is suggested that hospital services pay attention to the stage of children’s development during the treatment period, especially in creating a comfortable environment, providing psychological and nutritional therapy that meets the needs of the children. |
| 15 | Experiences of Mothers Who Have Autistic Children at Binjai Extraordinary School (SLB): A Phenomenology Study | Autism is a developmental disorder characterized by lack of communication and social interaction, difficulties in verbal and non verbal communication, having restricted and repetitive behavior. The experiences of mothers who have autistic children are important to understand because autistic children need helps to behave and to fulfill their daily activities. They also need advice and control over social interaction that lead to their high dependence on parents, especially mothers. This study used a phenomenological design and aimed to explore the experiences of mothers who have autistic children at Binjai Extraordinary School (SLB). The sampling technique used was purposive sampling. The participants composed of 8 children. This study was conducted from March to June 2016. Data were analyzed using Collaizi method. This study revealed 5 themes related to the experiences of mothers who have autistic children Binjai Extraordinary School (SLB), i.e. 1) suffering psychological and physical problems, (2) accepting the condition of children with autism, (3) giving care to children, (4) having problems in caring for children, and (5) mother's expectations for children with autism. It is expected that the results of this study used as source of reference for extraordinary schools to improve knowledge and skills for support mothers who have autistic children so that parents understand about autism and its treatment. |
| 16 | Experiences of Community Who received Nursing Care at SeringPuskesmas in Medan TembungSubdistrict, North Sumatra: Phenomenology Study | Puskesmas (Community Health Center) is one of the healthcare facilities that organizes first-level of public healthcare service in its working area. Nursing is one of the important integral parts of healthcare services in puskesmas, which is expected to be able to provide healthcare services including sustainablity of promotive and preventive aspects without neglecting curative and rehabilitative services to individuals, families, groups and communities comprehensively and integratedly. This study aimed to explore the experiences of community who received nursing care at SeringPuskesmas in Medan Tembung sub-district. This study used phenomenological design. The sampling technique used was purposive sampling. The participant composed of ten people. Data were analyzed using content analysis. The results showed that there were 4 themes related to the experiences of the community who received nursing care at SeringPuskesmas in Medan, i.e.(1) receiving healthcare services from nurses at puskesmas (2) receiving caring and non-caring behavior from each service provided (3) getting explanation and being asked for approval before having an action (4) participating in the main program of the puskesmas. It is recommended that puskesmas evaluate itself to identify strengths and weaknesses in the services provided to community and improve health or nursing care. |
| 17 | Factors Inhibiting the Implementation of Family Planning Programs in the Use of Contraception By Fertile Couples in Sarudik Sub-district, Tapanuli-Tengah District | Family Planning is a program intended to help couples achieve their reproductive goals, prevent unwanted pregnancies, and reduce the incidence of high-risk of pregnancies, morbidity and death. Family planning program is always associated with contraception. Contraception becomes a vehicle for the success of the family planning program. Family Planning Program in Sarudik sub-district was not yet optimal which one of them is marked by 4 birth per woman of childbearing age. The objective of this study was to identify factors inhibiting the implementation of family planning programs in the use of contraception. This study employed quantitative research. The population was 1404 fertile couples who did not use contraception and the sample was composed of 150 respondents. The results showed that the majority of respondents, 89 respondents with moderate knowledge (59.3%) 95 respondents with moderate attitude (63.3%) In regard to husband support factor 112 respondents were not supported (74 , 7%) As for family income factor 97 respondents were not supported (64.7%) and for high side effects factor 116 respondents were not supported (77.3%) It is suggested that relevant institutions should promote family planning programs, improve contraceptive services, and develop an approach to community and religious leaders to facilitate the community promotion of family planning programs. |
| 18 |  Stress, Anxiety and Depression Level of Breast Cancer Patients Who Underwent Chemotherapy in H. Adam Malik Hospital Medan | Incidence of Breast cancer in women is increasing every year. This cancer is very dangerous because it leads to death. However, breast cancer cells can be killed by chemotherapy. chemotherapy is a long term treatment and causes side effects, most patients suffered psychological problems. This sometimes leads to unwillingness of patients to continue their treatment. The objective of this study was to determine the level of stress, anxiety, and depression of breast cancer patients who underwent chemotherapy. This study employed a descriptive study . The population was 41 breast cancer patients who underwent chemotherapy in inpatient wards in H. Adam Malik Hopital Medan, and all of them were used as samples (total sampling). The data were collected from May 20 to June 20, 2016 by using DASS 42. The results showed that 73.2% of the respondents did not have any stress, 58.5% of the respondents did not have any anxiety, and 80.5% of the respondents did not have any depression. It is recommended that the health service team involve patients’ families in providing correct intervention for the breast cancer patients who got stress, anxiety, and depression so that the length of treatment can be reduced, cost can be saved, and productivity can be increased. |
| 19 | Low Grade Papillary Urothelial Carcinoma : A Case Report | Non-invasive tumors represent the majority of primary bladder neoplasms during initial diagnosis. About 70-75% of new urothelial carcinomas are non-invasive and papillary with male to female ratio of 3:1. More than 50% of these tumors are low grade. We reported the case of a 53-year-old woman who complained of low back pain without hematuria. Then, bladder biopsy was done. Macroscopic examination revealed 1 cc of grayish mass with an uneven surface. Microscopic examination revealed fragmented tissue with a papillae and branched structure covered with more than 7 transitional epithelium layers with slightly irregular nuclei, rough chromatin, several clear cytoplasms and low mitotic activity. Stroma consists of fibrous connective tissue, with dilated blood vessels and congestion. Papillary urothelial carcinoma is papillary urothelial neoplasm with cytoarchitectural disorder in various levels. Based on histological features, a diagnosis of low grade papillary urothelial carcinoma was made. It was concluded that this tumor had a high risk of recurrence, and less than 15% of patients develop onto invasive disease. |
| 20 | Relationship between Foot Care Behaviors and the diabetic foot complications in Patients with Type 2 Diabetes Mellitus at Tuntungan Public Health Center in Medan | Diabetes is a chronic disease caused by lack or ineffectiveness of insulin. WHO estimates that the world population with diabetes in 2030 will increase to at least 366 million people. Indonesia is the world’s fourth most populated country and its prevalence of diabetes is 8.6% of the entire population. Diabetes will be a serious problem once complications occurrs. One of the complications is diabetic foot. diabetic foot caused a longer length of hospital stay and more than 90% leads to the amputation of the lower limb . The objective of this study was to analyze the relationship between diabetic foot care behaviors and the diabetic foot complications in patients with type 2 diabetes mellitus at Tuntungan Public Health Center in Medan. This study employed an analytic study with cross sectional approach. The population of this study was all patients with type 2 diabetes mellitus who came to Tuntungan Public Health Center in Medan and 83 patients were recruited as samples (consecutive sampling). The research used a questionnaires with 15 questions to collect data of knowledge and foot care behaviour. Data were analyzed using chi square test. The results showed that 48 diabetic patients (57.8%) demonstrated poor behavior towards foot care, 29 patients (349%) had a history of diabetic foot ulcer complications. The results of the chi square analysis showed that there was a significant relationship between diabetic foot care behavior and diabetic foot complications in patients with type 2 Diabetes Mellitus at Tuntungan Public Health Center in Medan (p <0.05). It was concluded that foot care behavior had a high correlation with the incidence of diabetic foot. It is recommended that doctors and health staffs educate diabetic patients to perform good foot care behaviors. |
| 21 | Anti-Toxoplasma IgG in Cerebrospinal Fluid (CSF) ofHIV/ AIDS infected patients with Meningitis | Toxoplasmosis is estimated to infect a third of the world's population and can be life-threatening to human immunocompromised system . Toxoplasma Encephalitis (TE) is caused by reactivation of latent T. gondii infection that often occurs in AIDS patients especially those with end-stage . To establish a definite diagnosis in AIDS patients with Central Nervous System (CNS)disorders is very difficult. The diagnosis of TE is only based on the assumptions of clinical symptoms, radiological features, and responses to the therapy given. Examination of IgG levels from organ fluids is still rare. CSF samples were taken from 50 HIV/AIDS patients collected from January 2013 to 2014 at the Parasitology Laboratory at FKUI (Medical Departement of University of Indonesia). CD4 levels, clinical symptoms, radiological results, clinical diagnosis, history of co-trimoxazole prophylaxis, and SCF analysis were obtained from medical records. The results showed that IgG-anti Toxoplasma was positive in 24 patients (48%) and negative in 26 patients (52%). From the positive IgG, there were 5 patients(20.83%) with high IgG levels, and 19 patients(79.17%) with low IgG levels. There was no significant difference between the levels of IgG anti-toxoplasma and the results of radiology, clinical diagnosis, and a history of co-trimoxazole prophylactic therapy. There was a weak negative correlation between CD4 + and IgG anti-Toxoplasma levels, The results of radiology showed values of sensitivity 56%, specificity 57%, positive predictive value 41%, and negative predictive value 71%. |
| 22` | Patterns of Degenerative Disease, Levels of Health Satisfaction and Quality of Life among Elderly in Medan | The number of people aged over 60 years is projected to grow and estimated to reach 36 million in 2025. The increase in the elderly population is associated with the increase of risk of suffering from degenerative disease that can affect the health status and quality of life of the elderly. A cross-sectional study of 100 elderly was taken with consecutive sampling technique to assess the patterns of degenerative disease through screening examinations, the level of satisfaction, and quality of life of the elderly based on WHO WHOQoL-BREF quality of life questionnaire. This research was conducted at the Elderly Posyandu (Integrated Health Service Post) in Medan Amplas sub-district. The results showed that 69% of the elderly suffered from hypertension, 55% suffered from hyperlipidemia, 20% suffered from diabetes mellitus, 20% suffered from hyperuricemia, and 13% suffered from proteinuria. In this advanced age various diseases can affect the elderly, 16% of the elderly suffered from at least 3 types of diseases, 31% of the elderly suffered from 2 types of diseases and 33% of the elderly only suffered from one disease. Nevertheless, their levels of satisfaction with their health were quite good. 21% of the elderly were not satisfied with their health. The assessment of quality of life in general showed that 63% of the elderly stated that their quality of life was mediocre, 28% of the elderly felt that their quality of life was good and only 8% stated that their quality of life was poor. Generally, elderly suffered from hyperlipidemia and hypertension, and the elderly suffered from at least 2-3 types of degenerative joint diseases. However, the majority of elderly stated that their quality of life was relatively good. Because elderly has a high risk of degenerative diseases,it is imperative that promotive and preventive programs be established to increase the awareness of disease occurence. |
| 23 | Mucinous Carcinoma, Gastric Type of The Cervix : A Case Report |  Mucinous carcinoma, gastric type is an uncommon variant of cervical adenocarcinoma. This type is different from most of cervical cancers due to gastric differentiation and unrelated with HPV infection. Well differentiated form of mucinous carcinoma, gastric type sometimes is called minimal deviation adenocarcinoma or adenoma malignum. The incidence was found in almost all groups of age (25-72 years old). The average age was around 42 years old. This study objective is to present a new and uncommon variant case in Indonesia primarily in Medan. This study reported a case of 47-year- old woman, Mrs. M, who was clinically diagnosed with suspected carcinoma of cervix. A whitish, poorly demarcated mass in cervix was found in hysterectomy specimens. Microscopic examination revealed that the cervix was lined by atypical and pleomorphic columnar cells, partially forming papillary pattern. The glands were proliferated with variable sized, some of which dilated and covered with mucin, and also the glands formed back to back appearance. Disorganized glands were found in some foci. Glandular epithelium lining consisted of atypical and pleomorphic columnar cells with coarse chromatin and partially prominent nucleoli. Abnormal mitoses were easily found. In some foci, tumor cells also formed solid pattern. According to these histological features, a diagnosis of mucinous carcinoma, gastric type of cervix was made (ICD-0 8482/3). Despite well differentiated form of mucinous carcinoma, gastric type, this variant had aggressive behavior and worse prognosis than other cervical carcinoma variants (usual type endocervical adenocarcinoma). |
| 24 | Validity and Reliability of Measurements of the Horizontal Position of Menton in Mandibulofacial Asymmetry Assessment (A PosteroanteriorCephalometric Study) |  Cephalometric measurements objectively determine anatomical points but it can also involve measuring subjectivity with factors that can influence measurement results. In this case a test is needed to obtain good validity and reliability of measurements so that the analysis of the measurement results is considered accurate and feasible. The development of digital radiography supported by software makes it easier for operators to interpret quantitative and qualitative radiographic imaging results. Menton Point (Me) is an anatomical point that is often used as a reference for horizontal facial symmetry in the posteroanteriorcephalogram. To prove the validity of the measurement, a suitability test was conducted in asymmetry group, symmetry group, and combined group to determine the position of the menton to MSR (Mid Sagital Reference). This study used 8 symmetrical samples and 8 asymmetrical samples measured by the main researchers and compared with the gold standard researchers (inter-observer test). An intra-observer test was also conducted where the main researcher made measurements twice to obtain the reliability of the measurement. The Bland Altman suitability test was used and the measurement results showed both measurements inter-observer and intra-observer demontrated good validity and reliability (p> 0.05) The measurement results could be used as a preliminary study for further research by determining point reliability anatomical points needed in the analysis of mandibulofacial asymmetry. |
| 25 | Parenting Burden of Parents with Autistic Spectrum Disorders children | This study aimed to determine the burdens experienced by parents in caring for children with autistic spectrum disorders. It is expected that the results of this study help professionals provide support for parents who have autistic children. This study employed descriptive research using sequential mixed method. Data were collected by using focus group techniques and questionnaires. In the first stage, this study involved 7 respondents (6 mothers and 1 father) while the second stage involved 31 respondents (18 mothers and 13 fathers). The results showed that parents who had children with autistic disorders experienced parenting burdens that could be classified into three dimensions. First, burdens associated with the personal aspects of parents, i.e. the presence of psychological disorders, such as feeling ashamed of the children condition, feeling guilty, or feeling bored with the life. Second, burdens associated with difficulties experienced by children with autism such as being difficult to control children behaviors and emotions. And third, burdens associated with parenting roles in general, for example quarreling frequently with couple. The results also showed that there were several factors that help strengthen parents in caring for children with autism. First, personal factors such as sincerity in accepting the children's condition, closeness to God, and positive ways of thinking. Second, the presence of social support, especially from the couple. |
| 26 | Changes in Surface Roughness of Heat Cured Acrylic Resin after Immersed in Yogurt | To mantain a digestive health, people usually consume yogurt that has acidity of 4-5. Acidic solutions can cause the surface roughness of heat cured acrylic resin which is used as denture base material. Denture with rough surfaces facilitates the presence of plaque and bacteria that can degrade the cleanliness and health of the patient. The objective of this study was to analyze the surface roughness of heat cured acrylic resin after immersed in yogurt with different immersion time. Thirty heat cured acrylic resin specimens (12 mm in length, 12 mm in wide and 2 mm in height) were prepared and divided into three experimental groups (n=10): I ( specimens were immersed in yogurt for 60 minutes), II (specimens were immersed in yogurt for 120 minutes) and III (specimens were immersed in yogurt for 180 minutes). Surface roughness before and after immersion was measured using Profilometer. Data were analyzed using T test (p<0,05). After immersion, the specimens showed significantly different on surface roughness (p=0,04). Among the experimental groups, immersion for 180 minutes showed the highest surface roughness value than 60 and 120 minutes. It could be concluded that yogurt could make surface roughness of heat cured acrylic resin . Increasing surface roughness depended on exposure time of yogurt on heat cured acrylic resin. |
| 27 | Effectiveness of Cheddar Cheese Chew Against Increasing of Calcium Ion Concentration in Saliva as an Alternative for Dental Caries Prevention | Cheese is a dairy product that is rich in minerals, vitamins, phosphorus, calcium and protein (casein) which plays a role in reducing caries. Cheddar cheese can reduce caries risk because calcium ions in cheese can protect teeth from acid by increasing the pH of saliva (buffer). The objective of this study was to determine the calcium ion concentration in saliva before and after 3 and 5 minutes chewing cheese. This study employed clinical experimental research with a pre and post test control group design. The research subjects were 30 students of Faculty of Dentistry University of North Sumatera who were randomly divided into 2 groups, namely the treatment group chewing cheddar cheese and the control group chewing paraffin wax. The baseline saliva sample was taken and the treatment group was given 5 grams of cheddar cheese and 5 grams of paraffin wax for the control group. The two groups were instructed to chew for 3 minutes then the saliva sample was taken. Subjects were instructed not to consume anything for 5 minutes and saliva sample was taken once again. Calcium ion concentration in saliva was measured by Atomic Absorption Spectofotometry (AAS). Then t-test was conducted to find out the difference in calcium ion concentration in saliva before and after chewing 3 and 5 minutes between groups chewing cheddar cheese with the control group. The results showed that there was a significant increase in the concentration of calcium ion in saliva; before chewing, it was 1.67 ± 0.44 µg/ml, after chewing for 3 minutes it was 4.63 ± 2.21 µg/ml and after chewing for 5 minutes it became 2.34 ± 0.89 µg/ml (p<0.05). However, there was no significant increase in the control group; before chewing it was 1.61 ± 0.54 µg/ml, after chewing 3 minutes it was 2.16 ± 1.22 µg/ml, and after chewing 5 minutes it was 2.15 ± 0.77 µg/ml (p> 0.05). It could be concluded that chewing cheddar cheese was effective in increasing the concentration of calcium ions in saliva so that it could prevent the occurrence of caries. |
| 28 | FusobacteriumNucleatum: Anaerobic Bacteria in Oxygen Rich Environments (Associated with StatherinSaliva) | Fusobacteriumnucleatum on dental plaque plays an important role as a transitional bridge between early bacterial colonization of dental plaques and subsequent bacterial colonization, especially obligate anaerobes. Fusobacteriumnucleatum is an obligate anaerobic bacteria, but the outer nucleatum membrane specifically binds to the 21st and 26th amino acids from the statherin molecule which comes from saliva, allowing this bacteria to grow in saliva and supragingival plaque. The objective of this study was to determine the presence and the number of fusobacteriumnucleatum colonies, statherine concentrations, their correlation to saliva and supragingival plaque. This observational study used a cross-sectional design in 28 unstimulated whole saliva samples using spitting and mature supragingival plaque methods attached to number 60 paper points from patients at Installation Periodonsia RGGMP FKG USU. The concentration of statherin was calculated using ELISA, the number of F. nucleatum colonies by culturing samples on the Violet Erythromicyn Crystal media. Manual calculations were made on petri dishes. This study found small amounts of F. nucleatum colonies from saliva and supragingival plaque samples. The median statherine concentration was found at saliva 1.5 µg / ml (x = 2.35 ± 2.71 µg / ml) and at supragingival plaques 223 µg / ml (x = 332 ± 242 µg / ml). Theoretically, this bacteria is related to statherine, but its growth can not be statistically correlated with statherine in this study. The conclusion of this study proved that F. nucleatumcould be obtained from oxygen rich environment such as saliva and supragingival plaque, but its association with saliva in the temperature required further explanation. |
| 29 | Effects of Complementary Feeding Mixed of Awak Banana, Rice, and Sprouted Soybean Flour on Nutrient Intakes of Infants | The high prevalence of malnutrition in infants under two years of age relating to the provision of inadequate complementary feeding. The low quantity and quality of complementary feeding will trigger insufficient nutrient intakes of infants. This research aimed to determine the effects of complementary feeding mixed of of awak banana, rice, and sprouted soybean flouron nutrient intakes of infants. The study employed quasi experimental non-equivalent control group design. Samples were divided into three groups; the first group was given complementary feeding mixed of awak banana and rice flour. The second group was given complementary feeding mixed of ofawak banana, rice, and sprouted soybean flour. The last group was served as control. Each group consisted of 25 infants aged 6-9 months. The study was conducted for 3 months. Data were measured using a 24-hour food recall and analyzed using Anova test. The results showed that complementary feeding mixed of ofawak banana, rice, and sprouted soybean flour could increase the nutrient intakes of infants during the intervention. The two ways of complementary feeding could increase energy and protein of babies. Complementary feeding mixed of awak banana, rice, and sprouted soybean flour could increase vitamin A intake, while the complementary feeding mixed of awak banana and rice flour can increase iron intake. In conclusion, the mixture of awak banana, rice, and sprouted soybean flour could be as alternative way of complementary feeding to improve the nutritient intakes of infants. |
| 30 | Natal Teeth Treatment for Infants Aged 3 Months under General Anesthesia: A Case Report | Natal and neonatal teeth are teeth that appear since the infant was born or in the first 30 days after birth. This is an abnormal eruption in deciduous teeth, where the teeth erupt before or faster than the time. The incidence of natal teeth ranges from 1:2000 to 1:3000 birth rates. Natal and neonatal teeth usually appear on front lower jaw causing problems in breastfeeding because the teeth cause pain to the gingiva, oral cavity, infant's tongue and mother's nipples. In addition, because the teeth have not been fully formed and only held on to the edge of the gums, it causes the teeth shaky. It is feared that the teeth can be fell out and swallowed which can cause respiratory problems. In this case, the infant was born with erupted teeth in the front jaw. Parents did not take the infant to the dentist immediately and let the condition until the infant aged 3 months. The teeth caused swelling and ulcer in anterior gingiva of the lower and upper jaw, in the maxillary labialfrenum, and on the tip of the tongue. This condition caused the infant did not want to drink milk so that his weight dropped. General anesthesia for extraction was taken to treat the natal teeth because of impossible condition to take the infant to a dental practice unit. In conclusion, natal dental care had to be done immediately before causing further problems for infants. |
| 31 |  Fishermen Occupational Health And Safety at Occupational Health Effort Post(PosUkk) in Belawan Public Health Center | Occupational Safety and Health OSH) for fishermen at work really needs attention. Workplace accidents can occur when they are at sea when weather changes. Fishermen can also get health problems caused by work. Besides that, the condition of the boat must be considered and personal protective equipment must be available because they are important factors in maintaining safety. This study aimed to determine workplace accidents and complaints about health problems at work. This study employed descriptive research. It took place at Occupational Health Effort Post(PosUkk) in Belawan Public Health Center. The results showed that types of workplace accidents were slips, shipwrecks, sinks, being hit by sea animals, snake snake bite, being hit by cranks of engines, and exposed to nets. In addition, fishermen also complained about health problems at work, such as back pain, itching, coughing, dizziness, hearing loss, hand numbness, vomiting, and back pain. Workplace accident that often occured to fishermen was being hit by sea animals, while the most common complaint was back pain. It is recommended that fishermen be more careful to work, improve work attitudes towards more ergonomic, wear protective clothing with long sleeves, and use buoys. |
| 32 | Fissure Sealent Application on Children's Teeth ( A Case Report) | Occlusal surfaces with pits and fissures are claimed to be vulnerable area for caries to develop due to specific anatomy and inability to eliminate plaque adequately. Fissure sealant application is an action to prevent caries in teeth which has deep pits and fissures anatomically and more easily attacked by caries. The main purpose of applying fissure sealant to teeth is to penetrate anatomic surface pits and fissures, to polymerize, and to close the area from bacteria and debris. This case was about fissure sealant application as an effort to prevent caries on children’s teeth. This application had been proven effective in reducing the occurence of caries on the pit and fissure because pit and fissure were vulnerable *f*or caries to develop. Caries frequently occurred on molars. Molars had a very important role in food particles mastication and softening on their wide surfaces that we had cut with our front teeth. It is expected that pit and fissure sealant applied since the tooth erupts prevent the bacteria. |
| 33 |  Seeking Behaviors for Odontogenic Pain Treatment in Communities in Medan Polonia, Medan Petisah, and Medan Barat Sub-Districts | Health service is one of the efforts to achieve the highest level of public health conducted by individuals, groups, communities, government institutions or non-governmental organizations to maintain and improve health, to prevent, to cure diseases, and restore individuals, families, groups or communities health. The aim of the study was to determine the seeking behaviors for odontogenic pain treatment in communities aged 21-50 years in Medan Polonia, Medan Petisah, and Medan Barat sub-districts. The samples were obtained using multistage random sampling. There were 300 people from every sub-district. Data were collected using a questionnaire to determine the seeking behaviors for odontogenic pain treatment in the three sub-districts. The results showed most people chose to go to modern medical facilities 47% in dealing with odontogenic pain, self-healing 42%, applying traditional medicine 2%, and doing nothing 9%. In conclusion, there were still many people who take inappropriate actions in treating odontogenic pain. |
| 34 | In Vitro Antioxidant Activity of Ethanol Extract of Poguntano (PicriaFel-Terrae Lour) | Background: Antioxidants are compounds capable of counteracting or reducing the negative effects of oxidants in the body. Antioxidants work by donating an electron to an oxidant compound so that the activity of the oxidant compound can be inhibited. Poguntano (Picriafel-terrae Lour) is used as an antidiabetic drug and has been reported to contain chemical compounds, , as secondary metabolites that have antioxidant properties. Objective: This study aimed to determine antioxidant activity and total phenolic and flavonoid content of the ethanol extract of poguntano. Research Method: . The dried materials were macerated using 96% ethanol and then it was concentrated using rotary evaporator to obtain crude extract. The extract was tested by DPPH free radical scavenging method (1,1-diphenyl-2-picrylhydrazyl) and the total phenolic and flavonoid content was determinedby measuring absorbance using uv-vis spectrophotometry which was incubated successively for 60, 90 and 40 minutes at wavelength 516, 775 and 432 nm. Results: The evaluationof antioxidant activity using DPPH free radical scavenging method ofethanol extract of poguntano showed the antioxidant activitywas in very strong category with IC50 value of 21.79 ppm and quercetin showed the antioxidant activitywas in very strong category with IC50 value of 4.9 ppm. The result of the measurement of total phenolic content by the Folin-Ciocalteu method was66.29 mg GAE/g extract and the result of measurements of total flavonoid content was19.26 mg QE/g extract. Conclusion: Ethanol extract of poguntanohas antioxidant activity in a very strong category and it has higher total phenolic content compared with total flavonoid content. |
| 35 | Mobile Phase Optimization of High Performance Liquid Chromatography for Simultaneous Determination of Paracetamol, GlycerylGuaiacolate, Chlorpheniramine Maleate, and Phenylephrine HCl in aTablet Dosage Form | There are numerous drug preparations that consist two or more active substances in a fixed combination dosage form . One of them is flu remedies containing paracetamol, chlorpheniramine maleate, glycerylguaiacolate, and phenylephrine hydrochloride. This study aimed to determine the levels of the four mixtures of active substances simultaneously because the analysis of the four mixtures of active substances had not been found either in Indonesian Pharmacopoeia or in the United States Pharmacopoeia. The study was conducted by optimizing various types of mobile phase mixtures, i.e. methanol-phosphate buffer at pH 4.1, methanol- phosphate buffer at pH 4.3, and methanol-phosphate buffer at pH 4.6. Besides that, optimization of various mobilephase ratios were also conducted, i.e. 30:70; 40:60; 50:50; 60:40 and 70:30. The results showed that the mobilephase combination of methanol-phosphate buffer at pH 4.3 with a mobilephase ratio of 60:40; flow rate of 1 ml/minute and detection wavelength at 263 nm could be used to determine the levels of paracetamol, chlorpheniramine maleate, glycerylguaiacolate, and phenylephrine hydrochloride using HPLC. The results of the levels in Supraflu® tablet preparations met the requirements, where levels of phenylephrine HCl, paracetamol, glycerylguaiacolate and chlorpheniraminemaleate were 99.2362% ± 0.4493%; 96,0242% ± 0,2180%; 97.9870% ± 0.7435% and 101.4191% ± 0.7106%, respectively. |
| 36 | The effect of Poguntano (PiciaPicriaFelTerraeLour) Ethanol Extract on Lipid Profile of Dyspilidemic Male Rat | Background: Dysplipidemia is a lipid metabolism dysfunctionsuch as the incline and the decline of blood lipid profile. The main abnormallipid fractionlevel are the increase of total cholesterol level, LDL level, and triglyceride and the decline of HDL level. The high level of blood lipid can cause atherosclerosis with the atheroma in arterial intima that contains cholesterol, lipoid, and lipophage. The advance stage of atherosclerosis can cause complications to target organs such as heart and brain. Objectives: This research aimed to evaluate the effects of herbapurganto (PiciaPicriaFelTerraeLour) ethanol extract on Lipid Profile of Dyspilidemic Male Rat(the decline of total cholesterol level, triglyceride level, LDL level, and the increase of HDL level) and also the atherosclerosis process. Research method: This research was conducted to 30male ratswhich dividedinto 6 groups. Group 1was served as the normal control, Group 2was servedas negative controls which were given 10 ml/kg bb Na-CMC , Group 3 was served as positive controls which were given 2 mg/kg bb of atorvastatin dosage, Group 4, 5, and 6 were served as the treatment group, and administered with EEHP at the dose of 75, 150, and 300 mg/kb bb . The test animals were fedwith high fatdiet using quail yolk, used cooking oil, and cow fat mixture for 14 days consecutively to obtain dyslipidemia subjects and continued with 14 consecutively treatment. The measure of lipid profile was conducted in the 28th day. Finding: The statistical analysis results indicated that EEHP could decrease the total of cholesterol level, triglyceride level, LDL level, and also it could increase the HDL level (p < 0.05). Conclusion: Based on the results, it could be concluded that EEHP haseffect towards dyslipidemia rat(the decline of total cholesterol level, triglyceride level, LDL level, and the increase of HDL level) and it could also prevent atherosclerosis. |
| 37 | Formulation and Formulation and Anti-aging Effect of Red Rice (*Oryza nivara* L.) Extract | Background: Anti-aging is a substance to slow degenerative process in causing the signs of aging to skin. Red rice (*Oryzanivara* L.) contains anthocyanin which is a fenolicthat can be usedas an effective natural anti-oxidant to prevent premature aging. Research objectives: To formulate and evaluatethe anti-aging activity of red rice extract in cream solution with red rice extract concentration variation of 5%, 7%, and 10%. The cream evaluation included homogeneity test, emulsion type, pH measurement, viscosity, irritation test, stability test such as organoleptic and pH observation for 12 weeks in room temperature. The anti-aging activity test was conducted on volunteers by applyingthe cream twice a day to their skin at the back of hands and measuring the parameters, including water level, skin smoothness, pores size, and stains using skin analyzer to the initial state and for every 4 weeks use. Findings: Red rice extract could be formulated into homogenous cream, not irritating, and stable for 12 weeks storage period. The 10% red rice extracted cream had more water content to the skin, smoother skin, smaller pores size, and less stain than the other solutions. Conclusion: Red rice extract could be formulated in cream solution as anti-aging after 4 weeks use. |
| 38 | In Silico Docking of Naringenin Ester as an Anti-Diabetic | Diabetes mellitus is a disease suffered by many around the world. There are many available synthetic medications for diabetes mellitus treatment. However, there are urgent needs to produce a better anti-diabetic especially from natural sources. Previous studiesindicated that flavonoid is asecondary metabolite from plants which has good anti-diabetic function. Naringenin is a flavonoid from orange which has anti-diabetic activity. The lipophilic derivative compound of naringenin flavonoid in ester form can increase the anti-diabetic activity from the parent compound. This research objectives were to determine the anti-diabetic activity of naringenin compounds and its ester compounds. This research was conducted using in silico docking ofcompound molecule of naringenin and also the ester derivation from naringenin with in silico docking to PhosphoenolpyruvateCarboxykinase (PEPCK) downloaded via Protein Data Bank (PDB) using 1 KHB protein code. Furthermore, docking process was conducted using PLANTS program, and also the bond energy value evaluation of the docking process. The ligand molecule docked in bag of bonds molecule (PhosphoenolpyruvateCarboxykinase (PEPCK) and the Root Mean Square Derivation (RMSD) with the value of 0.7670 Å was obtained. The naringenin ester derivation docking test indicated a better activity with a lower bond energy value than the naringenin parent compound. |
| 39 | Red Palm Oil Potential and Carotenoid as Anti-Oxidant Supplements in Glucose Tolerance Test on Rat (Preliminary Study) | Red Palm Oil is one of processed products from palm oil and also a food source rich in carotenoid,around500-800 ppm. Carotenoid concentrate is also a product obtained from the oil removal process and the carotenoid level increases to 6000-7000 ppm. This research aimed to determinethe potential of the red palm oil and the carotenoid concentrate as a preliminary test of anti-oxidant supplement Glucose Tolerance Test on Rat. The anti-oxidant activity of red palm oil and carotenoid concentrate was tested using DPPH method with 60 minutes incubation period. The anti-hyperglycemia activity evaluationwas conducted using animals(n=40) which divided into 8 groups: Negative control group (distilled water), positive control (glibenclamide 10 mg), three groups were given red palm oil with dose of1, 2, and 3 ml , and three groups were given carotenoid concentrate with dose of 1, 2, and 3 ml . The decrease of blood glucose for 180 minutes in anti-hyperglycemia test were in order ofglibenclamide10 mg> MSM 3 ml> MSM 2 ml> MSM 1 ml> KK 3 ml> KK 2 ml> KK 1 ml and distilled water. The red palm oil induction could lower blood glucose level faster than carotenoid concentrate, The anti-oxidative properties of minor componentsin red palm oil prevent the blood glucose oxidation and the pancreas could be actively produce insulin normally. In conclusion, red palm oil could be used synergistically toenhance the effectiveness oforal hyperglycemic agent. |
| 40 | The Study of Purple Passion Fruit Rinds (PassifloraEdulis Sims.) Ethanol Extract Toxicity towards Mice LiversThe toxicity evaluation of Purple Passion Fruit Rinds (*Passifloraedulis* Sims.) Ethanol Extract in Mice Livers | Background: Purple passion fruit (Passiflora*edulis* Sims.) is consumed a lot as fresh drinks. The rinds of purple passion fruit can be used as anti-hypertension, anti-microbes, and anti-inflammatory. Research objectives: To determine the toxic dose (LD50) so it could be safe to use as medicine. Research method: The animals used were 25 mice which were divided into 5 groups, the control group (Na-CMC 0.5%), the treatment group given the purple passion fruit rinds ethanol extract with dose of of 500, 1000, 2000, and 5000 mg/kb bb. the observations of the signs of toxicity, weights, deaths, and macrophatology and histophatologyexaminations of mice liver were conducted. Findings: The purple passion fruit rinds ethanol extract given to all groups didn’t induce mortality. The control group with the dose of 500 mg/kb bb, 1000 mg/kb bb showed no sign of toxicity obeserved. However, at the dose of 2000 mg/kb bb, and 5000 mg/kb bb were found sign of toxicity. The histophatologyexamination of mice livers indicated that the dose of2000 mg/kb bb caused hemorrhagia necrosis to central vena and the dose of5000 mg/kb bb caused expanded necrosis and hemorrhagia. Conclusion: Thepurple passion fruit rinds ethanol extractat the doses of2000 mg/kb bb and 5000 mg/kb bb were very toxic and the LD50 could not be determined. |
| 41 | Saponin Compound From Buni Leaves (AntidesmaBunius (L.) Spreng.) IsolationIsolation of saponin from Buni Leaves (AntidesmaBunius (L.) Spreng.) | Buni (Antidesmabunius (L.) Spreng.) has been traditionally used for the treatment of hypertension, tachycardia, anemia, syphilis, and used asanti-cancer, anti-oxidant, natural dye, and anti-diabetic. Saponin is a phytochemical compound which has capability in forming foam and contains polycyclic aglycone that binds with one or more glucose. This research aimed to conduct the characterization of saponin compound from buni leaves with ultraviolet spectrophotometer and infrared. Buni leaves simplicia was characterizedand extracted using sequential maceration method with n-hexane and 80% ethanol. The ethanol extract was hydrolyzed with HCl 2N and fractionized using chloroform solvent. Isolation of chloroform fraction was done using preparative thin-layer chromatography using silent phase of silica gel GF 254 and suitable mobile phase. Isolates obtained was taken into purity test with two dimensions thin-layer chromatography and characterized using ultraviolet spectrophotometer and infrared. The characterized simplicia resulted with 7.32% of water content, 52.70% of dissolved content in ethanol, 23.25% of dissolvedcontent in water, 6.86% of total ash content, and 0.94% of undissolved ash content in acid. Fractinationof chloroform fraction with thin-layer chromatography using mobile phase ofn-hexane-ethyl acetate with 5:5 ration resulted with 13 spotsand the result of the preparative thin-layer chromatography resulted 2 pure isolates which are isolate 1 (purple-red) with Rf 0.92 and isolate 2 (blue) with Rf 0.78. The characterization of isolate 1 resulted that the maximum wave lengthwas 208 nm with hydroxyl group, –CH aliphatic group, C=C bond, –CH2 group, –CH3 group, and C–O group. The characterization of isolate 2 resulted that the maximum wave lengthwas204 nm with hydroxyl group, –CH aliphatic group, –CH2 group, –CH3 group, and C–O group |
| 42 | Phytochemical Screening and Triterpenoid/Steroid Isolation of Buni Leaves Buni (AntidesmaBunius (L.) Spreng.) | One of plants used for traditional medication is buni (Antidesmabunius (L.) Spreng.) which can be used for treatment of hypertension, rapid heartbeat, anemia, syphilis, and asanti-cancer, anti-radical, and can be used as natural dye. Buni leaves contain triterpenoid/steroid, saponin and flavonoid. Triterpenoid/steroid showpharmacology activities such as anti-bacteria, anti-inflammatory, inhibition to cholesterol synthesis, anti-cancer, anti-tumor, and cytotoxic activity to pancreatic cells. This research objectives were to conduct phyochemical screening and to isolate the triterpenoid/steroid from buni leaves (Antidesmabunius (L.) Spreng.The phytochemical screening of Buni leaves simplicia was conducted and thenextracted using maceration method with n-hexane and evaporated using rotary evaporator. The n-hexane extract was subjected to isolation with thin-layer chromatography and preparative thin-layer chromatography using stationaryphase of silica gel GF 254 and suitable mobile phase. The isolates obtained was taken into purity test using two dimensions thin-layer chromatography and identified with ultraviolet and infrared spectrophotometers. The phytochemical screening test showed the presence ofglycosides, saponins, flavonoids, and triterpenoids/steroids. The thin-layer chromatography of n-hexane extractwith n-hexane-ethyl acetate as mobile phase (70:30)showed 4spotsafter sprayed with Liebermann-Burchard. The n-hexane extract was further fractionated with preparative thin-layer chromatography and 1 pure purple-red isolate (Rf 0.90) was obtained. The characterization of isolate showed that the wave length was203.2 nm with hydroxyl group, –CH aliphatic group, C=C group, –CH2 group, and C–O group. |
| 43 | Flavonoid and Polyphenol Examinations and Anti-Oxidant Activity Evaluationof Sachet Soursop Leaves Tea (AnnonaMuricata Linn.) by DPPH Method | Anti-oxidant is useful for heath to protect and cure the body from every degenerative disease and cancer by neutralized the free radical. One of the plants used as anti-oxidant is soursop leaves (Annonamuricata Linn.). Indonesian people use soursop leaves traditionally as herbal drinks. However, sachet soursop leaves tea has not been consumed often. Due to this fact, a study about the anti-oxidant activity in soursop leaves needs to be conducted to find more about soursop leaves potential that can be functioned as herbal drinks. This research was conducted to examine the flavonoid and polyphenol compoundsthat act as anti-oxidant in three sachets of soursop leaves tea using DPPH method (1,1-diphenyl-2- picrylhydrazil) and measured at 216 nm maximum wave length after 60 minutes in room temperature. The sachet soursop leaves tea examination gave positive result to flavonoid and polyphenol and the anti-oxidant activity in scavenging free radical ofDPPH resulted in Inhibitory Concentrations (IC50) of 1943 ppm, 2287 ppm, and 2383 ppm for K1, K2, and K3, respectively. It could be concluded that each sachet soursop leaves tea indicated weak category of anti-oxidant activities. |
| 44 | Total Phenol ContentDetermination in Tempuyung (*Shoncusarvensis* L.) Ethanol Extract | Tempuyung is one of traditional medical plant in Indonesia and used in kidney stone medication, anti-inflammatory, dysentery, inflammation, and rheumatism. Tempuyung contains substantial flavonoid which considers as the biggest phenol. This research started from the preparation and sample collection, phytochemical screening, ethanol extract preparation, and total phenol test using colorimetry method usingFolin-Ciocalteu reagent byUV-Vis spectrophotometer and gallic acid as the standard compound. The phytochemical screening indicated that tempuyung leaves contained flavonoid compound. The total phenol contentwas determined using colorimetry method of Folin-Ciocalteu reagent and resulted with regression value of y=0.00077 x+0.03667 and the value of r2=0.99757 and the average of total phenolcontent of 45.04 ± 0.46 mg GAE/g. |
| 45 | The Evaluation of Knowledge, Perception, and Belief of Medan People about Antibiotic Use  | Antibiotic is a common medicine used in treating a disease. Antibiotic resistance becomes a big problem around the world. Antibiotic resistance is very related to the misunderstanding of antibiotic use in society. This research aimed to evaluatehow were the knowledge, perception, and belief of Medan people about antibiotic use. This was a cross sectional research and analyzed descriptively to evaluate the knowledge, perception, and belief of the people about antibiotic use. There were 98 respondents in this research, the majority was women (51%), 43-54 years (36.7%), university education level (44.9%) and entrepreneurs (43.9%). This research found 82 (82.7%) people knew that antibiotic is a medicine to kill bacteria, but there were only 16 (16.3%) people knew that antibiotic is not used to kill virus. This research also found that people had low knowledge about the use and the side effects of antibiotic (<60%). 65.4% people knew that the irregular use of antibiotic can cause resistance to antibiotic but only a few knew about the antibiotic use duration. This research also found that people often misunderstood about the perception and belief in using antibiotic. Based on this research result, it could be concluded that the knowledge, perception, and belief of the people about antibiotic were still low and efforts were needed to increase their understanding and knowledge about antibiotic. |
| 46 | Medical Soap Preparation of Red Palm Oil Stearin with Carotenoid and Vitamin E | Red stearin is solid fraction produced through filtering process of red palm oil production. Red stearin can be used as an alternative ingredient of soap production with high vitamin E and pro-vitamin A and can maintain the skin health. Soap is one of pharmacy products produced through chemical reaction of sodium base and vegetable fatty acid called saponification. This research aimed to utilize the stearin waste in red palm oil production process using NaOH concentrate variation to produce soap with Indonesia national standard No. 06-3532-1994. Solid soap production started with the use of 10, 20, 30, 40, 50, 60, 70, and 80% of NaOH concentrate variation in 40°C temperature for 15 minutes. Stearing which was used contained carotenoid of 715-750 ppm and vitamin E of 885-895 ppm. Based on the analysis in accordance of Indonesian national standard No. 06-3532-1994, best soap was produced using 40% of NaOH use with the analysis of 9.53% water content, 72.99% fatty acid amount, 0.051% free alkali, 0.26% free fatty acid, 1.18% true fat, and pH of 9. In every sample was found less than 0.05% of mineral in the solid soap. |
| 47 | Saturated Fat Acid Profile in Palm Oiled Food Products in Indonesia | Saturated fat acid can be related with the increase of blood cholesterol which responsible for coronary heart disease. Vegetable oil such as palm oil contains high saturated fat acid and unsaturated fat acid. The oil commonly used in food production processes such as biscuits, snacks, and chocolate which commonly found in the market. This research aimed to determine the saturated fat acid in some food products which contain palm oil. 56 food products were obtained in Indonesian market such as biscuits, snacks, chocolate products, cooking oil, margarine, and shortening. Fat or oil in the products was extracted with hexane using soxhlet and analyzed using gaschromatography. The result indicated that all samples contained palm oil based on the fatty acid profile composition. All biscuit samples, snacks, instant noodle, and chocolate products contained low saturated fatty acid (0.468-9.715 g/serving size) it might be due to thestearin of palm oil fraction mixture was notused. One of 12 cooking oil contained coconut oil but it indicated low saturated fat acid (2.137-6.488 g/serving size) since it might use the mixture of coconut oil and palm kernel oil. All shortening samples had high fatty acid (13.651-14.963 g/serving size) since it mixed palm oil with palm kernel oil. Generally, all samples contained low saturated fat acid less than 20 g/serving size based on Nutrient Reference Values (NRVs). |
| 48 | The effect of Amoxicillin Combination with Betel Leaves (Piper Betle L) Ethanol Extract against Bacterial GrowthofEscherichia Coli and Staphylococcus Aureus | A new concept to treat resistant bacterial infection is using antibiotic combination with herbal extract. Betel leaves extract has an anti-bacteria activity towards Escherichia coli and Staphylococcus aureus since it contains secondary metabolite. Betel leavesextract combination with amoxicillin is needed to be tested to find evaluatetheiranti-bacteria effects and compare with its combination. By finding the characteristics and phytochemical screening simplicia and the betel leaves extract and also the anti-bacteria activity of amoxicillin combination with betel leaves to Escherichia coli and Staphylococcus aureus. This research covered extraction of simplicia powder using macerationmethod. The simplicia characteristics were conductedto determinethe water content, dissolved extract content in water, dissolved extract content in ethanol, total ash, and the acidic undissolved ash, and also the phytochemical screening of simplicia and the betel leaves extract and also the anti-bacteria activity of amoxicillin combination with betel leaves to Escherichia coli and Staphylococcus aureus using diffusion method using paper disc method. The result indicated that the betel leaves powder simplicia had 3.66% of water content, 22.54% of dissolved content extract in water, 14.65% of dissolved content extract in ethanol, 9.25% of ash content, and 1.03% of acidic undissolved ash content. The chemical components in simpliciaand ethanol extract of betel leaves were flavonoid, tannin, saponin, and steroid. The ethanol extract of betel leaves inhibited the growth of Escherichia coli and Staphylococcus aureus bacteria with MIC of 8 mg/ml and 9 mg/ml. Amoxicillin inhibited the growth of Escherichia coli and Staphylococcus aureus bacteria with MIC of5 g/ml and 10 g/ml with diameter of inhibition zone of 6.83 mm and 7.05 mm, respectively. The diameter of inhibition zone towards Escherichia coli and Staphylococcus aureus increased when the bacteria exposed to the combination of betel leaves ethanol extract and Amoxicillin. The research indicated that Amoxicillin combination with betel leaves ethanol extract showed synergistic effect. |
| 49 | The In Vitroevaluation of Anti-Seizure Activity of Titanus Leaves Ethanol Extract(LeeaAequata L.) on Isolated Ileum of Marmot (CaviaPorcellus) | Titanus (Leeaaequata L.) is a plant from Leeaceae family used in traditional medication in Tanah Karo, North Sumatera as wound and anti-tetanus medicine. One of the main signs of tetanus is muscle spasm or seizure in some or all parts of body. This research aimed to evaluatethe anti-seizure effect of titanus leaves ethanol extractsuch as relaxation isolated ileum of marmot which was contacted with acetylcholine. This research was conducted byin vitro studyusing organ bath instrument. The stages of this research were the material preparation and isolated ileum relaxation effect evaluation. The parameter measured in this research was the isolated ileum smooth muscle relaxation. Before the test, isolated marmot ileum was equilibrated for 45 minutes until the stable condition in tyrode solution was obtained at 37°C temperature which aerated with carbogen gas (O2:CO2) 95%:5%. The relaxation effect test was conducted aftermarmot ileum was contracted with acetylcholine, and then, titanus leaves extract and atropine sulfate were added to each ileumswith cumulative concentration. The result indicated that the titanus leaves ethanol extract had relaxation effect. Titanus Leaves ethanol extract in 2.5 mg/ml concentration (105.4203±2.9151) had the same ability as atropine sulfate 1x10-5 (113.9796±4.5825)in decreasing the ileum smooth muscle contraction induced with acetylcholine 1.889x10-4 M (p>0.005).It could be concluded that titanus leaves ethanol extract hasrelaxation effect to isolated ileum smooth muscle and it was not so different with atropine sulfate. |
| 50 | The Oral Cavity Condition towards Life Quality of Pregnant Women at Community Health Center (Puskesmas) in Medan | Pregnancy is a biological process which causes the changes in a woman’s body physically and psychologically. During pregnancy, oral cavity change due to hormonal change, diet change, behavior change, and other demands such as craving, feeling sick, and vomiting. Pregnant women become more susceptible to gingival and periodontal diseases caused by a habit to ignore dental and oral hygiene. The high probability of oral diseases may happen and affect the life quality related to pregnant women oral cavity. This research aimed to find gingival hemorrhage percentage and the life quality of pregnant women at Community Health Center in Medan. This was a survey descriptive research. The population was 100 pregnant women who came to Community Health Center. The gingival hemorrhage data collection was conducted using Oral Health Impact Profile (OHIP-14) instrument through interviews and questionnaires. The result indicated that 74% of samples experienced gingival hemorrhage. The life quality measurement resulted with 12% had trouble in tasting, 16% felt discomfort due the pain when chewing, 2% experienced anxiety, 16% had sudden stops while eating, 20% felt ashamed, 6% were easily offended, and only 1% experienced the inability to do any activity. |