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## **THE EFFECT OF GIVING HERBS MADE FROM SOYBEANS ON BLOOD INSULIN LEVELS IN TYPE 2 DIABETES MELLITUS**

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### **ABSTRACT**

*Glucose, fatty acids and amino acids physiologically stimulate the release of glucagon like peptide-1 (GLP-1) and stimulate an increase in blood insulin levels. Genetic variation can affect the composition of the GLP-1 receptor amino acid and affect its function. Genetic variation in GLP-1 receptor gene is one of the genetic variations that play a role in the development of diabetes mellitus. Soybeans have protein and flavonoids which can increase GLP-1 levels. This study was conducted to find out how the influence of soybean-based herbs stimulate the increase in blood insulin levels in people with type 2 diabetes mellitus. A pre-experimental study with a randomized, treatment controlled, open clinical trial design was carried out on two groups of people with type 2 diabetes mellitus. Samples were recruited as many as 15 people consisting of 8 men and 7 women. One consists group of 6 people was given herbs made from soybeans and the control group consisted of 9 people given placebo (aqua). The results of the study were obtained: the blood insulin level of the herbal treatment group before treatment averaged  $6.5 \pm 4.6 \mu\text{IU} / \text{ml}$  while the control group  $29.2 \pm 39.4 \mu\text{IU} / \text{ml}$ . Blood insulin levels after herbal group treatment were  $10.6 \pm 4.6 \mu\text{IU} / \text{ml}$  and control group  $27.5 \pm 36.7 \mu\text{IU} / \text{ml}$ . The herbal treatment group insulin level increased  $4.0 \pm 2.2 \mu\text{IU} / \text{ml}$  while the insulin level control group decreased  $1.6 \pm 3.6 \mu\text{IU} / \text{ml}$  ( $p < 0.05$ ). In this study herbal administration made from soybeans significantly increased insulin levels compared to placebo.*

**Keywords:** herbs, soybeans, GLP-1, insulin, type 2 diabetes mellitus

## **EFFECTIVITY OF ANTISEPTIC BEE PROPOLIS GEL EXTRACT AS HAND SANITIZER TO REDUCE BACTERIAL NUMBER**

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### **ABSTRACT**

*Hand sanitizer products on the market have harmful side effects and expensive, so it need to find an active substance which has an antiseptic hand sanitizer potency. Bee propolis is one of alternative active substance that can be used. The aim is to know effectivity Bee Propolis gel as Hand sanitizer to reduce bacterial number. Bee propolis gel hand sanitizer consist of propolis extract, Carbopol-based gel and water were tested to 120 respondents. Hand hygiene was conducted by 6 groups with alcohol, Antis® (positive control), base gel (negative control), 0.3 %, 0.9 % and 15% bee propolis gel extract. Bacterial number were measure before and after hand hygiene. Bacterial number were analyzed using Wilcoxon, Kruskal-Wallis and Mann-Whitney test. The results showed the average of bacterial number before performing hand hygiene with alcohol, Antis, Base-gel, 0.3%, 0.9% and 15% bee propolis gel extract respectively are 40.25 cfu /cm<sup>2</sup>, 30.50 cfu / cm<sup>2</sup> , 23.95 cfu / cm<sup>2</sup> , 16.25 cfu / cm<sup>2</sup>, 41.80 cfu / cm<sup>2</sup>, 23.70 cfu / cm<sup>2</sup>, while after hand hygiene are 6.30 cfu / cm<sup>2</sup>, 8.90 cfu /cm<sup>2</sup>, 18.15 cfu /cm<sup>2</sup>, 9,40 cfu /cm<sup>2</sup>, 11,65 cfu /cm<sup>2</sup>, 4,35 cfu /cm<sup>2</sup>. Bacterial number can be reduced significantly by 0.9% and 15% bee propolis gel extract and has an equal ability with alcohol and Antis® (p <0.05).*

**Keywords:** Bee Propolis, Hand Sanitizer, Hand Hygiene, Bacterial Number

## **UTILIZATION OF MANGIFERIN COMPOUNDS FROM MANGO LEAVES AS ANTIHYPERTENSIVE DRUGS**

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### **ABSTRACT**

*Hypertension is still a major problem in the world. Patients with hypertension nearly one billion in the world with 32% prevalence. Until now, hypertension is still a problem in public health service centers in Indonesia. In West Sumatra, this disease includes five of the most common diseases experienced by the community. Synthetic drugs of hypertension cause side effects for people with hypertension, hopefully there is a new phytopharmacology drug from nature that is easily obtained by society. The study was conducted experimentally, by isolating mangiferin compounds from mango leaves from the extraction stage to purification stage. Pharmacological tests were then performed on hypertensive rats in which healthy rats were induced with prednisone 1.5 mg / kg of body weight and 2.5% NaCl for 14 days to become hypertensive. Rats were divided into 5 groups: negative control group, positive control group, and 3 treatment groups with doses of 20 mg / kg of body weight, 40 mg / kg of body weight, and 80 mg / kg of body weight. This research used indirect blood pressure measurement method, with NIBP tool. One-way ANOVA data analysis was followed by Post-hoc Duncan test to see the difference of therapeutic effect of each group. Result of data analysis from dose variation, giving mangiferin compound 40 mg / kg of body weight and 80 mg / kg of body weight gave decrease of blood pressure effect in hypertensive rat with p value = 0.045 and 0.038, while at dose 20 mg / kg of body weight did not give antihypertensive effect with p value = 0.20.*

**Keywords:** mangiferin compounds, mango leaves, blood pressure, hypertension

## **EFFECTIVENESS OF ANTIINFLAMATION AND ANALGETICS ACTIVITIES OF ETHANOL EXTRACT FROM LEMONGRASS (CYMBOPOGON CITRATUS)**

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### **ABSTRACT**

*Lemongrass (Cymbopogon citratus) is one of the native plants of Indonesia that many people use as a spice food or beverages that believed have health benefits. This study aims to examine the effectiveness of ethanol extract of Cymbopogon citratus as anti-inflammatory and analgesic. Extract of lemon grass with variation dose 5%; 10%; and 20% as the treatment group and ibuprofen as a positive control group in 50 male Wistar rats (Rattus norvegicus). The anti-inflammatory effect was tested by measuring carragenan induced rats paw edema model for acute inflammation and the analgesic effect was tested by measuring the onset of pain after the rat was placed on a hotplate at 55°C. Observations were performed at 15, 30, 60, and 90 minutes after treatment. The results showed that 20% of the ethanol extract of Cymbopogon citratus had the best anti-inflammatory effect compared to other treatment groups and positive control after 90 minutes of treatment. Analgesic effect in this study showed no significant difference between treatment group and positive control group although better than negative control group. The ability of ethanol extract of Cymbopogon citratus as anti-inflammatory is possible because of the active substance of flavonoids and tannins which are known to inhibit the path of cyclooxygenase 2 (COX 2), but not able to inhibit the signal of central nosiseptic pain so as not to show analgesic effect.*

**Keywords:** *Lemongrass (Cymbopogon citratus), anti-inflammatory, analgesic*

## **ANALYSIS OF PROTEIN PROFILES IN MEATBALL FOOD PRODUCTS USING SDS-PAGE METHOD (SODIUM DODECYL SULPHATE POLY ACRYLAMIDE GEL ELECTROPHORESIS)**

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### **ABSTRACT**

*Pork is not halal for Muslims, so that the presence of pork in any food is a crucial issue especially for Muslims. The aim of this study was to determine the differences in protein profiles of bovine, pork and other processed products such as reference meatballs and commercial meatballs. The method used in this study was laboratory experimental using SDS - PAGE (Sodium Dodecyl Sulphate Polyacrylamide Gel Electrophoresis). Identification of protein fragments were carried by molecular weight. The results showed the difference of protein band between the sample of bovine and pork and its processed. Samples of bovine contain 16 bands, pork 12 bands, meatballs reference 2 - 9 bands and commercial meatballs 1 - 2 bands. The results showed there were of specific bands of bovine with a molecular weight of 24.5 KDa (troponin I and LC1) and specific bands of pork with a molecular weight of BM 97.7 KDa (actinin). Desmin protein bands, Eu actinin and actin are detected in all reference meatballs but a actinin is present in only a few samples of pork and bovine meatballs. In commercial meatballs there is only desmin with BM 57.5 KDa, but there is one protein band found only in pork on sample B1 with BM 63 KDa. In bovine there are two specific bands with a molecular weight of 104.4 KDa and 44.5 KDa, whereas in pork there is a specific band with a molecular weight of 64.5 KDa of unknown type of protein. Based on the results, there are differences in protein profile of pork and bovine isolation and its processed based molecular weight using SDS-PAGE method.*

**Keywords:** Meatballs, SDS PAGE



## **KAFFIR LIME EXTRACT (CITRUS HYSTRIX) AS A CANDIDATE FOR ANTISEPTIC IN ALLERGY OF IODINE-BASED MOUTHWASH**

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### **ABSTRACT**

*Allergic causes of iodine antiseptic material were found at several hospitals, one of the case reports from National Taiwan University Hospital shows that 34% patient experienced allergic to iodine used as antiseptic. Staphylococcus aureus is an anaerobic gram-positive bacterium that become one of the causes of infections in the oral cavity. Infections that occur in the oral cavity can be prevented by using a mouthwash. Kaffir lime fruit (Citrus hystrix) contains flavonoid, saponin, tannin and essential oils that have the inhibitory effect to the bacteria by destroying and inhibit the formation of the bacterial cell wall. This research aims to determine the effect of kaffir lime extracts at any concentration in the growth of Staphylococcus aureus. The method of this research is laboratory experimental by in vitro. The result showed that kaffir lime extract at concentration 12,5%; 25%; 50% and 100% can inhibit the growth of Staphylococcus aureus. It was concluded that the kaffir lime extract has a potential to be developed as an alternative to replace iodine as a mouthwash basis material.*

**Keywords:** *Kaffir Lime Fruit, Povidone iodine, Staphylococcus aureus, Inhibition test*

## **THE POTENCY OF CELLULASE TO DEGRADE CYST WALL OF ACANTHAMOEBA SP.**

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### **ABSTRACT**

*The goal of this study is to know the potential of cellulase in degradation of cyst wall Acanthamoeba sp. Methods: Sample of Acanthamoeba sp. obtained from isolate collection of Department of Parasitology FKUI which 2 samples come from patient and 1 sample from environment. All three samples were cultured using non-nutrient agar (NNA) media and identified by PCR and sequencing. The concentration of cellulase concentration used was 50 U, 100 U, 150 U, 200 U, 250 U, and 300 U with the incubation time used was 2 hours, 4 hours, 6 hours, 8 hours, and 24 hours. Furthermore, treatment results with the most optimum concentration and incubation time were observed by using SEM to see changes in the surface of the walls of the cyst. Then performed cysticidal test to determine the effectiveness cysticidal of disinfectant solution, cellulase, and combination of disinfectant solution and cellulase in killing Acanthamoeba sp. cyst assessed by their viability value. Results: The most optimal cellulase concentration in killing Acanthamoeba species cysts. is 300 U with incubation time of 24 hours. Percentage of viability of Acanthamoeba sp. which was exposed to a disinfectant solution for 24 hours was 95%, cellulase alone for 24 hours 75%, and the combination of cellulase and disinfectant solution for 24 hours was 25%. Conclusions: Cellulase are capable of degrading Acanthamoeba sp. cyst wall. Optimal cellulase concentration in degrading Acanthamoeba sp. cyst wall is 300 U with an optimal incubation time is 24 hours. The addition of cellulase to the disinfectant solution has the potential to increase the effectiveness of the disinfectant solution because cellulase can degrade the cyst wall allowing the disinfectant solution to enter and kill Acanthamoeba species cysts.*

**Keywords:** *Acanthamoeba sp., Acanthamoeba keratitis, Cellulase*

## **EFFECT OF ETHANOL EXTRACT OF BLACK CUMIN SEED ON MACROPHAGE PHAGOCYTOSIS ACTIVITY IN SPRAGUE DAWLEY MICE BEFORE AND AFTER INDUCTION OF DIMETHYLBENZANTHRACEN**

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### **ABSTRACT**

*Ethanol extract of black cumin seed (EEBJH) increases phagocytosis activity, ROI and NO secretion by DMBA induced macrophages. Generally, measurements of immune responses are performed at weeks 16 or 21 after complete induction. The objective of the study was to investigate the effect of EEBJH on phagocytic activity of peritoneal mice peritoneal mouse rat (Sprague Dawley) before induced and 5 weeks induction of 7.12 dimethyl Benz (a) anthracene (DMBA). A group of 42 adult female rats of 1-month-old SD strain has been adapted, divided into 7 groups, randomly. Group I or normal control group is fed and fed standard. Group II or negative control group, given DMBA 2x20 mg / kg of body weight / week for 5 weeks. Groups III, IV and V were each given 5, 25 and 125 mg / kg of body weight / day EEBJH as the treatment group. Groups VI and VII were each given Timokuinon and tamoxifen as positive controls. Starting week 3 to week 7 all test animals were induced DMBA 2x / week intra-gastrically with a dose of 10x20mg / kg of body weight, except the normal group (solvent). At week 3, before first induction and week 7 after complete DMBA induction, rats were sacrificed and isolated peritoneal macrophage cells for culture. Macrophage phagocytosis activity was observed by latex method. The mean data of macrophage phagocytosis percentage was tested two ways ANAVA with 95% confidence level. The results showed that administration of EEBJH, Imboost and tamoxifen 2 weeks before induced proved not to affect the hematogram picture but increased macrophage phagocytosis activity. DMBA induction leads to a decrease in macrophage phagocytosis activity in the group receiving EEBJH ( $p < 0.05$ ). Based on the results of the study it can be concluded that EEBJH administration decreases phagocytosis activity by macrophages at week 5 of DMBA induction period.*

**Keywords:** dimethylbenzanthracene, macrophage phagocytosis, EEBCS

## **DECREASED INFLAMMATORY FACTOR TNF IN DIABETIC RATS AFTER CONSUMING CINNAMON INFUSION**

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### **ABSTRACT**

*Diabetic Mellitus is a metabolic disease with high blood glucose level due to disruption of insulin secretion, insulin-act or both. High blood glucose levels induce the reactive oxygen species (ROS) thus enhancing the expression of tumor necrosis factor a (TNF-a) and resulting in insulin resistance. Cinnamon has a proactive component such as polyphenols that have acted like insulin (insulin mimics). This study was experimental research used 25 healthy white male rat strain Sprague Dawley with weight around 150 grams and age 2 months. The Rat divided into 5 groups as Control positive, Control Negative, Dose I, Dose II and Dose III. Serum withdrew on day 0, day 7 and day 14. TNF-a levels were measured using ELISA. The results: There was no significant differences in TNF-a levels before treatment (p value = 0.107) and after day 7 therapies (p value = 0.907) in all groups and there were significant differences in TNF-a levels at the time after day 14 therapies (p value = 0.02). Cinnamon infuse dose 300 mg/ kg of body weight in diabetic rats there was a significant difference to the change of TNF-a level before and after therapy (p value <0,05) whereas at dose 150 mg/ kg of body weight there was no significant difference before and After therapy (p value > 0.05). Cinnamon infusion at doses of 300 mg/ kg of body weight /day reduced TNF-a levels in diabetic rats but not on 150 mg/ kg of body weight /day.*

**Keywords:** *cinnamon infusion, TNF- a, diabetes mellitus*

## **THE EFFECT OF AIR FRESHENER EXPOSURE ON EARLY AGE WHITE RATS (*RATTUS NORVEGICUS*) ON SEMINIFEROUS TUBULAR DIAMETER AND SPERM CONCENTRATION**

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### **ABSTRACT**

*The air freshener is used in various spaces either private or public space. It contains formaldehyde and phthalates that are potentially damaging to the reproductive system. This experimental study aims to reveal the effect of air freshener exposure on early age rats on seminiferous tubular diameter and sperm concentration. Subjects of this study were 30 male rats (*Rattus norvegicus*) 7 days old, divided into 3 groups: group K(Control), group P1(treated with spray air freshener), and group P2(treated with gel air freshener). Groups P1 and P2 were exposed to air freshener since subjects aged 7 days with duration of 15 minutes each morning and afternoon every day. The duration of the treatment is increased 15 minutes every 7 days until 67 days. Statistical test data using Kruskal Wallis test for seminiferous tubular diameter are as follows: group K=205.26 ± 14.2224a, P1=182.34 ± 8.557b and P2=148.94 ± 11.106c micron. While the results of the data using Anova test for sperm per mL are as follows: group K=1583200 ± 418874,895b, P1=735600 ± 121961,014a, and P2=414800 ± 363846,366a. It is evident that the exposure of air freshener since early age rats negatively affects the diameter of seminiferous tubule and sperm concentration.*

**Keywords:** *air freshener, early age, seminiferous tubular, sperm concentration*

## **DIFFERENCES OF HEMOGLOBIN LEVEL, HEMATOCRIT, ERITHROCYTE COUNT AND SERUM IRON LEVEL IN ELEMENTARY SCHOOL STUDENTS BETWEEN THE FULL DAY AND NON-FULL DAY SYSTEM**

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### **ABSTRACT**

Anemia is the most common medical problem encountered worldwide, especially in developing countries. Elementary school children (6-12 years old) are a group that is susceptible to iron-deficiency anemia because it takes the same time as rapid and sophisticated tissue enhancement. In Indonesia there are two educational systems for elementary school, ie full day and non-full day systems. Differences in student activity in both systems can become an anemia risk factor. It is necessary for the study to determine differences in hemoglobin level, hematocrit, erythrocyte count and serum iron levels in elementary students between full day with non-full day system education. This research used analytic observational with cross sectional design. The sampling technique used purposive sampling in elementary school which apply a full day curriculum and elementary school that apply non-full day curriculum. The samples of 60 elementary school students consisted of 30 full day students and 30 non-full day students. Then the whole blood sample is taken in the second group and followed by The Hematology Analyzer laboratory test to determine the level of hemoglobin, hematocrit, erythrocyte count. Measurement of Serum Iron (Serum Iron) used Colorimetric Ferrozine method. The Data is analyzed by independent t-test. The results showed that the prevalence of anemia in elementary school students with full day education about 33.33%, whereas in elementary school students with non-full day about 3.33%. The means of hemoglobin level in full-day was  $12.31 \pm 1.57$  gr / dl, whereas, non -full day was  $14.09 \pm 0.94$  gr / dl, significance value  $p = 0.000$  ( $p < 0.05$ ). The means of hematocrit value in the full day group was  $36.74 \pm 4.28\%$ , while non-full day was  $41.37 \pm 1.96\%$ , with significance value  $p = 0.006$  ( $p < 0.05$ ). The means of erythrocyte count in the full day group was  $4.35 \pm 0.743$  million/mm<sup>3</sup>, whereas no-full day group was  $5.02 \pm 0.433$  million/mm<sup>3</sup> with  $p = 0,000$  ( $p < 0.05$ ). The means of serum iron level in full day group was  $69,72 \pm 20,48$  mg / dl, meanwhile non-full day group was  $87,91 \pm 22,13$  mg / dl, with significance value  $p = 0,02$  ( $p < 0,05$ ). There is an appreciable difference in hemoglobin level, hematocrit, erythrocyte count and serum iron level in elementary school students between full day and non-full day system education.

**Keywords:** Hemoglobin, hematocrit, erythrocyte count, serum iron, full day school, non-full day school

## **REMUNERATION SYSTEM AT FIRDAUS CLINIC: ACTION RESEARCH**

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### **ABSTRACT**

*Background: Since 2014, the health financing system to health service providers in Indonesia has changed to be prospective. In regard to the issue mentioned, it should improve the clinic payment system to the health employees in order not to use the fee-for service. Remuneration system has been proved to be able to encourage the improvement of health workers' performance and cost containment. Objective: This case study seeks to examine the changing nature of health workers' performance in primary health service through performance indicators. Method: This research adopted mixed method with action research approach at Firdaus clinic of Yogyakarta. Focus Group Discussion was also used in this research conducted by involving all employees and managers of Firdaus clinic to set the performance indicators. Then, the achievement of performance targets was associated with the amount of income received. Results: The action conducted in the first cycle was the preparation of performance indicators associated with the duties and functions of each profession and associated with the clinical accreditation standard. Besides, the performance indicators organized were expected to be fair, self-assessed, transparent and encouraging the achievement of clinic accreditation. In the second cycle, it conducted the implementation of five (5) performance indicators which were about discipline, service orientation, communication skills, job neatness, and compliance. During 3 months of research conducted, the results showed the increasing achievement graph of each individual's indicator. Hence, the outcome of clinical accreditation readiness was achieved Conclusion: Remuneration model based on the performance indicators at clinic can be applied by adjusting requirement and able to improve clinical performance in achieving the target.*

**Keywords:** *Primary Health Services; Performance Indicator; Prospective Payment*

## **DIABETES MELLITUS AS PREDICTOR RISK FACTOR FOR CORONARY LESSION IN CORONARY HEART DISEASE PATIENT AT RSUP DR.SARDJITO YOGYAKARTA**

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### **ABSTRACT**

*Cardiovascular disease is leading cause of death in developed countries. In 2020 there were estimated to be 25 million deaths each year most of them are coronary heart disease. Diabetes mellitus both type-1 or type-2, is a strong risk factor for coronary heart disease, peripheral vascular disease and stroke. Eighty percent of death in diabetes patient due to atherosclerosis. Diabetes mellitus is also one of the factors that increase the progression of coronary lesion. The aim of this study was to determine whether diabetes mellitus is a factor predictor of coronary lesion complexity of coronary heart disease. The benefits of this research to develop a program of primary and secondary prevention in diabetics. This study is a cross-sectional study. Subjects are male and female patients aged between 20-60 year who undergo angiography coroner for theirs STEMI, NSTEMI or NSTEMI which include unstable angina pectoris, and stable angina pectoris. Complexity off coronary lesion marked by SYNTAX score. The subject consisted of 49 (76.6%) men and 15 (23.4%) women. Most of them 75.6% were male. With mean age was  $54.48 \pm 7.63$  years. 59.4% of patients underwent coronary angiography on clinical indication APS. Statistical analysis showed no significant difference ( $p 0.158$ ) in both groups of patients (diabetic and non-diabetic) although the average SYNTAX score higher in diabetic patient 21.53 compared with no diabetes is 15.8. Diabetic patient with 3VD are 60% higher than 1VD (13%) and 2 VD (27%), although no statistically significant difference ( $p 0.230$ ). Primary care physician can take part in increasing glycemic control of diabetic patient by frequent medication intensification, intensive lifestyle counseling and collaborate with primary nurse and dieticians. the Conclusion is Diabetes is a predictor factor of coronary lesions in coronary heart disease patients. So that primary prevention programs, especially in primary care centers covering education and achievement of therapeutic target in patient with diabetes is very important.*

**Keywords:** diabetes, predictor factor, coronary lesions, coronary heart disease, primary care



## **HEALTH PROMOTION PROGRAM POLICIES OF DIABETES MELLITUS IN SLEMAN**

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### **ABSTRACT**

*The global prevalence of Diabetes Mellitus (DM) among adults over 18 years of age has risen from 4.7% in 1980 to 8.5% in 2014. World Health Organization (WHO) projects that DM will be the seventh leading cause of death in 2030. Healthy diet, regular physical activity, maintaining a normal body weight and avoiding tobacco use are ways to prevent or delay the onset. This analysis aimed to evaluate the health policy program to DM control in Sleman District. research method is to use qualitative method, with observational approach and in deep interview. Varieties of health policy program has been done by the government to increase people's health, especially in the matter of DM, starting from 2013-2016. Policies on controlling DM in Sleman district have been implemented. Health Officials in Sleman reported that there are some factors causing not maximized DM control program, because of people low knowledge, behavior and habit in controlling DM. People assumed that normal blood glucose level make them safe from DM by not consuming medicines, doing exercise, or controlling their diet. Modernization era is one of the factors that influence people behavior, proved by a lot of Shopping Centers and Fast Food Restaurants. A lot of online-based transportations influenced people to be lazy to do physical activities. The constraints encountered in the field are knowledge and behavior that are less than diabetes mellitus. Generally, there are 2 approaches of intervention model to change people with DM lifestyle, which are community-based intervention and individual-based intervention. Comprehensive approach between health workers and patient to improve the knowledge and behavior about DM.*

**Keywords:** *Policy, Health Promotion Program, Diabetes Mellitus*

## **HEALTH WORKER CONTACT TIME (HCT) AND QUALITY HEALTHCARE IN RURAL COMMUNITY HEALTH CENTER**

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### **ABSTRACT**

*Healthcare facilities of rural and remote area with high burden patient face high risk problem of quality and safety. This study is a pilot research of quality healthcare in primary services that aims to evaluate the influence of HCT on health services delivery in providers perspective. We performed a time motion survey at a community health center in Gunungkidul, Yogyakarta, Indonesia over 1-day period with all patients (n=70 from 109 patients) consecutively. The deep interview was conducted to collect information about the perception of doctors and nurses about quality of care, barriers and enabling factors to gain quality and safe healthcare services. The average of total time spent of each patient with doctors was 304,4 second, and 152,5 by nurses. We got near-miss incidents because incorrect identification and illegible writing during the observation. The health workers had a good perception about the importance of adequate time for quality and safety care delivery. Communication openness and accreditation process were enabling factors, but the burden of patients is the most problem since the lack of doctor quantity. Different perception with patients was a challenge while shorter wait times still considered as higher quality of care delivery. The conclusion is lack of human resources still a major problem to achieve quality health services. Further study is needed to keep the appropriateness healthcare worker workload and service flow re-design in primary care.*

**Keywords:** *Primary Care, Patient Safety*

## **MEDICINAL IRON SUPPLEMENTATION REDUCE RISK OF ANEMIA IN INFANT AND UNDER 2 YEARS OLD - CHILDREN**

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### **ABSTRACT**

*Iron Deficiency Anemia (IDA), an inadequate amount of red blood cells caused by lack of iron an is an important children health problem in Indonesia and wide-world. In Asia the prevalence of IDA ranges between 32-58 % of infant and children under five year aged. In Indonesia according to Survey Kesehatan Rumah Tangga (SKRT) the occurrence of IDA in 2007 was 61.3 % among 0-6 months infants and 64.8 % among infant 6-12 months aged. SKRT shows 40-50 % in under-five years children. IDA in children is associated with neurodevelopmental problem result in impaired of concentration, impaired growth, decrease of physical activity, creativity, and immunity of the children. Iron supplementation is considered as an effective way to control IDA; however, it remains controversy regarding the timing and methods used for supplementation. This supplementation can be provided as medicinal iron or in iron-fortified complementary foods. American Academy of pediatrics (AAP) recommended a dose of 2 mg/ kg of body weight /day iron supplementation for preterm infant starting at 4 weeks age and 1 mg/ kg of body weight /ay for term infant, starting at 4 months age. This research objective is to determine the association between medicinal iron supplementation with the occurrence of iron deficiency anemia in infant and under-2 years-old children. This study is designed as a case control study. The case group is defined as infants 9 months old - 24 months old children with anemia and the control group are infants and children without anemia at same age. The subject of this study consists of 12 children with hemoglobin level less than 11gr/dL as case group and 24 children with hemoglobin level 11gr/dL or more as control group. Data is analyzed with Fisher's- exact test and strength of the association between factor and outcome is determined as an odds ratio (OR). This study result shows that iron supplementation is associated with the occurrence of anemia that is considered as an iron deficiency anemia in infant and children under 2 years old. Non-iron supplemented infant and children have 8,78 times possibility to suffer from iron deficiency anemia (OR= 8,78; CI 95%= 6,15-11,41). Thus, medicinal iron supplementation decreases the risk of iron deficiency anemia in infant and under 2 years old children.*

**Keywords:** medicinal iron supplement, iron deficiency anemia (IDA), case-control.

## **FACTORS INFLUENCING NURSES' MEDICATION ADMINISTRATION PRACTICE: A SURVEY IN FOUR PUBLIC HOSPITALS IN YOGYAKARTA**

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### **ABSTRACT**

*Medication administration is the most common nursing task which required skills, techniques, and good knowledge to perform safely. The aim of this study was (1) to explore nurses' medication administration practice using 6 rights procedure; (2) to determine the factors influenced to nurses' medication administration practice. A descriptive cross-sectional study was used to randomly recruit 123 nurses in four public hospitals in Yogyakarta, Indonesia. Data was collected using questionnaires developed by researcher to gain data related to demography, nurses' knowledge, supportive leadership behavior, and medication administration. Descriptive statistic and multiple linear regressions were used to examine the influence of factors selected. Most participants were female, earned diploma degree, and had working experience more than 6 years. Most of participants (78.1%) were able to always follow the procedure to "check form of medication". Meanwhile, the highest score of violation was related to procedure of "administer the medication if only prepared by self" in which only had 8.9% of participants who always follow to this procedure. The public hospital nurses were mostly (58.5%) had performed a good practice on medication administration. The results of the regression indicated the six predictors explained 39.2% of the variance ( $R^2 = .39$ ,  $F(6,116) = 12.48$ ,  $p < .001$ ). It was found that supportive behavior significantly predicted medication administration practice ( $B = .51$ ,  $p < .001$ ), as did education level ( $B = -.24$ ,  $p < .01$ ).*

## **HOUSEHOLD ENVIRONMENT AND TOBACCO SMOKE EXPOSURE ON THE RISK OF ASTHMA EXACERBATIONS IN CHILDREN**

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### **ABSTRACT**

Household air pollution comes from inhabitants' activities such as fumes for cooking, pets and smoking. The concentration of household air pollution is strongly influenced by physical environmental characteristics of the house and its inhabitants' behavior. Long-term exposure to air pollution influences public health, especially the risk of asthma exacerbations. The purpose of this study was to analyze the effect of household environment and tobacco smoke exposure on the risk of asthma exacerbation in children. This research used the design of observational research with a 12-week cohort study. The sample size consisted of 114 children based on medical record clinical trial with criteria of asthma patients aged 12-18 years and did not smoke. Examination of the household environment of the house covered lighting, temperature, humidity and ventilation. The researchers used self-reported observation with questionnaire to find out the activity or behavior of fuel use for cooking, pets, and smoking behavior. In addition, the researchers used Asthma Control Test (ACT) to assess the risk of asthma attack. Survival analysis was conducted by using Cox Proportional Hazard Model with 95% of confidence interval. Median survival of asthma exacerbation attack in a group of children who had an unhealthy physical house environment occurred at 9 weeks and it increased the risk of asthma exacerbation (HR=2.00, 95% CI= 1.148-3.483),  $p= 0.014$ . Children who lived with smoker at home had asthma exacerbation attack at 8 weeks, while children who did not live with smoker at their home had exacerbation asthma attack more 12 weeks. Therefore, tobacco smoke exposure increased the incidence of asthma exacerbation attack in children (HR= 2.85, 95% CI=1.691-4.809),  $p=0.001$ . Household physical environments and exposure to tobacco smoke increased the risk of asthma exacerbation attacks in children. Therefore, it is necessary to make the house be healthier and stop tobacco smoke exposure in the family.

**Keywords:** Household environment, tobacco smoke, asthma exacerbations

## **DIFFERENCES OF COMMUNITY KNOWLEDGE LEVEL ABOUT DENGUE FEVER BETWEEN HIGH AND LOW ENDEMIC AREAS IN SLEMAN, YOGYAKARTA**

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### **ABSTRACT**

*Public knowledge about dengue and its prevention is an important aspect to reduce dengue cases in the community. High endemic areas are often getting counseling about dengue, whereas low endemic areas do not. This study aims to compare the level of public knowledge between high and low endemic areas since dengue cases are increasingly widespread to previously low-endemic areas by using cross sectional study. There were 696 peoples involved in this study involved, 338 peoples of high endemic and 358 peoples of low endemic areas. The data obtain by using questionnaires. Mann-Whitney Test showed that there is no significant difference of public knowledge between high and low endemic area ( $p=0,274$ ).*

**Keywords:** public knowledge, dengue, high endemic, low endemic

## **THE DIFFERENCES BETWEEN PHYSICAL FITNESS LEVEL AMONG SMOKERS AND NON-SMOKERS STUDENTS IN UNIVERSITAS MUHAMMADIYAH YOGYAKARTA**

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### **ABSTRACT**

*Physical fitness needs for optimum activity daily living. Physical fitness levels must be prepared to do physical activity. It shows the quality of physical performance. Everyone has the differences of physical fitness levels. The factor that can make the differences of physical fitness levels is smoking. Smoking influence the physical fitness levels compare to non-smoking. To know the differences between physical fitness levels between smoker students and non-smoker students in Universitas Muhammadiyah Yogyakarta. This study was quantitative research with observational analytic cross sectional. Statistical analysis using Mann Whitney Test to know the differences between physical fitness levels between smoker students and non-smoker students. Research sample was 65 participants selected by purposive sampling. Harvard Step Test was used to collect the data. Statistical analysis shows that the differences between physical fitness levels between smoker students and non-smoker students in Universitas Muhammadiyah Yogyakarta was significant with  $p < 0.00$  ( $p < 0.05$ ). Non-smoker's physical fitness levels are higher compare with smokers. The Conclusions is there are significant differences between physical fitness levels smoker students and non-smoker students with  $p < 0.00$  ( $p < 0.05$ ). Non-smoker's physical fitness levels are higher compare with smokers.*

**Keywords:** *Physical fitness levels, smoker students, non-smoker students*

## **THE CORRELATION OF ENVIRONMENTAL FACTORS AND PREVALENCE OF ATOPIC DISEASES IN ELEMENTARY SCHOOL CHILDREN**

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### **ABSTRACT**

*Atopic disease is a disorder that emerges when the body is exposed by allergens coming from the environment, that triggers a hypersensitivity reaction to the body, as in rhinitis allergic, dermatitis allergic, and asthma. The factors that affect atopic disease are genetic and environment. The risk of suffering atopic disease is higher on a patient whose has family atopic disorder record. This research is conducted to figure out the correlation of environment condition to the atopic incidents' record on elementary children. The subject's data was obtained through ISAAC questionnaires in the validated Bahasa Indonesia. This research's subjects were categorized according to the atopic disease record, which are atopic symptom (n=75), allergic rhinitis (n=80), asthma (n=23) and allergic dermatitis (n=29). The subjects of the research were categorized based on the environment's conditions, like the smoke-exposure (n=87), food allergen (n=22), the floor's condition of the residence and the location of the residence. The analysis was performed using the chi-square test, or fisher test if the chi-square test's conditions are not met. Result: On the children group which does not have any atopic symptoms, rhinitis allergic and dermatitis allergic didn't have any significant correlations statistically ( $p > 0,05$ ) to the environments, like the smoke-exposure area, food allergen, floor condition, and the residence's location. Meanwhile, there is a significant correlation statistically ( $p > 0,05$ ) between asthma incidence to the floor's condition of a residence ( $p = 0,008$ ). There was no significant correlation between asthma and the smoke-exposure area, food allergen, and the residence's location. Conclusion: The children who have atopic record - like asthma - have a tendency of wheezing and triggered by aeroallergen, such as dust on the residence's floor.*

**Keywords:** Atopic disease, rhinitis allergic, asthma, dermatitis allergic, children, environment



## **A COMPREHENSIVE STRATEGY TO DECREASE MATERNAL MORTALITY: THE IMPLEMENTATION OF MATERNAL SHELTER MODEL AND MID-LEVEL PROVIDERS**

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### **ABSTRACT**

*According to the National Health Survey (2015), maternal mortality rate in Indonesia is 359 maternal death. The Local Government has established 209 maternal shelters under 17 Primary Health Centers (Puskesmas). However, the usage of these facilities was far from what it should be achieved. To respond the problem, it is important to develop a system to improve the management of the shelters by involving Mid-Level Providers (MLP) and setting up a model of the shelters as a community empowerment project. Method: Previous need assessment research was advantaged to develop the model for shelter system and how the MLP could deliver a better health services assistance. The MLP function is designed as a connector among the community at the rural areas with the nearest health facilities, either hospitals, clinics, or Puskesmas. They received serial basic maternal health training to provide support for mothers and their family during the waiting period for labor and after delivery. Shelter will be designed with comprehensive approach; as a place of living and access to obtain health education of pregnancy related issues. Two selected shelters in Bulukumba will be a pilot project to develop this model. As an accommodation, it provides meals for mother which funding supported by Jampersal, a health insurance for mother health. The health education given will cover a list of skills that useful for ante and post-natal care and early detection of maternal health problem. The post-natal care assistance will be designed through a regular post-partum visit. The communication between villagers, MLP's, and health facilities will be connected by mobile connection. All activities in waiting homes is coordinated with village local government and midwives at the nearest health facilities. Result: MLP and maternal shelter as key strategies in overcoming maternal mortality in remote rural areas will be evaluated in the third-year program, after their implementation in the second year. The evaluation of the effectiveness of MLP's and shelters are resources for model development. All stake holders in the village and districts level will be encouraged to deliver their findings during the second-year implementation.*

**Keywords:** Mid-Level providers, Maternal Shelters, rural areas, community empowerment, maternal mortality

## **IMPLEMENTATION OF SHELTER AND MID LEVEL PROVIDER TO DECREASE MOTHER MORTALITY RATE IN INDONESIA**

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### **ABSTRACT**

*One of the objectives in Millennium Development Goals (MDGs) is the decreasing of maternal mortality rate (MMR). Currently, by the end of MDGs in 2015, MMR in Indonesia is recorded at 359, out of the target that should be decreased to 102. To overcome this problem, in South Sulawesi has established maternity waiting home (shelter) but its utilization is not yet optimal. This is a preliminary research to find constraints faced in the utilization of shelter at East Sulawesi. The qualitative study will be designed as a need assessment tool. The methods of data collecting use were FGD and in-depth interview. Research respondents were consisting of provincial policy maker, head of the health department district and midwives from Bulukumba, Bantaeng, and Makasar. The results of the study found that the shelter is a residential house with facilities of beds and household appliances. Rental fees for housing and meals were provided free of charge. All fees are covered by Government insurance for pregnant women using Jampersal scheme. A pregnant woman did not have any activities and without any companion from health personnel when living in a shelter. Besides, pregnant women felt more comfortable living near their family. As a conclusion of the research, there are some limitations in the utilization of shelter such as human resources, cost, the psychological condition, education, and Facilities. Therefore, it is necessary to find the effective solution to optimize the use of the shelter.*

**Keywords:** Maternal Mortality Rate, Decrease, Shelter, Mid-Level Providers

## **RISK FACTORS OF OVARIAN CANCER INCIDENCE IN PKU MUHAMMADIYAH TEACHING HOSPITAL, YOGYAKARTA**

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### **ABSTRACT**

*Ovarian cancer is non-communicable diseases that has a high mortality rate. In 2014-2017 ovarian cancer is 5th out of all types cancers diagnosed in PKU Muhammadiyah Teaching Hospital Yogyakarta. Most of them are asymptomatic in early stage and come to hospital at late stage. Recognize and identify the risk factors of ovarian cancer are very important to prevent the patient from morbidity and mortality. The purpose of this study was to know the relations between low parity, infertility, age, and family history with ovarian cancer in PKU Muhammadiyah Teaching Hospital Yogyakarta. This study was an observational analytical study with cross sectional design. The sample was medical record of women with ovarian cancer and non ovarian cancer in PKU Muhammadiyah Teaching Hospital Yogyakarta, period of April 2014-September 2017 with inclusion and exclusion criteria. Data analysis used chi-square test. The bivariat analysis showed that there is no relation between ovarian cancer incidence with low parity ( $p=0,790$  OR=0,87; 95% CI 0,305-2,466), no relation with infertility ( $p=0,104$  OR=2,48; 95% CI 0,815-7,545), and no relation with family history ( $p=0,01$ ; OR=3,18; 95%: 0,315-32,039). But there is a relation between age with ovarian cancer ( $p=0,01$  OR=0,11; 95% CI 0,022-0,510). There are no relations between low parity, infertility, and family history with ovarian cancer. But there is a relation between age with ovarian cancer.*

**Keywords:** *risk factors, ovarian cancer, non-communicable diseases*

## **EXAGGERATED BLOOD PRESSURE REACTIVITY AND LOW PAIN SENSITIVITY IN NORMOTENSIVE SUBJECTS WITH FAMILY HISTORY OF HYPERTENSION**

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### **ABSTRACT**

*Hypertensive person has been acknowledged for having low sensitivity to pain. However, the mechanism still needs to be elucidated. Normotensives with family history of hypertension is a pre-hypertension model since they show exaggerated cardiovascular response to laboratory stimuli. This study aimed to examine whether exaggerated blood pressure response and low pain sensitivity has occurred in normotensive subjects with family history of hypertension. In this observational study, we collected study subjects who had systolic blood pressure <140 mm Hg and diastolic blood pressure <90 mm Hg, aged under 30 years old, had body mass index <27.8 kg/m<sup>2</sup> for male subjects and <27.2 kg/m<sup>2</sup> for female subjects, had no cardiovascular, renal and endocrine diseases, did not pregnant, did not use hormonal method for family planning. The subjects performed postural changes from supine to standing and cold pressor test. Systolic blood pressure (SBP) and diastolic blood pressure (DBP) were measured two times and averaged during supine and once immediately during standing using oscillatory method. Mean arterial blood pressure (MABP) was calculated using a definite formulae based on SBP and DBP readings. Delta change score were calculated by subtracting standing's measurements from supine's. Subjects's pain tolerance was measured using cold pressor test, which duration of hand immersion in seconds was used as the parameter. Family history of hypertension was defined as either subject's father/mother/both had been diagnosed hypertension based on JNC VII. Data of mean arterial blood pressure was cross tabulated with of pain tolerance using median value of each parameters, and then was analyzed using Fisher test. There were 16 normotensive subjects with parental hypertension and 14 normotensive subjects with parental normotension. The two groups did not differ significantly in terms of age, body mass index and office blood pressure. Median value of delta change score of MABP response to postural change was 3 mm Hg, whereas of pain tolerance to cold pressor test was 60.5 seconds. There was a significantly difference in proportion of subjects who had delta change score of MABP >3 mm Hg in response to postural change and duration of hand immersion >60.5 seconds during cold pressor test in parental hypertension than in parental normotension (p=0.02). In conclusion, normotensive subjects with family history of hypertension, as a pre-hypertension model, is associated with exaggerated blood pressure reactivity and low pain sensitivity.*

**Keywords:** cardiovascular reactivity, pain tolerance, postural change, cold pressor test, family history of hypertension.

## **THE POTENCY OF SOCIAL MEDIA APPLICATION TO INCREASE PATIENT'S KNOWLEDGE ON DIABETES DIET MANAGEMENT**

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### **ABSTRACT**

*Diet is considered as the key component in diabetes management. Patients with diabetes require adequate knowledge to implement recommended diet. The social media application plays major roles in information transfer that may be beneficial to increase patient's knowledge. The objective of this study was to examine the effect of social media-based educational program on patient's knowledge related to diabetes diet management. This was a quasi-experimental study with pre-post-test and control group design. Forty respondents were selected through purposive sampling technique and divided into the intervention group (received standard care and educational program) and the control group (received only standard care), 20 respondents in each group. The data were collected by using the diabetes diet management knowledge questionnaire and analyzed by using inferential statistics. The knowledge score of the intervention group before ( $M=10,70$ ,  $SD=1,49$ ) and after ( $M=11,70$ ,  $SD=1,13$ ) the intervention was statistically significantly different ( $t=-3,249$ ,  $p=0,004$ ). However, the mean difference score between the control group (Mean rank=17,43) and intervention group (Mean rank=23,58) was not statistically different ( $p=0,066$ ). Education program through social media applications potentially improves patients' knowledge especially related to diabetes diet. The nurses may utilize social media to educate their patients. Further research is needed to investigate the effect of the social media-based education program on other key elements of DM.*

**Keywords:** *diabetes mellitus, knowledge, social media, diet management*

## **IMPLEMENTATION OF COMMUNITY-BASED REHABILITATION BY SOCIAL WORKERS IN PERSONS WITH SCHIZOPHRENIA IN YOGYAKARTA SPECIAL PROVINCE**

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### **ABSTRACT**

*Pharmacological therapy in people with schizophrenia using antipsychotic drugs is not the only way to reduce symptoms. The most effective therapy in coping with schizophrenia is a combination of pharmacological therapy and psychosocial intervention / rehabilitation. Psychosocial rehabilitation can result in better outcomes in terms of reducing recurrence and improving social functioning in schizophrenia, strong improvement in cognition, improving medication adherence, and demonstrating social improvement in life. The rehabilitation effort has been carried out only in hospitals and there is no continuity when the person with schizophrenia has returned to the family. While person with schizophrenia is mostly living with his family. Community-based rehabilitation (CBR) has been implemented in February - December 2017. The model developed involves Physician, Public Health Nurses, Community Health Worker, Family and Social Health Workers District. This study aims to evaluate and see the perception of the Social Workers on the implementation of CBR. This research uses descriptive qualitative approach. Participants in this study a total of 7 social workers who involved in the Focus Group Discussion. The results of this study found that the social workers who accompanied the activities felt that CBR is very helpful in their tasks in mentoring people with psychosocial disability, and they become exposed to mental health. The curriculum used is appropriate, but needs to be modified in the method of delivery of materials and skills. Benefits for schizophrenia persons perceived by social workers are patients can socialize with others, monitored taking medication and increasing patient confidence. They make sure that this activity can continue by funding each village to the social service.*

**Keywords:** *community rehabilitation, schizophrenia, social worker, mental health*

## **FACTORS THAT INFLUENCE THE QUALITY OF LIFE PEOPLE WITH SKIZOFRENIA IN THE COMMUNITY**

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### **ABSTRACT**

*Currently, the management of schizophrenia is more focused on improving the quality of life, not just improving symptoms. Many factors influence the quality of life of people with schizophrenia (PwS). The purpose of this study is to analyze the factors that influence the quality of life of people with schizophrenia in the community. The design of this study was cross sectional. Subjects of the study were people with schizophrenia in the community, aged 18-56 years, participants of Community-Based Rehabilitation in Yogyakarta Special Region. Quality of life was assessed using a validated measuring instrument. Hypothesis test using chi square test and anova test. A total of 100 ODS were obtained by purposive sampling technique. Statistical analysis showed that the factors of sex, age, education, duration of illness, age of onset, frequency of hospitalization, family history of disease, antipsychotic type, caregiver, medication adherence did not affect the quality of life of people with schizophrenia ( $p > 0,05$ ). Occupational factors, marital status, clinical symptoms are factors that affect the quality of life of people with schizophrenia ( $p < 0.05$ ). Factors that influence the quality of life of people with schizophrenia are occupation, marital status and clinical symptoms. Sociodemographic factors and other clinical characteristics have no influence.*

**Keywords:** quality of life, schizophrenia, factors that influence

## **ASSOCIATION BETWEEN LEADERSHIP AND EMPLOYEES SATISFACTION IN PRIMARY HEALTH CENTRES DENPASAR**

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### **ABSTRACT**

*Employees satisfaction is very important because it can affect the behavior of employees working in organization. Employees who are satisfied in the work will have positive behavior so they have a better performance compared with employees who are not satisfied. Leader in organization must be apply effective leadership which is encourage employees to achieve organisation goals without ignore employess satisfaction. Preliminary study found that some employees are less satisfied with the supervisory aspects and attention of leader to employees. This study aims to determine the relationship of leadership and employees satisfaction in primary health centres Denpasar. This study is cross-sectional study, which involving 75 samples. Samples were selected using total population sampling. Data was collected by interview with employees using questioner then analyzed using chi-square test. The most of employees perceived a lack in leadership of head the primary health centres (52%) and satisfied with their work (52%). The result of chi-square test shows that leadership with OR = 12,01 (95% CI = 4,02-35,89) is related to employees satisfaction in primary health centres Denpasar. Leadership has a great influence for objective organisation. This because all management activities at primary health centres both planning, implementation and supervision are managed and control by the head of primary helath centres. A leader is expected to apply effective leadership that move employees to achieve goals together without ignore the employess satisfaction. Leader who are able to feel employees need can make employees feel satisfied for they work. Employees who are feel satisfied will give the best for the organisation so can achieve the objectives. Most of the employees of primary health centres Denpasar feel satisfied in work and leadership related to employees satisfaction in primary health centres Denpasar*

**Keywords:** *Leadership, Employees Satisfaction, Primary Health Centres*



## **ANALYSIS ABILITY AND WILLINGNESS TO PAY OF INPATIENTS IN GENERAL HOSPITAL PURI RAHARJA DENPASAR, 2012**

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### **ABSTRACT**

*Ability and willingness to pay is important because consumer responses toward the changes of rates can be influence the utilization of health care services and income received. The decreased of revenues from inpatients general hospital Puri Raharja in 2011 shows a problem affordability of consumer to acces health care services especially ability and willingness to pay. This study aims to know the ability and willingness to pay inpatients at general hospital Puri Raharja in 2012. This study is crossectional design. This study is quantitative with descriptive approach. Samples were selected using purposive sampling. Data was collected by interview with patient using questioner then analyzed descriptively. The results of this study shows that the ability to pay patients are VVIP is Rp 3,202,500, VIP A Rp 3,089,898, VIP B Rp 3,471,454, VIP C for Rp 2,963,912, first classroom Rp 2,221,508, second classroom Rp 2,124,764 and third classroom Rp 1,389,435 while the willingness to pay patients are VVIP Rp 745.000, VIP A Rp 600,000, VIP B Rp 575,000, VIP C Rp 530,000, first classroom Rp 457.000, second classroom Rp 320.000 and third classroom Rp 240,000. Revenue may influence the determination of the patient to choose a health care services. The lower income makes the ability to pay become low so that it tends to choose an affordable health care services while the greater income makes the ability to pay become high then they will choose a better health care services. General Hospital Puri Raharja need to consider the ability and willingness to pay patients besides unit cost for preparation of hospital rates so that the public can acces health care services.*

**Keywords:** *Ability And Willingness To Pay, Inpatients, Hospital*

## **FACTORS AFFECTING INCOMPLETE INPATIENTS MEDICAL RECORDS AT HOSPITAL IN INDONESIA**

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### **ABSTRACT**

*The hospital is one health service facility that has important role to improve the health status of community and expected to provide quality health services. One indicator of quality service is complete medical records data and information. The complete of medical record is very important because it can affect the patient's treatment process and insurance claims. In fact, there are still many medical records that have not been filled completely. This study aims to determine the factors affecting incomplete inpatients medical records at the hospital in Indonesia This study use descriptive approach. This study uses a systematic review through: 1) search using an indexing site (google scholar) with the specified keyword, 2) the literature obtained through indexing site then limited with certain categories, 3) the literature then selected with certain inclusion and exclusion criteria. Based on the literature study, there are several factors affecting incomplete inpatients medical records at hospital in Indonesia that is human, tools, methods, materials and finance factor. Human factors are lack of communication between health worker, busy doctors and a lot of work of medical record officer. Tools factors are the absence of tools to print medical records form, there is no assembling room and there is no checklist of medical record completeness assessment. Methods factor are the lack of information about standard operational procedure medical records and the absence of a reward and punishment system. Material factors are the unstructured form of medical records and the kind of medical records form. Financial factors are the lack of funds to provide medical records form. There are several factors cause incomplete medical records in hospital that is human, tools, methods, materials and finance factor. Hospitals need attention these factors to maintain quality of services especially quality of patient medical records.*

**Keywords:** *Incomplete, Medical Records, Inpatients, Hospital*

## **EVALUATION OF TRADITIONAL TREATMENT PROGRAMS IN MENGWI COMMUNITY HEALTH CENTRE**

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### **ABSTRACT**

*Community Health Center (Puskesmas) at Mengwi is one of the Puskesmas that apply for traditional treatment program since 2012. However, the result of the program is still under the expected target. Most of traditional medical do not have a registered permit and registered letters of the traditional healer. Evaluate the traditional treatment program at Puskesmas Mengwi. This research was a descriptive evaluation research with a qualitative approach. The data collection used in-depth interviews with 11 informants. Data analysis was done by thematic analysis while data validation was done by a triangulation method. The availability of an input program in terms of human resources was found in the lack of staffs' knowledge. The availability in terms of operational costs, this program had not been supported by special funding, facilities, and infrastructure. In the process of implementing the program from manager's perspective, the program had been made in accordance with the guidance of the Puskesmas level planning and the implementation had been done regularly in accordance with the action plan. From the perspective of the traditional healer, the guidance and visits from Puskesmas had not been done routinely. They have a low level of information about the requirements of making registered permit and registered letters of the traditional healer. From the community perspective, the supervision by Puskesmas was important in order to keep the traditional healer from the criminal. The availability of inputs on the traditional treatment program at Puskesmas Mengwi is not optimal yet and the implementation process has not been run maximally. So, it is recommended for Badung Regency Health Service to use the result of program evaluation as the basis to provide further guidance for health workers and traditional healers.*

**Keywords:** *Program Evaluation, Traditional treatment, Puskesmas*

## **ASSESSMENT OF TRANSMISSION POTENTIAL OF CRYPTOSPORIDIUM SP. IN CILIWUNG RIVER WATER BASED ON OOCYST ENUMERATION**

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### **ABSTRACT**

*Cryptosporidium sp. is an intracellular protozoa parasite that causes diarrhea. Infection may occur due to swollen Cryptosporidium oocyst through direct contact with infected human/animal or eating and drinking contaminated food or water. Contaminated water supply with Cryptosporidium oocyst may cause diarrhea outbreak. Poor wastewater treatment facilities in Jakarta become the main cause of water contamination, even in the river that was designated for the clean water reservoir. The aim of this study is to evaluate the Cryptosporidium sp. existence in Ciliwung river water. This study used 7 samples of Ciliwung river water. Microscopic examination using modified Ziehl-Neelsen (MZN), Auramine Phenol staining (AF), Immunofluorescent Assay (IFA) and Polymerase Chain Reaction (PCR) was performed to detect Cryptosporidium oocyst. Oocyst enumeration was done by the IFA method. Assessment of oocyst viability was performed by addition of 4'-6-diamidino-2-phenylindole (DAPI) solution to the IFA method. The results showed that Cryptosporidium oocyst found in upstream and downstream of Ciliwung river water. Contamination of Cryptosporidium oocysts shows higher contamination in the downstream river. Assessment of the viability of Cryptosporidium sp. oocyst showed that Cryptosporidium oocysts in the downstream Ciliwung river water are viable, suggesting that oocysts are infectious. It can be concluded that upstream and downstream of Ciliwung river water are contaminated with Cryptosporidium sp. and potential as a source of cryptosporidiosis infection.*

**Keywords:** *Cryptosporidium, river water, Immunofluorescent assay*

## **EXPLORING DEVELOPMENT OF PRE-SCHOOL CHILDREN IN YOGYAKARTA, INDONESIA**

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### **ABSTRACT**

*According to child growth and development theories, children development in their early lives has long term consequences through adulthood. However, many children in developing countries cannot achieve their optimum growth and development. Children experiencing developmental delay at this period may have poor outcomes in adulthood. Early screening on child development may help to build strategies to prevent the developmental delays. Therefore, this study aims to explore the growth and development of pre-school children in Kasihan district, Bantul, Yogyakarta, Indonesia. Method: Quantitative study with survey approach was used in this study. Purposive sampling technique with inclusion and exclusion criteria was used to obtain the sample. A questionnaire and a developmental screening tool based on Indonesian Developmental Screening Tool (KPSP) were used to measure child's development. Results: The average number of cognitive development of preschool children in Kasihan Yogyakarta is included in good category with 69.7% children aged 48 months, 67% of children aged 54 months, 72.3% of children aged 60 months, 83.4% children aged 66 months and 89.7% children aged 72 months. Only 10% of preschool did not achieve the cognitive developmental tasks assigned to them. More than 85% of preschool children in Kasihan aged 40 to 72 months are able to do all the tasks assigned in KPSP. Children aged 54 months have the biggest percentage (10.8%) of children who have not able to do the language developmental tasks. Children aged 60 months has the biggest percentage of success in finishing motoric development tasks in KPSP. The lowest percentage of motoric development achievement belongs to children aged 54 months with 91.9%. Around 93% of preschool children in Kasihan Yogyakarta achieve their developmental tasks. Conclusion: The results indicate that the development of children in Kasihan Yogyakarta needs to be improved. Collaboration between parents, teacher, and preschool education providers are needed to ensure that pre-school children get sufficient stimulation and living in nurturing environment in order to achieve their optimum developmental milestones.*

## **THE CORRELATION BETWEEN BRUSHING PARENTAL EFFICACY (BPE) AND THE SEVERITY OF EARLY CHILDHOOD CARIES (ECC) AMONG PRESCHOOL CHILDREN SLEMAN DISTRICT 2015**

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### **ABSTRACT**

*Dental caries in preschool children which is called Early Childhood Caries (ECC), is a disease which is extremely destructive; thus, this impacts on the growth and development of the permanent teeth. The prevalence of ECC in children aged 2-4 years in countries has reached 18%, while the prevalence of ECC in children aged 3-6 years in the city of Yogyakarta has reached 84.1%. ECC is a multifactorial disease, among others, influenced by host factors, agent, oral environment, and other factors from family level such as parent's socioeconomical status, maternal education and Brushing Parental Efficacy (BPE). The objective of this study was to determine the correlation of BPE with the severity of ECC in preschool children in Sleman District. This was an observational using a cross-sectional design. Subjects were 618 children aged 4-6 years who attended kindergarten in Sleman, and selected using simple random sampling. The variable studied was Brushing Parental Efficacy (BPE), measured using BPE's questionnaire. The severity of ECC was measured using the dmf-s index, interrater reliability test showed Kappa coefficient (100%, p value 0,000). Data analysis used logistic regression. The ECC prevalence of preschool children in Sleman District is 94,3%. Bivariate analysis showed that there is a correlation between BPE and the severity of ECC ( $p=0,04$ ,  $OR=2,0$ ,  $95\% CI=0,697-1,626$ ). There is a significant correlation between BPE and the severity of ECC, children with bad BPE have 2 times greater risk of suffering severe ECC than children with good BPE. The ECC prevalence in Sleman District is 94,3%.*

**Keywords:** *Early childhood caries, preschool children, BPE*

## **RELATIONSHIP BETWEEN FAMILY SUPPORT WITH IMPLEMENTATION OF HYPERTENSION DIET ON HYPERTENSION PATIENT IN PUSKESMAS BANTUL I YOGYAKARTA AREA**

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### **ABSTRACT**

*Hypertension is one of cardiovascular disease that needs right and continuing treatments. One of it, is implementation of hypertension diet that can control blood pressure and prevent the complications. Family support can influence the implementation of hypertension diet on hypertension patients. Aim of research is to know the relationship between family support with implementation of hypertension diet on hypertension patient in Puskesmas Bantul I Yogyakarta area. This research used correlation research. Sampel was 60 hypertension patients with purposive sampling. Data analysis used Somers'd test. The result showed that there is relationship between family support with implementation of hypertension diet that is showed p value 0.01 ( $< 0.05$ ). Family support has relationship with implementation of hypertension diet in Puskesmas Bantul I Yogyakarta area.*

**Keywords:** Implementation of hypertension diet, family support

## **THE EFFECT OF SPORT GAME ON ERYTHROCYTE COUNTS AND HEMOGLOBIN LEVELS IN PRIMARY SCHOOL STUDENTS IN IODIUM DEFICIENCY DISORDER ENDEMIC AREAS**

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### **ABSTRACT**

*Iodine Deficiency Disorder (IDD) is still one of the problems in Indonesia. This disorder is often associated with anemia, which is marked by a decrease in erythrocyte counts (AE) and hemoglobin (Hb). One way to increase AE and Hb is by exercising. This study was conducted to see the effect of sports games on the AE and Hb levels in primary school students in IDD endemic areas. The quasi experimental study with pretest posttest group design uses 32 intervention group samples and 17 control group samples. The intervention group exercised 5x/week for 6 weeks. Subjects are children born and living in IDD endemic areas from birth, aged 6-12 years, and willing to be a research respondent. Blood samples from both groups were assessed for AE and Hb before and after exercise at Laboratory of PKU Muhammadiyah Gamping. AE and Hb was analyzed using Paired Samples T-Test for normal distributed data and Wilcoxon for abnormally distributed data. The relationship between AE and Hb was analyzed using Pearson product moment. There was an increase in AE after treatment which was not significant in the intervention group ( $p=0.601$ ) and control group ( $p=0.587$ ). Hb were significantly increased in the intervention group ( $p=0.001$ ) and not significant in the control group ( $p=0.071$ ). There is a very strong relationship between the increase of AE and Hb ( $r = 0.798$ ;  $p = 0,000$ ). Sport game may increase erythrocytes counts and hemoglobin levels in primary school students in IDD endemic areas.*

**Keywords:** *Sport game, erythrocyte counts, hemoglobin levels, IDD endemic*



## **OVERVIEW OF THERAPEUTIC COMMUNICATION SKILLS AMONG THE DENTAL CLINICAL STUDENTS IN THE ACADEMIC DENTAL HOSPITAL UNIVERSITAS MUHAMMADIYAH YOGYAKARTA (UMY)**

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### **ABSTRACT**

*Communication skills must be mastered to determine success in dental treatment by dental profession. Good therapeutic communication skills will make doctor able to build trust relationship with patients and improving the effectiveness and optimal dental health services. Therapeutic communication skills are needed by the dental clinical students in the academic dental hospital UMY. Dental students received theory of communication therapeutic skills since preclinical and they are expected to apply it to patients in the academic dental hospital UMY. The objective of this study is to gain the overview of therapeutic communication skills among the dental clinical students in the academic dental hospital UMY. This research is a non-experimental study with descriptive design and conducted at the academic dental hospital UMY, involving 105 patients and 105 dental clinical students as samples selected by simple random sampling method. Data were obtained from the checklist of therapeutic communication skills. The result showed 75% dental clinical students in the academic dental hospital UMY have good therapeutic communication skills. Dental clinical students in the academic dental hospital UMY have good therapeutic communication skills.*

**Keywords:** *therapeutic communication skills, dental clinical student, academic dental hospital*

## **ORTHODONTIC TREATMENT NEEDS IN ADOLESCENTS AGE 13-15 YEARS USING INDIKATOR KEBUTUHAN PERAWATAN ORTODONTIK (IKPO)**

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### **ABSTRACT**

*The prevalence of malocclusion in Indonesia is still very high, which is about 80% of the population and is one of the major dental and oral health problems. The mixed dentition period ends at the age of 13 years which is a critical period where there is a high probability of malocclusion caused by growth factors, development of the jawbone, teeth and from external factors. At ages 13-15 years there are many abnormalities in the oral cavity such as dental growth disorder that can cause malocclusion which affects the function, health, and quality of life so that it requires orthodontic treatment as early as possible. Objective: To assess the need for orthodontic treatment and malocclusion classification in adolescents aged 13-15 years using Indikator Kebutuhan Perawatan Ortodontik (IKPO). Methods: This research is an analytical observational study with approach cross-sectional. Samples are 100 students aged 13-15 years in SMP Muhammadiyah 3 Yogyakarta. Each sample will fill out an IKPO questionnaire and an intraoral photo is taken to see the orthodontic treatment needs relationship and determine the classification of malocclusions. Results: The results showed 61% of subjects required orthodontic treatment and 63% had Class I malocclusion, 28% had Class II malocclusion and 9% had Class III malocclusions. The analytic result stated that there was a correlation between the questionnaire of orthodontic treatment needs on age with Chi-Square test obtained a significant value of 0.037 (p-value <0.05). Conclusion: Orthodontic treatment needs in students of SMP Muhammadiyah 3 Yogyakarta aged 13-15 years are still high where the biggest malocclusion is Angle Class I malocclusion so is needed to be done orthodontic treatment.*

**Keywords:** Malocclusion, Indikator Kebutuhan Perawatan Ortodontik (IKPO), Adolescents.

## **EFFECT OF SPIRITUAL EMOTIONAL FREEDOM TECHNIQUE (SEFT) THERAPY ON SPECIFIC PHOBIAS: A PILOT STUDY**

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### **ABSTRACT**

*Specific phobia, a type of anxiety disorder, is an extreme or irrational fear of or aversion to an object or a specific situation. These irrational fears can cause debilitating anxiety, and prevent the sufferers from enjoying life. Common therapy for specific phobia is systematic desensitization, which requires significant amount of time. Emotional Freedom Technique (EFT), a meridian-based tapping technique has been shown to reduce anxiety and behavior associated with specific phobias. Spiritual EFT (SEFT), a brief exposure therapy that combines cognitive and somatic elements with a spiritual approach, has been introduced for managing specific phobias. This study examined whether SEFT therapy had an immediate effect on reduction of specific phobia related anxiety. Twenty medical students with specific phobias participated in a quasi experimental two-group pretest-posttest design study, and were allocated into control and intervention groups, each consisting of 10 students. Specific phobia related anxiety levels of participants were measured using Subjective Units of Distress Scale (SUDS). The intervention group received one session of 15-45 minute SEFT therapy, while the control group did not receive any treatment. Mean pretest SUDS scores of the control and intervention groups were 78 (SD=3.9) and 76.5 (SD=5.42) respectively (P-value= 0.059). Mean posttest SUDS scores of the control and intervention groups were 83 (SD=3.7) and 27 (SD=7.1) respectively (P-value= 0.007). The difference of SUDS scores between the control and intervention groups at pretest and posttest showed P-value= 0.001. There was a statistically significant difference of specific phobia related anxiety levels before and after SEFT therapy. The study showed the potential of SEFT method as an alternative therapy for specific phobias.*

**Keywords:** *Specific phobia, anxiety, Spiritual Emotional Freedom Technique (SEFT), Subjective Units of Distress Scale (SUDS)*

## **HOSPITAL INTANGIBLE ASSETS AS SOURCE OF COMPETITIVE ADVANTAGE**

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### **ABSTRACT**

*According to previous research, intangible assets are the source of competitive advantage. There are three components of intangible assets, namely Human resources, information technology, and organization assets. The purpose of this study is to analyze how the hospital intangible assets can improve the competitive advantages? Questioners were shared and interviews were conducted in X Hospital to collect the data. The respondents were 28 persons that hold structural job. Descriptive quantitative and qualitative approach were chosen as the methods. The result as follows: the human resource assets that comprise of knowledge, skills, character are most importance thing compare to Information technology and organization assets. The component of human resource intangible assets insert in information technology and organizational assets as experts. There for, to improve the information technology and organization assets, the hospital management should increase the knowledge, skill, and character by giving them more training and education, formally or informally.*

**Keywords:** *Intangible Assets, Human Resources, Information Technology, Organization, Competitive Advantages*

## **INTERRATER RELIABILITY OF OSCE CHECKLIST OF INTRAVENOUS THERAPY SKILLS IN SCHOOL OF NURSING UGM**

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### **ABSTRACT**

OSCE becomes one method used to evaluate nursing student's competence in the skills lab. The reliability of the checklist becomes a concern as evaluation instrument in the OSCE. Therefore, research on reliability checklist is very useful to assess the instrument. Objective: This Study purpose to assess the reliability of the OSCE checklist of intravenous therapy skills. This study was a non-experimental quantitative descriptive study with a cross-sectional study design. This study involved 105 respondents, all of them are second-year students in the school of nursing FKMK UGM. To determine the reliability of this checklist, this study uses interrater reliability by involving 2 raters to perform assessment during the OSCE. Kappa and Percent of Agreement (PA) are used to analyze the results. Interrater reliability of OSCE checklist of intravenous therapy was fair with kappa value 0,3164 and PA 72,38%. 26 items from this checklist are grouped into 4 categories. 6 items included in the first category of kappa and PA received (Kappa =  $\geq 0.41$ , PA  $\Rightarrow 80\%$ ), 2 items entered in the second category of kappa accepted and not accepted, 10 items included in the third category ie kappa not accepted while PA is accepted called kappa paradox, and 6 items fall into the fourth category having unacceptable kappa and PA values (Kappa  $= < 0.41$ , PA  $= < 80\%$ ). The interrater reliability of the OSCE checklist for intravenous therapy skill was fair, so it is necessary to evaluate and improve the checklist for later research.

**Keywords:** Checklist, Interrater reliability, OSCE, Intravenous Therapy

## **A QUALITATIVE STUDY ON BULLYING PREVENTION RELATED SELF REFLECTION STRATEGY TO HEALTHY RELATIONSHIP AMONG ADOLESCENTS**

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### **ABSTRACT**

*The increasing awareness of bullying prevention among adolescence was needed to promote mental health. Self-reflection could help adolescence clarifies meaning in their perspective in a healthy relationship. Adolescents should be aware how to make a healthy relationship with their peers and family. However little is known about how bullying prevention through self-reflection strategies could promote healthy relationship among adolescents. This study aimed to explore self-reflection strategies on bullying prevention among adolescents in building a healthy relationship. Participatory research involves members of the research group in meaningful participation in all stages of the research process. In this study, group members choose the topic, share their experiences with bullying prevention—and method of data collection—A structured self-reflection provided insight into adolescent perception of healthy relationship experience. Twenty-two adolescents participated in this study. The findings show that adolescents emphasizing the three main interrelated themes of respect, positive perception, and parental support. Overall, adolescents that participating in the self-reflection helped them to get a healthy relationship so that could prevent bullying. Self-reflection is a useful tool for adolescents to promote bullying prevention through healthy relationship.*

**Keywords:** *Bullying prevention, Self-reflection, Adolescents.*

## **THE EFFECTIVENESS OF EDUCATION ABOUT COUGHT ETIQUETTE TO INCREASE SITUATION AWARENESS OF THE PARAMEDICS**

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### **ABSTRACT**

*Nosocomial infection is a problem that will always increase significantly worldwide. To minimize the risk of infection in hospitals, it is necessary to apply standard precautions. One of which is to follow conduct of caught etiquette. Objective: This research aimed to analyze the effectiveness of education about caught etiquette to increase the situation awareness of caught etiquette on paramedics in hospital. Method: This study was a Quay experiments with pretest and posttest control group design. The sample of this study uses purposive sampling with 57 respondents in experiment group and 47 respondents in control group. The data was analyzed by Wilcoxon and Independent Sample T test. Collecting data through a questionnaire. The result in this study showed that in control group, the value of situation awareness pretest and posttest was  $p = 0.571$  ( $p > 0,05$ ). In experiment group the value of situation awareness pretest and posttest was  $p = 0,001$  ( $p < 0,05$ ). The result of control group and experiment group was  $p = 0,001$  ( $p < 0,05$ ). The result of control and experiment group was significant difference. The conclusion of this study that education about caught etiquette was effective to increase situation awareness of caught etiquette on paramedics*

**Keywords:** Education, caught etiquette, situation awareness, paramedics

## **EFFECTIVE ISLAMIC PARENTING SHAPING POSITIVE SEXUAL ATTITUDE AMONG ADOLESCENCE IN YOGYAKARTA**

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### **ABSTRACT**

*Pregnancy and sexually transmitted diseases are increasing among adolescents in Yogyakarta. It is related to risky sexual attitudes and behaviors among adolescents. Parents have a great role in shaping sexual attitudes in adolescents. Islam provides guidance for parents about how to educate children known as Islamic parenting. Islamic parenting is a way of educating children in accordance with Islamic principles applied in all aspects of the child's life, including in shaping sexual attitudes in adolescents. This study aims to determine the relationship between Islamic Parenting with adolescent sexual attitude in Yogyakarta. This study was an analytic survey who use to 214 student of Madrasah Tsanawiyah Yogyakarta who selected used random sampling method as sample. Score of sexual attitude and Islamic parenting obtained from questionnaire. Correlation between Islamic parenting and Sexual attitude categorize analyzed using Spearman test. The result of this study shown Islamic parenting categorize is moderate (56.1%) and sexual attitude categorize is negative (22.9%). There was any relationship between Islamic parenting with sexual attitude among student of Madrasah Tsanawiyah Yogyakarta ( $p = 0.000$ ,  $r = 0.252$ ).*

**Keywords:** Adolescence, Islamic parenting, Sexual Attitude



## **TEACHERS' PERCEPTIONS OF BULLYING AMONG SCHOOL AGE CHILDREN**

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### **ABSTRACT**

*Bullying is a very common, complex and potentially damaging among school age children. Teachers' perception about bullying have an important role in this incidents. Teacher who has positive perceptions about this was tend to be able to minimize bullying that occurs. The purpose of this study is to investigate the teachers' perceptions concerning school age bullying. This research used descriptive quantitative design included 100 teachers from public elementary schools taken through by total sampling technique. Teachers' responses to questionnaire related to four variables perception in Health Belief Model including perceived seriousness and susceptibility of bullying, perceived benefits and barriers of bullying prevention among school age children. Data were analyzed using descriptive analysis. The results showed that majority of respondents aged 41-65 years, male sex and came from Javanese tribe. Respondents aged 41-65 years had quite negative perceptions about the perceived susceptibility of bullying (69.2%), perceived severity of bullying (61.5%), perceived benefits of taking preventive of bullying (96.2%) and perceived barriers to prevent bullying (69.2%). Respondent with female gender was dominated by quite negative perception related to perceived susceptibility of bullying (70,1%), perceived severity of bullying (61%), perceived benefits of taking preventive of bullying (93,5%) and perceived barriers to prevent bullying (75,3%). Respondents from Javanese ethnic group had quite negative perception about the perceived susceptibility of bullying (69,7%), perceived severity of bullying (61,6%), perceived benefits of taking preventive of bullying (94,9%) and perceived barriers to prevent bullying (73, 8%). The conclusion is the majority of teachers' perceptions of bullying in school age children is negative category.*

**Keywords:** Teachers, perception, bullying, school.

## **RELATIONSHIP OF SINERGISITY OF INTELLIGENCE OF EMOTIONAL INTELLIGENCE, SPIRITUAL INTELLIGENCE AND PHYSICAL INTELLIGENCE ON HEALTHY LIFE ATTITUDE**

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### **ABSTRACT**

*Seven of the highest non-communicable diseases by Riskesdas in 2013 are hypertension 25.8%, central obesity 26.6%, lack of physical activity 52.8%, smoking habit 21.1%, lack of vegetable and fruit consumption 10.7%, diabetes mellitus 2.1%, obstructive pulmonary disease 3.8%, coronary heart disease 1.5%, stroke 1.21%, cancer 1.4%. Meanwhile, the highest number of accident cases in 2011-2014 in 2013 was 35,917 cases of occupational accidents (2011 = 9,891 people, 2012 = 21,735 people, 2014 = 24,910 people). The condition of this disease occurs due to unhealthy lifestyles. Efforts to prevent the onset of this disease can actually be done with the formation of a healthy life attitude. The formation of a healthy life attitude cannot work well if only rely on knowledge of health science alone but must be done with the synergy of emotional intelligence, spiritual intelligence, and physical intelligence. This study aims to the formation of a healthy life attitude by improving emotional intelligence, spiritual and physical. This study is an experimental study of 20 employees of glove factory in Yogyakarta. Respondents were grouped into two groups: 10 employees as control and 10 people as groups treated with emotional, spiritual and physical intelligence training. All respondents before and after the research measured the level of emotional intelligence, spiritual, physical and healthy lifestyle. The treatment group was given emotional, spiritual and physical intelligence training 4 stages, each stage was given training materials for 3 sessions. The result of t test analysis to the respondent of the treatment group showed that there was an increase of emotional intelligence ( $p = 0,000$ ), spiritual intelligence ( $p = 0,000$ ), physical intelligence ( $p = 0,001$ ) and healthy life attitude ( $p = 0,007$ ). The result of regression analysis shows the value of  $R = 0,923$ . The conclusion of this research is a strong relationship of emotional, spiritual and physical enhancement to the improvement of healthy life attitude.*

**Keywords:** *Emotional intelligence, spiritual intelligence, physical intelligence, healthy life attitude*

## **ANALYSIS OF FACTORS THAT AFFECTING THE RESULT OF MCQ USING CBT IN PSIK FKIK UMY STUDENT**

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### **ABSTRACT**

*The Multiple Choice Question (MCQ) exam is the most objective and numerous test of method in the context of students' understanding and knowledge. The MCQ exam has a big influence with the figure of 35%. There are factors influencing MCQ result there are internal factors such as health, intelligence, readiness, fatigue, and external factors include how to educate parents, teaching materials, student learning method, and mass media. Purpose: This study aims to analyze the factors that affect the results of MCQ on students of Nursing Science Program Faculty of Medicine and Health Sciences University Muhammadiyah Yogyakarta. Method: The type of this research is non experiment with quantitative method and using correlational descriptive design. The approach used is cross sectional approach. Respondent in this research is 213 respondents and using proportional stratified random sampling technique. Data analysis used chi-square test and continued with logistic regression test. Result There are significant relationship between health ( $p = 0,023$ ) and intelligence ( $p = 0,051$ ) with MCQ result. There is meaningful relationship between health ( $OR = 2,085$ ) and intelligence ( $OR = 0,493$ ). Conclusion: The factors that influence the MCQ result is health and intelligent and health is the most dominant factor which influence MCQ result.*

**Keywords:** MCQ, CBT, student

## **SOCIAL AND INTERPERSONAL CONSIDERATIONS IS THE MOST FACTOR INFLUENCE OF NURSE READINESS FOR INTEPROFESIONAL COLLABORATION PRACTICE (ICP)**

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### **ABSTRACT**

*The best service for the patient can depend on the collaboration practice among the professional health personnel in providing the integrated service to the patient, including nurses. The ability to explain the knowledge, skills, and role of nurses to other health professionals well is a competency that must be mastered by nurses. Find out the most factors that influence nurse readiness in inter professional collaboration practice (ICP). This study used cross-sectional design with a total population of 103 nurses in the hospital. The instrument of this research used a valid and reliable questioner. All data in this study analyzed univariate, bivariate and multivariate. External and internal factors influence the readiness of ICP with p-value 0.000 (sig 0.05). The most positive relationship is on social and interpersonal factors of consideration (correlation 0.635\*\*). Variables of Age, work experience, Social and Interpersonal Considerations, Physical, Organizational and Institutional Environments, Intrapersonal and Intellectual explaining the variance of variables of readiness of inter professional collaboration practice at 20%. The most influential factor in this research is social and interpersonal because in good collaborative practice it is an in interaction between health teams that require good interpersonal communication skills. In accordance with The World Health Professions Alliance (WHPA) (2013) which states that inter professional collaborative practice requires mutual respect, competence, trust and synergy of each team member. the most factors that influence nurse readiness of inter professional collaboration practice is a social and interpersonal consideration (correlation 0.635\*\*), p-value 0.000 (sig 0.05).*

**Keywords:** Nurse Readiness, Interprofessional Collaboration Practice, Social and Interpersonal Considerations

## **PROFESSIONALISM AND PROFESSIONAL BEHAVIOUR ASSESSMENT IN NURSING EDUCATION: AN INTEGRATIVE REVIEW**

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### **ABSTRACT**

*Professionalism assessment is imperative for professional health education nevertheless it is difficult to appraise student's professional behaviors. Objectives This paper is to provide information about the literature on professionalism and professional behavior assessment methods and provide the recommendation for nursing education. Methods There is an integrative review of the literature. Databases from Pubmed, Proquest, Google Scholar, and Science Direct were searched for relevant literature from 2000 to 2017 with 897 of total articles. Forty-three documents were reviewed, analyzed critically and 22 articles related to professionalism and professional behavior were used. Results Eight methods of assessments were obtained including self-administered rating, simulation, direct observation, multi-source feedback (MSF) or 360-degree evaluation, peer assessment, patient's opinion, role model evaluation, and professional environment. Professionalism and professional behavior assessment includes professional values suitable with the concept of professionalism in nursing. Conclusion The MSF method is recommended for measuring professionalism through a student's professional behavior and provide comprehensive feedback for nursing education.*

**Keywords:** *assessment, methods, nursing education, professionalism, professional behaviour*

## **ARE THE STUDENTS GOOD IN GUESSING THEIR OWN PERFORMANCES IN MEDICAL EXIT EXAMINATION TRY-OUT?**

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### **ABSTRACT**

*Understanding their own weaknesses and capability could be important for the students to keep the pace of their learning to prepare themselves in the long run to face the final exam to become a physician. This research aims to evaluate students' self-evaluation of their readiness to face the final exam. There are two TO exams analyzed for this research. Both are pre-requisite exams within our school for the students to be able to join national exam (UKMPPD). In the following exam, the students were asked to fill the questionnaire. Then the result of the exam was combined with the questionnaire result. The first exam reliability alpha is = .92 and the second exam alpha is = .89. Whilst the median is =60(min=32; max=77.5) and median is =58(min=31; max=74.5), for the first and second exam respectively. This study showed that students' prediction of their own score was not accurate ( $r=.048$  and  $r=.142$ ). The average of self-prediction is different from the actual score are 6.78 and 6.41. And in both self-prediction, nearly 1/3 of the students predicted lower than the actual score. This result suggests that the students' self-evaluation on their own score prediction, have poor accuracy when compared to their own real score. Educators should find another method so that the students have high awareness of their ability so that they can force themselves to study harder.*

## **ACADEMIC PERFORMANCE DURING 4 YEARS OF UNDERGRADUATE PROGRAM: CAN WE PREDICT THE MEDICAL EXIT EXAM FAILURE?**

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### **ABSTRACT**

*The successful licensing exam to become physician could be predicted through their solid performance in bachelor of medicine program. The aim of this study is to understand whether we could predict the medical exit exam failure by tracking their record during four years period of block examination when they were in undergraduate program. The data was obtained from 3 different cohorts from school of medicine national exit exam. Furthermore, we matched the data from the result of 23 blocks' exams during 4 years of undergraduate program. There were 15.4%, 10.5%, and 9% of the students - from the cohort 2009, 2010 and 2011, respectively -- who did not pass on the first-round national exam. Among those who passed the exit exam, the average of the "one time passed" from their undergraduate blocks exam were range from 15.9% to 24.7% (from total blocks n=23). Whilst the students that failed the exit exam, they were took remedial on their blocks' exam, with the average range from 47.5% to 58.3%. It is possible to predict the failure of the national exit exam by reviewing their performance during the undergraduate program. Medical educators should be aware and put more attention to the "predicted" to be failure students so that they will succeed during the final exam.*

## **THE HEMODIALYSIS CLIENT'S EXPERIENCE ON SELF-MANAGEMENT OF DIETARY AND FLUID MANAGEMENT IN INDONESIA**

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### **ABSTRACT**

*Background: In Indonesia in 2012, as many as 83% of clients are diagnosed with the end-stage renal disease (ESRD) that requires renal replacement therapy lifetime like hemodialysis. Uremia syndrome, malnutrition, and fluid accumulation are often encountered in hemodialysis clients, so dietary and fluid management are important for the clients. It requires the integration of self-management behavior to confirm the dietary regimen, therefore the quality of life of the client's can be increasing. Objective: To understand the meaning of self-management experience in dietary and fluid management of hemodialysis clients at RSUD Panembahan Senopati Bantul, Yogyakarta, Indonesia. This studied is a qualitative research using phenomenological approach. Data collection was done through in-depth interviews with 10 participants who were selected using purposive sampling. Data analyzed was done using the Colaizzi method. Results: The results of this study identified self-management of hemodialysis clients in dietary and fluid management illustrated in six themes were knowledge and beliefs on dietary and fluid management, changes in eating and drinking behavior of hemodialysis clients, ability to eat and drink as recommended, inconsistent in compliance with the rules of eating and drinking, the impact of dietary and fluid management undertaken, and the effort of clients to comply with dietary and fluid management as recommended. Conclusion: Management of dietary and fluid in hemodialysis clients is difficult to adhere. Health workers need to improve client's self-management in dietary and drinking arrangements by providing continuous education, improving client's self-efficacy, and involving families in providing positive social support therefor the client's level of compliance with their dietary regimens can be increasing.*

**Keywords:** Experience, Self Management, Dietary and Fluid Management, Hemodialysis



## **CORRELATION OF HYPERTENSION WITH SEVERITY OF OSTEOARTHRITIS**

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### **ABSTRACT**

*World Health Organization (WHO) states that Osteoarthritis is one of the main causes of malfunctions that reduce quality of life of people in the world. Osteoarthritis affects the entire joint, including changes in periarticular tissues, subchondral bone and synovial membrane (American Academy of Orthopaedic Surgeons, 2013). Osteoarthritis can experience both in terms of the severity of clinical symptoms (pain using the VAS or WOMAC) and the progression of joint structures (generally measured by radiology). Progression of the structure can be measured by scoring techniques including levels according to Kellgren and Lawrence. One of the factors that affect the progression or severity of Osteoarthritis is Hypertension. Hypertension affects the severity of Osteoarthritis through vascular pathways. This research includes quantitative research. The study design is observational analytic with cross sectional approach. Samples in this study are out patients with Osteoarthritis at PKU Muhammadiyah Yogyakarta Hospital Unit I, which amounted to 20 respondents and Osteoarthritis at RSUD Kota Yogyakarta totaling 10 respondents drawn at random. Analysis of the data used chi-square test to see the relationship between these two variables. The instruments used in this study were medical records, sphygmomanometer, the results of knee radiology, and the WOMAC questionnaire. Osteoarthritis patients who experience Hypertension as many as 28 people (93,3%) more than Normal as many as 2 (6,7%). In this study, statistically shows there is no significant relationship between Hypertension against both the severity of Osteoarthritis of Radiology and Clinical with a value of  $p = 0,543$  and  $p = 0,441$ . This research concluded that there is no statistically significant relationship between hypertension with Osteoarthritis Severity based on Radiology (Kellgren-Lawrence) and Clinical (WOMAC score).*

**Keywords:** *Hypertension, Osteoarthritis, Criteria Kellgren-Lawrence, and WOMAC scores.*

## **PULSE PRESSURE AS A POTENTIAL PREDICTOR ON STROKE INCIDENT**

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### **ABSTRACT**

*Stroke is a clinical manifestation of both focal and global cerebral disorders, lasting more than 24 hours or ending with death, without the discovery of causes other than brain vascular disorders. One of the risk factors for stroke is the stiffness of blood vessels that can be detected by pulse pressure measurement. Pulse pressure is the difference between systolic and diastolic blood pressure. to determine the correlation of pulse pressure and stroke incident. an observational study with cross-sectional design, conducted 198 patients who had been hospitalized in RSUD Agoesdjam Ketapang, during May 2015-2016 with age range 50-75 years old. Data was obtained from medical record. We divided subjects in groups of age. The correlation test in patients age group 50-55 yo was moderate correlation ( $p=0,001$  ;  $r=0,572$ ), 56-60 yo was moderate correlation ( $p=0,001$  ;  $r=0,599$ ), 61-65 yo was moderate correlation ( $p=0,001$  ;  $r=0,572$ ), 66-70 yo was hard correlation ( $p=0,001$  ;  $r=0,643$ ), and 71-75 yo was hard correlation ( $p=0,001$  ;  $r=0,622$ ). The correlation of pulse pressure with stroke as strong as diabetes ( $r=0,659$ ), dyslipidemia ( $r=0,678$ ), smoking ( $r=0,652$ ) and hypertention ( $r=0,669$ ). High pulse pressure has a hard correlation with stroke. Increasing the age increases the risk of stroke because of the higher pulse pressure.*

**Keywords:** pulse pressure, stroke incident, age

## **THE RELATION BETWEEN LONG PERIOD OF DIABETES MELLITUS WITH THE SEVERITY OF DIABETIC RETINOPATHY**

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### **ABSTRACT**

*Diabetic retinopathy is a retinal disorder due to changes in the retinal blood vessels resulting from diabetes mellitus, which is one of the biggest causes of blindness worldwide. Yogyakarta is known to get into the top ranking of diabetics, that is believed that the incidence of diabetic retinopathy will increase. The aim of this research was to know the relation between long period of diabetes mellitus less and more than 5 years with the severity of diabetic retinopathy especially in PKU Muhammadiyah Gamping Hospital and AMC Clinic Yogyakarta. This study was non experimental with analytic observational method with cross sectional study design. The subjects were all patients suffering from type 2 diabetes mellitus at AMC Clinic and RS PKU Muhammadiyah Yogyakarta from 2014 to March 2018. Data retrieval conducted in December 2017 until March 2018. Data were taken from the form of medical record and measured with nominal and ordinal scale. Analysis data were using Univariate and Chi-square test. Fifty-seven patients had examined there is eyes. Females were more common than men. Patients with suffering diabetes less than 5 years were 26 patients and more than 5 years were 31 patients. The severity of diabetic retinopathy was significantly significant in patients with diabetes mellitus over five years compared with less than 5 years since the p value of 0.016 is smaller than the significant level ( $\alpha=0,05$ ). The longer a person suffers from diabetes mellitus, the longer the exposure of hyperglycemia occurs in the retina's blood vessels. It impairs vascular stability and results in damaged vascular endothelial cells in the retina. We conclude that there is enough evidence to suggest an association between long period of Diabetes mellitus and Diabetic Retinopathy severity.*

**Keywords:** Diabetic retinopathy, diabetes mellitus

## **THE EFFECT OF GONADOTROPIN STIMULATION ON FOLLICULOGENESIS ON MILD AND SEVERE ENDOMETRIOSIS**

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### **ABSTRACT**

*The hypothesis that explains the mechanism of infertility in endometriosis is still controversial and widely investigated. Nevertheless, several mechanisms of infertility in endometriosis have been proposed. One of them is a disturbance in the process of folliculogenesis. Whether this disorder is associated with endometriosis stage and whether it can be corrected with gonadotropin stimulation remains unclear so further research is needed. To compare outcome of folliculogenesis after stimulation of gonadotropin between mild endometriosis and severe endometriosis. The total number of follicles, the number of mature follicles and the ovarian response will be observed in both groups. The study was conducted with an observational analytic design. The subjects were 28 patients with mild endometriosis and 25 patients with severe endometriosis undergoing ovarian stimulation in the IVF program at Permata Hati Clinic, Dr. Sardjito Hospital in Yogyakarta. Data analysis was done by statistic using T test and Chi Square test. In the mild endometriosis group, the total number of follicles was no significant difference compared with severe endometriosis ( $15.21 \pm 11.09$  vs  $10.6 \pm 6.002$ ;  $p 0.07$ ). The number of mature follicles in the mild endometriosis group was higher than that of severe endometriosis ( $2.89 \pm 1.62$  vs  $1.76 \pm 1.17$ ;  $p 0.006$ ). Poor ovarian response in the severe endometriosis group was more than in the mild endometriosis group (RR 1.26,  $p 0.018$ ). There was no significant difference in the number of total follicles between mild endometriosis and severe endometriosis, but the number of mature follicles was higher in the mild endometriosis group and the incidence of poor ovarian response was higher in the group of severe endometriosis.*

**Keywords:** endometriosis, folliculogenesis, severe, mild

## **LEA VS NON-LEA FOR REDUCING LABOR PAIN AND SHORTENING AT THE FIRST STAGE OF ACTIVE PHASE IN LABOR PROCESS**

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### **ABSTRACT**

*For most women labor causes severe pain, similar degree to that cause by complex regional pain syndromes. Although severe pain is not life threatening in labor women, but pain in labor can have neuropsychological effect. The purpose of this study was to compare the effectiveness of the Lumbar Epidural Analgesia technique as a modern therapeutic choice and a very significant breakthrough in reducing labor pain and shortening at 1 active phase. This study was an experimental study with randomized clinical trial design and single blind observation. The study was conducted on women who have labor process at Asri Medical Center from January to June 2018. Consisting of 24 women with LEA and 24 people without LEA. In the LEA group, Levobupivacain was given 0.5% 100 mg. The duration of the active phase is measured by time in hours compared to the normal value of prolonged physiological labor and pain with VAS (Visual Analog Scale). The results showed that there was a significant difference to the decrease of labor pain in the group with LEA ( $P < 0,05$ ,  $RR = 2,5$ ,  $95\% CI = 0,282$  to  $2,464$ ) and the shortening of stage I active phase in the group with LEA vs non LEA ( $p < 0,05$ ;  $RR = 2,2$ ;  $95\% CI = 0,308$  to  $0,342$ ). The mean of shortening in the LEA group is approximately 3 hours faster than non LEA. There is a significant difference between delivery process using LEAs versus those not using LEAs for shortening the stage of the active phase and decreasing pain in labor.*

**Keywords:** lumbar epidural analgesia, active phase, delivery process, labor pain.

## **LARGE PULMONARY CONGENITAL CYSTIC ADENOMATOID MALFORMATION MIMICKED CONGENITAL LOBAR EMPHYSEMA**

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### **ABSTRACT**

*CCAM (Congenital Cystic Adenomatoid Malformation) is a group of multicystic or noncystic mass caused by abnormal proliferation of terminal respiratory bronchioles. Its incidence is 25% of bronchopulmonary malformations. It is often present with respiratory distress and can be life-threatening. Radiology has an important role in distinguishing pulmonary congenital lucency lesion because it has different treatment. CT provides more detailed information concerning chest anatomy and pathology than a chest radiograph. To report concordance radiologic and histopathologic finding of CCAM and distinguish CCAM from CLE (Congenital Lobar Emphysema). 2-days-old female neonates presented to the Sardjito Hospital with respiratory distress and cough. It has a prenatal history of right lung cyst at 24 weeks. Chest radiograph showed one large cyst in right upper lobe measuring 3,5 cm in diameter with smaller cyst seen along its periphery. Shifting mediastinal to the left appeared. CCAM was diagnosed based on chest radiograph, but CT scan admitted in another hospital showed CLE. Occasionally, to differ CCAM with CLE is difficult. However, if we look at that lesion more carefully in CT scan, there is no pulmonary vascular marking within the lesion. The thickness of lucency lesion is 3 mm, so it is indicated the cyst, not bullous emphysematous which its wall thickness is less than 1 mm. Not easy to differ CCAM with CLE. No finding of pulmonary vascular marking and the thickness of focal lucency lesion play an important role to distinguish it.*

**Keywords:** CCAM, CLE, focal lucency lesion

## **CASE REPORT TWENTY WEEKS PRIMIGRAVIDA WITH MASSIVE CONDYLOMA ACCUMINATA**

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### **ABSTRACT**

*Pregnant women need changes for the intrauterine fetus to survive and appropriate with gestational age. It affects susceptibility and facilitates infection due to immunologic changes resulting in genital infection. Condyloma accuminata is a sexually transmitted disease caused by Human Papilloma Virus or Chlamydia trachomatis, while in pregnant women more common and severe than in non-pregnant women. Reported 20 weeks, gestation primigravida patient with clinical manifestations massive Condyloma accuminata due to Chlamydia trachomatis infection. Twenty weeks primigravida with a massive Condyloma accuminata is followed by clinical manifestation, vaginal swab, and Chlamydia immunoserology test during pregnancy. Treatment by cauterization and observation of clinical manifestations until delivered. Inspekulo: cauliflower mass at vagina to cervix, intact cervix, closed ostium uteri external, a lot of fluor albus and livid appearance. Microscopic no bacterial vaginosis and Trichomonas vaginalis, yeast cells (+). IgM & IgG Anti-Chlamydia are negative, while her husband IgG is positive. Cauterization showed lesion healing and no growth new tissue but not all condyloma tissue can be cleaned, because it is extensive massive. Its site close to the cervix makes it bleeding easily. Evaluation 1 month after delivery. Termination at 37 weeks, term pregnancy and estimated weight are > 2500 grams by section caesaria. Condyloma accuminata appear during pregnancy due to changes in immunity and increased blood supply. T Lymphocytes number of peripheral blood samples of a pregnant woman is reduced. Maximum reduction of CD4 + T lymphocytes occurs in the third trimester, but this patient infection occurred at the first trimester. Lymphocytes proliferation was lower during pregnancy than post-partum and lower in a pregnant woman than non-pregnant woman significantly. Twenty weeks primigravida with Massive Condyloma accuminata have been cauterization showed clinical results cured, pregnancy termination with section caesaria.*

**Keywords:** Primigravida, Condyloma accuminata

## **COMPLEX AND COMPLETE ESTHETICS TREATMENT WITH PORCELAIN FUSED TO METAL, FIBER POST AND SDR AFTER RCT FOR ANTERIOR UPPER TEETH (CASE REPORT)**

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### **ABSTRACT**

*Restoration material has developed to treat root canal and crown restoration. Restoration of endodontically treated tooth may bring more risk of fracture than vital tooth. The decision making should be taken based on clinical appearance and consideration. This case report will inform about crown restoration with fiber post and SDR after root canal treatment for anterior maxilla teeth. 24 years old, female, visit the dental hospital complaining pain in anterior upper teeth. The pain arises spontaneously and worse when chewing something since three days ago. Clinical examination showed central right incisor had an acrylic restoration, temporary restoration found in lateral right incisor, temporary bridge central left incisor and missing lateral left incisor. Patient felt pain during percussion and vitality test. Radiograph examination revealed diffuse lesion 4 mm around apical upper right incisor and upper left incisor. Case management. Pulpectomy has been made on the first visit to reduce the pain. After that root canal treatment has made by multiple visits. The biomechanical preparation was done with stepback technique followed by medication of root canal was scheduled in next visit. Obturation after the root canal has sterilized. Root canal restoration planned to be achieved using fiber post and porcelain fused to metal crown. Endodontic treated teeth in the anterior region should consider being restored with esthetics materials. Fiber post can be used to restore endodontically tooth followed by porcelain fused to the metal crown to improve the function of mastication as well as esthetics. evaluation one month, the good condition without any complain, pain and clinical abnormalities.*

**Keywords:** Root canal treatment(RCT), fiber post



## **EFFECTIVENESS OF PATIENT CENTERED CARE IN REDUCE ANXIETY LEVEL AND INCREASE SATISFACTION ON PATIENT POST OPERATION CESAREAN SECTION**

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### **ABSTRACT**

*Patient Centered Care (PCC) has become one of the standard services in hospitals in support of the Government of Indonesia's National Program, one of which is reducing maternal and infant mortality and improving maternal and infant health. Not much research on PCC in Indonesia, especially related to the effectiveness of PCC application in reducing the level of anxiety and improve patient satisfaction after Cesarean Section surgery. This study was a Quasi Experimental, involving 30 respondents (controls) and 30 PCC respondents (intervention) in postoperative Cesarean Section patients. The research instrument used a State Anxiety Inventory questionnaire to measure anxiety and SERVQUAL modification methods to measure patient satisfaction. Data analysis using independent sample t-test. From the measurement of satisfaction level showed there was no difference of satisfaction level between control group and PCC group (sig. 2-tailed = 0,424), but there was difference of anxiety level from both groups (sig. 2-tailed = 0,000). There was no significant difference in anxiety and satisfaction levels in the control group and PCC (intervention) group in the Cesarean Section postoperative patient. Further research on PCC effectiveness is still needed but with better implementation.*

**Keywords:** Patient center care, Anxiety, Satisfaction

## **PERCEPTION ABOUT CONTRIBUTING FACTORS OF NURSES CONTINUING PROFESSIONAL DEVELOPMENT AMONG HOSPITAL MANAGERS**

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### **ABSTRACT**

*Nurses are required to work in a professional manner, including maintaining and improving their competency periodically through continuing professional development. However, it is not easy for Indonesia nurses because Indonesia does not have a Nursing Council which impacts to the different regulation implemented in the clinical practice. Variety of regulation implementation involves the updating competency of nurses in the hospital who work in different areas of practice. This study aims to explore a deep understanding of the factors contributing to continuing professional development from the perception of hospital managers in Indonesia. This study was a qualitative design, the data for which were gathered from 20 hospital managers of one hospital in east Java, Indonesia. The measurements included 20 in-depth interviews and focused group discussion. Data were analyzed using qualitative content analysis. Three themes emerged as follows: 1) Nursing professional careers with two subthemes: practitioners and educators; 2) In-depth recognition by society, comprised two subthemes: as requirement and improving confidence and 3) selecting prospective program, derived into two subthemes: department needed and length of experiences. There were factors contributing to continuing professional development including internal and external factors which could be a basis for developing a greater principle of continuing professional development.*

**Keywords:** *Continuing professional development, perception, qualitative study*

**JAVANESE STROKE PATIENTS NEEDS IN THE CONTEXT OF CARING AT**

## HOME

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### ABSTRACT

*The issue of quality of home care is still the focus of various parties. Home care will be effective, efficient, safety, and affordable, if performed in patient-centered care. Patient-centered care can only be achieved when patients and professional officers work together to create a service system that integrates both patient and provider perspectives. The implementation of patient-centered care remains a challenge in determining the outcome of health services. This study aimed to explore the expectations of stroke patients, family caregivers as recipients of home care services, as well as health workers as home care providers. This research used cross sectional explorative qualitative design. Data were obtained by semi structured interviews on 19 informants and 4 focus group discussions. Data were analyzed by grounded with Open Code 13 software and the results was presented in COREQ systematics for qualitative studies. The four themes of study were physical wellbeing, self-actualization, psychological condition and balance between family burden and coping. Subsequent research is suggested to add informants from various parties interested in home care such as hospital directors or heads of primary health care, health offices, heads of regions or regents, insurers and communities around the patient reside. Also comparing between Javanese ethnic with other ethnics in Indonesia.*

**Keywords:** *activity daily living, stroke, patient-centered care, home-based services, Javanese ethnic*

## **KOMAK (KOTAK BERMAIN ANAK): A CHILDREN PLAYING THERAPY PACKAGE FOR REDUCING ANXIETY DURING HOSPITALIZATION**

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### **ABSTRACT**

*Many hospitalized children face to anxiety problem. They meet unfamiliar place and people. Moreover, they have to undergo some new activities related to their health problem. This can impact their growth and development, so it needs an intervention to reduce anxiety level of children who stay in the hospital such as playing therapy. This research is a quasi-experimental pretest posttest with control group. Thirty respondents were divided into two groups: control and intervention groups. Intervention group received an intervention to reduce anxiety level with KOMAK. Data of anxiety level was measured using 'Depression and Anxiety Rating Scale' instrument. Then, it was analyzed with Wilcoxon and Man-Whitney U test. The study showed that anxiety level between pre and posttest were different ( $p = 0,000$ ), also between control and intervention group ( $p = 0,000$ ). The Conclusion is Based on the research, it can be concluded that KOMIK can reduce the level of anxiety among children during hospitalization.*

**Keywords:** Anxiety, Hospitalization, Playing Therapy

## **THE EFFECT OF PROGRESSIVE MUSCLE RELAXATION TOWARD BLOOD PRESSURE OF HIPERTENSION PATIENTS**

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### **ABSTRACT**

*Hypertension occurs a lot at the age of the elderly but does not require the possibility of hypertension can also occur at a young age. Handling hypertension can be done with pharmacological therapy as well as non-pharmacology. One of the non-pharmacological therapies that can be done is progressive muscle relaxation. Goals: To know progressive muscle relaxation effect on blood pressure reduction in hypertension patients. Research Methods: The type of research used in this study is Quasi-Experiment with pretest-posttest control group design. The population in this study was 63 people with hypertension. Samples were 30 respondents using purposive sampling. The research was conducted on April 16-April 20, 2017 at Posyandu Lansia Wonokromo Pleret. The collected data were analyzed by statistical test of Wilcoxon sign test. Results: The results of the analysis that have been done show the significant difference in blood pressure after progressive muscle relaxation in patient of middle age hypertension and elderly. The result of statistical test showed that systolic blood pressure significance value was 0,005 ( $p < 0.05$ ) and diastolic blood pressure 0.003 ( $p < 0.05$ ) in middle age group. In elderly group, the result of statistical test showed that systolic blood pressure significance value was 0.007 ( $p < 0.05$ ) and diastolic blood pressure 0.041 ( $p < 0.05$ ) Conclusion: The progressive muscle relaxation effective to decrease blood pressure as a complementary therapy in middle age and elderly.*

**Keywords:** Hypertension, Blood Pressure, Progressive Muscle Relaxation

## **CHRONIC ILEOCOLIC INTUSSUCEPTION DUE TO INTESTINAL LYMPHOMAS AS LEAD POINT: A RARE CASE REPORT**

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### **ABSTRACT**

*Intussusception can be described as the telescoping of a proximal segment of the intestine within the lumen of the adjacent segment, causing bowel obstruction. The cause of intussusception was still unknown and thought to be idiopathic. We report a 2-year-old boy with abdominal pain for the last 2 months. A detailed history revealed an intermittent colicky abdominal with an intermittent palpable mass in the right upper abdomen. On clinical examination, abdomen was mildly distended with palpable mass in the right flank. Abdominal x-rays demonstrate the presence of soft tissue mass and paucity of bowel gas. Ultrasonography revealed of target sign and pseudo kidney sign. Investigation with contrast enema showed meniscus sign and coiled spring sign. Based on the findings, the diagnosis of colocolical intussusception was established. Because of the intussusception was not released during the contrast enema investigation, a decision for an emergency laparotomy was taken. Intraoperative findings confirmed colocolical intussusception. During inspection of the bowel, there were mass within the terminal ileum, caecum and ascendants colon, working as lead point of the intussusception. The histopathological diagnosis was Non-Hodgkin Lymphoma Burkitt type. This reported intussusception is rare, since cases of intussusception in children are usually idiopathic, only about 10% of patients have lead points, including lymphomas, Meckel's diverticulum, duplicated cysts or polyps. This chronic intussusception occurs when strangulation and obstruction are incomplete. The incidence of chronic intussusception is reported as 5.2% of all intussusception cases and is higher in patients older than 1 year compared with patients under 1 year. In children, a lead point is not identified in 90% of cases, and this is most frequently thought to relate to hypertrophic lymphoid tissue following an infection.*

## **SPIRITUALITY AND RELIGIUSITY AMONG PATIENS WITH CANCER IN PUBLIC HOSPITAL PROVINCE OF WEST NUSA TENGGARA**

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### **ABSTRACT**

*The spirituality of cancer patients can give a positive effect in cancer patients including finding meaning and purpose in their life, but healthcare practitioners is still focus in physical problems. Therefore, spirituality and religiosity has not yet became focus of care and the need of spiritual care is often still neglected. This study aimed to investigate spirituality and religiosity among patients with cancer. This is a descriptive correlational study that included 100 cancer patients who are treated in RSUD Province of West Nusa Tenggara. Data were collected using adapted version of Spiritual Well-Being instrument to assess spirituality. The study show that the average of religious well-being rate was higher than the existential well-being level in cancer patients. The statistical test is using t test, it showed that spirituality was significantly associated to worship with p value  $0.002 < 0.05$ . Spirituality can be impact to worship in cancer patients.*

**Keywords:** Spirituality, Religiosity, Cancer

## **FEMALE NURSES: LITERATURE REVIEW ON ISLAMIC PERSPECTIVE**

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### **ABSTRACT**

*Nurses are identical jobs with women, as most nurses are women. The nurse's job requires to interact a lot with other people, including men who are not their mahram. (Mahram: people who can't be marry with because of blood relationship) Therefore Muslim female nurses need a handle that can be used to carry out their roles and functions in providing care. This paper is a literature review of the duties and roles of female nurses in Islamic religious reviews. Female nurses in Islam have a function as health workers by carrying out their duties as nurses, besides female nurses also act as preachers, by giving warnings, advice and guidance about Islamic teachings to clients and examples of their practice. Whereas in certain conditions and situations, female nurses are permitted to care for men who are not their mahram.*



## **GAS CHROMATOGRAPHY-MASS SPECTROMETRY (GC-MS) ANALYSIS OF N-HEXANE EXTRACT OF DIOSCOREA ALATA L. TUBERS**

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### **ABSTRACT**

*Dioscorea alata L. tubers containing active compounds for having several the biological function among others immunomodulatory, allergenic agent, anti-inflammatory agent, etc. To investigate the active compound of N-hexane extract Dioscorea alata L. tubers. In the present study the phytochemical investigation N-hexane extract of Dioscorea alata L. tubers has been subjected to GC-MS analysis in Chemical Laboratory, Faculty of Mathematic and Sciences, Universitas Gadjah Mada. Forty chemical constituents have been identified. The major chemical constituents are decane group 40% (tetra, octa, hexa, hepta) and decanoic acid group 27,5%. The minor chemical constituents are cosane group 10% (penta, eico), benzene group 5%, dimethyl-cyclocanone 2,5%, octadecadienoyl 2,5%, ethyl octadecenoate 2,5%, octa-decenamide 2,5%, Tricosanol 2,5%, octadecenamamide 2,5%, stigmasterol 2,5%. Stigmasterol is steroidal saponin which have immunomodulatory, anti-inflammatory, allergenic activity, etc. Forty chemical constituents are found in N-hexane extract of Dioscorea alata L. tubers used GC-MS analysis. One of the important chemical constituent is steroidal saponin group.*

**Keywords:** GC-MS Analysis, Dioscorea alata L. Tubers, N-Hexane Extract

## **COX-2 EXPRESSION IN GASTRIC DAMAGE INDUCED ETANOL**

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### **ABSTRACT**

*Gastric damage is frequently digestion issue found in society related alcoholic people in Indonesia. The research of gastric damage in the rat models is mostly conducted by ethanol induction. Gastric damage by ethanol can induced COX-2 expression with understandable mechanism. It analyzes the COX-2 expression in difference of gastric damage level on rat models induced ethanol. Sprague Dawley rat was divided into 4 group; aquades control (KA), first day of terminated ethanol (EH1), third day of terminated ethanol (EH3), fifth day of terminated ethanol (EH5). After 24 h fasted rats, all groups were being per oral induction with 100% ethanol of 1ml/200grBB. Stomachs were removed, opened along the lesser curvature. After macroscopic analysis, the gastric mucosa will slice in 4-5 for histology preparations using immunohistochemical (IHC) staining. The observation value produced expression COX-2 data. The data was displayed descriptively. Assessment of COX-2 expressions referred to Allred score protocol. Final assessment was done by summing percentage value of positive cell and intensity value of coloring. Interpretation of expression value COX-2 was 0-2, interpreted as negative expression, value>2-5 interpreted as weak expression, and value>5-8 interpreted as strong expression. Result: The highest average value of expression appeared at groups EH1 of  $6,000 \pm 0,000$ , that interpreted as strong expression. Conclusion: The highest COX-2 expression at gastric ulcer induced with ethanol was at the beginning of damage's occurrence and turn on for mucosa healing process.*

**Keywords:** Gastric Damage, Ethanol, COX-2 expression.

## **MAPPING OF TUBERCULOSIS CASES IN YOGYAKARTA CITY WITH GEOGRAPHIC INFORMATION SYSTEMS**

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### **ABSTRACT**

*Tuberculosis is a highly contagious disease of worldwide. 1.7 million people died due to Tuberculosis in Indonesia. In Special Region of Yogyakarta, 33 people are infected with Tuberculosis per 100 thousand population. The objective of this research is to map the spread of tuberculosis cases in Yogyakarta City with Geographic Information System method. The type of research is explanatory research with observational method. The research was conducted in 14 sub-districts in Yogyakarta City whose residents have been reported to have pulmonary tuberculosis, based on microbiology laboratory examination in Yogyakarta city general hospital in 2016. The respondents were 53 suspects with pulmonary tuberculosis. The data were consisted of geographic coordinate of location patient and waste shelters. Spatial analysis was used to know the distance between location house of respondents with river and waste shelters. Mapping data used geographic information system. The results showed that most patients with pulmonary tuberculosis was men. There are 57 temporary waste shelters in Yogyakarta City. The waste shelters were spread in 13 sub-districts. Gondomanan has the most garbage dumps. Umbulharjo sub-districts have the most of pulmonary tuberculosis cases in Yogyakarta City. 43% of patients with pulmonary tuberculosis are located less than 250 m from the river. 47% of the patients lived within more than 500 m from the waste shelter.*

**Keywords:** *Pulmonary tuberculosis, spatial analysis, waste shelter*

## **COGNITIVE FUNCTION AND NUTRITIONAL STATUS IN GROWTH SPURT ADOLESCENT**

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### **ABSTRACT**

*Adolescent is a period of transition or change between childhood to adulthood. One of the changes that occur is cognitive change, where there is a change in the ability to think. One of the factors that influence cognitive development is nutritional status. Nutritional status is one of the factors that influence adolescent intellectual development. The purpose of this study was to determine the description of the relationship between nutritional status to cognitive function in adolescent's growth spurt phase of age 12-14 years. This research uses observational analytic research design with cross sectional study approach in teen age group 12-14 years old. The number of subjects was 71 people. The Nutritional status measured by Body Mass Index (BMI) and cognitive function used MMSE-Child. Data were analyzed by Chi-Square statistic test. The results shown that most subjects have normal nutritional status of 32 people (45.10%). The normal cognitive function that was as much as 63 people (88.70%). In this study found that, there was no significant relationship between nutritional status and cognitive function (0.454). The nutritional status and cognitive function in growth spurt adolescent mostly under normal value, although there was no relationship between nutritional status with cognitive function.*

**Keywords:** *nutritional status, cognitive function, adolescent*

## **PRIMARY SCHOOL TEACHER'S KNOWLEDGE LEVEL OF FIRST AID AND THE USE OF FIRST AID KIT IN MANAGING INJURY AT SCHOOL**

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### **ABSTRACT**

*Child injuries can happen anywhere including at school. Teachers have responsibility to have good knowledge of first aid and the use of a first aid kit to manage injury for their students. Limited studies have investigated this topic. To know the teacher's knowledge level of first aid and the use of first aid kit in the handling of the students in primary school. This descriptive study included 69 teachers at SDIT Luqman Al Hakim who was recruited using total sampling technique. The knowledge level is measured using a first aid knowledge questionnaire and the use of a first aid kit in the form of multiple choice. The results showed that most of the respondents were women (62.3%), aged 21-40 years (76.8%), has bachelor degree (97.1%) and the majority did not have experience dealing with injuries (66.7%). The most common type of injuries in school are scratched wounds (40.5%). 58 respondents have good knowledge (84,1%), 9 respondents have moderate knowledge (13%), and 2 respondents have poor knowledge (2,9%) about first aid. Regarding respondent's knowledge about using of first aid kit, the study found that only 24 respondents have good knowledge (34,8%), 23 respondent have enough knowledge (33,3%), and 22 respondents have poor knowledge (31,9%) . The teacher's knowledge level of first aid and the use of first aid kits in the managing of injuries to students in elementary schools are in good category.*

**Keywords:** Knowledge Level, Teacher, First Aid, First Aid Kit, Primary School

## **CORRELATION OF THROMBOCYTE PARAMETER RESULTS AS EARLY DETECTION TO DENGUE HEMORAGIC FEVER AND DENGUE SYOCK SYNDROME ON CHILDREN AT WIROSABAN YOGYAKARTA CITY TERRITORY HOSPITAL, INDONESIA**

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### **ABSTRACT**

*Dengue Syock Syndrome (DSS) is a severe manifestation of Dengue Hemorrhagic Fever (DHF) and affects more children and young adults. The age of DSS susceptible are 5-15 years, due to an imperfect immune system. Platelet score is one of the laboratory parameters so that DHF patients with DSS manifestation can be diagnosed early. This research is aimed to know the correlation between platelet count to DHF incidence in Wirosaban Yogyakarta City Territory Hospital from March 2015 until July 2016. All data are gain from medical records of children aged 5-15 years. The research method used was to know the correlation between platelet count to DHF and DSS incidence in children. The first is the normality test (Kruskal-Wallis). Data analysis using chi square to know the relationship between platelet count to DHF and DSS incidence in children. In this study the number of samples that meeting both the inclusion and exclusion criteria were 74 data. Chi-square test for thrombocyte examination was obtained  $p > 0,05$  meaning there were no significant correlation between platelet count to DHF and DSS. In this study the number of platelets is not a determinant factor that can be used as DHF and DSS detection.*

**Keywords:** *platelets, DHF, DSS*

## **RFID WRIST-BAND IDENTIFICATION FOR MENTAL PATIENT IN HOSPITAL**

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### **ABSTRACT**

*One of the patient's safety goals was used patient identification. This time mental patients used the same wristband identification as for common patients in hospital. Many obstacles faced in the hospital, such as wrist-band was often removed and always changed, or often blurred or not clearly to vision, so that was inefficient for management hospital, too risky to occur adverse event or medical errors. The aim of this study was developed a patient identification wristband for Mental patient Hospital, which different characteristics with common patient. Method for this study with clinical trial design and make a System information to connect wristband with data of mental patient in hospital. Result this research was a wristband identification can improve patient safety in mental hospital and simple system information. The wristband identification for mental patient in hospital was hard texture not make it harm, flexible and non-slashed very suitable for mental patients in hospital. The wristband identification put inside with RFID (Radio Frequency Identification) reader device. RFID used to make easier for all health worker in hospital to check the patient's data. Excellences of RSIF were Tag has a unique ID and different in worldwide, regardless of its manufacture, so it is not possible to appear duplicate ID, Operation in Harsh Environment. RFID can work in extreme environments such as high or low temperatures, high humidity to include wet categories, high noise environments, Reusable. RFID can be used repeatedly, and no line of sight required. In its use RFID was not needed to be faced directly with the reader.*

**Keywords:** *Wrist-band Identification, RFID, mental patient*

## **GIANT TONSILOLITH: A CASE REPORT**

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### **ABSTRACT**

*Tonsilolith is defined as concretion of calcified materials in the crypt of palatine tonsil. Giant Tonsilolith is a rare clinical entity although small concretions in the palatine tonsils are a common clinical. Tonsilolith occur in up to 10% of the population, frequently due to episodes of tonsillitis. Tonsilolith can produce symptoms such as foreign body sensation, bad breath, pain during swallowing or referred ear pain. The case is described a 57-year-old female complaining foreign body sensation on the left throat, pain during swallowing, and bad breath since a year ago. There was no history of foreign body ingestion or recurrent tonsillitis. She denied neck swelling, referred otalgia or constitutional symptoms. On oropharyngeal examination, bilateral tonsils were grade 1 with smooth surface without signs to suggest infection. There was a yellowish mass in between left tonsils and uvula. On palpation, the mass was hard in consistency. There were no palpable cervical lymph nodes. The other ENT examinations were unremarkable. The patient was admitted for elective surgery for removal of the Tonsilolith. a large-sized tonsilolith observed during the surgery. It was dissected gently using feer dissector and the stone was removed. The tonsilolith measured 4,2 x 2,4 x 1 cm. A weeks later, the clinical findings were within normal limit. No complication afterward. It has been advocated to remove the stone surgically or perform tonsillectomy if stone is larger or impacted within tonsil. No recurrence was reported by maintaining good oral hygiene through oral prophylaxis and periodic once in every 2 months thorough irrigation of the tonsillar site with normal saline in the present case.*

**Keywords:** tonsilolith, tonsil stone, oral cavity



## **CASE REPORT: WHY DO HYPERSENSITIVITY REACTIONS OCCUR AFTER THE EXAMINATION OF HYSTEROSALPHYNGOGRAPHY?**

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### **ABSTRACT**

*Anaphylactic reactions on non-vascular contrast examination, usually rarely cause hypersensitivity reactions. Administration of non-vascular contrast in several radiological examinations, including urethrography, retrograde pyelography, myelography, oral contrast, cholecystography, hysterosalpingography. This case report is a very rare case of hypersensitivity reactions i.e. face edema, angioedema, laryngeal edema post contrast in hysterosalpingography examination using ionic water-soluble contrast. A 32-year-old woman, shortly after hysterosalpingography examination experience swelling of the face, eyelids and respiratory tract accompanied by a little shortness of breath. Hysterosalpingography is an imaging method to evaluate the endometrial and uterine morphology and fallopian tube patency, by introducing a 10cc ionic water-soluble contrast into the uterine cavity via an external uterine ostium with falley catheter no.8. Vital signs and generalist status checks within normal limits. Results of examination of normal uterine cavity hysterosalpingography, both patent tubes. Contrast intravasation appears in the bilateral peri tubal and around the cavity uteri. Hypersensitivity reactions such as angioedema and facial swelling and edema larynx are systemic reactions that occur post non-vascular contrast giving on hysterosalpingography examination. Why this reaction can happen? This is due to the presence of intravasation of the ionic water-soluble contrast fluid passing through the vascular path of the uterine endometrium and peri tubal filling that progresses to the vascular (surrounding venous blood vessels). This contrast fluid systemically can cause hypersensitivity reactions from mild to moderate to severe levels. The prevalence of intravasation has been reported to be 0.4-6.9%*

**Keywords:** hypersensitivity reactions, angioedema, hysterosalpingography, contrast ionic water soluble, contrast intravasation

## **EXECUTIVE ADVANCE STEPS ADEKUAT APPROACH TO SPATIAL MEMORY AND BRAIN STRUCTURE CONGGUIDE HYPOTHYROID**

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### **ABSTRACT**

*Hypothyroidism leads to impaired growth and development of the nerves. Stimulus of physical activity, physical exercise will increase blood flow and neurogenesis and synapse plasticity. This study aims to prove the rapid physical activity of the road can improve thyroid function and memory and the number of Purkinjean cell cerebellum of congenital hypothyroid rat at the time of growth. The design of this study was an experiment on animals testing control group post. The subjects of the study were mice born from 0.05% parent 0.05% induced propylthiouracil (PTU) hypothyroid mother in drinking water from 5th to 15th postnatal pregnancy. The group of training mice began to be trained to walk on a rotating wheel that could spin if a mouse walked. After the age of 1 month of walking practice on the treadmill with a 20-meter / minute son, up to 2 months old mice. A total of 5 normal and hypothyroid mice were taken at the age of 15 days to measure free T4 (fT4) by Elisa method. T4 is freely measured again when 2-month-old mice. The Morris Water Maze (MWM) test was performed after a 1.5-month-old mouse. The learning was done 3 days in a row each of 4 experiments on 4 quadrants. MWM test is done again 1 time on 3 days and 7 days later to know the memory retention of rats. Used the fastest time a mouse can do every day and averaged. Observation of Purkinjean cerebellum cell number by using 40x magnification microscope of 2067µm<sup>2</sup> wide field of view. Data were analyzed with Anova. Posts of mean fT4 (ng / dL) normal mice, normal exercise, hypothyroid, hypothyroid exercise, hypothyroid thyroxine, and hypothyroid thyroxine exercises were 1.32 ± 0.20, 1.77 ± 0.11, 0.50 ± 0.09, 1.46 ± 0.37, 1.50 ± 0.2 and 1.20 ± 0.33 (p <0.05). The latent learning phase, memory retention of 3 days and 1 week of exercise group and thyroxine and thyroxine exercise were significantly faster than the non-exercise group (p <0.05). The conclusion of this study is that physical exercise improves cognitive learning and memory, and increases cell numbers Purkinjean cerebellum of congenital hypothyroid rat.*

**Keywords:** congenital hypothyroid, Purkinjean cell