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Effectiveness of Pamphlet Utilization in Increasing the Behavior of Housewives in the Use of Iodized Salt

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Abstract, **Background :** Poor management of iodized salt when using it when cooking food or vegetables can cause potential problems due to reduced iodine levels in salt. Effective and educative information is needed as a preventative effort. The effectiveness of pamphlet on changes in housewife's behaviour in the use of iodized salt when cooking food or drinks is the purpose of this study.

Methods: The study design was conducted by quasi-experiment on 2 intervention groups, namely the group attached pamphlet in the cooking room and the group was given little, before intervention and after 4 months the intervention was identified and compared and measured and processed using SPSS version 19, then tested for effectiveness the behaviour of using iodized salt with a statistical logistic regression test with a variable control model as a confounder variable (age, education).

Results: The results of the study indicate the magnitude of the effect or effectiveness of the main independent variable (pamphlet attached) illustrated from the exponent value (β) or Odds Ratio (OR) 5.11 CI: (0.815-32.48) after being controlled by other variables. The ability of the independent variable to explain the behavioural variables for using iodized salt is seen in the Nagelkerke *R* Square value of 0.237 or 23.7% and there are 100% - 23.7% = 66.3% other factors outside the model that explain the behaviour of using iodized salt. the end of the regression equation is $LLP / 1-P = -4.458 + 1,638$ attached of pamphlets + 1,500 age groups of housewives 15-19 years + - 1,878 age groups of housewives 20-35 years.

Conclusion: The attached of pamphlets in the cooking room is quite effective in changing the behaviour of using iodized salt, it is necessary to follow up with an advocacy policy by related parties.



Hahslm Graph In Heart Rate With Allah Praise on Electrocardiogram (ECG) Toward Islamic Medical

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Abstract,

Background: There are various aspects of human life in the medical field about the heart such as the circulatory system of heart and heart rate machine with religiosity factor. In Quran and hadith can be found accurate depictions of anatomical structure, physiology, medicine, prevention, and spiritual health and heart. This research aims to analysis about relation among medical in human body, circular system of heart and religiosity of heart.

Methods: Data gets from various sources books, journals, internet, primary data, and secondary data also from holy book. Primary data gets from electrocardiogram (ECG) with the rate of heart. Methodology used in this study is approach of hahslm with main variables from religiosity aspects and internal external factors of medical. The methods are similarity and reflexivity. Similarity between ECG and form of hahslm. Reflexivity in the main variables of heart rate. The Hahslm method is a genuine method of Islam because Derived from Quran Surah Al-Hijr (15): 87. Formula: $H = a.h (s.l.m)$ with equation numbers of 472319, where: H = Huda (Guidance), A = Alif (Road), H = Hanif (Straight), S = Sin (Human), L = Lillah (God), M = Mosque (Worship)

Results: The results are human heart always praises to Allah and the graph of heart rate in ECG shows the symbols of sequence of prayers order. Heart variable can explains about religiosity spectrs in heart rate that it turns out the heart has the same concept with the Hahslm theory. If on the theory Hahslm depicted that human (sin) was created by Allah (lam) to worship (mim). The heart as the core organ of the human is denoted as (lam) instructions. Because the function of the heart itself is very important that is to pump blood. Then in the heart there is a section called Aorta. The aorta serves to carry blood containing oxygen. the superior vena cava and Ventricle are represented as (mim).

Conclusion: The heart is the most vital human organ, because with heart, human is able to live in daily activities. In harmony with the Islamic religion, the heart is the organ that first formed, which serves to pump blood and drain it throughout the body, as well as the existence of Islamic religion. Islam is the religion that was first established since the time of Prophet Adam (AS) created and sent down to earth.

So the heart is the most important organ and must be maintained by every human being to stay in a healthy and stable condition, as well as with Islam. Islam is the spiritual heart for Muslims that we should keep and always be used as a guide for life, in order to get physical and mental happiness.



Brine Shrimp Teratogenic Screening Test on *Nigella Sativa* Extract

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Abstract,

Background: *Nigella sativa* was plant that often used as traditional medicine for women's health care, such as during pregnancy, menstrual disorders, contraceptives, body treatments, and during postnatal. Several studies revealed that these plants also had anti-fertility and inhibit proliferation effects. The use of *Nigella sativa* by women, especially during conception and pregnancy was feared could affect the growth and development of embryo or fetus, therefore it is very necessary for testing teratogenic on these plants. The aims of this research were to analyse teratogenic properties on *Nigella sativa* seed extract using brine shrimp teratogenic screening test (BSTST) method.

Methods: Artemia cysts were hatched into 1st stage nauplii, then taken and put into seawater medium which contain test substance and kept alive until 2nd stage, 3rd stage and 4th stage, and then observed number of deaths, morphological abnormalities, body length, and retarded of development for each stage.

Results: Hatch ability of cysts in *Nigella sativa* seeds extracts 1 mg/ml and 0.5 mg/ml, were significantly different to control ($p < 0.05$). Survival nauplii in 1 mg/ml and 0,5 mg/ml were significantly different to control ($p < 0.05$). there are no morphological abnormalities were exposed on all concentration. Nauplii body length on *Nigella sativa* seeds extract showed no significantly difference compared to control.

Conclusion: Based on brine shrimp teratogenic screening test (BSTST), *Nigella sativa* seeds had no teratogenic effect.



Relationship Between Dental Health Care Habits With The Incidence Of Dental Caries In Elementary School Students Of Ciptakarya Baleendah, Bandung Regency

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Abstract, **Background:** Oral health is an important part of determining the health status of children, especially in school-age children. The most common oral health problem experienced by school-age children is dental caries. The prevention of dental caries is one of the programs of the Global Oral Health Program launched by WHO. The incidence of dental caries is strongly influenced by bad habits such as lack of awareness to maintain oral hygiene so that microorganisms in plaque continues to multiply on the surface of the teeth and thicken. In addition to lack of self-care habits, children have a habit of eating sweet foods that contain simple sugars.

Methods: This type of research is cross-sectional, the number of samples is 96 students grades 4, 5 and 6 at the Cipta Karya Baleendah Elementary School in Bandung Regency. The relationship between dental health care habits and caries incidence is done by bivariate test between independent variables to the dependent variable using the Chi-Square test.

Results: Univariate test results showed that 59% of students experienced/had caries, 65% of students had fairly good toothbrushing habits, 55.57% of students had poor eating habits of cariogenic food, 83% of students had the habit of eating non-cariogenic foods, 96.0% of students do not rinse their mouths after eating snacks, and 52% of students doing oral health control to the dental clinics. Bivariate test results showed $p = 0.039$ ($p < 0.05$) on the variable of no mouth rinse habit after eating snacks, and $p > 0.05$ for the other variable.

Conclusion: The conclusion is there is no relationship between dental health care habits with dental caries, except not rinsing the mouth after eating snacks.



Inhibition Of Salam Leaves Extract (*Eugenia Polyantha* Wight) And Identification Of Contaminated Bacteria Colonies In Tooth Brush

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Abstract, **Background:** Toothbrush contamination occurs immediately after use and increases when use is repeated. After the toothbrush is used, it should be washed and disinfected. Bay leaf (*Eugenia polyantha* Wight) can be an alternative herbal disinfectant because it contains tannin, flavonoids and essential oils that are antiseptic and antimicrobial. This study was an experimental laboratory to see the inhibitory content of bay leaf extract concentration of 20%, 30%, 40%, 50% and 60% on the growth of toothbrush bacteria colonies.

Methods: Samples are bacterial colonies originating from 8 toothbrushes that have been used by 8 students in the mass toothbrush activity in SDN Harapan in the City of Bandung, with inclusion criteria aged 9-12 years and having a DMF-T index > 3. Repeat treatment for each concentration was 4 times.

Results: The results showed that bay leaf extract at concentrations of 20%, 30%, 40%, 50% and 60% could inhibit the growth of bacterial colonies, but when compared with the antibacterial effects produced by antibiotics Ciprofloxacin (5 µg), inhibitory content of bay leaf extract the five concentrations are relatively smaller.

Conclusion: Colonies of contaminant bacteria that often appear on toothbrushes are *Neisseria* sp and *Streptococcus* sp, *Klebsiella* sp, *Enterobacteriaceae* sp (Coliform), and *Staphylococcus aureus*. Further research can be developed to find out other herbal ingredients that can be combined to increase disinfection, good dosage forms and the right contact time between disinfectant and toothbrushes.



Effect of Drying Method on the Antioxidant Capacity of *Stevia Rebaudina* Leaves

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Abstract, **Background:** Stevia as a natural sweetener with zero calories and 300 times sweeter than sucrose. The present study investigated the changes in extract yield value, water content and antioxidant potency and water content of stevia after three drying treatments (air drying without sun exposure, oven drying method at 40°C, 60 °C) and compared to fresh samples. **Methods:** DPPH (2,2-diphenyl-1-pikrilhidrazil) radical scavenging activity assay was used to measure the antioxidant properties. **Results:** The results showed that oven drying method at 60 °C had the most potent antioxidant capacity (IC₅₀=14,501 µg/ml) with extract yield value 11,0112% and water content value 9,282%. On the other hand, stevia that was dried by air drying without exposure presented the lowest antioxidant potency (IC₅₀= 67,923µg/ml) with extract yield value 12,0178% and water content value 9,615%. **Conclusion:** These results suggested that oven drying method at 60 °C could be applied to enhance antioxidant activity of *Stevia rebaudina* leaves.



Hepatoprotector Effect of Combination of Binahong Leaf Extract (*Anredera Cordifolia* (Ten.) Steenis) and Temulawak Rhizome (*Curcuma Xanthorrhiza* Roxb.) on Male *Wistar* Strain Rats which Induced by Paracetamol

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Abstract, **Background :** In Indonesia, liver disease is mostly caused by a virus that is still an endemic disease. In addition, there are many other causes that can attack the liver such as drugs, both of which can cause direct damage to liver cells, as well as causes of liver disorders based on hypersensitivity reactions, hepatotoxic chemicals, toxins in food and pollution. The research on hepatoprotection effect of Binahong leaves' water extracts, ginger rhizome, and their combinations has been studied.

Methods: Dosage used for water extract of leaf binahong (*Anredera cordifolia* (Ten.) Steenis) is 70 mg/kg bw, ginger rhizome (*Curcuma xanthorrhiza* Roxb.) 50 mg/kg bw, dosage combination of I (water extract of leaf binahong 52.5 mg/kg bw and 12.5 mg/kg bw ginger rhizome), dose combination of II (water extract of leaf binahong 35 mg/kg bw and 25 mg/kg bw ginger rhizome) and dosage combination of III (water extract of leaf binahong 17.5 mg/kg bw and 37.5 mg/kg bw ginger rhizome). Hepatoprotective testing was conducted on male *Wistar* rats by the method of protection induced by paracetamol (acetaminophen) dosage of 750 mg/kg bw.

Results: The results showed that water extract of leaf binahong dosage of 70 mg/kg bw, the water extract of ginger rhizome dosage of 50 mg/kg bw and dosage combination of I can reduce the highest levels of SGPT, which was significantly different compared to controls ($P < 0.01$) and ($P < 0.03$) on the parameters of SGOT and also equivalent to the comparator Cursil[®] dose 19.16 mg/kg bw ($P \leq 0.05$), in which binahong leaf extract 70 mg/kg bw lowered the highest levels of SGOT, while the ginger rhizome extract of 50 mg/kg lowered the highest levels of SGPT among the other test dosage materials.

Conclusion: dosage combination of I (water extract of leaf binahong 52.5 mg/kg bw and 12.5 mg/kg bw ginger rhizome) has the highest effect on reducing levels of SGPT and SGOT compared to other dosage combinations.



Effectiveness of Media Video Tutorial on Management of Exclusive Breastfeeding Against Knowledge and Skills of Mothers In Breastfeeding

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Abstract, **Background :** Health education for breastfeeding mothers aims to increase knowledge and skills in milking and storing the right milk. In order for health education to be provided more effectively and in accordance with the goals and objectives, it is necessary to have media that are interesting and more easily accepted by the target. One of the media that can be used is video tutorial media. Video tutorial media rely on hearing and vision of the target. Video tutorial media involves all the senses of learning, so that the more sensory devices involved to receive and process information, the more likely the contents of the information can be understood and retained in memory. Thus, it is very important to know the effect of health education with video tutorial media on improving the knowledge and skills of mothers in the management of exclusive breastfeeding in the area of Bogor City Health Centre.

Methods: This study uses a pre-experimental one group pre-test post-test design, conducted in the area of Bogor City Health Centre. Sampling was done by purposive sampling conducted on 26 respondents in the intervention group and 26 respondents in the control group. Variables were measured using a pre-test post-test instrument before and after the educational treatment was given with a video tutorial media about the management of exclusive breastfeeding. Statistical tests use the one sample t test.

Results: The results showed that there was a significant increase in knowledge and skills of mothers in breastfeeding after being educated through video tutorial media about the management of exclusive breastfeeding with a p value <0.005.

Conclusion: It is expected to be able to use this video as a media in educating pregnant women, breastfeeding mothers so that they can improve their knowledge and skills in breastfeeding to increase the scope of exclusive breastfeeding behaviour.



Factors Associated with Exclusive Breastfeeding for Six Months Among Working Mothers in Karawang District

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Abstract, **Background :** Exclusive breastfeeding is the optimal way of feeding infant, however, until 2018 the rate of exclusive breastfeeding in Indonesia was only 35.7%. The WHO has set a goal of increasing exclusive breastfeeding to at least 50% by 2025. Working mother is one of priority population for breastfeeding campaign. The objective of this study was to analysed factors related with exclusive breastfeeding among working women in Karawang district.

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Conclusion: Colonies of contaminant bacteria that often appear on toothbrushes are *Neisseria* sp and *Streptococcus* sp, *Klebsiella* sp, *Enterobacteriaceae* sp (*Coliform*), and *Staphylococcus aureus*. Further research can be developed to find out other herbal ingredients that can be combined to increase disinfection, good dosage forms and the right contact time between disinfectant and toothbrushes.



The Effectiveness of Early Detection Guidance for Danger Signs on Mothers Using Leaflets and Audio Visual

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Abstract, **Background :** Good maternal knowledge of the danger signs during pregnancy, childbirth and the puerperium is an appropriate strategy to reduce and prevent delays in the mother to seek emergency help (JHPIEGO, 2004; Starrs, 2006). Data on maternal deaths in the city of Bogor in 2016, there were reported to be 22 maternal deaths due to bleeding of 8 people and Pre-Exclamation of Heavy-Exclamation of 2 people. Other causes of maternal death are due to heart disease by 6 people and non-obstetric causes by 4 people. These conditions can give an idea, that there has been a delay in recognizing problems / complications in pregnancy, childbirth and puerperium or emergency. which is actually the death of the mother can be prevented (preventable).

Methods: The study design was a quasi-experimental, non-randomized pre-test post-test with two group design models. This study compared two intervention groups, namely those who used audio-visual media and leaflet media in providing guidance on early detection of danger signs for mothers during pregnancy, childbirth and the puerperium. The pre-test and post-test results in this study were tested with the Wilcoxon rank test on two media and Mann-Witney to see the difference results from the values obtained in the two groups. The sample size according to Lemeshow et al (1996) for 30.72 each, but 32 people were obtained so that the normality test was conducted according to Shapiro-Wilk and declared abnormal.

Results: The results of this study found that most respondents were of reproductive age, had a low level of education, had insurance and had had a good pregnancy check. Based on statistical tests it was found that both audio-visual media and leaflet media can increase knowledge by $p < 0.05$, the average value in audio-visual before intervention 6.84 ± 1.273 and after intervention mean the value of 8.48 ± 1.231 , while for the attitude value $33 \pm 4,537$ before the intervention and $34.8 \pm 4,259$ after the intervention. In the leaflet media p value < 0.05 for knowledge with a mean value before intervention 6.56 ± 1.014 and after intervention 8.16 ± 1.110 while for attitude p value > 0.05 with mean value before intervention 33.56 ± 3.501 and after intervention 36.02 ± 3.424 . The results of the comparison between the two media found no difference, both for knowledge and attitudes of mothers towards early detection of danger signs in mothers with p values > 0.05 .



Background on Contract Marriage in Rev Titi Nurhayati¹ Yohana Wulan Rosaria²

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Abstract, **Background :** Marriage contract is also called a temporary or mating disconnection, because neither the female male party agrees to conduct the marriage for a while, a week or several months. Named the wedding mut'ah because men intend to have fun for a while only, not for good. Contract marriage in Indonesia is generally done by indigenous women and foreign men who have stopped in Indonesia for some time. In Cisarua, Bogor, West Java. Around June to August, or in the Arabian season, the local community, many tourists from the Middle East come on vacation.

Methods: This research uses qualitative research methods with a phenomenological approach that examines how people build and give meaning to each of their actions in a concrete social situation. This research was conducted in the top Bogor area. The population as a social situation in this research is the contract marriage actors in the top Bogor area. The samples in this study were also referred to as participants of the marriage contract and who had been contracted. Data collection conducted an in-depth interview research subject search with *snowball* sampling techniques. Assess the validity of data is triangulated to the policy stakeholders of village chief, midwives, data analysis is the analysis content

Results: *The results* of the study describing contract marriage is a form of violation of marital law and ignore the sublime value of marriage and the low understanding of marriage itself. Women in the marriage have no bargaining position to gain rights as wives, reproductive rights and legal protections. Characteristic respondents low level of education, low economic level, lack of awareness of the risk of contracting the disease impact of marriage, and excommunicated in social life, they are forbidden to associate with the surrounding community, but Psychological marriage is lived because the value of material gained and beneficial although it must be willingly abandoned when the contract period is completed, experiencing domestic violence, psychologically and sexually not allowed Using the Counter- conception tool there is no legal protection against the child who was born so that the problem of child rights administratively, among others, difficulties making birth certificates



The Effect of Health Education with Proactive Cognitive Game to Teenager Knowledge about High Risk of Early Matrimony

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Abstract, **Background:** Indonesian Demographic and Health Survey in 2012 showed 12.8% of women ages 15-19 were married. The social phenomenon of getting pregnant before getting married is now increasing in Bogor. In 2013 there were 1,626 couples are early matrimony because of pregnancy with an age range of 16-19 years and 8,130 matrimony which 20 percent matrimony at age 19-20 years. This young couple is still at school age. The average age for males is under 19 years and for females under 16 and 17 years. One of effort that can be done to help teenagers solve these problems is through reproductive health education which is usually called counselling learning methods that are more appropriate with the discussion method to get conclusion and not be rigid when give counselling. Based on study, the proactive cognitive game method is one of the effective learning methods to increase teenager knowledge in reproductive health education. This study aims are determining the effect of health education with proactive cognitive game methods to knowledge and attitudes of teenagers about the high risk of early matrimony.

Methods: Design of this study is Quasi experimental pre and post-test design with control group with the intervention using proactive cognitive game method. Sampling technique use purposive sampling. The inclusion criteria in this study were teenagers aged 15-19 years, students of class XI-XII, willing to be respondents. Variables were measured with knowledge and attitude questionnaire. Data analyse using the Mann Whitney test. Data was collected in August 2018.

Results: Results in intervention group, there was a change in the mean of knowledge by 4 points, from 24.53 at the pre-test to 28.28. Whereas in the control group the change in value occurred only 1 point from 20.50 to 21.73 at post-test value.

Conclusion: There is an effect of providing health education through proactive cognitive games to teenager knowledge about the impact of early matrimony with p value <0.05.



The Influence of Peer Education to Knowledge and Attitude Concerning Premenstrual Syndrome to Junior High School Student

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Abstract,

Background: One of the troubles that related to menstrual is Premenstrual Syndrome. The symptoms of the menstrual trouble are start from the uncomfortable sense around the stomach until the emotional instability trouble. This condition has known as Premenstrual Syndrome. These symptoms are usually emerged around 6-10 days before menstruation and it disappear when the menstruation starts. The important knowledge about Premenstrual Syndrome to the ability to knowing the grade of Premenstrual syndrome who need to handle the symptoms of Premenstrual Syndrome have sensed. Various of information sources about Premenstrual Syndrome that can obtained by the family or by the surroundings and would be better if it obtains by friends or by the same age group where they could more open and more understand to sharing especially in the case of the positive things. Therefore, the effort is needed to provided assistance to the youth to provide knowledge and form positive attitudes about premenstrual syndrome. The effort that can be done is to form a peer group (Peer Group). The purpose of this study was to determine the influence of Peer Education on knowledge and attitude regarding Premenstrual Syndrome in female students of Junior High School in Bogor City.

Methods: This research is a quantities research design with Pre-experimental, one group pre-test post-test, the sampling technique using Cluster Sampling Place of this research in the territory of the city of Bogor, was conducted from February to October 2018 with a sample of Junior High School students 6 grade VII a number of 42 people.

Results: The results obtained the increase of knowledge which is significant with p value 0.000 ($p < 0.005$). Similarly, there is an increase in the attitude of a significant with an average of 51.69 be 56.04, p value 0.000 ($p < 0.005$).

Conclusion: Peer Education effect on knowledge and attitude regarding Premenstrual Syndrome in female students of Junior High School, therefore advice to form peer group education in schools and always conduct health education on reproductive health of adolescents, especially about Premenstrual Syndrome.



Pre Menarche Class Assistance Model Through Empowerment Of Youth Red Cross Members (Pmr), At Smpn 4 And Smpn 6 Bogor City, Bogor Barat District, Bogor City

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Abstract,

Background: Models of Mentoring Pre-Menarche Class Through the Empowerment of the Members of the Youth Red Cross (PMR) In 4 Bogor Junior High School And 6Bogor Junior High School in Bogor West Bogor Subdistrict, Bogor City. One of the signs a girl enter puberty is getting menstruation or menarche that being the biologically sign from the sexual maturity. Menarche at a girl can make a dread it is because of un ready bounce, less have the good knowledge and attitude about the physical and psychological related menarche and less the knowledge about the self-care who needed when menstruation Effort to provide socialization, pre menarche too young to give knowledge and form positive attitudes about menarche is formed a container in the form of pre menarche class is to give assistance to a group of teen age pre menarche which consists of 15people/group. Such activities are in preparing youth to face menarche. So, teenagers who are not getting the knowledge and proper information about can easily receive the condition-a condition associated with menarche.

Methods: Model this behaviour begins with the formation of a team of PMR, and then after that a team of PMR providing information about menarche in the form of premenarchal class to seventh Grade students who have not yet experienced menstruation. This event is planned in period of time around 12 months start by form the PMR group as the investigator of pre menarche class counted in 10 persons in each school. After that the PMR member that have practiced and have an opportunity to do the information about pre menarche by their self and the society services as duty to observation Evaluation of mentoring pre menarche class in the form of pre-test is done from the first meeting. Furthermore, at the final stage will be carried out post-test to determine the extent of the success of the community service activities that have been carried out.

Results: The results of the evaluation of pre and post test showed there is an increase in the readiness of young women in the face of menarche. Therefore, the activities of the Pre-Menarche class recommended to do in Junior High School in order to prepare the youth of menarche and as one of empowering members of the Youth Red Cross.

Conclusion: Evaluation of pre and post test showed there is an increase in the readiness of young women in the face of menarche.



Community based Science and Technologies (IBM) Empowerment of Women in the Approaching Menopause by Doing Aerobic Low Impact Gymnastics and Kegel Exercise as an Effort to Improve the Quality of Life Menopause Women in Curug Village Area Bogor West District

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Abstract, **Background :** The utilization of Posyandu cadres that also as a service provider (Kader) Posbindu in Curug Kelurahan in the monitoring of menopause has not been optimal. The existence of a cadre in 5 people health cadres every Posyandu become an opportunity. The proximity of Posyandu cadres with the community makes the service rendered easily accepted by the community. The solution offered is to partner with the head of the Semplak Community Health Center by activating the role of Posyandu Kader. The Model used is training and mentoring cadres and communities. The training aims to empower cadres as a companion to menopause mothers. The intended mentoring is to provide knowledge to the maternal perimenopause, physical care, psychological and fulfilment of activities and equip the skills in the effort to prevent and reduce complaints during the perimenopause period.

Methods: of coaching is by forming a cadre class consisting of 3 cadres from each posyandu. Participants were given materials and practices by means of discussion, lectures, questions and answers, role play, tags and demonstrations. Evaluation theory is done 2 times to see the success of the training, for practice conducted evaluation using a checklist after doing gymnastics. Monitoring is carried out by accompanying cadres in providing knowledge and teaching gymnastics to the group of perimenopause mothers. Coaching activities are conducted for 2 semesters consisting of: initial activities.

Results: The result of of this activity has increased partner knowledge after following the material about the concept of menopause. Partners can exercise aerobic low impact gymnastics and Kegel gymnastics, but the practice of gymnastics still needs regular repetition. Kader more concerned and disseminating information about changes in menopause, training aerobic low impact gymnastics and Kegel gymnastics and accompany the mother of menopause. The sustainability of in with the activities of promotive and preventive efforts that have been developed through this community dedication should continue to be built.



The Anti-Bacterial Inhibition of Coffee Extracts Against Bacterial Isolates from Caries Sufferers

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Abstract, **Background :** Streptococcus mutants are recognized as the main cause of caries because Streptococcus mutants have acidogenic and acidic properties (resistant to acids). To inhibit the growth of Streptococcus mutants, it can also be done by using mouthwash containing anti-bacterial such as Minocept, Listerine, chlorhexidine which have been widely circulating in the market, besides the mouthwash mentioned above there are some traditional ingredients that can be used to inhibit the growth of these bacteria because contains anti-bacterial such as coffee. (Nisengard and Newman, 2002).
Coffee is rich in antioxidants such as quinine, lignans, chlorogenic acid, tocopherol, *trigonelline* and minerals such as magnesium which can increase insulin sensitivity thereby improving the body's response to insulin and glucose metabolism. (Marifin, H., 2005) These substances are thought to contain antibacterial and *anti-adhesive* which can help prevent the formation of cavities. Because the acid compounds contained in coffee can reduce the chance of cavities.
Methods: The purpose of this study is to determine the minimal inhibitory effect of coffee extracts on isolates from caries sufferers and the contact time of coffee extract in reducing the number of Streptococcus mutants. The research method used was experimental, the sample of this study was Streptococcus isolate. Mutants have taken from dental caries sufferers. and the hypothesis test used is the two-way Anova test. The benefits of this research coffee extract can be used as an alternative ingredient to inhibit the growth of Streptococcus mutants from caries sufferers.
Results: The results showed a minimum inhibitory concentration of coffee extract that inhibited the activity of Streptococcus mutants at a concentration of 25%. The results of the two-way ANOVA test the contact time factor gives an effect if there is an interaction between the Coffee Extract with the contact time with the value obtained for the calculated F value of 8,890 with a significance (p) of 0,000.



Application of Pregnant Exercise for Pregnant Mother and Cadres in Karawang Kulon Health Care Area, Karawang 2018

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Abstract, **Background:** During pregnancy a mother will naturally experience various changes, both anatomically and psychologically. To anticipate various changes so as not to have a negative impact, efforts are made in various ways by health workers and pregnant women themselves in the framework of preventive efforts. Pregnancy exercise is one of the activities in health services during pregnancy or prenatal care that aims to prepare and train the muscles so that they can be used optimally in normal labor. Yuliasari's 2010 research results titled Relationship of knowledge and attitudes with the implementation of pregnancy exercise studies of trimester III pregnant women in Ciputat Health Center, South Tangerang showed that there was a relationship between knowledge and the implementation of pregnancy exercises as much as $p = 0.037$ ($p \leq 0.05$). with the implementation of pregnancy exercises (p value 0.001). Based on the results of his research suggested an increase in health promotion of pregnancy exercise and held a pregnancy exercise program for pregnant women. The results of the 2017 Mardianti and Komalasari study entitled The Effect of Pregnant Exercise on Hemoglobin Levels in Pregnant Women in the Work Area of Rengasdengklok Health Center in Karawang District showed an increase in Hb of 5.4% from the original Hb if carried out regular pregnancy exercises. The problem is in the working area of Karawang Kulon Health Center, Karawang Regency. Is how to improve the knowledge and behavior of pregnant women in performing pregnancy exercises for pregnant women and health cadres who are in the working area of the Karawang Kulon Health Center in Karawang Regency. The purpose of community service to the IbM is to improve the knowledge and behavior of pregnant women in the implementation of exercise in the work area of the Karawang Kulon Health Center, Karawang Regency.

Methods: The methods used in the service of the IbM community are lectures, questions and answers, discussions and practices or demonstrations in providing health education / health promotion about pregnancy exercise to pregnant women and health cadres who are in Anjun Kaler and Poponcol Kaler working area of Karawang Kulon Health Center. Karawang Regency. Allocation of time required is 10 weeks. It is expected that the Puskesmas and village midwives will conduct planned health education with interesting media.



Factors Related to The Incident Stress in Pregnant Women Workers Working in Karawang District In 2018

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Abstract, **Background:** Stress can be defined as a situation that tends to upset the balance between living things and their environment. In everyday life there are many stressful situations such as work stress, examinations, psychosocial stress and physical stress due to trauma, surgery and various health problems (Ranabir Salam and K. Reetu, 2011). Karawang Regency is currently experiencing an increase in the number of industrial factories, government and non-government agencies which is rapidly increasing to an additional 700 industries both at home and abroad. Which of course requires human resources as employees. one of them is a woman, who if she is pregnant it is necessary to get services that suit her needs. The purpose of this study was to determine the factors associated with the incidence of stress in pregnant women working in the Karawang district area in 2018.

Methods: Using a cross-sectional method with a sample of 94 respondents.

Results: The results showed that the incidence of work stress in pregnant women working in the Karawang district reached 14.4%. There was a significant correlation between the variables of gestational age ($p = 0.008$) and workload (0.041) with the incidence of stress in working mothers, while the gravidity variable ($p = 1.0$) and income (0.737) did not have a meaningful relationship.

Conclusion: As a reference for local government managers to determine maternity and maternity leave policies so that pregnant women do not experience work stress during pregnancy, which is followed up with advocacy to the users of women workers.



The Relationship of Body Mass Index with Haemoglobin Levels in Adolescent Girls in High School Student Dormitory 1 Cisarua, West Bandung Regency

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Abstract, **Background:** The prevalence of anaemia in the world is quite high, especially in developing countries, global estimates show that 29% of nonpregnant women worldwide suffer from anaemia (Stevens 2013). Iron deficiency anaemia is considered to be the most common cause of anaemia worldwide. Based on the results of the Basic Health Research (Riskesdas) in 2018, young women are one of the groups prone to suffering from anaemia, it was reported that the incidence of anaemia in adolescent girls nationally was 48.9 per cent, this figure has increased compared to 2013 which was 37, 1 per cent. The greatest proportion of anaemia occurs in the 15-24 years age group and 25 to 34 years. Iron Deficiency Anaemia that occurs in this vulnerable group is due to the increased need for iron, the amount of iron that is absorbed is very small, insufficient iron intake due to low bioavailability of iron-containing foods, menstruation begins and includes a period of rapid growth. This study aims to determine the relationship between body mass index with haemoglobin levels in adolescent girls.

Methods: This study used a cross-sectional design conducted from June to October 2019. The research subjects consisted of 65 people selected by total sampling technique. Measurement of body mass index, through an anthropometric examination of body weight and height, then an examination of haemoglobin levels. Data analysis using Pearson correlation test at 95% confidence level.

Results: The results found that 30.9% of adolescents with anaemia had an average haemoglobin level of 12.5 g / dl and a body mass index of 19.3.

Conclusion: The results of this study can be concluded that there is a significant relationship between haemoglobin levels and body mass index in adolescent girls with $p = 0.011$ ($p < 0.05$).



Technical Guidance on How to Cope Menstrual Pain with the Implementation of *Dysmenorrhoea* Exercises in Android Applications for Teachers and Administrators of Parenting SMPIT Mentari Ilmu Karawang Regency

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Abstract, **Background:** *Dysmenorrhoea* is a condition in which a woman who will or is having menstruation feels a prickling pain or cramps in the lower abdomen. Ernawati (2010) stated the incidence of mild *dysmenorrhoea* in adolescents was 18%, moderate 62% and severe *dysmenorrhoea* 20%. Efforts were made to reduce *dysmenorrhoea* 51.2% with drug therapy, 24.7% relaxation and 24.1% distraction (Depkes RI 2010). *Dysmenorrhoea* exercises are an effective alternative to reduce *dysmenorrhoea* for adolescents (Suparto Ahmad, 2011). The results of research conducted by Eneng Solihah & Ugi Sugiarsih (2018) stated that there are significant differences between *dysmenorrhoea* symptoms before and after exercises using smartphone application. **Objective:** Increase the knowledge and skills as well as the participation of parents and teachers in overcoming menstrual pain with *dysmenorrhoea* exercises in the smartphone application as a guide. **Methods:** Partnership with the Principal of Mentari Ilmu SMPIT organizes extra-curricular activities on how to cope with menstrual pain with *dysmenorrhoea* exercises using brainstorming method, question and answer, demonstrations and redemonstrations also installing *dysmenorrhoea* exercises applications on Android-based smartphones as a guide and monitoring and evaluation of *dysmenorrhoea* exercises. **Results:** There was an increasing knowledge and skills after community service was carried out both for partner I and partner II, in the knowledge of 30 points for first partner and 35 points for second partner. In the aspect of skills there is a suitability of the implementation of *dysmenorrhoea* exercises as much as 26.09 in first partner and 13.33 in second partner after using an android-based application on a smartphone.



Bromelin Isolation Of Pineapple Fruit With Salt

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Abstract,

Background: Pineapple is widely known by the people of Indonesia because its plants grow in tropical Indonesia. Pineapple is often used as a meat scraper because in pineapple contains a component of bromelain which is an enzyme sulfhydryl protease (-SH) which can hydrolyse the peptide bonds in proteins into bonds of amino acid compounds that are simpler so that it can compress meat. The process carried out to get pure bromelain from pineapple is enzyme isolation. Enzyme isolation can be done based on differences in chemical-physical properties, such as solubility, size, charge, and adsorption characteristics. Enzyme isolation based on solubility is one of them by precipitation with inorganic salts. The addition of inorganic salt into the solution containing the enzyme causes the solubility of the enzyme in the solution to decrease, and the enzyme will precipitate.

Methods: This study aims to isolate pineapple fruit bromelain with 40% salt at a pH variation of 6.0; 7.0; 8.0; and 9.0. Three repetitions are performed. The optimum pH is determined for the isolation, yield value, and specific activities. Analysed by Anova test.

Results: The results of the research showed that the most optimal pH was to isolate bromelain at pH 9 with yield of 7.7768%, and the most optimal specific enzyme activity at pH 6 with a value of 14.5684 U / mg.



Effectiveness of Kilemo Oil as *Aedes Aegypti* Biolarvaside

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Abstract, **Background:** Dengue haemorrhagic fever (DHF) is a disease whose medicine is still unknown. DHF is caused by the Dengue virus by means of the *Aedes aegypti* mosquito bite. Dengue cases are increasing every year and cause serious problems in the community. Various attempts were made to control DHF vectors such as the use of chemicals and biological agents. The research carried out is an effort to improve biological control using kilemo oil. The activity will be carried out by extracting kilemo leaves to produce kilemo oil. The research sample was instar 4 *Aedes aegypti* larvae, amounting to 360 larvae, then divided into four repetitions and five treatments including controls.

Methods: This study uses a completely randomized design (CRD). The concentration used was 0.5%; 1.0%; 1.5%; 2.0%; and 2.5%. Using the Quasi experiment method.

Results: The results showed that 2.5% Kilemo Oil caused deaths above 95%, and 1.5% concentration caused deaths above 50%. Kilemo oil is effective in causing 50% larval death at 1.5% concentrations.



The Difference of Glycaemic Index (Gi) Among White, Red And Brown Rice From East Java, Indonesia

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Abstract, **Background:** With the change of dietary habit of people in Indonesia to more metabolic disease preventing diets, it is important to study glycaemic index (GI) in white, red, and brown rice grown in East Java, Indonesia. The negative effect of a high-carbohydrate diet on plasma glucose and/or insulin and triglyceride and/or HDL levels occur only when carbohydrate-containing foods with a high glycaemic index are consumed, while they are excluded from the diet if the diet is based largely on fibre-rich, low-glycaemic index foods. This study aims to comprehend whether there is differences in average GI among white, red and brown rice.

Methods: In this study, twenty-eight healthy volunteers in a single-blinded randomized study tested for the GI were divided into four groups, which were asked to consume white, red, and brown rice, and also pure glucose. The content of carbohydrate for each diet was 50 g given *ad libitum* and the blood glucose levels were measured at 0', 15', 45', 60', 90', and 120' (incremental area under curve; IAUC) and then compared to that of 50 g of available carbohydrate from glucose. From the three samples of rice, brown rice has the lowest GI value of 51.09 compared to red rice with GI value of 70.17, and white rice with GI value of 72.84.

Results: These results suggest that brown rice can be considered to be used for alternative dietary for preventing metabolic diseases.



Continuity of Care System Model in Improving Satisfaction and Shorten of Wound Healing Time

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Abstract, **Background:** The high level of hospital occupancy had prompted policies to repatriate patients early. Surgical site infection risk did not only occur during hospitalization, surgical site infection could also occur when the patient has been discharged from the hospital. Continuity of care intervention was required to avoid surgical wound infections as long as the patient needed. Objective of this study was to explore the existing situation of continuity of nursing care system for surgical patient, especially monitoring service to prevent surgical site infection. **Methods:** Research method include the first stage was conducted qualitative research through focus group discussion with the staff nurses, head nurses, and nurse managers in public hospitals Karawang area amounted to 25 people and test model with a sample of 140 people in public hospital Karawang and public hospital Bayuasih. In the third phase experimental model was conducted with quasi-experimental method. **Results:** The result of the study was found level of satisfaction of the intervention group was higher than the control group. Continuity of care system model in surgery patients was very important to be applied in nursing care to improve patient satisfaction and shorten wound healing time.



Good Knowledge Increase Personal Hygiene Behaviour of Adolescent in Boarding School

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Abstract, **Background:** Attitudes and knowledge that is lacking in maintaining hygiene of external genitalia, as well as bad behaviour triggers vaginal discharge. The purpose of this study was to knowing changes in personal hygiene knowledge of adolescent, Knowing changes in personal hygiene behaviour of adolescent, and Relationship of knowledge with adolescent personal hygiene behaviour.

Methods: This study use quasi-experimental design (quasi experimental research) with a post-test design technique. The population in this study are all adolescent girl who are school in Daarut Tauhid High School. Based on the formula, the sample size of this study 80 people. The questionnaire was given to respondents, before and after given health education about personal hygiene.

Results: The results showed that there was a Relationship between knowledge and adolescent personal hygiene behaviour with a P value of 0.001.

Conclusion: The conclusion of this study show that Adolescent personal hygiene knowledge increases after being given health education. Adolescent personal hygiene behaviour increases after being given health education. Good knowledge increases personal hygiene behaviour of adolescent. Suggestions: giving health education to the adolescent should be given gradually and repeatedly so that the adolescent has better personal hygiene behaviour.



Development of A Spectrophotometric Method for Determination Of Serum Chloride Levels Using 1,5-Diphenylthiocarbazone

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Abstract, **Background:** The function of chloride in the body is to balance electrolyte fluid, regulate the acidity (pH) of gastric fluid and acid-base balance. Examination of chloride levels is useful for the diagnosis of hypo and hyperchloremia. Examination of serum chloride levels by the thiocyanate method at acidic pH will form a ferric thiocyanate complex.

Methods: This method has poor stability. In this study a modification of the method for chloride examination with diphenyl thiocarbazone indicator was applied, which would react with excess mercury to form a purple mercury (II) diphenyl thiocarbazone complex. This reaction has good stability. The aim of the study was to determine the concentration of diphenyl thiocarbazone in the examination serum chloride levels.

Results: The results of the study were statistically tested with $p = 0.05$, obtained a maximum wavelength of 541 nm. The optimal diphenyl thiocarbazone concentration is 0.4%. Validation of this method is good with accuracy <5%, precision <5%, stability of reaction time up to 55 minutes, specificity with Hb levels above 1 g / dL, triglyceride levels of 599 mg / dL and total bilirubin levels of 6.51 mg / dL. Linearity up to 130 mmol / L, detection limit (LOD) at 96 mmol / L, and quantization limit (LOQ) at 105 mmol / L.



Association of Benefits Perceived Factor and Participation of Women in Early Detection of Cervical Cancer

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Abstract,

Background: The high incidence of cervical cancer which is the cause of female death can be prevented by early detection of precancerous lesions. Precancerous lesions are abnormalities of the cervical epithelium due to changes in epithelial cells. Early detection of precancerous lesions can prevent precancerous lesions from progressing to cervical cancer if prompt treatment is taken. Early detection of cervical cancer is important for all married women to prevent the occurrence of cervical cancer which can be done through an IVA test (Visual Acetic Acid Inspection test) or Pap smear. One of causes of the low participation of women was the perception factor of barriers that women have. The aim of this study was to determine the association of benefits perceived to women's participation in early detection of cervical cancer.

Methods: The design of this study was cross-sectional with affordable population were women in several region of Public Health Centre in Bandung City. The sampling technique was consecutive sampling. The sample size was 190. Data collection used questionnaire instrument. Data analysis used chi-square test using SPSS software.

Results: The results of this study indicated that benefits perceived factor was related to women's participation in early detection of cervical cancer ($p < 0.05$) based on age, education, parity, income, and knowledge about early detection of cervical cancer.

Conclusion: Barrier perceived as factor in early detection of cervical cancer needs to be improved in health promotion



Vaginal Microbiota and Contraception Methods in Reproductive-Aged Women

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Abstract,

Background: Vaginal Microbiota Balance is one of the most important factors in women's reproductive health, it can affect the physiological status of vaginal milieu. This balanced can be disturbed by various factors including hormonal status, sexual behaviour, contraception, vaginal bleeding, vaginal irrigation or the use of foreign objects or drugs. Various changes and syndromes of vaginal dysfunction resulting from the use of contraceptive methods are important to observe, especially those using periodic contraception, IUDs and condoms.

Methods: This research aim was to determine the vaginal microbiota condition in women of childbearing age using various contraceptive methods. Samples in this study were 23 women in childbearing-aged who used birth control pills, injections, implants and IUDs. Vaginal swab has been taken according to the procedure for examining vaginal microbiota and examined by gram staining. Medical history was taken to detect the symptoms of urinary tract infections such as itching, sores, swelling, unusual odours, excessive vaginal discharge, ensuring contraception used, history of surgery or other procedures related to the vagina, cervix, uterus, or vulva. The basic criteria for diagnosis using Numerical Values according to Nugent criteria.

Results: The results showed that women use contraceptives increase the level of abnormal vaginal function. The analysis results of various contraceptive methods and their effects on vaginal microbiota show the relationship between oral microbiota and normal microbiota, and no relationship between normal microbiota and vaginal inflammatory response and bacterial vaginosis in groups using oral contraceptives, in other words the use of oral contraceptives provides protection.

Conclusion: The use of oral contraceptives is challenging in bacterial vaginosis and the endocrine environment. Effects on increased glycogen from epithelial cells due to oestrogen, good lactic acid production and decreased vaginal pH are very good for lactobacilli.

Keywords: contraception, vaginal microbiota, vaginal dysfunction



COMFORT IN THE USE OF CHARCOAL-BASED FABRICS

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Abstract, **Background:** In Indonesia, as a tropical country 90% of women have a potential experience to be uncomfortable disturbances in the area of external genitalia because fungi easily to breed. About 31.8% of unmarried adolescent girls, aged 15-24 years show more risk of vaginal discharge. Another studies showed there were 17.59% of adolescents didn't dry out external genitalia after urinating or defecating using dry tissue or towel. WHO data states, the prevalence rate in 2006, 25% - 50% candidiasis, 20% -40% bacterial vaginosis and 5% -15% trichomoniasis. The research results showed that the charcoal-based fabrics has a high absorption, eliminates odor and humidity and as anti-bacterial.

Methods: The purpose of this study was to determine the effect of bamboo charcoal drying-based fabrics/cloth to the comfort of the female area in adolescents. The research sample was taken as many as 80 adolescent girls in Bandung City boarding school, carried out by giving a charcoal-drying cloth to 2 participant groups each are 40 people then evaluating the comfort through a monitoring sheet for 3 weeks. Data analysis was performed using a T-Test with $p = 0.018$ & the experimental Quasy design.

Results: The results showed the behavior of 72.5% of adolescents who use bamboo charcoal-based drying fabrics above the average and comfort of 72.5%. The control group showed 67.5% of teens using bamboo charcoal-based drying fabrics above the average and comfort 50.0%.

Conclusion: The conclusion of this study is that the use of bamboo charcoal-based drying fabrics is effective in increasing the comfort of adolescent external genitalia. Suggestions from this research are need further research with more refined methods, collaborating across sectors and receiving support from the government including research to find out the types of microbes that can be prevented so as to further increase the effectiveness of using bamboo charcoal-based drying fabrics.



Knowledge and Selection of The Intrauterine Device Among Women in Sumedang District

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Abstract, **Background:** Sumedang has low Intra Uterine Device (IUD) acceptors coverage. It was 5.7% in 2011, decreasing to 5.2% in 2012. The region with the lowest IUD coverage was the Hargombong Health Center in Sumedang district (4.8%). The problem was multifactorial, one of them is a factor related to knowledge of the IUD.
Methods: The research method was a cross-sectional study with a sample of 190 respondents. Data collection using a questionnaire, analysis with chi-square test.
Results: The group of women who had knowledge about the IUD more used the IUD (16.5%) compared to the group of women who had low knowledge (2,3%). Statistical test results showed a significant association (p value 0.001). Women who used an IUD tend to have more knowledge about the IUD (Hlandky, 2011). In this study, women who were knowledgeable about the IUD used more IUDs. The lowest level of knowledge is related to follow up after IUD (85,3%), and how the IUD works (55,3%).
Conclusion: There was significant association between women's knowledge's and choice of using an IUD. Counselling or health education about the IUD need to be developed and increase.



The Effect of Sexual Education with The Information Motivation Behaviour Skill (Imb) Approach to Adolescent Knowledge About Preventing Risky Sexual Behaviour

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Abstract, **Background:** Adolescence is a critical period that is the transition from children to adults. At the present, age of adolescent dating at a younger age, while they do not have adequate life skills, so it is risky for sexual behaviour. Risk behaviours in adolescents are obtained through bad relationships and wrong information. Risky sexual behaviour among adolescents is caused by identity crisis, lack of knowledge and lack of parents' attention to children's activities. The strategy for avoiding sexual risk behaviour in adolescents is give information health education. The Information Motivation Behaviour Model explains how to make healthy behaviour through information, motivation and skills improvement. Sexual education with the Information Motivation Behaviour Skill model approach is expected to increase adolescent knowledge, motivation and skills in preventing risky sexual behaviour. The purpose of this study was to determine the effect of sexual education with the Information Motivation Behaviour Skill (IMB) model approach to adolescent knowledge about the prevention of risky sexual behaviour.

Methods: This research used quasi experiment design with pre post-test design. The population in the study were all adolescent at Senior High School in Bandung. The sample was boy and girl adolescent which aged 15-18 years according to the inclusion criteria as many as 37 respondents. The data obtained was the primary data from the questionnaire assessment of adolescent knowledge about the prevention of risky sexual behaviour. Paired T-test is used to analyse the effect of sexual education with the Information Motivation Behaviour Skill (IMB) model approach to adolescent knowledge about preventing risky sexual behaviour. We used booklet with the information motivation behaviour model.

Results: The results showed that the majority of respondents were girl, most of respondent had a boyfriend or girlfriend. There is significant difference of knowledge level of between pre and post-test Sexual education with the Information Motivation Behaviour Skill (IMB) model approach had an effect on increasing adolescent knowledge about preventing risky sexual behaviour with a p value <0.05.

Conclusion: Sexual education with the Information Motivation Behaviour Skill (IMB) model approach had an effect on increasing adolescent knowledge about preventing risky sexual behaviour is expected that sexual education is provided to adolescents in extracurricular activities in schools through the provision of information, motivation and skills improvement



The Cytotoxicity Assay of Water, Ethanol, And N-Hexane Extract of Palm Fruit (Phoenix Dactyliferous) Against Murine Leukaemia P388 Cells.

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Abstract, **Background:** The World Health Organization (WHO) states in 2015 there are an estimated 9 million people who die because of cancer and in 2030 there are an estimated 11.4 million death because of cancer. Blood cancer reaches 3% of all cancers found in humans and most common in children. The cancer drug that is available today has quite severe side effects. Palm fruit (Phoenix dactyliferous) has activity as an antioxidant agent which is potential as anticancer agent, therefore in this study an antileukemia activity test was carried out on water, ethanol, and n-hexane extract of palm fruit.
Methods: The cytotoxicity assay against Murine Leukaemia P388 cells using the MTT assay method. The IC₅₀ value of dates extract is used as the assessment of the activity of palm fruit extract as antileukemia.
Results: The results show that the IC₅₀ value of water, ethanol, and n-hexane extracts of palm fruit are more than 100 ppm which means that each extract of palm fruit is not potential as antileukemia agent.
Conclusion:



Anti-Bacterial Effect of Extract *Drymoglossum Pylochelids* Leaf Compared with *Abreus Pretorius* Leaf, Piper Betle Leaf and Cinnamon Against Black Pigmented Bacteria

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Abstract, **Background:** *Drymoglossum piloselloides* leaf compared with *Abrus precatorius* leaf, piper betle leaf and cinnamon aldehyde have been used in dentistry as traditional mouthwash. However, there are not many scientific researches on investigating those leaf and their therapeutic effects to bacterial that caused periodontitis. This research aims to investigate the antibacterial effect of the extract of *Drymoglossum piloselloides* compare to extract *Abrus pretorius* leaf, piper betle leaf and cinnamon aldehyde to black pigmented bacteria.

Methods: Sample was black pigmented bacteria taken from gingival socket patient with periodontitis. Furthermpre the isolated planted in the LAD and then examine the Minimum inhibitory concentration and minimum bactericidal concentration of those extracts using disc diffusion methods and broth microdilution technique.

Results: the disc diffusion test shown there's a half bacterial growth at 5%, 10%, 15% and 20% concentration of extracts though statistically there's no significant differences between those four extracts. The minimum bacteriostatic effect of *Drymoglossum piloselloides* leaf was 6,25%, *Abrus precatorius* leaf 12,5%, Piper bettle 0,8% and cinnamon aldehyde 5,2%. Meanwhile the minimal bactericidal effect of *Drymoglossum piloselloides* leaf was 12,5%, *Abrus precatorius* leaf 25 %, Piper bettle 3,25 % and cinnamon aldehyde 10,4%. Inconclusion theres difference potential bacterial effect of *Drymoglossum piloselloides* leaf compared with *Abrus precatorius* leaf, Piper betle leaf and Cinnamon aldehyde for black pigmented bacteria although Piper bettle proven to be the strongest one.



Empowering of Family Towards Health Family Models in Sanca Village, Ciater, Subang District

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Abstract, **Background:** The success of development can be seen from a healthy community. To improve the degree of public health, a family is the beginning to encourage independent communities to live healthy in line with the Healthy Indonesia Program through the Family Approach. Program with a public health approach are a family approach with 12 indicators of a healthy family and the Healthy Living Community Movement (GERMAS). The implementation of the GERMAS must start from the family. Survey Mawas Diri in Sanca Village, Ciater District in 2016 in 1114 Families: 72.9% of family heads who smoke and 52.7% of adolescents have smoking habits, 66% do not 41.6% poor food consumption patterns, 51.9% lack nutritional knowledge, 79, 1% had never had a routine health check. Community Program (Ipteks berbasis Wilayah/IbW) solves partners' health-related problems with a family approach to creating a healthy family through family empowerment.

Methods: The method used is coaching for families in the form of health and nutrition education (counseling about balanced nutrition, hypertension diet, diet for heart disease and diabetes mellitus), health checks (blood pressure, cholesterol, blood sugar and nutritional status assessment), knowledge measure before and after intervention and model indicator measurement healthy family. Respondents were 8 families from Dusun Sanca and 11 families from Dusun Ciwirangga (two partners).

Results: The measurement of the average knowledge score before giving nutrition education in both partners is still low, but after intervention, there is an increase in knowledge. The percentage of obesity was higher in responden in Dusun Ciwirangga (53,3%) than in Dusun Sanca (33,3%). Of the respondent with hypertension, 46,7% in Dusun Sanca, 6,7% in Dusun Ciwirangga. Among all respondent, only 10% were known case hyperkolesterolemia. The average achievement indicator of applying a healthy family model is 88.6%

Conclusion: The average achievement indicator of applying a healthy family model is 88.6%. Application of a healthy family model can be improved even in the family each and can be an example for other families so they can be a change agent.



Utilization of Medicinal Herbs Is Efficacious in Dental and Oral Diseases in Kampung Naga

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Abstract, **Background:** The Kampung Naga community has a tradition of treating diseases using natural plants which have been passed down from generations of ancestors. Treatment of dental and oral diseases generally they use plants that are around his house, orally from generation to generation (Ridwan,2016). The purpose of the study was to find out the types of medicinal plants, the parts used, and the procedures for gathering. The benefits of research as a material for developing sustainable use of medicinal plants.

Methods: This research uses descriptive method with qualitative exploration approach. The sample size of this study was 32 respondents. Measuring instruments used in-depth interviews.

Results: Data processing results from open questionnaires were recorded, transcribed, coded, grouped into main categories. Types of plants used as medicine include garlic, bandung kale, koas leaf, latek angšana, kaca piring, dadap leaf, kencur, pucuk kadu, tebu leaf, katuk leaf, cingcau leaf, and handeuleum black. The effect of using medicinal plants, can relieve heartburn due to pain, relieve throbbing pain, reduce swelling, and relieve heartburn. When the effects of the use of medicinal plants include 1-3 days. Parts used as medicine include the leaves, skin, and sweet potatoes. Doses used as medicine include sheets and grains. Ways to mix herbs as medicine include pounding, grinding, squeezing, brewing, grinding, grated and burned.

Conclusion:



Improvement of Adolescent, Attitude and Adolescent Behaviour of Reproductive Health Through The Formation Of Adolescent Care Schools in Bandung

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Abstract, **Background:** Adolescence is a transition period in the period of life. In its development adolescents often feel confused because of the transition. The stages of growth and development of adolescents both physically, psychologically and socially progress quickly, but many adolescents are not able to adjust themselves so that problems that have a major influence in adolescent life arise. Along with the increasingly complex problems faced by adolescents and the importance of the role of schools in overcoming these problems, therefore the proposal submitted Ibm Establishment of school care for adolescents to Improve Knowledge, Attitudes and Behaviors of Adolescents about Reproductive Health in the District Health Center Cibodas Kec. Lembang Bandung especially in Mekarwangi High School, Lembang District.
Method: Desciptif study in community empowerment. The location in Mekarwangi Lembang in Bandung. The sampel 29 person. First partnet is lecture and second partner is student.
Result: There is a improvement of adolescent, attitude and adolescent behavior of reproductive health through the Formation of adolescent care Schools in Bandung
Conclusion: : the Formation of adolescent care Schools to be improved in in Bandung to a improvement of adolescent, attitude and adolescent behavior of reproductive health



Effectiveness of Behavior Self-Management Model On Control Of Fasting Blood Sugar In Dm Patients In Prolanis Group Of Bandung City 2019

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Abstract,

Background: The prevalence of diabetes for all age groups worldwide is estimated at 2.8% in 2000 and 4.4% in 2030. The number of diabetics is projected to increase from 171 million in 2000 to 366 million in 2030. The prevalence of diabetes is higher in men than women, but there are more women with diabetes than men. Urban populations in developing countries are projected to double between 2000 and 2030. The most important demographic change to the prevalence of diabetes worldwide seems to be an increase in the proportion of people aged 65 years. The existence of problem-solving skills in DM disease, allows patients to make a decision about the best management for themselves namely DM Model 2 Control of Blood Sugar Level 2 where one of them is by self-management behaviour Research includes 4 steps of activities namely physical activity, diet management, therapeutic management and control compliance.

Method: This study aims to identify the delivery of self-management behaviour models to control fasting blood sugar in patients with Type 2 diabetes in the working area of Bandung City Health Centre. The results of the study can be used as consideration for counselling in controlling fasting blood sugar in patients with Type 2 diabetes in the working area of the City Health Centre in Bandung. This type of research is a quasi-experiment with pre-post-test with control group design. The population is premenopausal women in the city of Bandung. Based on the calculation of the number of samples needed 60 people (the intervention group 30 people and the control group 30 people). Location determination using multi-stage random sampling. Samples were taken using consecutive sampling techniques. Pre-test and post test to determine blood sugar levels of patients with type 2 diabetes, performed after 3 times the intervention.

Result: The results showed that there was a significant difference in 2019 where the results of $p = 0.022$ then $p < 0.05$ so that the giving of self-management behaviour models influenced the control of fasting blood sugar DM Type 2 in the working area of Bandung City Health Centre 2019.

Conclusion: Recommended research results as a standard procedure for counselling in controlling fasting blood sugar and used as a guideline in providing counselling for sufferers of Type 2 diabetes in 2019.



Family Communication As A Determinant Of Communication Between Parents And Adolescent About Risky Sexual Behavior

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Abstract, **Background:** Quality human resources will determine the nation's development. Adolescent are assets of national development that must be formed into quality human resources. Adolescence is an important stage in the development of individuals from children to adulthood. The challenges for adolescents' lives are the opportunity to have risky behavior without being aware of the long-term consequences of that behavior. Risky behavior in adolescents is adopted through unhealthy relationships and ill-advised information. One of the efforts to prevent risky sexual behavior in adolescents is by creating openness and communication between parents and adolescents. Communication is influenced by a person's attitude towards the message / information to be conveyed. The effectiveness of communication between parents and adolescents is something that must be realized to achieve optimal prevention of risky sexual behavior.

Method: This study aims to explore the supporting factors in the process of communication between parents and teens about risky sexual behavior. This research is a qualitative research with a narrative approach. Respondents were experts in the field of communication / counseling, adolescent psychology experts, steak holders of youth health programs in the city of Bandung and West Java province. Data obtained by in-depth interviews and Expert judgment.

Result: Communication between parents and adolescent about risky sexual behavior is determined by the quality and intensity of communication between father and mother. In addition, the relationship between adolescents with parents and siblings is also related to the process of communication with adolescent about risky sexual behavior. A good condition of communication between father and mother can be an example for adolescents and will lead to confidence in adolescents towards their parents. The conducive conditions of communication and relationships within the family determine the success of communication between parents and teens about risky sexual behavior.

Conclusion: Communication between parents and adolescents about risky sexual behavior is determined by the quality and intensity of communication between father and mother and adolescent relationships with other family members.



Analysis Of Factors Related To Exclusive In Workplace

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Abstract, **Background:** WHO recommends breastfeeding for 6 months and continued breastfeeding until the first two years of life. Problems arise when a mother works. The causes of low breastfeeding in Indonesia are the lack of knowledge of pregnant women, families and the community about the importance of breastfeeding, the increase in premature feeding of MPASI and the lack of support from community, including institutions where women work who have not provided opportunities and special space for breastfeeding. This study aims to analyze the factors of Mother's Age, Knowledge, Attitude, Motivation, Family Support and Support of Health Workers related to the exclusive breastfeeding of Mothers in the Workplace. Study design is a sequential exploratory mixed method.

Method: The first phase of the study analyzes the success factors of exclusive breastfeeding for working mothers. Then an exploration with indepth interview was carried out. The study population was all female workers who have children aged 6-60 months in the Bogor City Garment Factory. The research sample for quantitative studies is 72 people. For qualitative studies using saturated samples, in this study the number of qualitative samples was 10 people. Analysis of Factors Related to Giving Breastfeeding Working Mothers, using Chi Square Analysis.

Result: The results showed that there was a meaningful relationship between the attitudes of breastfeeding female workers with exclusive breastfeeding at work. Whereas knowledge, motivation, family support and health care are not significantly related to exclusive breastfeeding at work.

Conclusion: It is expected that health workers in the Cimandala PKM work area will be more active in increasing the knowledge and motivation of factory workers through the health ministry and cooperation with garment management in increasing the scope of exclusive breastfeeding in the workplace.



The Role Of Dbd Coordinator Nurses and Jumantic Kader on the Management of Muaro Jambi District Type Density In Puskesmas Perumnas of Rejang Labong District and Health Center of Muaro Jambi District in 2019.

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Abstract, **Background:** The development of dbd cases from 2016 increased to 224 cases, in 2017 there were 145 cases decreased, in 2018 it increased again to 220 cases DBD incident cases have increased and decreased and are increasing again with the DBD case number still remaining, dbd puskesmas coordinator officers have done fogging, abate powder distribution, health counseling, as well as mutual assistance activities to eradicate mosquito nests with 3 M, but the results have not been maximized, transition season from the dry season to the rainy season, mosquitoes leave their eggs in waterlogged places that are not monitored, so that the development of mosquito larvae is still found. Proven discovery of larvae in non-landfill sites in the home, HI (66.7%), CI (CI 33.3%, BI (10.8%) found positive *Aedes aegypti* larvae, location behind the refrigerator, HI parameter > 20%. With df (6.3%) with a high larval density level, to break the vector life cycle, researchers making mosquito traps (ovitrap) and larval observation cards (KOJ). The purpose of the study is to evaluate the performance of the Nurse Coordinator dbd and describe what activities have been done, and what their shortcomings are, as well as the performance of jumantik cadres and describe what activities have been done by cadres and what has not been done.

Method: Qualitative method, 14 participants, processed manually, making transcripts, arranged in a matrix, analyzed by content analysis method. Results of research at Puskesmas Perumnas, Coordinating Participants: 80% of the dbd coordinator nurses have performed fogging, the problem being the limitation of the malatoin fluid for fogging, "due to the high cost of malatoin fluid" 90% of the distribution of abate powder has been carried out.

Result: The evaluation has never been done thoroughly, only some people were asked, the answer is "afraid later the water will be mixed with chemicals from abate powder" 100% health education has been given, through posyandu activities, community constraints present little because of the "busyness of household work routines" Cadre: 71.43% Cadre has not been effective in carrying out filling on the larva observer card constraints "cards distributed are rather complicated and difficult to understand" Recommendation: Because dbd cases still exist, and the development of mosquito larvae that not monitored still exists.

Conclusion: Researchers need to make a mosquito trap tool (ovitrap) and larvae observation card (KOJ) that is socialized to the coordinator, cadre and housewife.



The Effect of Animation Film "Complementary Feeding" to Mother's Knowledge about Baby Feeding at Ages 6-12 Months

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Abstract, **Background:** Many children in Indonesia were stunting, 35% of them dispersed in West Java. The efforts to reduce those incidents is through intervention of specific nutritional on 1000 First Days of Life. Giving exclusive breastfeeding for 6 months isn't enough, so that additional time for giving right complementary feeding is needed until the baby reach 6-12 months old. One of the efforts is by educating the mother through film "Complementary feeding".
Method: The research design was a Quasi-Experiment with pre and post-test with control approach. The subjects were 30 mothers who had children aged 6-12 months, for each group. The study was held in Bogor Regency in September-October 2018. The intervention given was an animated film.
Result: The dependent variable is the mother's knowledge, while the independent is the animated film. The analysis of Mann Whitney test shows that the animation film gave significant effect to upsurge respondents' knowledge ($p < 0.05$).
Conclusion:



The Influence of Tape Black Sticky Rice Snack Bar (Oriza Sativa Glutinosa) on The Level of Haid Pains Intensity in Princess Princess in Puskesmas Pasirkaliki City of Bandung City

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Abstract, **Background:** Dysmenorrhoe is a situation in which a woman who will or is experiencing menstruation feels pain. This cramps-like pain is felt in the lower abdomen, usually starting 24 hours before menstruation comes and lasts until the first 12 hours of menstruation, after which all the discomfort has disappeared. The cause is an imbalance of the hormone progesterone in the blood. Various treatment efforts have been made to alleviate these pain symptoms both pharmacologically and non-pharmacologically. Non-pharmacological treatments include giving warm compresses, massages, efflurance, distractions, physical exercise, and adequate rest or consuming foods that contain anthocyanin and flavonoids, one of which is the administration of Black Glutinous Tape.

Method: The research method used is quasi-experimental research design with one group pretest-posttest, without control. The sample is 35 female teenage girls (ages 10-19 years) as many as 35 respondents, with a purposive sampling technique. Data analysis consisted of univariate analysis with (mean and standard deviation) and bivariate analysis using Chi Square test.

Result: The results showed there was a decrease in the intensity of menstrual pain in female adolescents. The results showed a decrease from pre-test 4.54 to 3.06 test post. Statistical tests using the Wilcoxon sign rank test obtained a probability value of 0,000, smaller than alpha 0.05. The test results showed that there were differences in pain intensity before and after the administration of black sticky rice Snack Bar Tape to Female Adolescents in the Work Area of Pasirkaliki Health Center in Bandung.

Conclusion: Giving black sticky rice tape to young girl who reduce dysmenorrhoea as a snack can reduce fatigue alternative non-pharmacological, then it need to be further analyzed in the form, taste, expiration period and black sticky tape snack bar tape packets for anyone who is easily obtained by young girls.



Relationship between Cadres Knowledge About P4K (Maternity Complication Planning and Prevention Program) with Preparedness Behavior in Facing Complications in Public Health Center Pasirkaliki Bandung City

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Abstract,

Background: Maternity Complication Planning and Prevention Program (P4K) in the context of accelerating the reduction of MMR and Infant Mortality Rate (IMR) through activities to improve access and quality of services, which are activities to build community potential, especially for preparation and action to save mothers and newborns. The role of cadres in implementing P4K activities is very important. However, currently there are still many Public Health Center that have not fully implemented P4K activities. One of the contributing factors is the lack of knowledge of cadres in the implementation of the Delivery Planning Program and the Prevention of Complications. The purpose of this study was to determine the relationship of cadre knowledge about P4K with cadre preparedness behavior towards emergencies.

Method:

Result: There is a relationship between cadre knowledge about P4K and cadre preparedness behavior towards emergencies with $P = 0.05$. Discussion. With good knowledge of cadres about P4K, it will improve cadre preparedness behavior towards emergencies in mothers and infants in the region.

Conclusion:



DETERMINATION OF FLAVONOID CONTENT ON CREAM COMBINATION OF ROSELLA FLOWER EXTRACT AND CORNCOB EXTRACT

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Abstract, Background: At present, the community's needs for aesthetics are increasing, such as the use of cosmetic products. Therefore, the production of cosmetics is formulated to enhance beauty, one of which is facial lightening. This study uses a combination of rosella flowers and corn cobs to increase tyrosinase inhibitory activity. The purpose of this study was to determine the physical evaluation and levels of flavonoid Lightening cream preparations extract of rosella and corn cobs with a ratio of 25%: 75%, 50%: 50% and 75%: 25%.

Method: This research is a laboratory experiment with descriptive properties because it describes the results of the evaluation of physical quality, and measurement of flavonoid levels

Results: The results showed that in formula I showed a light brown color, formula II showed a brownish yellow / brown color while the formula III showed a dark brown color. For homogeneity, the three formulas show homogeneity. The highest sample concentration results in formula I in the second replication with a concentration of 15,183ppm or 0,00015%, formula II in the third replication with a concentration of 12,772ppm or 0,000127% and formula III in the first replication with a concentration of 14,022ppm or 0,00014 %.

Conclusion: In conclusion, physical properties include organoleptic test, pH, homogeneity, dispersion, adhesion test and measurement of flavonoid lightening levels are by the standard. Suggestions for other researchers to conduct further research to analyze the levels of flavonoids on roselle extract and corn cobs using solvents and different methods.

Keywords: Flavonoids, Rosela Flower Extract, Corn Cob Extract



Bay leaf as regards benefits on the growth of bacteria in a Toothbrushes

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Abstract. Background : Oral cavity is a reservoir of microorganism as a focus infection. Some of microorganisms are transmissible of pathological disease. Toothbrushes as a medium transfer of oral microorganism has to keep properly to prevent cross contamination or reinfection. Therefore, decontaminated toothbrush is needed to reduce numbers of microorganism. Bay leaf (*Eugenia polyantha Wight*) as an Indonesian's spices is easy to find in the market. It has chemical properties consist of tannin, flavonoid, essential oils, including citric acid and eugenol.

Objective: The purpose of this study was to determine the effectiveness of *Eugenia Polyantha Wight* decoction against oral microorganism collected from used toothbrushes.

Methods: 150gram *Eugenia polyantha Wight* were boiled in 1.5 lt. distilled water in 900C for 20 minutes. It was cooled, filtrated and diluted with distilled water to become 60%, 80% and 100% of decoction. 32 toothbrushes that used by children in primary school were soaked in 3 different concentration of *Eugenia polyantha Wight* (60%, 80%, 100%) and sterile water as a control. All samples and control were diluted with NaCl 0.85%, then inoculated twice on PCA medium using pour plate method. Full covered plates were incubated for 24-48 hours in 37^oC. Colony counter has been used to count the total number of oral microorganisms on 64 PCA discs. The data were analysed using Kruskal- Wallis and Mann-Whitney test.

Result: There were significance differences of numbers of microorganism between three concentration ($p = 0.007$) including sterile water. The mean of microorganism number in concentration 0%, 60%, 80% and 100% were 22.94, 35.96, 3.44 and 3.88 respectively. There were significance differences between 0% and 60% ($p=0,006$), 0% and 80% ($p=0.009$), 0% and 100%($p=0.08$). However, there were no significance differences between three consecutive concentration: 60% and 80% ($p= 0.123$), 60% and 100% ($p = 0.164$). 80% and 100% ($p=0.874$).

Conclusion: *Eugenia polyantha Wight* has an effectiveness to reduce numbers of oral microorganism within three concentration compare to the control. However, the most effective concentration of decoction cannot be determined.

Keyword: Used toothbrush, Decoction, *Eugenia polyantha Wight*, Oral microorganism