THE EFFECT OF MASSAGE USING VIRGIN COCONUT OIL FOR RISK PREVENTION ON IMMOBILITY PRESSURE IN PATIENTS IN THE INTENSIVE UNIT CARE

by Suryati Romauli

Submission date: 24-Feb-2023 09:34AM (UTC-0500)
Submission ID: 2021876068
File name: NEW_Jurnal_VCO.doc (1.21M)
Word count: 5538
Character count: 34454

THE EFFECT OF MASSAGE USING VIRGIN COCONUT OIL FOR RISK PREVENTION ON IMMOBILITY PRESSURE IN PATIENTS IN THE INTENSIVE UNIT CARE

Suryati Romauli [1], Frankly D Latjandu[2], Jems Kifen R Maay3,
[1]Midwifery D-III Study Program, Nursing School , Jayapura Ministry of Health Poltekes, Jalan Padang Bulan II, Heram Village, Heram District, Jayapura City, PAPUA Province, Indonesia
Email: romaulisuryati@gmail.com / jemskrmaay@yahoo.co.id

ABSTRACT

The incidence of pressure sores in Indonesia in patients treated in ICU reaches 33%, this figure is high enough when compared to the incidence of pressure sores in Southeast Asia which ranges from 2.1% -31.3%. In order to prevent pressure sores, an effleurage massage with oil is used as a lubricant, namely Virgin Coconut Oil. This research aims to assign the effect of massage effleurage by using Virgin Coconut Oil to prevent the risk of pressure sores on immobility patients in the Intensive Care Unit of Abepura Regional Hospital in PAPUA Province.

This study uses a quasi-experimental design with post-test only. The sample is the total population that is all patients who are at risk of experiencing pressure sores in the Intensive Care Unit of Abepura Regional Hospital as many as 20 samples divided into two groups, which intervention, and control. The intervention group received treatment for pressure sores according to the SOP + Massage effleurage with VCO, while the control group only received pressure sores treatment according to the SOP of the room. Data were analyzed using Spearman's rho nonparametric statistical test.

The results showed: Characteristics of respondents in the intervention group were found to be the most age <60 years (62.5%), female (75.0%), have a high risk (60.0%) and standard/ ideal BMI (57.1%) whereas in the most age control group > 60 years (58.3%), male (66.7%), have a high risk (40.0%) and fatter BMI (66.7%). Influence of standard actions without effleuragemassage found some suffered pressure sores (50.0%),and some did not experience pressure sores (50.0%). The effect of standard action + effleurage massage using VCO was found not to experience pressure sores (100%). Rank Spearmen correlation test resultsare known that the value of sig (1-tailed) = 0.008, <0.05, it is concluded that there is a significant correlation between effleurage massage using Virgin Coconut Oil to prevent the risk of pressure sores.

Keyword : MASSAGE, VIRGIN COCONUT OIL, RISK PREVENTION, IMMOBILITY PRESSURE

Introduction

Pressure sores are a severe problem for patients who have to be hospitalized with limited activities and multiple life-threatening medical complications. Setiani (2014), said that the prevalence of pressure injuries that occurred in the ICU and other countries and continents was 49% in Europe, ranging from 8.3% -22.9% in Western Europe, 22% in North America and 29% in Jordan. The incidence of pressure sores in America, Canada,and the UK is 5% -32%. In Korea, especially in the ICU, the incidence of pressure sores increases from 10% -45%. In Indonesia, the incidence of pressure sores in patients treated in ICU reaches 33%, this figure is high enough when compared to the incidence of pressure sores in Southeast Asia which ranges from 2.1% -31.3%.

Pressure sores occur because of the lack of monitoring and care of the skin of the depressed part, thus resulting in the occurrence of impaired skin integrity in the depressed part. Nurses have an essential role in preventing the occurrence of pressure sores. The action that can be done is immobilization. Immobilization can improve circulation and re-stimulate nerves pushing to move back the parts that are experiencing weakness. Also, there are actions to tilt the body's position to the right and left, which aims to reduce the pressure on the skin area but does not maintain skin vascularization. Another action that can be done is a massage technique. Massage therapy is a healing effort that is safe, effective and without side effects (Firdaus, 2012), as for some massage techniques, namely: squeezing (petrissage), small circular (friction), vibrating (vibration), hitting (tapotement / tapotage) and rubbed (effleurage).

The results revealed that massage therapy is a method used to facilitate blood circulation and help maintain skin vascularization. One massage therapy that can be used is effleurage massage,which is a once or twice a day rubbing technique effective in preventing the development of pressure sores (Prayadniet al., 2012). In the case of massage therapy, the lotionis needed as a lubricant and skin moisturizer. According to Rindegan (2014), the ideal moisturizer that can soften and protect the skin from damage consists of various vegetable oils, animals and synthesis that can flex the layers of dry and rough skin and reduce the evaporation of water and skin cells that contain coconut oil (Virgin Coconut Oil).

Virgin Coconut Oil (VCO) is a processed coconut product that is safe for consumption by the community and has high economic value. VCO is pure coconut oil that is produced from the processing of coconut meat without heating or through heating with low temperatures to produce oil with a transparent color and free from free radicals due to heating (Handayani et al., 2011). The results of a study conducted by Dewandono (2014), at the St. Anthony of Darma Bakti Kasih Surakarta Nursing Home, concluded that by doing massage on the elderly using VCO, pressure sores become dry, wound colors become brown, wound structures become smooth and tissue repair.

Observations made by the author during the author's work in the Abepura Regional Hospital's Intensive Care Unit found that almost all patients treated were patients in a state of immobility. The length of stay of patients in the ICU varies from a week to three months of treatment. Disease conditions experienced are bone injuries, diseases related to nerves, diseases related to the heart and breathing, and critical illnesses that require rest such as sepsis.

Based on the data obtained by the author through the medical records of Abepura Regional Hospital in January to March 2019, there were 12 patients at risk of grade II pressure sores and six patients including pressure injuries (Abepura Regional Medical Record Data, 2019). Treatment performed on patients with immobility in the ICU Abepura Hospital to prevent pressure sores is to reposition by changing the right-tilted left tilt position (once every two hours). Therefore the authors are interested in treating patients with immobility by doing massage to prevent pressure sores. This study aims to assign the effect of massage effleurage by using Virgin Coconut Oil to prevent the risk of pressure sores on immobility patients in the Intensive Care Unit of Abepura Regional Hospital in PAPUA Province.

Research Method

This type of research is a quasi-experimental with post-test only. In this study, there are two groups, namely the intervention group/treatment group and the control group. The treatment group was given the treatment in the form of standard preventive care and effleurage massage using VCO with 15 minutes of massage time two times a day morning and evening in the back, scapula, sacrum areas while the control group received only standard preventative care.

This research was conducted in the Intensive Care Unit of Abepura Regional Hospital in PAPUA Province from May to July 2019. The population in this study are all patients who were at risk of experiencing pressure sores as many as 20 patients. The sample in this study was a total population of 20 patients taken by purposive sampling,and the determination of samples included in the intervention group or the control group was carried out by simple random sampling, which was divided into ten samples for the intervention group and ten samples for the control group.

Data collection techniques used two parts, namely section A sheet consisting of the characteristics of respondents including age, gender, risk categories that refer to the Branden and anthropometric scale values (IMT) and section B sheet to collect observational data. The material used by researchers was Virgin Coconut Oil from PT Sr12 Herbal Perkasa Bogor, West Java. The Data analysis performs by univariate analysis to produce distribution and presentation of each variable including age, sex, risk category and anthropometry (BMI) while bivariate analysis was performed using Spearman's rho nonparametric statistical test.

Research Result

Respondent Characteristic

Table 1 : The Frequency Distribution Characteristics of Immobility Patients In Abepura Regional Hospital's Intensive Care Unit in PAPUA Province in 2019 (n = 20)

Characteristic	Intervension Group		Control Group		Total	
	F	%	f	%	F	%
Age						
< 60 year	5	62.5	3	37.5	8	100
> 60 year	5	41.7	7	58.3	12	100
Gender						
Male	4	33.3	8	66.7	12	100
Female	6	75.0	2	25.0	8	100
Risk Category						
Moderate Risk	0	0	4	100	4	100
High Risk	9	60.0	6	40.0	15	100
Very High Risk	1	100	0	0	1	100
Anthropometric (IMT)						
Normal/Ideal: 19-24,9 kg/m^3	8	57.1	6	42.9	14	100
More fat: 25-29,9 kg/m^3	2	33.3	4	66.7	6	100

Source: Primary Data, 2019

Table 1 shows that of the 20 immobility patients in the Intensive Care Unit of Abepura Regional Hospital of PAPUA Province in the intervention group, the age of most respondents was <60 years (62.5%), female (75.0%), high risk of pressure sores (60.0%) and standard/ ideal BMI (57.1%) while in the control group, the age of most respondents was> 60 years (58.3%), male (66.7%), high risk of pressure sores (40.0%) and fatter BMI (40.0%) 66.7%)

Effect of Preventing Risk of Pressure Wounds on Immobility Patients who take standard measures without effleurage massage

Table 2 : Frequency Distribution of Standard Measures Without Effluerange Massage For Immobility Patients in the Intensive Care Unit of Abepura Hospital in PAPUA Province in 2019 (n = 10)

Standard Action With *Massage Effluerange*	Control Group	
	F	%
Suffered a pressure wound	5	50.0
Not suffered a pressure wound	5	50.0
Total	10	100

Source: Primary Data, 2019

Table 2 shows that of the ten immobility patients in the Intensive Care Unit of Abepura Regional Hospital in PAPUA Province, in the control group who performed standard measures without effleurage massage, some had pressure sores (50.0%),and some had no pressure sores (50.0%).

The Effect of Effluerange Massage Using Virgin Coconut Oil on the Prevention of the Risk of Pressure Wounds in Immobility Patients in the Intensive Care Unit of Abepura Regional Hospital in PAPUA Province

Table 3 : Frequency Distribution of Standard Measures + Effluerange Massage Using VCO on Immobility Patients in the Intensive Care Unit of Abepura Hospital in PAPUA Province 2019 (n = 10)

Standard action + *Massage Effluerange* with VCO	Intervention Group	
	F	%
Suffered a pressure wound	0	0
Not suffered a pressure wound	10	100
Total	10	100

Source: Primary Data, 2019

Table 3 shows that of the ten immobility patients (intervention groups) in the Intensive Care Unit of Abepura Regional Hospital in PAPUA Province who performed standard actions + effleurage massage using VCO, all did not experience pressure sores (100%). In a hypothesis test looking for the effect of effleurage massage using Virgin Coconut Oil on the prevention of the risk of pressure sores in immobility patients in the Intensive Care Unit of Abepura Regional Hospital, PAPUA Province, researchers used Spearman's rho nonparametric statistical test. From the Spearmen Rank correlation test it is known that the value of sig (1-tailed) = 0.008 <α0.05, CC = 95%, it can be concluded that there is a significant correlation between effleurage massage using Virgin Coconut Oil to prevent the risk of pressure sores on Immobility patients in the Intensive Care Unit of Abepura Regional Hospital, PAPUA Province.

Discussion

Characteristics of Respondents (age, sex, risk category, and anthropometry).

Age

The results showed that in the intervention group, it was known that the age of most respondents was <60 years (62.5%). These results areby the research conducted by Rosita & Maria (2017) about mobilization and the emergence of pressure sores on bed rest patients in Jakarta Hospital which in characteristics respondents showed the age distribution of most respondents was> 60 years. The World Health Organization, WHO believes that individuals after 30 years will experience a deterioration of skin tissue caused by the aging process. Aging causes reduced the elasticity of skin cells due to decreased vascularization fluid in the skin and reduced-fat glands,which further reduce skin elasticity.

Whereas in the age control group,most respondents were> 60 years (58.3%). The results are by the research of Adi Irawan (2011), who said that the most age experienced pressure sores at the age of 51-60 years. According to Nursalam (2011), old age has a risk of pressure sores because the skin and tissues will change with aging and Purwaningsih (2000) research shows that the prevalence of pressure sores is 40% where at the age of 60-80 years.

According to the researchers' assumptions, the characteristics of respondents aged> 60 years in the control group were more than in the intervention group whose age was <60 years because of the aging factor. The aging process that takes place after 45 years will result in physiological and biochemical changes in each cell so that it can experience a decrease in the quality and productivity of cells. Also, the majority of people over> 45 years of age have a reduced quality of life or productivity level so that old age can make it harder for people in the group in their activities compared to young age. In this study, all respondents were diagnosed with diabetes mellitus, CKB, stroke,and hypertension. The duration of treatment carried out in the Intensive Care Unit, nerve room and disease room in an average of more than a week depending on the condition of the patient, this is what often causes the risk of pressure sores.

Gender

The results showed that in the intervention group the majority of immobility patients who were treated in the Intensive Care Unit of Abepura Regional Hospital of PAPUA Province were female (75.0%), while in the majority control group male were (66.7%). From the results of the percentage and the total of respondents, the comparison is not too significant and almost balanced. This study is by research conducted by Mutiaet al. (2015), were viewed from gender; the number of women was 66.7% while men were 33.3%.

When viewed from a hormonal point of view, women will quickly experience a higher risk of pressure sores than men, due to a decrease in estrogen due to menopause (Setyawatiet al., 2015). According to Widodo (2007), states that gender is not meant as a factor that causes the risk of pressure sores. Thisis due to one of the factors that influence the risk of pressure sores is immobility, friction,and a decrease in the level of patient activity.

Risk Category

Based on the distribution table, Branden's score in the intervention group had a high risk of pressure injuries of 60.0%,and the control group had a high risk of pressure injuries of 40.0%. This is by the research of Fatonahet al. (2013), about the use of local VCO to treat pressure sores, were in the study there was a control group of 60% who experienced a high-risk category of pressure sores.

According to the researchers' assumptions, the high-risk category that is found in patients in the Intensive Care Unit of Abepura Regional Hospital in PAPUA Province is likely to occur because 80% are patients with impaired consciousness, all of whom have total bedrest. Pressure sores are a severe problem that often occurs in patients with impaired mobility so that all activities must be assisted and carried out in bed. Suheri's research results (2009), said that the condition of prolonged bed rest, especially for patients with muscle damage could cause pressure sores.

Respondents in this study experienced mobility disorders caused by the disease they were experiencing. In the study of Alfiyanti, et al. (2011), it was stated that mobilization was one of the factors that had a contribution in the intensity of the pressure that caused the occurrence of pressure sores.

Anthropometry (IMT)

The results showed that the respondent BMI in the majority of the intervention group was standard/ ideal (57.1%) This is in accordance with the research Harmyastuti et al. (2016), about the relationship between albumin and BMI levels with the incidence of pressure sores in immobilized patients in Dr. Moewardi General Hospital, where the results the study found that most respondents with standard/ ideal BMI were 37 or 35.6%.

The results of the majority of BMI control groups were fatter (66.7%). Previous research conducted by Puspanigrum (2013), there is a relationship between nutritional status with the risk of pressure sores in stroke patients. Also, according to research Vangilder, et al. (2008) said that pressure tenderness is higher in patients with low BMI and also

in patients with underweight and overweight. This finding is also almost the same as the results of a survey of the prevalence of pressure sores conducted by Vangilderet al., (2009), in the United States in 2007 to find out the relationship between the prevalence of pressure sores, body mass index,and body weight. The results obtained are a higher prevalence of pressure sores in patients with less or more bodyweight.

According to the researchers' assumptions, this shows that in people with a small body mass index, they tend to experience a more significant emphasis on bone protrusions compared to people with a higher body mass index so that pressure sores are more comfortable to occur. The risk of pressure sores is also increased in people who are very obese due to decreased blood supply to the skin area associated with thickening of the subcutaneous layer.

Effect of Preventing Risk of Pressure Wounds on Immobility Patients who take standard measures without effleurage massage

Based on the results of research conducted in the control group, it was found that immobility patients who performed standard measures without partial effleurage massage suffered pressure sores (50.0%). This is by research conducted by Tarihoran (2010), about the effect of a 30-degree tilt position on the incidence of grade I pressure sores in stroke patients at Siloam Hospital, which found that some patients (48.0%) who performed the oblique position suffered pressure sores.

Actions that can be taken as prevention of pressure sores such as wound care, topical medication, therapeutic mattresses and education, in addition to prevention of pressure sores performed in the Intensive Care Unit of Abepura Regional Hospital of PAPUA Province, among others, change the position of beds every 2 hours by tilting left and right tilt after the patient is bathed in the morning, supporting the head, shoulders and between the knees with a pillow until the buttocks are raised 300.

Positioning is the most valuable component of the prevention of pressure sores. The 300 tilt position is a repositioning technique to relieve pressure and prevent contact with the skin which can result in pressure sores by placing the patient's body in the middle of the bed using a pillow to support the head and neck. Next place one pillow at an angle between the buttocks and the mat by tilting the pelvis as high as 30 degrees, the next pillow is placed extending between the legs (Young, 2004). According to Fitriyani (2009), changes in the position of bed rest on the condition of immobilization which is done every 2 hours regularly and continuously can prevent sufferers from a prolonged emphasis on specific body parts that can result in injury. This study shows that there is an influence between the treatment of 30-degree tilt position with the incidence of pressure sores, where there are some respondents who are given30-degree tilt position treatment of pressure sores. While among respondents who were given standard care interventions, there were others (50%) who did not experience pressure sores.

The results of studies conducted in the control group also showed that some (50%) patients who had taken standard measures without effleurage massage did not experience pressure sores. According to the researchers' assumptions, in order to prevent the risk of pressure sores on immobility patients in Abepura Regional Hospital in PAPUA Province, nurses are required to conduct a risk category assessment when the patient enters the room so that based on the assessment of the risk category nurses can perform treatments according to hospital operating procedure standards, because based on the results of research that the administration of tilted position and skincare significantly affect the prevention of pressure sores.

The effect of massage effleurage by using Virgin Coconut Oil to prevent the risk of pressure sores

Based upon the results on immobility patients who performed standard actions + effleurage massage using VCO, most did not experience pressure sores (100%). This is by research conducted by Sari (2017) on the application of massage techniques using VCO to prevent the occurrence of pressure sores in stroke patients in the memory room of RSUD Dr. Soedirman Kebumen, where most respondents who intervened by VCO massage did not occur as many as 80 sores %.

Associated with nursing interventions for the prevention of pressure sores, Perry & Potter (2005) states there are three main areas of nursing intervention in the prevention of pressure sores namely skincare which includes hygienic care and topical administration, mechanical prevention and surface support which includes the use of beds, positioning,and therapeutic and educational mattresses.

The National Guideline Clearinghouse (NGC) and Institute for Clinical Systems Improvement (ICSI) (2007) recommendations to minimize friction and shear that cause a decrease in tissue tolerance and support the occurrence of pressure sores are as follows: regularly use lubricants from hypoallergenic oils, creams or lotion on the surface of the skin that is pressed, lubricated or sprinkled powder on the bedpan before use by the patient and protect the skin from moisture. Giving local ingredients that function as a moisturizer will protect against the skin from damage. In the opinion of researchers, hypoallergenic oils,as suggested by NGC and ICSI above, can be obtained from VCO. The process of making VCO that is processed with a minimum of heating or no heating at all can produce coconut oil with a soft texture and transparent color and fresh-scented coconut.

Virgin Coconut Oil (VCO) is beneficial for skin health. The content of fatty acids (especially lauric and oleic acids) softens the skin and antimicrobial so that VCO is effective and safe to use as a moisturizer on the skin by increasing skin hydration and accelerating healing in the skin (Lucidaet al., 2008). The content of saturated fatty acids in VCO can reach 92% which consists of 48% -53% lauric acid (C12), 1.5-2.5% oleic acid and other fatty acids such as 8% caprylic acid (C: 8) and (7%) capric acid (C: 10). Also, according to Setiani (2014), one of the features possessed by coconut fat is its anticidal property. The antics are in the MCFA. All fatty acids,including MCFA and its derivatives (MGs: Monoglyseride), have great ability as the antichrist. Caprylic Acid (C: 8), capric acid (C: 10) and myristic acid (C: 14) have an outstanding

ability in eradicating various microbial species from groups of bacteria, fungi, yeast,and viruses.

According to Rajamohan & Kevin (2010), VCO is believed to increase body immunity, prevent premature aging, help cure the HIV, control diabetes, help strengthen teeth, speed up the process of wound healing, fight various infections and viruses, prevent heart problems. Besides that, VCO also contains vitamin E (Amin, 2009). Utilization research as a cosmetic ingredient shows that VCO is good for the skin (Nilamsari, 2006), besides that VCO is believed to be good for skin health because it is easily absorbed by the skin and contains vitamin E.

From the results of unstructured interviews with several research respondents in the intervention group about their experiences, impressions,and responses when given VCO topically after bathing, they stated that VCO is easily absorbed and not sticky in the skin so that most respondents feel the benefits. VCO,combined with the use of massage, can increase blood circulation. The use of VCO with massage not only increases muscle relaxation, improves circulation, but also increases the absorption of the biological content of VCO through the skin. The lubricant effect of VCO will prevent the skin frombeing massaged from friction injuries due to massage.

Dewandono's research (2014) said that the application of massage techniques and VCO in the healing of grade II decubitus wounds in the elderly gave a very significant wound development, with the results of dry wounds, wound color becoming brown, the wound structure becoming smoother and the wound repair marked by granulation, proliferation,and wounds are getting smaller.

The massage technique used by researchers is the effleurage massage technique. Massage effleurage is the most basic massage movement and is often used as a connecting movement by the therapist in maintaining contact with the patient by transferring gentle movements from one movement or to the next area of the body. Effleurage is suitable for use in every area of the body that would generally be massaged (while avoiding any area that should not be massaged/contraindicated) (Arovah, 2012).

Effleurage is an application of Gate Control Theory because in this technique skin stimulation is done by massaging the surface of the body which will be maximized if it is done without obstructions in the form of clothing (Peeterset al. 2005). Effects of movement Usually repeated several times over the same area of the body. This is to encourage relaxation and other physical benefits of effleurage, which can help the nerves in the working tissue, facilitate blood supply to the working tissue and facilitate skin control, relax muscle fibers, and release muscles.

Spearmen Rank Test Results Knowing the value of sig (1-tailed) = 0.008, <α0.05, CC = 95% it can be denied that Ho is rejected and Ha is accepted, really needs to be discussed relating to massage effleurage using Virgin Coconut Oil Regarding the risks that occur in immobility patients in the Intensive Care Unit of Abepura Regional Hospital, this is in accordance with research conducted by Sari (2018), regarding the use of VCO assistance in stressed areas for the prevention of pressure sores in bed rest patients at ICU Soedarso Hospital, found there is a difference in the value of sig (1-tailed) = 0.006, <α0.05, a significant change between effleurage massage using Virgin Coconut Oil to the change in importance due to pressure sores.

Effleurage massage using VCO conducted by researchers in the intervention group in the Abepura Regional Hospital Intensive Care Unit can provide positive and therapeutic responses to patients who receive these therapies. The positive effect of the massage is the comfortable sensation felt by the patient where the patient feels relaxed, calm, sleepy even asleep. The application of effleurage massage techniques with VCO results in the conclusion that there is no risk of pressure sores, where the skin color remains reddish, the structure of smooth skin and skin tissue is proper.

According to the researchers' assumptions based on the theory and research results, it is proven that effleurage massage treatment using VCO can prevent the risk of pressure sores on immobility patients who are located so that it can be appliedinpatient care in the form of patient safety implementation.

Based on observations during the study, the researchers concluded that ICU officers at Abepura Regional Hospital in PAPUA Province had implemented several measures to prevent the risk of pressure sores such as bathing patients routinely every morning, repositioning routinely every 2 hours and maintaining a tidy bed. The room also has several air conditioners (AC) to regulate the humidity of the room so that it is maintained.

Conclusion

1. Characteristics of respondents in the intervention group were found to be the age of most respondents <60 years (62.5%), female (75.0%), high risk (60.0%) and normal / ideal BMI (57.1%) while in the age control group most respondents > 60 years (58.3%), male (66.7%), high risk (40.0%) and BMI fatter (66.7%)
2. The effect of standard measures without effleuragemassage found that some had pressure sores (50.0%) and some had no pressure sores (50.0%).
3. Effect of standard action + effleurage massage using VCO, found most did not experience pressure sores (100%).
4. Rank Spearmen correlation test resultsare known that the value of sig (1-tailed) = 0.008 <0.05, so there is a significant correlation betweeneffleurage massage using Virgin Coconut Oil to prevent the risk of pressure sores in immobility patients.

Suggestion

The results of this study could be a positive input for the Abepura Regional Hospital PAPUA Province, especially in modifying the Operational Standard Operating Procedures (SOPs) related to the prevention of the risk of pressure sores in patients with immobilization.

For patients with immobility, to prevent the risk of pressure sores, families can perform treatment with a massage using VCO that has proven useful in preventing pressure sores according to the results of this study.

REFERENCE

1. Arovah Overweight Status, Eating Pattern, Level of Physical Activity and Degenerative Diseases of Lecturers and Employees of Yogyakarta State University, Medikora, 2012
2. Adi Irawan. Old Relationship with the Occurrence of Decubitus in Patients Treated in ICU Room Dr.H Soemarno Hospital Sostroatmodjo Kuala Kapuas Banjarmasin: Muhammaiyah University Banjarmasin, 2011
3. Alfiyanti, et al. The Effect of Skin Care Based on Branden Q Scale Scores on the Incidence of Pediatric Wounds in the Pediatric Intensive Care Unit (PICU) of Tugurejo Hospital and Roemani Hospital Semarang. LPPM UNIMUS, 2012: 130-144, 2011
4. Abepura Regional Hospital Medical Record Data, 2019
5. Dewandono. Utilization of Virgin Cococnut Oil (VCO) with Massage Techniques in the Healing of Decubitus Sores of Second Degree Nursing Stikes Kusuma Husada Surakarta, 2014
6. Fatonah, et al. Effectiveness of Topical Use of Virgin Coconut Oil (VCO) for Overcoming Grade I and II Pressure Sores (Decubitus). Journal of Health, Vol IV, Number 1 April 2013. Pages 254-270, 2010
7. Fitriyani. Effect of Inklin 300 Position on Decubitus Occurrence in Sroke Patients in Ward Anggrek I of Dr. Moewardi Hospital Surakarta. Master's Thesis. Faculty of Nursing, Muhhamadiyah University, Surakarta, 2009
8. Handayani et al. Prevention of Pressure Wounds Through Massage Using Virgin Coconut Oil. Indonesian Journal of Nursing, Volume 14 Number 3 November 2011,141-148, 2010
9. Harmyastuti, et al. The Relationship Between Albumin Levels and Body Mass Index (BMI) With Decubitus Incidence In Immobility Patients In RSUD Dr. Moewardi, 2016
10. Lucida et al. Effect of Virgin Coconut Oil (VCO) on a Cream Base on Active Penetration of Substances, January, 2010. http://ffarmasi.unand.ac.id/pub/Publikasi%20Sukma.pdf, 2008
11. Lucia, et al. Increased Penetration Power Test for Virgin Coconut Oil (VCO) in a Cream Base. Journal of Pharmaceutical Science and Technology, Volume 13 Number 1 2008, 23-30, 2008
12. Perry & Potter. Fundamental Of Nursing USA: Mosby Inc., 2005
13. Purwaningsih. Decubitus Analysis in Bed-Resty Patients in Rooms A, B, C, D and B3 Room Irna Dr. Sardjito Jogjakarta, Thesis: Yogjakarta, 2000
14. Peeters, et al. The Effectiveness Of Massage With And Without Dimethyl Sulfoxida In Preventing Pressure Ulcers: A Randomized, Double-Blind Cross-Over Trial In Patients Prone To Pressure Ulcers. International Journal of Nursing Studies 44.2007: 1285-1295, 2005
15. Mutia, et, al. Profile of Patients with Decubitus Ulcers Who Have Bed Restings in the Inpatient Room of Arifin Achmad Regional Hospital, Riau Province, January to December 2013. Jom FK Vol II No. 2 Hal 1-11, 2015
16. National Guideline Clearinghouse (NGC) & Institute For Clinical Systems Improvement (ICSI), Skin Safety Protocol: Risk Assessment And Prevention Of Pressure Ulcers. Retrieved from www.essentialevidence plus.com, 2007.
17. Nursalam. Nursing Management: Applications in Professional Nursing Practices Edition 3, Jakarta, SalembaMedika, 2011
18. Stoning & Kevin. Effect Of Topical Application Of Virgin Coconut Oil On Skin Components And Antioxidant Status During Dermal Wound Healing In Young Rats. Journal of Pharmacology &Bhiophysical Research, 23 (6). Retrieved from http: //contont,karger.com/Produkte DB / produkte.asp? Doi = 313516, 2010.
19. Rosita & Maria. Mobilization & Incidence of Pressure Wounds in Bed-Resting Patients, Journal of FIK UI, 2017
20. Rukmana, et al. Use of Virgin Coconut Oil in the Prevention of Decubitus Wounds in Immobility Patients, Journal of Nursing Current Vol 5 No. 1 January 2017-June 2017
21. Sari. The Effect of Giving Virgin Coconut Oil (VCO) in a Depressed Area to Prevent Pressure Sores in Bedlocks Patients, Nursing Study Program Faculty of Medicine, Tanjungpura University, Pontianak, 2018.
22. Setiani Effectiveness of Massage with Virgin Coconut Oil Against Prevention of Compound Wounds in the Intensive Care Unit of the Husada Mahakam Journal, Volume 3 Number 8 November 2014,389-442, 2014
23. Setyawati, et al. Effect of Mobilization and Use of VCO (Virgin Coconut Oil) on Decubitus Ulcers in Post Stroke Motor Function Disorders, Journal of Nursing and Scientific Thought, Vol 1 Number 1 Page 1-7, 2015
24. Suheri. Overview of Old Days in the Occurrence of Sores Decubitus in Immobilization Patients in Haji Adam Malik General Hospital Medan, Bachelor Thesis, Paradise, 2009
25. Tarihoran. Effect of 30 Degree Tilting Position on the Occurrence of Grade I (Non-Blanchable Erythema) Wounds in Sroke Patients at Siloam Hospital, Thesis Universitas Indonesia, 2010
26. Young The 30 'Tilt Position Vs The 900 Lateral And Supine Positions In Reducing The Incidence Of Non-Blanching Erytema In A Hospital Inpatient Population. Journal of Tissue Viability, Volume 14 Number: 3 Retried from http://www.ebscohost.com/ciph.edu.on February 2, 2019, 2004
27. Vangilder, et al. Body Mass Index, Weight, And Pressure Ulcer Prevalence: An Analysis Of The 2006-2007 International Pressure Ulcer Prevalence Trade Mark Survey. Taken from http: //www.ncbi.nlm.nih.gove/pubmed/18641521 Date 17 June 2019, 2008
28. Widodo. Sensitivity Test of Decubitus Risk Assessment Instrument in Detecting Early Risk of Decubitus Occurrence at RSIS Universitas Muhamadiyah Surakarta, A.Widodo-2007-publicationilmiah.ums.ac.id.15 June 2019 (09:36), 2007

Author Profil :

1. Suryati Romauli

NAMA	: SURYATI ROMAULI, S.S.T, M.Kes
TEMPAT TANGGAL LAHIR	: JAYAPURA, 21 SEPTEMBER 1977
ALAMAT RUMAH	: PERUM BUMI ASIH HUSADA BLOK C NO 6 PADANG BULAN II , ABEPURA-JAYAPURA-PAPUA
ALAMAT KANTOR	: POLITEKNIK KESEHATAN KEMENKES JAYAPURA, JLN. PADANG BULAN II ABEPURA, JAYAPURA, PAPUA

2. Frankly D Latjandu

NAMA	: FRANKLY D LATJANDU, S.Kep
TEMPAT TANGGAL LAHIR	: MANADO, 19 OKTOBER 1978
ALAMAT RUMAH	: PERUM PEMDA BLOK D DOYO BARU KABUPATEN JAYAPURA-PAPUA
ALAMAT KANTOR	: RSUD ABEPURA, JLN. KESEHATAN ABEPURA, JAYAPURA, PAPUA

3. JEMS KIFEN R MAAY

NAMA : JEMS KIFEN R MAAY, S.Kep., Ns., M.Sc
TEMPAT TANGGAL LAHIR : JAYAPURA, 11 JULI 1978
ALAMAT RUMAH : PERUM GRAHA YOTEFA WAENA, ABEPURA- JAYAPURA-PAPUA
ALAMAT KANTOR : POLITEKNIK KESEHATAN KEMENKES JAYAPURA, JLN. PADANG BULAN II ABEPURA, JAYAPURA, PAPUA
PAPER PUBLIKASI :

1. THE RELATIONSHIP BETWEEN NURSE CARING BEHAVIOR AND PATIENT SATISFACTION LEVEL AT INPATIENT WARDS OF BAYANGKARA HOSPITAL JAYAPURA, TAHUN 2019
2. CLEAN HEALTHY LIVING BEHAVIOURS (PHBS) HOUSEHOLD ORDER KAMPONG SARMI REGENCY BONGGO SUBDISTRICT ARMOPA PAPUA IN 2017
3. IMPLEMENTATION OF FIXED PROCEDURES FOR CARE ACTION OF ARCHIPELAGO SURGERY SURGERY IN THE REGIONAL GENERAL HOSPITAL OF DOK II JAYAPURA
4. INTERVENTION EFFECT OF ULTRA VIOLET and EXHAUSE LIGHTS ON MICROBAL DENSITY DECREASING IN HONAI IN KURULU DISTRICT, JAYAWIJAYA DISTRICT, PAPUA PROVINCE
5. A MODEL OF MALARIA IN PREGNANCY PREVENTION COUNSELING IN CLINICS DISTRICT OF JAYAPURA, PAPUA

THE EFFECT OF MASSAGE USING VIRGIN COCONUT OIL FOR RISK PREVENTION ON IMMOBILITY PRESSURE IN PATIENTS IN THE INTENSIVE UNIT CARE

ORIGINALITY REPORT

14%	14%	2%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	sersc.org Internet Source	11%
2	www.ijphrd.com Internet Source	1%
3	eudl.eu Internet Source	1%
4	sinta.ristekbrin.go.id Internet Source	<1%
5	ww.ijicc.net Internet Source	<1%
6	sinta3.ristekdikti.go.id Internet Source	<1%
7	Submitted to Badan PPSDM Kesehatan Kementerian Kesehatan Student Paper	<1%
8	repository.radenfatah.ac.id Internet Source	<1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		

THE EFFECT OF MASSAGE USING VIRGIN COCONUT OIL FOR RISK PREVENTION ON IMMOBILITY PRESSURE IN PATIENTS IN THE INTENSIVE UNIT CARE