

ISSN 2685-032X



SOUTH EAST ASIA NURSING RESEARCH

Available on : <https://jurnal.unimus.ac.id/index.php/SEANR>



SEANR



South East Asia Nursing Research

South East Asia Nursing Research (e-ISSN:2685-032X) publishes articles of empirical study and literature reviews focused on science, practice, and education of nursing. South East Asia Nursing Research publishes four issues in a year (March, June, September and December).

South East Asia Nursing Research published by Universitas Muhammadiyah Semarang, Indonesia.



Editorial Team

Editor In Chief

Ns. Aric Vranada, S,Kep. MSN.
Universitas Muhammadiyah Semarang, Indonesia

Associate Editor

Dr. Edy Soesanto, S.Kp., M.Kes.
Universitas Muhammadiyah Semarang, Indonesia

Adnan Mujezinovic, PhD
School of Medicine, Department of Health Care, University of Zenica, Bosnia and Herzegovina

Editorial Board

Dr. Jonaid Mustapha Sadang, BSN, MAN, DScN
College of Health Sciences, Mindanao State University, Marawi, Philippines

Hiromi Ogasawara, MSN., Ph.D.
Kaikoukai Medical Foundation, Japan

Antonio Coyoc, B.Sc. MSN.
Ministry of Health Belize, Belize

Quyen Thao Nguyen, B.Mid. MNS.
University of Medicine and Pharmacy at Ho Chi Minh City, Viet Nam

Lin CHun Shing, MNS.
Taipei Veterans General Hospital, Taiwan

Sriyani Padmalatha, Ph.D.
Ministry of Health Sri Lanka, Sri Lanka

Ns. Satriya Pranata, M,Kep.
Universitas Muhammadiyah Semarang, Indonesia

Ns. Desi Ariyana Rahayu, M,Kep.
Universitas Muhammadiyah Semarang, Indonesia

Ns. Tri Nurhidayati, S.Kep, M.MedEd.
Universitas Muhammadiyah Semarang, Indonesia

Professor Junko Sugama, [Scopus-ID: 6602310352], Kanazawa University, Japan

Professor Chieh-Yu Liu, [Scopus ID: 14060585600], National Taipei University of Nursing and Health Sciences, Taiwan, Province of China

Professor Chia-Jung Hsieh, [Scopus-ID: 7401724043], National Taipei University of Nursing and Health Sciences, Taiwan, Province of China

Professor Chiou-Fen Lin, [Scopus-ID: 25937370400], Taipei Medical University, Taiwan, Province of China

Professor Tsae-Jyy Wang, [Scopus-ID: 8332469900], National Taipei University of Nursing and Health Sciences, Taiwan, Province of China

Professor Soh Kim Lam, [Scopus-ID: 57204760022], Universiti Putra Malaysia, Malaysia

Professor Zahrah Saad, [Scopus-ID: 35741658000], Faculty of Nursing and Midwifery, MAHSA University, Malaysia

Professor Faridah Hashim, [Scopus-ID: 54943077700], Faculty of Health Sciences, UiTM Kampus Puncak Alam, Malaysia

Professor Dr. Sandeep Poddar, Ph.D., [Scopus-ID: 21335539800], Lincoln University College, Malaysia

Dr. Rekaya Anak Vincent Balang, [Scopus-ID: 56197860600], Universiti Malaysia Sarawak, Malaysia

Nasruddin Nasruddin, Ph.D, [Scopus-ID: 55960484800], Universitas Muhammadiyah Semarang, Indonesia

Dr. Mohammad Fatkhul Mubin, [Scopus-ID: 57205695107], Universitas Muhammadiyah Semarang, Indonesia

Dr. Abdul Aziz Alimul Hidayat, [Scopus-ID: 57203654137], Universitas Muhammadiyah Surabaya, Indonesia

Dr. Mundakir Mundakir, [Scopus-ID: 57210859545], Universitas Muhammadiyah Surabaya, Indonesia

I Gede Putu Darma Suyasa, Ph.D, [Scopus-ID: 56124702600], Institut Teknologi dan Kesehatan Bali, Indonesia

VOL 2, NO 4 (2020)
December 30th, 2020

TABLE OF CONTENTS

Original Research

The effectiveness of garlic, black turmeric, and red betel vine solutions to maintain scalp hygiene (pediculicide efficacy test toward head lice)

Amin Samiasih, Ayu Dianingsih, Richa Jannet Ferdisa, Fitria Wati, Tri Hartiti, Ernawati Ernawati, Arief Yanto

DOI : 10.26714/seanr.2.4.2020.1-7

Culture And Community Partnership Approach to Making a Healthy Indonesian Society (GERMAS) With The Helix Method

Angga Irawan, Ahmad Hidayat, Jami Hariyadi

DOI : 10.26714/seanr.2.4.2020.8-19

The First 24 Hours Post Partum Mother's Breast Milk Production at Hospital

Menik Kustriyani, Priharyanti Wulandari

DOI : 10.26714/seanr.2.4.2020.20-24

The Anticipation of Schools Bullying

Eni Hidayati, Chistina Tri Cahyani, Desi Ariyana Rahayu, Muhammad Fatkhul Mubin, Tri Nurhidayati

DOI : 10.26714/seanr.2.4.2020.25-31

Case Study

The nursing experience of caring a patient with metastatic brain tumor in surgical pain management ward: a case study report

Sun Sheng-Feng

DOI : 10.26714/seanr.2.4.2020.32-42

Handover Nurse Monitoring and Evaluation In Meeting The SNARS Accreditation Standards 1.1

Kurnia Yuliantanti, Vivi Yosafianti Pohan, Tri Hartiti

DOI : 10.26714/seanr.2.4.2020.43-47

Kangaroo Method Treatment Increases Baby's Body Temperature With Low Birth Weight

Fenny Dwi Kurniasih, Heryanto Adi Nugroho, Chanif Chanif

DOI : 10.26714/seanr.2.4.2020.48-53



Original Research

The effectiveness of garlic, black turmeric, and red betel vine solutions to maintain scalp hygiene (pediculicide efficacy test toward head lice)

Amin Samiasih¹, Ayu Dianingsih¹, Richa Jannet Ferdisa¹, Fitria Wati¹, Tri Hartiti¹, Ernawati¹, Arief Yanto¹

¹ Universitas Muhammadiyah Semarang, Indonesia

Article Info

Article History:

Submit Nov 19th, 2020

Accepted Dec 13th, 2020

Published Dec 30th 2020

Keywords:

Garlic; Black Turmeric; Red Betel Vine; Pediculicide; Lice

Abstract

Head lice (*Pediculus humanus capitis*) is a parasite sticking on the scalp and in between the hair. It lives by laying its eggs on some strands of hair and sucking blood from the scalp, which results in itching, inflammation, restless sleep, and concentration degradation. Lice could also lower self-esteem. The infection may also lead to anaemia, which affects the learning pattern and cognitive function of children. However, the use of chemical insecticide may have a harmful effect. Therefore, this research tested three natural ingredients, namely garlic, black turmeric, and red betel vine, as the pediculicide. This research was aimed to find safe, natural ingredients to eliminate head lice while maintaining personal hygiene. It was an experimental research with Randomized Posttest Only Control Grup Design. This research's subject was 28 lice, which were grouped into seven treatments with four lice in each group. The seven treatments included the treatment by spraying garlic, black turmeric, and red betel vine solution. The concentration of those natural ingredients was determined at 8% and 16%. The control group was sprayed by using water. The finding showed the significance of black turmeric (p-value 0.000), garlic (p-value 0.000), and red betel vine (p-value 0.001) as the effective pediculicide. The effective concentration as pediculicide was a 16% solution.

INTRODUCTION

Scalp infection is usually caused by head lice or *Pediculus humanus capitis*. Head lice (*pediculus*) is a parasite sticking on the scalp and in between the hair. It lives by laying its eggs on some strands of hair and sucking blood from the scalp, which results in itching, inflammation, restless sleep, and concentration degradation. Lice could also lower self-esteem. The infection may also lead to anaemia, which affects children's learning patterns and cognitive function. ¹

The elimination of *Pediculus humanus capitis* by using chemical insecticide may result in negative effects. The pediculicide sold in the market contains a high chemical element, which may result in allergy and poisoning. One of the natural ingredients potent to be antioxidant and anti-inflammation is banana skin extract.² It is effective and could be planted in our yard. This research was aimed to find out the effectiveness of three natural ingredients to eliminate head lice. They were black

Corresponding author:

Amin Samiasih

aminsamiasih@unimus.ac.id

South East Asia Nursing Research, Vol 2 No 4, December 2020

ISSN:2685-032X

DOI: <https://doi.org/10.26714/seanr.2.4.2020.1-7>

turmeric (*Curcuma aeruginosa roxb*), garlic dan red betel vine (*Piper crocatum*).

Black turmeric (*Curcuma aeruginosa roxb*) is known to be useful for skin health. It contains beneficial essential oil, curcuminoid, alkaloid, and saponin.³ The essential oil is effective in killing head lice. It is because essential oil has its antibacterial effect, which keeps the scalp from damage. The antibacterial property in black turmeric is mainly contributed by terpene compounds, which are monoterpene and sesquiterpene.⁴

Garlic is effective in killing head lice as it contains ethanol with an 8% concentration. It was proven to be effective in killing head lice within 0.030 hours⁵. Besides, garlic is often used for its antifungal and antibacterial properties. Garlic contains essential oil, allicin, scordinin, and saponin.⁶

Red betel vine extract could also kill head lice as it contains 0.8 – 1.8% essential oil (consists of chavicol, chavibetol (betel phenol), allylprocatechol (hydroxychavikol), allylprocatechol-mono dan diacetate), vitamin c, sugar, cineole, caryophyllene, cadinene, estragole, riboflavin, starch, sesquiterpene, terpene, phenylpropane, tannin, diastase, carotene, p.cymene, thiamine, carvacrol, eugenol and amino acid.⁷

METHODS

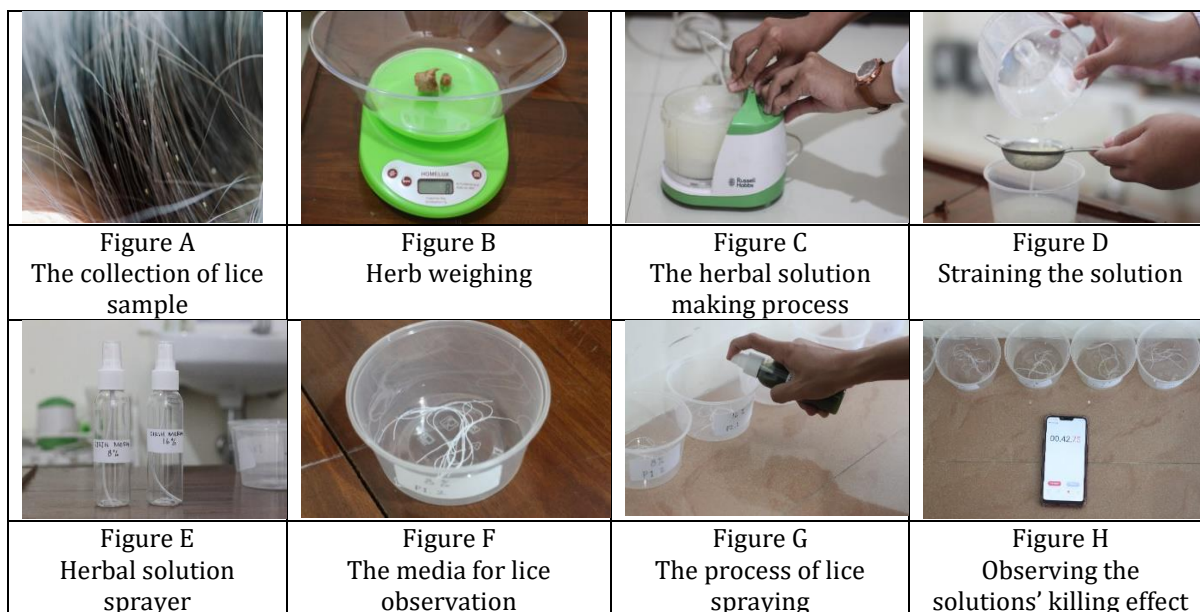
This study consisted of three kinds of research with the same research technique, design, and the number of groups. It was mainly experimental research with Randomized Posttest Only Control Grup Design. The subject of this research was head lice obtained from five female children who lived at Sendangguwo District of Semarang with *Pediculus humanus capitis* infection. The sample used was a group of

adult head lice, with 12 head lice for each research sample. The research group was divided into three groups of treatment, with four head lice for each treatment group. Treatment 1 used herbal spray with a concentration of 8%, treatment 2 used a concentration of 16%, and treatment group 3 used only water. The natural ingredients used were garlic, black turmeric, and red betel vine.

In preparing the solution, garlic, black turmeric, and red betel vine were weighed based on its planned concentration size as presented by figure B. the ingredients were grounded, strained, and mixed with water-based on the demanded concentration, which was 8% and 16% as presented by figure C. the solution was strained by using a strainer (figure D), put into a spray bottle (figure E). the cup and for lice media added with 2g of threads to make present, the similar condition with the real head condition was prepared (figure F).

The treatment was started by experimental animal adaptation. The adaptation was carried out in two hours. Four lice were put into the cup and propped with 2 grams of white threads (figure G). the 10ml sprayer was used to spray the experimental group three times. Meanwhile, the control group was given only a water sprayer.

The research was divided into seven treatment groups. Treatment group 1 (X1) was sprayed using 8% garlic solution, group 2 (X2) was sprayed using 16% garlic solution, group 3 (X3) was sprayed using 8% black turmeric solution, group 4 (X4) using 16% black turmeric solution, group 5 (X5) using 8% red betel vine solution, group 6 (X6) using 16% red betel vine solution, and group 7 (X7) using only water. The killing effect was measured by using a stopwatch, while the dead lice were observed and noted (figure H).



RESULTS

The total sample of the research was 28 lice from five children (figure A). each group of treatment consisted of four lice put into a cup with 2 grams of thread (figure F). the duration of research was two hours for lice adaptation and 45 minutes for data collection. The research data was in the form of killing the power duration of the herbal solution. It was measured by using a stopwatch for 45 minutes. It was shown that the most effective was the 16% red betel vine solution with a minimum of 4 minutes, a maximum of 6 minutes, and an average of 5 minutes of pediculicide duration. The slowest pediculicide duration was in 8% garlic solution with a minimum of 19 minutes, a maximum of 25 minutes, and an average of 22 minutes, as presented by table 1.

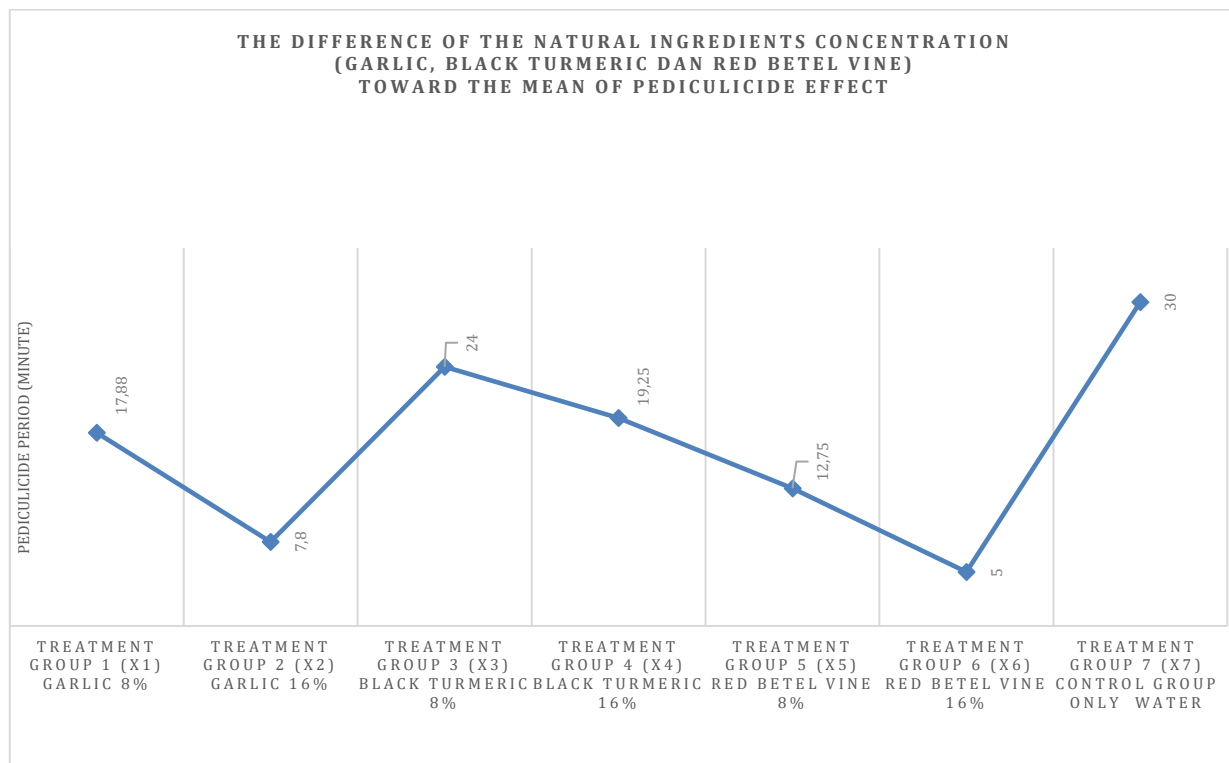
The difference of garlic, black turmeric, and red betel vine concentration toward the mean of pediculicide duration showed that the 16% concentration was more effective than the 8% solution. The most effective pediculicide was 16% red betel vine solution (X6 group), with the mean of pediculicide was 5 minutes. On the other hand, the least effective pediculicide was 8% black turmeric (X3 group), with the

mean of pediculicide was 24 minutes, as presented by graphic 1.

The statistical data analysis was implemented for each herbal solution and the control group. The statistical test used was from the Mann-Whitney test or Kruskal-Wallis test. The correlation between the implementation of garlic solution with the shown pediculicidal effect was $p\text{-value} = 0.000$. It means that the garlic solution spraying was significant to the pediculicide period. The correlation between the implementation of black turmeric solution with the shown pediculicidal effect was $p\text{-value} = 0.000$. It means that the black turmeric solution spraying was significant to the pediculicide period. The correlation between the red betel vine solution's implementation with the shown pediculicidal effect was $p\text{-value} = 0.001$. it means that the red betel vine solution spraying was significant to the pediculicide period. The three mentioned natural ingredients were significant to kill lice. In other words, the three natural ingredients were potential natural insecticide to eliminate head lice.

Table 1
the pediculicide duration based on the garlic, black turmeric, and red betel vine solutions' concentration.

Groups	pediculicide duration (minute)		
	minimum	maximum	mean
Treatment group 1 (X1) garlic 8%	19	25	22
Treatment group 2 (X2) garlic 16%	13	15	13.75
Treatment group 3 (X3) black turmeric 8%	23	25	24
Treatment group 4 (X4) black turmeric 16%	19	20	19.25
Treatment group 5 (X5) red betel vine 8%	10	15	12.75
Treatment group 6 (X6) red betel vine 16%	4	6	5
Treatment group 7 (X7) control group only water	30	30	30



Graphic 1

The difference of the natural ingredients (garlic, black turmeric, and red betel vine) concentration toward the mean of pediculicide duration

DISCUSSION

Spraying 16% black turmeric solution (X4 group) resulted in an average of 19.25 minutes of pediculicide effect. The black turmeric solution is significant toward the pediculicide effect with a p-value 0.000. Based on the analysis, the low concentration of black turmeric resulted in a bacteriostatic effect and bactericidal effect in high concentrations. This research proved that 16% black turmeric solution (X4 group) was more effective than the 8% black turmeric (X3 group). It was supported by

another research that stated that the higher the black turmeric concentration, the higher the active antimicrobial element in it, the higher ability to prevent microbial development. The low concentration black turmeric could perform as bacteriostatic, and the high concentration black turmeric could perform as bactericidal. The antibacterial property is contributed by terpenoid compounds in the form of monoterpene and sesquiterpene, which are the main components of black turmeric. The terpene compounds in black turmeric are the result of the secondary metabolism of

the plant, which is useful to avoid microbe (Bobarala, 2012). Black turmeric also contains essential oil, which helps prevent the growth of *S. aureus* and *B. subtilis* in certain concentrations.^{8,9}

The mean of the group's pediculicide effect, with a 16% garlic solution (X2 group), was 13.75 minutes. The garlic spray was significant, with a p-value of 0.000. It was in line with research mentioned that 4% garlic solution could kill lice in 0.4450 hours, 6% garlic solution could kill lice in 0.1380 hours, and 8% garlic solution could be an effective insecticide for head lice as mentioned that the higher solution of garlic was the better able to kill head lice or pediculosis capitis.⁵ Another researcher also stated that garlic extract is mortal for plant lice (*M. persicae*). In that research, the 0% garlic solution (control group) could kill 34.67% plant lice, 45% garlic solution killed 54.00% lice, and 60% garlic solution killed 72.33%^{10,11}. The chemical compounds in garlic such as allicin, saponin, and flavonoid are believed to perform as an insecticide for head lice, safe for health and the environment.⁵

In this research, the treatment group 7 (X7) as the control group was only receiving water spray. The mean of the pediculicide effect was 30 minutes. This research was supported by other researches that if the control group didn't receive any treatment, the pediculicide effect was performed in 8.974 hours. It was because head lice could live for ten days at 5°C without any blood intake and died at 40°C⁸. Head lice could not live without blood intake in 15-20 hours.¹² Head lice need a warm and humid climate for their incubation period. Meanwhile, for reproduction, they need an optimum temperature of 28°C - 32°C. Another research stated that pediculosis capitis could stay alive for 1-2 days out of the human head. The eggs could stay for a week outside the human head⁸. The long lifespan of pediculosis capitis, either with or without blood intake, could boost lice growth. The rapid growth and the effect of lice bite result

in the itching, which stimulates scratching to eliminate the itching. The itching as the effect of lice's saliva and excretion which is absorbed by the scalp.^{9,13,14}

The treatment by using garlic is not only killing the lice but also reducing the itching and inflammation in the head. It was supported by research that garlic contains a chemical compound in its essential oil has antibacterial and antiseptic property.⁶ The essential oil in garlic could also perform antifungal property to prevent candida Albicans growth.¹⁵ The other chemical compounds in garlic, which are allicin, have a strong aroma, which is powerful to damage disease germ protein. The active element in allicin is assumed to have a powerful antibiotic function.^{6,16,17}

The treatment using red betel vine in this research proved that the 8% red betel vine solution (X5 group) killed the lice in 12.75 minutes, and 16% red betel vine solution (X6 group) could kill in five minutes. The red betel vine solution was significant to kill head lice with a p-value 0.001. This research was in line with the previous research using different concentrations of red betel vine solution for *Sitophilus oryzae*'s mortality. The higher concentration of red betel vine extract, the higher *Sitophilus oryzae*'s mortality. The higher concentration of the essential oil resulted in a higher aromatic effect which is avoided by insects.¹⁸ The higher concentration also increases the poisoning effect for an insect, which could inhibit the growth and kill the insect.¹⁴

The compound in red betel vine, which is lethal for lice, is tannin. Tannin acts as contact and stomach poison for the insect. The mechanism is when lice had direct contact with the solution, the tannin-containing poison absorbed by the wall of the lice body and slowly kill the lice. Tannin functions as the protection inside or outside the body tissue. Besides, tannin could also shrink the tissue and close the protein on the skin and mucosa structure. Meanwhile, the tannin in red betel vine could kill lice.

Besides, tannin could also act as a stomach poison. The nutrition intake in lice's body could not be digested as it is intervened by tannin from the red betel vine directly sprayed on the lice. Indigestion in lice leads to death.^{15,18}

Besides tannin, red betel vine also contains phenolic compounds which could kill *Pediculus humanus capitis*. Phenol is an active compound that could initiate typical biological activity such as toxicity to inhibit nutrition, act as an ant parasite, and pesticide. Therefore, the phenolic compound in red betel vine could kill results in death in *Pediculus humanus capitis*.^{15,19}

Red betel vine also contains alkaloids, which could act as a stomach poison in insects and lead to death. Alkaloid decreases and damages the cell's membrane. This way, alkaloids could infiltrate and poison *Pediculus humanus capitis*. Death is mainly caused by indigestion.²⁰

The effectiveness of red betel vine solution to kill *Pediculus humanus capitis* was represented by the pediculicide effect shown by the certain herbal concentration. The 16% herbal concentration showed a quicker pediculicide effect compared to the 8% herbal concentration. The other proof of effectiveness could also be presented by the difference of *Pediculus humanus capitis* condition when it was sprayed by using red betel vine solution and that one sprayed by using only water. The success in using red betel vine could be beneficial for the people as they could get natural insecticide to inhibit *Pediculus humanus capitis* growth and avoid the use of chemical insecticide to eliminate *Pediculus humanus capitis*.

CONCLUSION

The three natural ingredient solutions were significant to kill head lice (*Pediculus humanus capitis*). They were black turmeric (p-value 0.000), garlic (p-value 0.000) and red betel vine (p-value 0.001). The effective concentration as pediculicide was 16%.

Amin Samiasih / The effectiveness of garlic, black turmeric, and red betel vine solutions to maintain scalp hygiene (pediculicide efficacy test toward head lice)

The use of natural ingredients black turmeric, garlic, and red betel vine to eliminate head lice (*Pediculus humanus capitis*) was safer. The natural ingredients are easy to get and could result in harmful side effects. The effective solution was the solution with a 16% concentration.

ACKNOWLEDGMENTS

The researcher would like to say thank you to all respondents who participated in this research.

CONFLICTS OF INTEREST

Neither of the authors has any conflicts of interest that would bias the findings presented here.

REFERENCES

1. Rahmi H, Rahmadewi R. Antioxidant Activity of Kawista Leaves and Fruit Skin Extract (*Limonia acidissima* L) from Karawang Regency. *J Midpro*. Published online 2020. doi:10.30736/md.v12i1.149
2. Samiasih A, Subagio WH, Dharmana, et al. Banana peels extract (*Musa Paradisiaca* Var Kepok) decreased MDA in New Zealand White Rabbit with DM hyperlipidemia. In: *IOP Conference Series: Earth and Environmental Science*. Vol 292. Institute of Physics Publishing; 2019. doi:10.1088/1755-1315/292/1/012008
3. Lim TK. *Curcuma aeruginosa*. In: *Edible Medicinal and Non-Medicinal Plants*. Springer; 2016:233-240.
4. Baharun K, Rukmi I, Lunggani AT, Fachriyah E. Daya Antibakteri Berbagai Konsentrasi Minyak Atsiri Rimpang Temu Hitam (*Curcuma aeruginosa* roxb.) terhadap *Bacillus subtilis* dan *Staphylooccus aureus* secara in vitro. *J Akad Biol*. 2013;2(4):16-24. Accessed October 10, 2020. <https://ejournal3.undip.ac.id/index.php/biologi/article/view/18998>
5. Pritacindy AP, Supriyadi S, Kurniawan A. Uji Efektifitas Ekstrak Bawang Putih (*Allium Sativum*) Sebagai Insektisida Terhadap Kutu Rambut (*Pediculus Capitis*). *Prev Indones J Public Heal*. 2017;2(1):1. doi:10.17977/um044v2i1p1-9
6. Salima J. Antibacterial Activity of Garlic Extract (*Allium sativum* L.). *Majority*. 2015;4(2).

7. Fadlilah M. Benefit of Red Betel (Piper Crocatum RUIZ & Pav.) As Antibiotics. *Med J Lampung Univ.* 2015;4(3):71.
8. Baharun K, Rukmi I, Lunggani AT, Fachriyah E. *Daya Antibakteri Berbagai Konsentrasi Minyak Atsiri Rimpang Temu Hitam (Curcuma Aeruginosa Roxb.) Terhadap Bacillus Subtilis Dan Staphylooccus Aureus Secara in Vitro.* Vol 2. Departemen Biologi, Fakultas Sains dan Matematika Undip; 2013.
9. Adham D, Moradi-Asl E, Abazari M, Saghafipour A, Alizadeh P. Forecasting head lice (Pediculidae: Pediculus humanus capitis) infestation incidence hotspots based on spatial correlation analysis in Northwest Iran. *Vet world.* 2020;13(1):40-46. doi:10.14202/vetworld.2020.40-46
10. Tigauw SMI, Salaki CL, Manueke J. Efektivitas Ekstrak Bawang Putih dan Tembakau Terhadap Kutu Daun (Myzus Persicae Sulz.) Pada Tanaman Cabai (Capsicum sp.). *EUGENIA.* 2015;21(3). doi:10.35791/eug.21.3.2015.9703
11. Al-zanbagi NA, Al-hashdi DF, Head K. In Vitro Investigation of Allium Sativum as Anti-Head Lice in Jeddah , Saudi Arabia. 2016;(2277):632-635.
12. Vonny Rumampuk M, Keperawatan Universitas Katolik De La Salle Manado Kampus Kombos F, Sulawesi Utara Kode Pos M. *Peranan Kebersihan Kulit Kepala Dan Rambut Dalam Penanggulangan Epidemiologi Pediculus Humanus Capitis (The Importance of Hair and Scalp Hygiene for Pediculus Humanus Capitis Epidemic Prevention).*
13. Dehghanzadeh R, Asghari-Jafarabadi M, Salimian S, Asl Hashemi A, Khayatzaeh S. Impact of family ownerships, individual hygiene, and residential environments on the prevalence of pediculosis capitis among schoolchildren in urban and rural areas of northwest of Iran. *Parasitol Res.* 2015;114(11):4295-4303. doi:10.1007/s00436-015-4670-1
14. Smith CH, Goldman RD. An incurable itch. *Can Fam Physician.* 2012;58(8):839 LP - 841.
15. Neng Ema Zahrotul F. Uji toksisitas minyak atsiri serai wangi (Cymbopogon Nardus L) terhadap mortalitas kutu kepala (Pediculus Humanus Capitis). Published online August 2014.
16. Verma P, Namdeo C. Treatment of Pediculosis Capitis. *Indian J Dermatol.* 2015;60(3):238-247. doi:10.4103/0019-5154.156339
17. Obaid HM. Home remedies for Pediculus humanus capitis infection among schoolchildren. *Our Dermatology Online.* 2018;9(2):131-136. doi:10.7241/ourd.20182.6
18. Mon I, Siska D, Staf E, Jurusan P. Pengaruh Ekstrak Daun Sirih Merah (Piper Crocatum Ruiz & Pav) Terhadap Pertumbuhan Bakteri Pseudomonas Solanacearum. *EKSAKTA.* 2011;1(1).
19. Kurt Ö, Balcioglu IC, Limoncu ME, et al. Treatment of head lice (Pediculus humanus capitis) infestation: Is regular combing alone with a special detection comb effective at all levels? *Parasitol Res.* 2015;114(4):1347-1353. doi:10.1007/s00436-015-4311-8
20. Gonzalez-Audino P, Vassena C, Zerba E, Picollo M. Effectiveness of lotions based on essential oils from aromatic plants against permethrin-resistant Pediculus humanus capitis. *Arch Dermatol Res.* 2007;299:389-392. doi:10.1007/s00403-007-0772-7



Original Research

Culture And Community Partnership Approach to Making a Healthy Indonesian Society (GERMAS) With The Helix Method

Angga Irawan¹, Ahmad Hidayat², Jami Hariyadi³

^{1,2,3} University of Sari Mulia, Indonesia

Article Info

Article History:

Submit Dec 5th, 2020

Accepted Dec 12th, 2020

Published Dec 30th 2020

Keywords:

Healthy Living; Community Movement (Germas); Partnership

Abstract

GERMAS is a movement with the aim of improving people's healthy life and leaving unhealthy habits and behavior of society. One of the areas that become national priorities based on the Decree of the Minister of Villages for Disadvantaged Areas and Trans-Migration of the Republic of Indonesia Number 126 of 2017 concerning the determination of priority villages for village development targets, development of underdeveloped areas and transmigration, including the Village Assistance of Banjar Regency, South Kalimantan Problems in the health sector in Banjar Regency can be seen from the Health Profile Data for Banjar Regency in 2017 which shows the incidence of infectious and non-communicable diseases that are still experienced by many people in Banjar Regency such as ISPA, Hypertension, Rheumatism, Gastritis, Duodenitis, Diarrhea, Dermatitis and Pulmonary TB. One of the concepts that can be used in the implementation of the GERMAS action program is the concept of a partnership with an approach to religious figures, educational institutions, society, and the media. This study uses a quantitative descriptive-analytical design with a quantitative descriptive survey method with a random sampling technique. By using the instrument used in this study is a questionnaire sheet. Based on the research results obtained as follows: knowledge level as much as 53%, physical activity 70%, eating fruit and vegetable foods 75%, alcohol consumption 56%, health checks 15%, environmental hygiene 45%, using a latrine 23%, use of media as much as 80% and social activities as much as 80%. The results of this study hope that the people of Desa Pembantanan will implement a community movement for healthy living which includes 4 indicators, namely increasing knowledge, not drinking alcohol, environmental hygiene, and not using latrines, so that they can avoid health problems from non-communicable diseases.

INTRODUCTION

GERMAS is a movement with the aim of improving people's healthy life and leaving unhealthy habits and behavior of society.¹ One of the areas that become national priorities based on the Decree of the

Minister of Villages for Disadvantaged Areas and Trans-Migration of the Republic of Indonesia Number 126 of 2017 concerning the determination of priority villages for village development targets, development of underdeveloped areas and transmigration, including the Village

Corresponding author:

Angga Irawan

angga_irawan10@yahoo.co.id

South East Asia Nursing Research, Vol 2 No 4, December 2020

ISSN:2685-032X

DOI: <https://doi.org/10.26714/seanr.2.4.2020.8-19>

Assistance of Banjar Regency, South Kalimantan.^{2,3} Problems in the health sector in Banjar Regency can be seen from the Health Profile Data for Banjar Regency in 2017 which shows the incidence of infectious and non-communicable diseases that are still experienced by many people in Banjar Regency such as ISPA, Hypertension, Rheumatism, Gastritis, Duodenitis, Diarrhea, Dermatitis and Pulmonary TB.³

One of the concepts that can be used in the implementation of the GERMAS action program is the concept of a partnership with an approach to Religious Figures, Educational Institutions, Communities, and Media, which are expected to collaborate and synergize in community activities in the GERMAS program.⁴⁻⁷ The GERMAS program through partnerships will consider aspects of local culture.⁸ This is intended to be well accepted by the target community, so that this action becomes a behavior that is inherent in everyday life. In the interests of disseminating the program in order to create an image of the program among the target audience, cooperation between the media, educational institutions, community leaders, health services and community leaders is required.⁹

Pembantanan Village is one of the underdeveloped villages in the Sungai Tabuk Subdistrict, Banjar Regency which is the National priority area based on the decision to describe the villages of disadvantaged areas and transmigration of the Republic of Indonesia Number 126 of 2017. Regarding the determination of priority villages for village development targets, development of disadvantaged areas. Problems in the health sector in Banjar Regency can be seen in the 2018 Banjar District Health Profile which shows that health problems are a priority in reducing the Sustainable Development Goal (SGDs) target.¹⁰ In addition, the prevalence of tuberculosis, hypertension, asthma and dermatitis experienced by the people of Pembantanan Village is in the area of Sungai

Tabuk District which is a village on the banks of the river.

Meanwhile, the total population of the Assistance Village is 3,345, 1,746 male and 1,599 female in the district. Sungai Tabuk, Banjar Regency, South Kalimantan 70653. Based on the existing resources in the village of Pembantan, as follows: health workers, farmers, craftsmen, construction workers and carpenters. There are public service facilities in the assistance village such as health services (2 puskesmas and 1pustu), education centers (PAUD = 1, TK = 3, SD = 2, Islamic boarding schools = 3, Madrasah TS = 2, Madrasah Itthadiyah = 3, Madrasah Aliyah = 1). In addition, there is a village fund to develop BUMDES (bumdes which has already run kelotok rental and sale of farm products). The community in the Assistance Village area is a heterogeneous community that is more receptive to change and has an impact on population dynamics from the center of community activities around it. The form of activities in the assistance village area consists of 2 activities, namely: 1) government: Government programs such as PNPM and PAMSIMAS while; 2) community self-help activities consisting of youth activities, recitation, and posyandu

Meanwhile, the Village Infrastructure Infrastructure is still very limited, such as: (suspension bridges, with wing ropes that are about to break and wooden bridges with many holes), which are the main connecting roads between villages and the trans-Kalimantan road axis. The facilities in the village area include: health services consisting of 2 health centers and 1 pustu, education centers consisting of PAUD = 1, TK = 3, SD = 2, Islamic boarding schools = 3, Madrasah TS = 2, Madrasah Itthadiyah = 3, Madrasah Aliyah = 1, badminton court and hall. While developments in the assistance village area are such as the office of the village head, while the organizations come from the community such as Pustu and Posyandu, while there are several party organizations. government such as PNPM

and PAMSIMAS meanwhile; 2) community self-help activities consisting of youth activities, recitation, and posyandu

Meanwhile, the Village Infrastructure Infrastructure is still very limited, such as: (suspension bridges, with wing ropes that are about to break and wooden bridges with many holes), which are the main connecting roads between villages and the trans-Kalimantan road axis. The facilities in the village area include: health services consisting of 2 health centers and 1 pustu, education centers consisting of PAUD = 1, TK = 3, SD = 2, Islamic boarding schools = 3, Madrasah TS = 2, Madrasah Itthadiyah = 3, Madrasah Aliyah = 1, badminton court and hall. While developments in the assistance village area are such as the office of the village head, while the organizations come from the community such as Pustu and Posyandu, while there are several party organizations.

The purpose of this study is to determine the factors that influence society in the Healthy Indonesian Society Movement.

METHODS

This research is a quantitative research with a descriptive research design. The research approach used was cross sectional. This study examines the factors that influence the community in the Healthy Indonesian Community Movement in the Village of Assistance.

Respondents of this study were members of the village community in South Kalimantan. respondents totaled 80 people according to the inclusion and exclusion criteria. The sampling technique used was simple random sampling.

Research variables have been measured using a questionnaire. The questionnaire used has been declared valid and reliable based on the results of the validity test and reliability test.

Researchers have provided explanations to potential respondents before the researchers conducted data collection. The explanation that has been done includes the objectives of the research, the benefits of the research and the consequences that must be borne in the research. After giving an explanation to the respondent, the researcher asked the respondent to sign the informed consent sheet. the researcher did not include the identity of the respondent in the research results.

RESULTS

The results of this study describe the results of research on the description of the Partnership with the Healthy Living Community Movement with the Penta Helix Approach. Data collection was carried out in August from 5 to 9 October 2020, with a total of 80 respondents. The number of clients who dropped out during the research process did not exist, because the researcher did this by directly visiting clients, so that the total results of this study were 80 respondents. This research was conducted in the village of Banjar Regency.

Description of the Characteristics of Respondents in the Healthy Living Community Movement in the Assistance Village area.

The results of the study show that the gender of the most respondents is male, namely 56 people (70%) while 24 (30%) women. The description of the education level of the most respondents is high school graduation, namely 27 (36.2%) while the lowest is college graduated 9 respondents (11.2%). The most respondents' education level is income, namely 41 (26%) while the lowest is 39 respondents (48.8%). The job description of the most respondents is income, namely 30 (37.5%) while the lowest is 6 respondents (7.5%).

Description of Factors Affecting Society in Healthy Indonesian Community Movement in Assistance Villages.

Table 1
Distribution of Respondents Characteristics in Assistance Villages 2020 (n = 80)

Indicators	f	%
Knowledge		
Knowing	53	66.2
Don't know	27	33.8
Physical Activity		
Knowing	70	87.5
Don't know	10	12.5
Fruit and Vegetable Diet		
Knowing	75	93.8
Don't know	5	6.2
Smoking Behavior		
Smoke	73	91.2
Do not smoke	7	8.8
Consuming Alcoholic Drinks		
Not Consuming	24	30
Consume	56	70
Consuming Drinks, Health Checks		
To do	15	18.8
Do not do	65	81.2
Environmental Cleanliness		
Done	45	56.2
Is not done	35	43.8
using latrines		
Done	23	28.8
Is not done	57	71.2
Maintaining Environmental Cleanliness		
Done	80	100
Is not done	0	0
Social Support and Community Leaders		
Get social	80	100

The results of the study show that the knowledge of gernas knowing is 53 people (66.2%), 27 people do not know (33.8%). The description of physical activity carried out by respondents is 70 people (87.5%), not done by 10 people (12.5%). Most of it was done, namely 75 people (93.8%), not 5 people (6.2%). Most of the people smoked, namely 73 people (91.2%), 7 people (8.8%) did not smoke. The pattern of consuming alcoholic drinks is 56 people (70%), not consuming 24 people (30%). Most of them did not do as many as 56 people (81.2%), did as many as 15 people (18.8%). Most people who do cleanliness in the environment are 45 people (56.2%), 35 people (43.8%) do not. Most of the people

who do not use as many as 57 people (71.2%), use 23 people (28.8%). Most of it is done as much as 80 (100%) Maintaining Environmental Cleanliness. Most of the village people get information by socializing as many as 80 people (100%).

DISCUSSION

This section describes the results of research based on literature reviews and previous research results. This discussion includes the interpretation and discussion of the results, limitations and implications of the research obtained from the research conducted as follows:

Identifying the Characteristics of the Community Based on the Healthy Living Community Movement.

One of the government's efforts to control and prevent the increasing number of non-communicable diseases is through Gernas, which is a systematic and planned action. This is in accordance with Presidential Instruction No. 1 of 2017 concerning the Healthy Living Community Movement, this has a major impact on the family and the lifestyle of each head of the family. "Starting from us as women, then later developing in the family environment and spreading in the wider community.¹¹ Therefore, every woman must become a pioneer of the Healthy Living Society Movement (GERMAS) by maintaining a healthy lifestyle in their respective family environment so that family health is maintained, family productivity increases, the environment becomes clean and costs for medical treatment are reduced.⁶

Based on the results of the study, it was shown that 56 people (70%) were male, while 24 were female (30%). This shows that the head of the family and family members tend to be dominated by men. Based on the culture of decision making in the family, it is the head of the family. The role of the head of the family takes the decision to take the right action. However,

not all family heads are held by men, the fact is that women / wives are the backbone of the family due to the condition of their husbands who do not work either because of illness or other.¹²

Education level plays an important role in public health. Community education can affect people's knowledge. Education is one of the community organizing efforts to improve health because the level of education can affect the healthy behavior of a family with a less supportive level of education which will lead to low environmental awareness, the better the level of formal education so that it will mature understanding of knowledge about germas.

Based on the results of the study, it shows that the highest level of education is 29 people (36.2%) graduated from high school and the lowest is 4 people (5%) who did not graduate from elementary school. Based on the results of other research, it shows that education will influence a person's behavior in life patterns.¹³ The results of this study are supported by other research which states that most respondents with secondary education (SMA) will influence family behavior in implementing healthy living behaviors because respondents have sufficient insight.⁸

The pattern of healthy living behavior in riverbank communities is by regulating diet, getting enough rest, exercising regularly and eating vegetables. All of this is done regularly to maintain health in life. If the body is in a healthy condition, you can do your usual activities, namely as a farmer. The income earned will affect the economy and health welfare in the family.^{14,15}

Work is a grouping of one's duties and responsibilities to meet needs that must be met and achieve a better standard of living.¹⁶ In addition, based on the research results according to other study, it is stated that work affects the ability of parents to provide nutrition for family members.¹⁷

It is proven in this study that the occupation of most respondents is self-employed 99 (30%). In Indonesia, fishermen usually live in rural areas. The stability of food availability at the household level is measured based on the adequacy of food availability and the frequency of meals for household members in a day. The combination of the two as an indicator of food sufficiency produces an indicator of the stability of food availability.¹⁸ If this availability is sufficient, the family will be able to realize health and apply germas properly.⁵

The researcher got the income of the community in the village of Pembantanan <Rp. 2,000,000; 41 people (51.2%) while income> Rp. 2,000,000 totaling 39 (48.8%) so that the purchasing power of the community in the village of pembantanan is still very low, both primary and secondary needs. As is the case according to the other study, which states that family income is one of the factors affecting the purchasing power of families to provide health needs.¹⁹ family. The higher the family income, the higher the pattern of family purchasing power in meeting the health needs of family members. Based on othe research As a result, most of the head of the family who played a poor role in the health of family members was a family head whose economy was low.²⁰ Low-income families tend not to be able to meet their food needs, the diversity of foodstuffs is not guaranteed, because with limited money there are not many choices of foodstuffs to be consumed.

The pattern of healthy living behavior in riverbank communities by adjusting the diet, getting enough rest, exercising regularly eating vegetables. All of this is done regularly to maintain health in life.

The income earned will affect the economy and health welfare in the family. Based on the results of research conducted, it was found that the highest number of private workers was 30 (37.5%) and the lowest was civil servants (3.8%). Work is a grouping of

one's duties and responsibilities to meet needs that must be met and achieve a better standard of living. Research conducted by other research states that work affects the ability of parents to provide nutrition for family members.¹⁸

The stability of food availability at the household level is measured based on the adequacy of food availability and the frequency of meals for household members in a day. The combination of the two as an indicator of food sufficiency produces an indicator of the stability of food availability. If this availability is sufficient, the family will be able to realize health.²¹

The research that was obtained based on people's knowledge about the GERMAS program was 53 people (66.2%) and 27 people (33.8%) did not know. The low number obtained by researchers is a basic reference and is not in line with other study, namely the main objective in providing health education, namely changing a person's knowledge, attitudes and behavior while Knowledge is the result of "knowing", and this occurs after people do sensing of a particular object. Knowledge or cognitive is a very important domain for the formation of one's actions (overt behavior).¹⁶

The research that was done got physical activity that did as many as 70 (87.5%) and those who did not do 10 people (12.5%). Based on research by other research on the relationship of physical activity, it shows that there are several things that can affect activity, including age, gender, occupation, education.²² Meanwhile, research according to other study on the relationship of physical activity shows that people with good physical activity are less at risk of contracting non-communicable events than people who have less physical activity.²³

Adequate consumption of vegetables and fruits plays a role in maintaining normal blood pressure, blood sugar and cholesterol levels. Adequate consumption of vegetables and fruits will reduce the risk of having

difficulty defecating (defecating / constipation) and obesity. This shows that adequate consumption of vegetables and fruits plays a role in preventing chronic non-communicable diseases. The Healthy Living Society Movement (Germas) invites people to consume 2-3 servings of vegetables and fruit every day, especially local vegetables and fruits, which are sufficient to consume vegetables and fruits. The fiber content in 100 grams of watermelon is 0.5 grams, oranges 0.1 grams, bananas 0.63 grams, salak is 0.5 grams and apples 0.65 grams. The fiber content of the vegetables consumed by respondents was 2.6 grams of cassava leaves, 1.1 grams of carrots, 0.7 grams of chayote, 0.2 grams of mustard greens and 1 g of kale.²⁴

In accordance with the theory that hypertension is the majority of women and the risk factors for a family history of hypertension are 197 people (58.3%). The age factor is very influential on hypertension because with increasing age, the higher the risk of hypertension. This is often caused by natural changes in the body that affect the heart, blood vessels and hormones. Based on the results of the research conducted in the assistance village, data were obtained for as many as 73 smokers (91.2%) and 7 non-smokers (8.8%). Actually information about the dangers of smoking has often been socialized by the government through the Ministry of Health. The Ministry of Health also has a community movement program (Germas), which is a healthy life without smoking with modules that are easily accessible on the internet, and information accompanied by pictures that are interesting to read.²⁵ However, programs like this need to be intensified again in order to reduce the prevalence of teenage smoking in Indonesia. The results showed a number of respondents (57.3%) had knowledge that the subject affected by the dangers of smoking was only for people around smokers. This shows that there are still many smokers in the village and this

does not stop the negative effects of smoking.

The results of the study found that the behavior of consuming alcohol in the village community was very high. Out of 80 samples, 56 (70%) consumed and 24 (30%) did not consume alcohol. Research conducted by other research found that alcohol consumption is influenced by factors of lack of self-confidence, curiosity or trying, flight from problems, lack of knowledge, bad family, bad environment significantly increases alcohol addiction (addiction).²⁶

The rampant circulation of alcohol causes people to freely buy it. Alcohol is known to be intoxicating and makes you unconscious and some even lead to death. Currently, various types of mixed liquor are also circulating in the market that mix various types of alcoholic drinks with harmful ingredients such as mosquito repellent creams. The risks faced can clearly lead to death. The school and related agencies must be aware of this and should follow the development of various information so that it can be disseminated to school students.

Health checks in the assisting village community who carried out as many as 15 people (18.8%) and those who did not do 65 people (81.2%), according to the researchers there was a very lack of public awareness of the importance of awareness in terms of conducting regular health checks. The average reason why respondents do not carry out routine health checks is because they are afraid of the results of the examination or know about their health problems, and are considered to be activities that waste money because they are carried out when the person is in a state that looks fit.²⁷ The quality of education also affects their awareness to carry out routine health checks. In contrast to the results of other research regarding the educational results of respondents having routine health checks, it shows that 72% of respondents who routinely carry

out health checks are college graduates. In addition, the higher a person's economic capacity, the more routine that person will take medical tests. Business at work also affects a person in routine health checks, besides that the time for health checks at health service places is during working hours.

The environment is an external variable that affects policy implementation. The environment in implementing the GERMAS policy includes socio-economic conditions and community technology. Most of the informants agreed that the socio-economy of society had an effect on policy implementation, especially in terms of behavior. Increasing the willingness, awareness and ability of the community to have a healthy lifestyle is the goal of GERMAS. Research from Yuliandari and Herya states that families or communities with low socioeconomic status have five times greater opportunities for not behaving in a clean and healthy life than families / communities with high socioeconomic conditions.²⁷

Based on the results of the study, it was shown that the environmental hygiene behavior in the community in the Assistance Village was carried out by 45 (56.2%) and not done by 35 (43.8%). This is in line with research conducted by Iskandar (2018) which found that environmental cleanliness is carried out by all residents together with full awareness so as to produce a clean and healthy environment.

The results of the study found that the behavior of using healthy latrines in the community in the village of assistance 23 (28.8%) used latrines and 57 (71.2%) still did not use latrines. People still lack awareness of the importance of latrines in terms of the requirements for a healthy home, namely the availability of clean and proper latrines and the availability of clean water at home. Other research found that there is a relationship between ownership

of a healthy latrine with education, knowledge, attitudes, and family income.

The results of the study found that the media provided information related to the GERMAS program with a total of 80 (100%). Overall, this indicates that the village community in the village of Pembantanan used the media as a means of obtaining information in the health sector. This research is in line with research conducted by other study which found that the cultivation of clean and healthy living or healthy living habits has an impact on: 1). Increased knowledge about the importance of maintaining health through the healthy life community movement (GERMAS), 2). Increase public awareness about the importance of health and PHBS, 3). The community can apply PHBS directly in their daily life.^{27,28}

Information in the implementation of the GERMAS policy includes transmission, clarity and consistency. Transmission is the process of delivering policy information to both implementers and groups. Information on GERMAS is carried out using media such as printed media (leaflets, posters, stickers, billboards, brochures and others), electronic media (radio and television), and social media (Twitter, Instagram, Facebook, Youtube and Whatsapp). Apart from these media, GERMAS socialization was provided through meetings / meetings, posyandu activities, posbindu activities and other health education activities. The submission of information that has been carried out has not been received thoroughly, this is because there are still schools that have never received socialization from the Health Office.²⁹

The transmission process in the communication of media information affects the clarity of policy implementation. Clarity of communication can be assessed how the implementers and target groups know the intent, content and objectives of the policy itself. The results of the interviews that have been carried out, the

delivery of GERMAS information carried out by the Health Office and Puskesmas has been carried out clearly in accordance with the objectives and indicators of GERMAS.^{23,30}

Based on the results of interviews conducted by researchers, the community has been given socialization related to GERMAS in accordance with the indicators. In addition, the delivery of GERMAS is provided by integrating it into existing programs / activities. This is because each of the GERMAS indicators already has its own program / activity, while the GERMAS socialization in particular is only carried out at certain times and the schedule for each puskesmas to hold it varies.

A public figure according to the Law of the Republic of Indonesia Number 8 of 1987 is "a person who because of his social position receives honor from the community and / or the government" (Government of the Republic of Indonesia, 1987). The position of public figures is obtained by individuals because of their knowledge, wisdom and wisdom, and their success in living life in society. The wisdom and knowledge possessed by community leaders usually become role models for people who are in their respective fields. Because of their activities, skills and characteristics, community leaders are people who are respected and respected.

Based on the results of the study, it was found that social activities and community leaders got a score of 80 (100%) that played a role as community leaders, among others, as a social controller, guardian and enforcer of values and norms that apply in society. In addition, community leaders also play a role in solving various problems that occur. Community leaders have an obligation to provide support, guidance, motivation and direction to the community. Community leaders also act as support providers. Support from community leaders can be divided into emotional support, reward support, instrumental support and

informative support. Emotional support is indicated by expressions of empathy, care and concern. Appreciative support is indicated by expressions of respect and encouragement to move forward. Instrumental support is indicated by providing direct assistance according to community needs. Informative support is indicated by providing advice, hints, suggestions and feedback.

Implementation of GERMAS Program Activities

Germas or Healthy Living Community Movement is a movement launched to achieve SPM and PIS PK. So that it is in line with Germas's goal of realizing a better degree of public health. As an effort to increase awareness, willingness, and ability to behave in a healthy society, Presidential Instruction Number 1 of 2017 concerning the Healthy Living Community Movement (Germas) has been issued.²⁵

The current health problem in the assisting village faces a major challenge, namely the triple burden of disease, because there are still infectious diseases, an increase in non-communicable diseases and diseases that should have been resolved do not reappear. Non-communicable diseases such as hypertension, stroke, heart disease and diabetes are in the highest rank.

The morbidity and mortality rates as well as the demand for health services (treatment) are expected to continue to increase. This is driven by changes in the lifestyle of people who tend to be physically inactive (for example spending a lot of time watching TV), low consumption of fruits and vegetables (eating lots of processed, ready-to-eat food, high in sugar, salt, etc.), lack of concern for check or detect early disease.³¹ Public health status is influenced by behavior, environment, health services, and heredity. Behavior and the environment play a role for more than 73% of the health status of the community and a number of risk factors for health behavior that occur,

namely the population lack of physical activity (70%), less consumption of fruits and vegetables (75%). As is known at this time, poor diet, unbalanced nutritional intake, lack of physical activity, lack of concern in routine health checks, have been inherent in most of the people's daily lives. This actually needs to be watched out for because the worst events that can be life-threatening are generally triggered by these bad behaviors. The Ministry of Health develops a Healthy Indonesia program, Healthy Living Community Movement through a family approach.³²

Germas is a national movement that cannot only rely on the role of the health sector alone. The role of ministries and institutions in other sectors also determines and is supported by the participation of the community in practicing a healthy lifestyle. The socialization of Germas is expected to be able to invite people to cultivate a healthy life, in order to be able to change unhealthy habits or behavior. Based on the results of the study, the results showed that questionnaires were distributed to 80 respondents who were randomly taken from 12 RTs in the assistance village area. This data can be seen from 10 indicators, there are 4 indicators that have not been implemented properly in the community in implementing the germas program.

The main activities carried out within the framework of Germas are: increasing physical activity, enhancing Clean and Healthy Living Behavior (PHBS), providing healthy food and accelerating nutrition improvement, increasing prevention and early detection of disease, improving environmental quality, increasing healthy living education. The results showed the application of the Healthy Community Movement (GERMAS) in the Village Assistance, Banjar Regency. It can be seen that respondents can carry out activities, consume fruits and vegetables and prevent disease by adopting a healthy and regular lifestyle.

Most of the respondents still use the latrine a lot as much as 57% while the community hygiene pattern in cleaning the house is 45%, and the lack of awareness in carrying out health checks is 65% and the smoking behavior pattern is 73%. This is in line with the GERMAS program organized by the Ministry of Health that in order to improve the quality of life, GERMAS invites the public to cultivate a healthy life, in order to be able to change unhealthy habits or behavior.

The implementation of GERMAS must start from the family, because the family is the smallest part of society that shapes personality. Based on the results of research on Basic Health Research, it was stated that many respondents did not carry out routine health checks, including checking blood pressure, blood sugar, weighing, measuring abdominal circumference, checking cholesterol.³³ From several research results, it is stated that there is a lack of understanding related to government programs, namely GERMAS, one of the reasons for not understanding health problems.

Implementation of GERMAS Program Activities using the Penta Helik approach

The bureaucratic structure in implementing the GERMAS policy includes Standard Operating Procedures (SOP) and division of tasks (fragmentation). The regulations that have been used as SOP guidelines in implementing GERMAS implemented by the Health Office and BAPPEDA are Presidential Instruction Number 1 of 2017 and Central Java Governor Regulation Number 35 of 2017. Furthermore, there is a follow-up from the Regional Secretary by issuing Circular Number 440/6192 dated 7. November 2018 aimed at regional apparatus organizations (OPD) to play an active role in GERMAS.

Based on the results of the study, it was found that there were no regional regulations and RAD on GERMAS in the Assistance Village. Regional regulations are

deemed necessary not just implementing regulations from higher legislation, but can become a forum for community aspirations, as well as being able to absorb and accommodate the special conditions of a region.⁵

The basis of the SOP because RAD can be used as a guide for each OPD to prepare GERMAS activities, as well as a guide in monitoring the evaluation of the implementation of GERMAS activities. SOPs have an influence on policy implementation. SOPs are used in harmonizing actions for policy implementers in a complex and widespread organizational structure, which can lead to flexibility and equality in implementing regulations. SOPs that are flexible are more adaptable to responsibilities compared to rigid SOPs.¹¹

Fragmentation relates to the distribution of responsibilities and the division of tasks to those who implement policies. Based on the results of interviews with informants, it was stated that the implementation of GERMAS was coordinated by the Health Office. The division of tasks between organizations or implementing agencies requires coordination. According to Winarno, the greater the coordination needed, the less likely the success of the policy will be.¹¹ This is in accordance with other research which states that the division of tasks and coordination between overlapping implementers will cause the implementation process to be less effective.⁶

CONCLUSION

Characteristics of respondents based on the results of the description of the community movement to live a healthy life, most of the respondents did physical activity, consumed fruits and vegetables, did not have regular health checks, did not carry out community movement activities to live well. Community suggestions are expected to implement a healthy living community movement which includes the results of this

research. Hopefully, the people of Assistance Village will implement a healthy living community movement which includes 4 indicators, namely increasing knowledge, not drinking alcohol, environmental cleanliness, and not using latrines, so that health problems are not contagious.

The community is expected to implement a healthy living community movement which includes 4 indicators, namely indicators, namely increasing knowledge, smoking behavior, environmental hygiene, and not using latrines, so as to avoid health problems from non-communicable diseases.

ACKNOWLEDGMENTS

The researcher would like to say thank you to all respondents who participated in this research.

CONFLICTS OF INTEREST

Neither of the authors has any conflicts of interest that would bias the findings presented here.

REFERENCES

1. Notoatmodjo S. *Promosi Kesehatan: Teori Dan Aplikasi*. PT Rineka Cipta; 2010.
2. Kemenkes RI. Profil Kesehatan Indonesia. In: Depkes RI; 2018.
3. Banjar D. *Profil Kesehatan Kota Banjar Tahun 2018*; 2016.
4. Zainul J, Nasrul M. Inisiasi Gerakan Masyarakat Sehat (Germas) Di Poltekkes Kemenkes Palu. *Poltekita J Ilmu Kesehatan*. 2019;13(1):54-61.
5. Suryani D, Nurdjanah EP, Yogatama Y, Jumadil M. Membudayakan Hidup Sehat melalui Gerakan Masyarakat Hidup Sehat (Germas) di Dusun Mendang III, Jambu, Dan Itrakah Kecamatan, Tanjungsari, Gunungkidul. *J Pemberdaya Publ Has Pengabdian Kpd Masy*. 2019;2(1):65.
6. Noor N. *Studi Implementasi Germas Pada Penderita Hipertensi Di Puskesmas Tapin Utara Tahun 2020*. Universitas Islam Kalimantan MAB; 2020.
7. Junita E, Handayani Y, Alfiah LN. GERMAS (Gerakan Masyarakat Hidup Sehat) Di Desa Rambah Hilir. *Kumawula J Pengabdian Kpd Masy*. 2020;3(1):100-105.
8. Rahmawaty E, Handayani S, Sari MHN, Rahmawati I. Sosialisasi dan harmonisasi gerakan masyarakat hidup sehat (germas) dan program indonesia sehat dengan pendekatan keluarga (pis-pk) di Kota Sukabumi. *LINK*. 2019;15(1):27-31.
9. Kementerian Kesehatan Republik Indonesia. *Pedoman Umum Program Indonesia Sehat Dengan Pendekatan Keluarga*. Kementerian Kesehatan RI; 2016. <http://library1.nida.ac.th/termpaper6/sd/2554/19755.pdf>
10. Habibie WL. Health Reform in Indonesia towards Sustainable Development Growth (Case Study on BPJS Kesehatan, Health Insurance in Indonesia). *Rev Integr Bus Econ Res*. 2017;6(3). Accessed November 16, 2018. <http://buscompress.com/journal-home.html>
11. Winarno B. Kebijakan Publik Era Globalisasi. *Yogyakarta CAPS*. Published online 2016.
12. Retnowulandari W. Kepala Keluarga dalam Hukum Keluarga di Indonesia: Tinjauan Perspektif Gender dalam Hukum Agama, Adat, dan Hukum Nasional. *J Huk PRIORIS*. 2017;5(3):235-245.
13. Angela M, Sianturi SR, Supardi S. Hubungan antara Pengetahuan, Sikap dan Perilaku Pencegahan HIV/AIDS pada Siswa SMPN 251 Jakarta. *J Penelit dan Pengemb Pelayan Kesehatan*. 2019;3(2):67-72.
14. Aida PM. Analisis Pelaksanaan Gerakan Masyarakat Hidup Sehat Di Wilayah Kerja Puskesmas Susoh Kabupaten Aceh Barat Daya Tahun 2019. Published online 2020.
15. Notoatmodjo S. Pendidikan dan Perilaku Kesehatan, Cetakan 2. *PT Rineka Cipta Jakarta*. Published online 2007.
16. Notoatmodjo Soekidjo. *Promosi Kesehatan Dan Prilaku Kesehatan Edisi Revisi 2012*. Rineka Cipta; 2012.
17. HDJ M. *Promosi Kesehatan*. 5th ed. EGC; 2009.
18. Rosyadi DW. Hubungan Antara Pengetahuan Ibu Bekerja, Jam Kerja Ibu dan Dukungan Tempat Bekerja dengan Keberhasilan Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Banyudono I. *J Univ muhammadiyah Surakarta*. Published online 2016.
19. Taylor C. *Fundamentals of Nursing : The Art and Science of Nursing Care*. 7th ed. Wolters Kluwer Health/Lippincott Williams & Wilkins; 2011.
20. Nugroho K, Sanubari T, Rumondor J. Faktor

- risiko penyebab kejadian. *J Kesehat Kusuma Husada - Januari 2019*. Published online 2019:32-42.
21. Spronk I, Kullen C, Burdon C, O'Connor H. Relationship between nutrition knowledge and dietary intake. *Br J Nutr*. 2014;111(10):1713-1726. doi:10.1017/S0007114514000087
 22. Mila M, Anida A, Ernawati Y. Hubungan Aktifitas Fisik Dengan Tekanan Darah Pada Lansia Di Dusun Miri Desa Sriharjo Imogiri Bantul Yogyakarta. *J Kesehat Masy*. 2017;10(1).
 23. Nurfitriani N, Anggraini E. Pengaruh Pengetahuan dan Motivasi Ibu Rumah Tangga Tentang Gerakan Masyarakat Hidup Sehat (GERMAS) di Kelurahan Talang Bakung Kota Jambi. *J Ilm Univ Batanghari Jambi*. 2019;19(3):532-538.
 24. Graham DJ, Laska MN. Nutrition Label Use Partially Mediates the Relationship between Attitude toward Healthy Eating and Overall Dietary Quality among College Students. *J Acad Nutr Diet*. 2012;112(3):414-418. doi:10.1016/j.jada.2011.08.047
 25. Kementerian Kesehatan Republik Indonesia. *Pedoman Umum Program Indonesia Sehat Dengan Pendekatan Keluarga*.; 2016.
 26. Enander J, Ivanov VZ, Mataix-Cols D, et al. Prevalence and heritability of body dysmorphic symptoms in adolescents and young adults: A population-based nationwide twin study. *Psychol Med*. 2018;48(16):2740-2747. doi:10.1017/S0033291718000375
 27. Yuliandari DW, UI NH. Pengaruh Pengetahuan Dan Sosial Ekonomi Keluarga Terhadap Penerapan Perilaku Hidup Bersih Dan Sehat (Phbs) Tatanan Rumah Tangga Di Wilayah Kerja Puskesmas X Kota Kediri. *J Wiyata Penelit Sains dan Kesehat*. 2017;3(1):17-22.
 28. Trisnowati H, Daduk SS. Hubungan pengetahuan dan sikap terhadap phbs di rumah tangga dengan perilaku merokok dalam rumah kepala rumah tangga di Dusun Karangnongko Yogyakarta. *Med Respati J Ilm Kesehat*. 2017;12(4):1-11.
 29. Printina AB. Pengaruh Promosi Kesehatan Melalui Video Vlog Terhadap Tingkat Pengetahuan Tentang Penyalahgunaan Narkoba Pada Siswa Siswi Di Smp Strada Marga Mulia Jakarta Selatan. *J Ris Kesehat Nas*. 2018;2(1):59. doi:10.37294/jrkn.v2i1.89
 30. Adha AY, Wulandari DR, Himawan AB. Perbedaan Efektivitas Pemberian Penyuluhan Dengan Video Dan Simulasi Terhadap Tingkat Pengetahuan Pencegahan Tb Paru (Studi kasus di MA Husnul Khatimah Kelurahan Rowosari Kecamatan Tembalang Kota Semarang). *J Kedokt Diponegoro*. 2016;5(4).
 31. Dedi K. Aksi Bersama Melakukan Gerakan Masyarakat Hidup Sehat. *Kemenkes, RI Ed*. 2017;1:2017.
 32. Heryati GS. Faktor-Faktor Yang Berhubungan Dengan Kepatuhan Diet Diabetes Mellitus Pada Pasien DM. *J Keperawatan*. 2014;1(3):97-107.
 33. RI K. *Laporan Riskesdas 2013*.



Original Research

The First 24 Hours Postpartum Mother's Breast Milk Production At Hospital

Menik Kustriyani¹, Priharyanti Wulandari¹

¹ Universitas Widya Husada Semarang, Indonesia

Article Info

Article History:

Submit Nov 5th, 2020
Accepted Nov 15th, 2020
Published Dec 30th 2020

Keywords:

Breast-milk production;
Postpartum

Abstract

Breast milk is ideal baby food, various kinds of breast milk content are needed by the baby. Factors affecting breastmilk production among others: mother's food intake, mind, physiological anatomy, baby suction factors, rest factors and drug factors. The purpose of this study was to determine the production of postpartum mother milk in the first 24 hours. The research was conducted in descriptive quantitative with a time-series approach. The research subjects were obtained through consecutive sampling. Data were obtained at 2 hours postpartum, 16 hours postpartum and 24 hours postpartum using measuring cups and observation sheets. The subjects of this study were 21 normal postpartum mothers. The research data were analyzed using univariate analysis. The study was conducted in July 2020 at Ungaran Hospital. Respondents have explained the study. Researchers guarantee the confidentiality of respondents from the beginning to the end of the study. The results showed parity of postpartum multiparous mothers was 52.4%, primiparous 47.6%. Postpartum mothers with the early adult category were 66.7%. Postpartum mother breastmilk production at 2 hours with an average ± 0.155 cc, the mother experienced an increase in the amount of milk production at 16 hours postpartum by an average of ± 1.272 ml and at 24 hours postpartum experienced an increase in the amount of mother's milk production on average ± 1.369 ml. It can be concluded that physiologically normal post-partum mother milk production has increased gradually, the increase is because the more often the mother empties the breast, the more breast milk production.

INTRODUCTION

Breast milk (ASI) is the ideal food for babies, various kinds of breast milk are needed by babies. Breast milk contains protein, carbohydrates, vitamins, minerals, fat and water as the suitable component suitable the needs the baby. Breast milk begins to be produced by the breasts on the 16th week where the breasts begin to synthesize the components of milk by being influenced by human placenta lactogen so that the milk is

still retained. Colostrum will generally come out from the 3rd trimester or around 34-36 weeks.¹

Breastfeeding rates in Egypt vary due to several factors, such as social, economic, political and cultural factors.² Likewise in Indonesia, the Ministry of Health in Indonesia has a program of 10 steps towards successful breastfeeding, several ways that must be done as a health worker in the hospital to help mothers start

Corresponding author:

Menik Kustriyani

menikkustriyani@gmail.com

South East Asia Nursing Research, Vol 2 No 4, December 2020

ISSN:2685-032X

DOI: <https://doi.org/10.26714/seanr.2.4.2020.20-24>

breastfeeding their babies within 60 minutes after giving birth in the delivery room, helping mothers to understand how to breastfeed correctly and how to maintain breastfeeding even if the mother is separated from the baby on medical indications. Performing combined care by getting the mother to be with the baby 24 hours a day. Helping the mother to breastfeed as much as the baby wants, without restrictions on the length and frequency of breastfeeding. Optimal breastfeeding will reduce the risk of various baby health problems.³

Several factors affect the production of breastmilk, the mother's food intake, peace of mind and soul, physiological anatomy, baby suction factors, rest factors and drug factors.⁴ Previous research stated that 66,7 % of postpartum mothers breastfeed smoothly, 60,2% of postpartum mothers provide sufficient breast milk. The fluency of breastfeeding in postpartum mothers is influenced by the early initiation of breastfeeding and baby suction.^{4,5}

This study aims to determine the production of breast milk during the first 24 hours postpartum.

METHODS

This research used a descriptive quantitative method with a time-series approach. This study wanted to measure the amount of normal postpartum breast milk production at three measurements, at 2 hours postpartum, 16 hours postpartum and 24 hours postpartum (Wulandari et al., 2018). Respondents in this study were normal postpartum mothers with the inclusion criteria of 2 hours postpartum normal mothers, Primipara and multiparous postpartum mothers, normal nipple forms, normal postpartum mothers, postpartum mothers with no systemic disease, the mother that was not taking drugs to facilitate expulsion. Breastfeeding, baby weight \geq 2500 grams, respondent with a good psychological condition, mother and

baby were in joint care and mother was willing to be the respondent. Respondents were 21 postpartum mothers. The sampling technique used was consecutive sampling.

Breast milk production was measured using a measuring cup for three measurement periods, namely at 2 hours postpartum, 16 hours postpartum and 24 hours postpartum. Researchers provided explanations to respondents about the objectives and benefits of the study and its consequences. Respondents were asked to sign an informed consent before conducting the study. The researcher did not include the identity of the respondent in the study. This research has received approval from the ethics committee with number 20 / KEPK-RSUD / EC / VI 2020. The research data was presented using univariate analysis, the study was conducted in July 2020 at the Ungaran Hospital.

RESULTS

The research data were analyzed using univariate analysis, the study was conducted in July 2020, at the Ungaran Hospital.

The results showed that the respondents consisted of mothers who had given birth to a live baby for the first time (primipara) and mothers who had given birth two to four times (multiparous). The youngest was 18 years old and the oldest was 37 years old. There was an increase at 2 hours postpartum with a mean (\pm 0.155) ml, the increase also occurred at 16 hours postpartum with an average (\pm 1.272) ml, the increase at 24 hours postpartum with an average (\pm 1.369) ml.

Table 1
Respondent Characteristics (n=21)

Indicator	Normal post-partum mother	
	f	%
Parity		
Primipara	10	47,6
Multipara	11	52,4
Age		
Late teens	6	28,6
Early adulthood	14	66,7
Late adulthood	1	4,8

Table 2
Production of normal post-partum mother breastmilk (n=21)

Indicator	Breast Milk Production
Breast milk production at 2 hours post-partum	0,171 ($\pm 0,155$) ml
Breast milk production at 16 hours post-partum	0,662 ($\pm 1,272$) ml
Breast milk production at 24 hours post-partum	0,852 ($\pm 1,369$) ml

DISCUSSION

Respondent Characteristics

Age is one of the physiological factors that may affect milk production, mothers who are younger or less than 35 years of age will produce more milk than older mothers (Biancuzo, 2000). For some mothers who are over 35 years of age, their milk production is smooth⁶. Mothers who are younger or less than 35 years of age produce more than older mothers. Meanwhile, mothers aged 19-23 years can generally produce enough breast milk compared to those in their thirties because of their good physiology.⁷

The age of the breastfeeding mother affects milk production. Younger mothers produce more breast milk than older mothers. Mothers aged 19-23 years can generally produce enough breast milk compared to 30 years old mothers.⁸

The age of 35 is risky because it is closely related to nutritional anaemia that may affect milk production. In primiparous mother with 35 years of age, there is a decrease in hormone production so that it decreases the lactation process.⁴

Another thing that can affect breast milk production is parity, multiparous mothers show more milk production than primiparous in the first 24 hours postpartum. In the process of breastfeeding, many factors influence it, including parity. Meanwhile, for mothers who gave birth more than once, the milk production is more than the birth of their first child.^{9,10}

Several deliveries that have been experienced by mothers provides experience in giving breast milk and know how to increase milk production so that there are no problems for mothers in breastfeeding. Mothers who have given birth for the first time and mothers who have given birth more than two times often find problems in breastfeeding. Problems that often arise are sore nipples due to inexperience or not ready to breastfeed physiologically and changes in the shape and bad condition of the nipples.^{4,11}

Mothers who gave birth more than once can produce more milk than those who gave birth for the first time. A person who has given birth for the first time usually has less knowledge and experience in terms of breastfeeding, while a mother who has given birth more than once certainly has experience in breastfeeding so that lactation management will be carried out properly. Furthermore, the psychological preparedness between primiparous and multiparous is very different. A primiparous person feels anxious and psychologically unstable more easily, it will affect the production of hormones that play a role in breast milk production.⁴

At the time of the study, it was found that more successful multiparous parity in breastfeeding, due to previous experience

of breastfeeding with children, knowledge from family and the surrounding environment and sources of information. Primiparous parity that succeeds in breastfeeding is because the mother has received knowledge about breastfeeding from the family when the family is breastfeeding the mother is concerned about breastfeeding. Besides, successful primiparous mothers are mothers with a background in health education, so that they already know about the correct way of breastfeeding.¹²

In primiparous parity, there were more fail to breastfeed because the mother still lacks experience in breastfeeding, they experienced the mistake in breastfeeding techniques so that there is no proper attachment between mother and baby and causes the baby to not suckle properly.¹³

The mother failure to breastfeed her baby immediately after birth will affect the mother milk production because the first-time breastfeeding after birth will stimulate the pituitary to release oxytocin. Oxytocin works to stimulate the smooth muscle to express milk in the alveoli, lobes and ducts that contain milk that will be excreted through the nipples. This situation forces the prolactin hormone to continue producing breast milk. So that the more often the baby sucks the nipple, then breastfeeding will also be smoother.¹⁴ Normally the first day of breastfeeding comes out on the first day of birth until the third day.¹⁵

Production and discharge of breast milk occur after the baby born, it is followed by a decrease in estrogen levels which stimulate the increase in prolactin levels for milk production. Even if only a little milk comes out on the first day, the mother must continue to breastfeed. This action besides the provide nutrition to the baby teaches the baby to breastfeed or get used to sucking the mother nipple and supports milk production.¹⁶

During pregnancy and the first postpartum days, milk production is affected by the prolactin hormone (the breast milk-producing hormone) and other reproductive hormones. As long as these hormones are present and balanced, the mother will begin to produce colostrum / first milk from the second trimester of pregnancy (Lactogenesis I) that increases the numbers about 30-40 hours after delivery (Lactogenesis II).¹⁷⁻¹⁹

In the final trimester of pregnancy, even though the breasts have produced colostrum, their secretion is inhibited by high levels of the hormone progesterone. During labor, the discharge of the placenta causes the levels of the hormones progesterone, estrogen, and human placental lactogen (HPL) to drop significantly. This condition is accompanied by high levels of the hormone prolactin marking the beginning of Lactogenesis II (production of large amounts of breast milk). Breastmilk production in the first 24 hours after delivery is usually not seen much. After 48-72 hours, the mother will feel a full sensation in the breast. It occurs when breast milk is produced a lot.⁹

Both of these processes are purely driven by hormones that come from the centre (glands in the brain) and still occur even if the mother does not breastfeed her baby. After Lactogenesis II, there is a shift in controlling milk production that is centred in the brain transferred to the breast. This stage is called Lactogenesis III. At this stage, the release of breast milk is the main control for milk production. Although hormonal disturbances can affect milk production, the role of hormones at this stage is much reduced. Under normal conditions, the breasts will continue to produce milk as long as the process of expressing milk continues.¹⁷

CONCLUSION

Based on the results of the study, there was an increase of breast milk production in

postpartum mothers at 2 hours as much as 0.171 ml, at 16 hours postpartum as much as 0.662 ml and 24 hours postpartum as much as 0.852 ml.

ACKNOWLEDGMENTS

Researchers would like to thank the Ministry of Research and Technology / the National Research and Innovation Agency for providing financial support in research implementation.

CONFLICTS OF INTEREST

Neither of the authors has any conflicts of interest that would bias the findings presented here.

REFERENCES

- Lawrence R, Lawrence R. Breastfeeding - 8th Edition. 8th ed. Philadelphia: Elsevier; 2016.
- Demir F, Ghosh P, Liu Z. Effects of motherhood timing, breastmilk substitutes and education on the duration of breastfeeding: Evidence from Egypt. *World Dev.* 2020 Sep;133:105014.
- Yanto A, Rochayati R, Wuryanto E. Decreased The Risk of Hyperbilirubinemia Incidence With The Initiation of Early Breastfeeding. *Media Keperawatan Indones [Internet]*. 2018 Jun 18;1(2):25. Available from: <https://jurnal.unimus.ac.id/index.php/MKI/article/view/3446>
- Pranajaya R, Rudiyananti N. Determinan Produksi ASI pada Ibu Menyusui. *J Ilm Keperawatan Sai Betik.* 2017 Jan;9(2):227-37.
- Yanti HF, Yohanna WS, Nurida E. Kelancaran Produksi ASI pada Ibu Post Partum Ditinjau dari Inisiasi Menyusu Dini dan Isapan Bayi. *J Aisyah J Ilmu Kesehat.* 2018 Jun;3(1):39-46.
- Budiati T, Setyowati S, CD NH. Peningkatan Produksi ASI Ibu Nifas Seksio Sesarea Melalui Pemberian Paket "Sukses ASI." *J Keperawatan Indones.* 2010 Jul;13(2):59-66.
- Firmansyah N. Pengaruh Karakteristik (Pendidikan, Pekerjaan), Pengetahuan dan Sikap Ibu Menyusui terhadap Pemberian Asi Eksklusif di Kabupaten Tuban. UNIVERSITAS AIRLANGGA; 2012.
- Pudjadi. *Keluarga dan Anak.* Jakarta: Kawan Pustaka.; 2005.
- Kari IK. *Seri Gizi Klinik, ASI ; Petunjuk untuk tenaga kesehatan.* Soetjningsih, editor. Jakarta: EGC; 1997.
- Bonuck KA, Trombley M, Freeman K, McKee D. Randomized, controlled trial of a prenatal and postnatal lactation consultant intervention on duration and intensity of breastfeeding up to 12 months. *Pediatrics.* 2005 Dec;116(6):1413-26.
- Impartina A. Hubungan Pengetahuan Ibu Nifas Tentang Teknik Menyusui Dengan Kejadian Bendungan ASI. *MEDISAINS.* 2017;15(3):156-60.
- Victora CG, Bahl R, Barros AJD, Franca GVA, Horton S, Krusevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet.* 2016;387(10017):475-90.
- McFadden A, Gavine A, Renfrew MJ, Wade A, Buchanan P, Taylor JL, et al. Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database Syst Rev.* 2017;(2).
- Nugroho T, Nurrezki, Warnaliza D, Wilis. *Buku Ajar Asuhan Kebidanan.* 3rd ed. Yogyakarta: Nuha Medika; 2014.
- Astuti I. Determinan pemberian ASI eksklusif pada ibu menyusui. *J Heal Qual.* 2013;4(1):1-76.
- Rahayu D, Yunarsih. Penerapan Pijat Oksitosin Dalam Meningkatkan Produksi Asi Pada Ibu Postpartum. *Journals Ners Community.* 2018;9(1):08-14.
- Mannel, R., Martens, PJ., Walker, M. M. *Core curriculum for lactation consultant Practice.* 2nd editio. Massachusetts: Jones and Barlett; 2012.
- Roesli U. *Panduan Konseling Menyusui. IV.* Jakarta: Pustaka Bunda; 2012.
- Ballestas HC, Caico C. *Pathophysiology of Nursing.* 2014.



Original Research

The Anticipation of Schools Bullying

Eni Hidayati¹, Christina Tri Cahyani¹, Desi Ariyana Rahayu¹, Muhammad Fatkul Mubin¹, Tri Nurhidayati¹

¹ Universitas Muhammadiyah Semarang, Indonesia

Article Info

Article History:

Submit Dec 2nd, 2020

Accepted Dec 28th, 2020

Published Dec 30th 2020

Keywords:

Bullying; Teacher; Junior High School

Abstract

Bullying is an action to harm other people that continuously happen either in groups or individually. Bullying could happen in a school environment to the students who are quiet, small and to those unable to defend themselves. This study aims to determine the anticipation of bullying in the school environment. The frequency distribution test results obtained that 250 teachers were in the sufficient category in anticipating bullying prevention and 3 teachers were still in the poor category. The research hopefully can stop bullying in the school environment. Bullying is an action to harm other people which is carried out continuously either in groups or individually. Bullying could occur in a school environment to students who are quiet, small and those unable to defend themselves. Bullying prevented by regulations that could be valid to all school members. The study aims to determine the anticipation of bullying in the school environment. The frequency distribution test results obtained that 250 teachers were in the sufficient category in anticipation of bullying prevention and 3 teachers were still in the poor category. The research hopefully can stop bullying in the school environment.

INTRODUCTION

Schooling period is a time in which children begin to pay attention to their environment and playmates, at this time children spend more free time with their friends rather than staying at home or hanging out with family. We would never know whether bullying frequently happens in the school environment; there will be many victims if we do not realize the situation.¹ Someone do repeated treatment who can harm others, both in the group and individually.² Bullying usually only to hurt others and create an aggressive attitude, the perpetrator could be in groups or individuals and only

targeting victims whom they think are vulnerable to attack.³

Bullying is one of the violence that appears among adolescents and can occur anywhere, especially in the school environment; bullying could be a threatening stressor. Bullying is a form of violence that hurts peers to find satisfaction in itself.³ Bullying in the school environment is verbal bullying such as taunting, calling parents 'names or changing friends' names as nicknames.⁴

Bullying in our country mostly occurs in the school environment; around 61-73% of

Corresponding author:

Eni Hidayati

eni.hidayati@unimus.ac.id

South East Asia Nursing Research, Vol 2 No 4, December 2020

ISSN:2685-032X

DOI: <https://doi.org/10.26714/seanr.2.4.2020.25-31>

bullying cases are in the form of violence, extortion, threatening and taking things, and other forms of cyberbullying.⁵ Bullying behaviour is considered a common thing among school peers, so we never know that it can lead to violence. Bullying cases are already familiar in Indonesia according to the Indonesian Child Protection Commission (KPAI), there are 369 reports related to bullying that occurred in schools from 2011 to 2014, and data from the ICRW (International Center for Research On Women) in 2015 was 84% the occurrence of violence in schools, this case is the higher number compared to the trend in Asia.¹

Discussion techniques on group guidance, to improve understanding of bullying behaviour, there are 75% cases of bullying in schools including verbal bullying such as mocking, insulting, cheering, calling by other names and insinuating 35%, relational bullying such as spreading gossip, looks cynical and ostracizes 20%, physical bullying is taking people's things without permission and coercing, stepping on their feet, pushing and hitting by 10%, cyberbullying such as teasing friends through social media, giving negative comments on friend status by 10%.⁶ If these bullying cases not handled immediately, there will be more victims, it will cause other consequences such as fear, stress, anxiety, insecurity and suicide. According to the counselling teacher, students do not want to go to class because they often receive bullying from their peers. There were many cases and forms of bullying found. The perpetrator will feel satisfied when the victim feels oppressed; the perpetrators' laughter moments when playing with the victim reinforce the behaviour.⁷

The teacher also plays a role in developing student characteristics in school. They did not only a role model but also a motivator and inspirator. A teacher becomes a figure to be trusted and imitated by students, at the same time they can help students' development and potency; the teacher can

also play a role in overcoming violence against school staff. Students play an important role in preventing bullying in the school environment.⁸ Bullying can occur and cause by several factors of bullying that happen in the school environment, the lack of teachers' attention to students both in economy and achievement or student behaviour outside the classroom and inside the classrooms, teachers who are rude to students including the TV shows about violence in film scenes.⁹ Bullying is defined as a group of teenagers or individuals who misuse their power so that causing casualties.¹⁰ The impact of bullying for victims, they prefer to stay away from the neighbourhood or friends and become coward, while others remained silent and did not reply to the perpetrators.¹¹

Bullying is behaviour intended to harm either directly or indirectly by a strong side to a weak side continuously.⁹ Bullying is also an action that carried out continuously in which involves an imbalance side such as a strong group against a weak group.⁸ Meanwhile, according to research³, bullying is an aggressive attack whether psychologically, verbally, socially, or physically which is carried out only for personal satisfaction. Bullying also defined as a group of adolescents and individuals who abuse the power that causes victims.¹⁰ According to study¹², the forms of bullying are physical bullying, verbal bullying, nonverbal-bullying directly, nonverbal-bullying indirectly, sexual abuse.

This study aims to determine the anticipation of bullying in the school environment.

METHODS

Descriptive research aims to get more accurate results from the problems under study, therefore the data collected is obtained from the results of interviews, questionnaires or observations.¹³ This research uses quantitative because of the data generated in the form of analysis and

numbers using descriptive methods. Data collection using a questionnaire to find out how deep the teacher's knowledge of bullying in the school environment, then the results of the questionnaire are used as an evaluation at school.

The population is research conducted on all research objects. The population in this study consisted of 35 junior high schools in Semarang, with 35 BK teachers as respondents. The sample is a type of research that is only taken part of the research object and is considered representative of the population.¹⁴

This research uses the quantitative descriptive method. The design is quantitative descriptive. Quantitative research is systemic and usually uses an empirical, destructive, logical, and measurable approach. The quantitative research goal is to use systemic models and develop theories related to natural phenomena.¹³ Sampling technique using a sample of 253 respondents, the sample taken from junior high school teachers. The instrument used in this study using a questionnaire. The questionnaire consists of questions that contain anticipation of the occurrence of bullying at school.

RESULTS

Based on table 1 above, the results obtained from 253 respondents, the anticipation of teachers of school bullying include in the category quite are 250 respondents (98.8%), while the anticipation of teachers against the occurrence of bullying in schools includes in category less are three respondents (1.2%). Based on table 1 above, the results show that of the 253 respondents who got information sources from television as many as 224 respondents

(88.5%), there were 169 respondents (66.8%) who got information sources from the print media peers were 126 respondents (49.8%), 34 respondents (13.4%) received information sources (13.4%), 17 respondents (8.0%) received information sources information from others there are 20 respondents (8.0%).

Based on table 2 above, the results show that of the 253 respondents, the respondents' answers were based on the research objectives of punishment at school which was included in the correct category in item 18 in how to prevent bullying at school there were 241 respondents (96.4%) while those who were included in in the wrong category there were 12 respondents (3.6%), in the twentieth item the anti-bullying program in schools that was included in the correct category was 156 respondents (62.4%) while those who were in the wrong category were 97 (37.6%), the second item, one way we respond to bullying actors, there are 245 respondents (98%) who answered incorrectly and 8 respondents (2%) answered incorrectly, the third item, one way so that bullying does not occur at school, there are 245 respondents (98%) who answered correctly and 8 respondents (2%) who answered incorrectly.

Table 1
Distribution of the frequency of teachers' anticipation and information sources (n = 253)

Indicators	f	%
Anticipate teachers		
Enough	250	98,8
Less	3	1,2
Resources		
Television	224	88,5
Print media	169	66,8
Peers	126	49,8
Health workers	34	13,4
Social media	17	8,0
Other	20	8,0

Table 2
Distribution of the frequency of respondents' answers based on research purposes on punishment

Question item	Answer the Questions			
	Correct		Wrong	
	f	%	f	%
How to prevent school bullying	241	96,4	12	3,6
Stop bullying program at school	156	62,4	97	37,5
What are the ways we deal with bullying	245	98	8	2
What are the ways to prevent bullying from happening at school	145	98	8	2

DISCUSSION

Bullying considered as a common thing and bullying also used as an encouragement for its victims to make themselves better person, some bullying victims' show that they do not deserve to bullied and they choose to fight the perpetrator by bullied them back.¹⁵ The impact of bullying for the perpetrator is that they will regret the action he has done when the victim prefers to remain silent and does not reply to the perpetrator. Meanwhile, to prevent bullying, families can teach good behaviour to their children at the early childhood stage, so that they can behave well when they are outside the home.¹⁰

Based on the research that done, there were 4 items of the punishment given by the teacher when a student makes a mistake, and those that include in the most significant number and most correct answers are in items 21 and 31 with the total of 245 respondents, and the most numbers of the wrong answer were in item 20 with a total of 97 respondents. Finding out the role of teachers and counsellors in guiding or solving problems, from the research conducted on 253 teachers were consisting of 3 items included in the correct answer category, most of which were in item 33 as many as 248 respondents and teachers whose answer was wrong mostly found in item 34 with the total of 45 respondents.

Bullying is an incident that often found in adolescents, which can have an impact on victims in mental, physical and other psychosocial health disorders.¹⁶ Bullying is

also defined as vicious behaviour done intentionally and continuously to injure someone physically and mentally. It carried out by one person or group resulted in an imbalance of power or strength.¹⁷ Bullying itself is also defined as behaviour carried out repeatedly by behaving in aggression and targeting weak children according to the perpetrator, by threatening or disturbing the victim so that the affected victim suffer psychological disorders.¹⁸

On the question item about finding out the discipline rules given by the school, from the research that have done on 253 teachers, there are 5 question items and the correct answers are in item 23 as many as 244 respondents, and the most incorrect answers are in item 22 as many as 153 teachers. Finding out the regulations from the Minister of Education and Culture that applied in schools, from the research have done on 253 teachers, there are 2 items and the teachers who are correctly answering the questions in item 37 as many as 212 respondents, and those who answer incorrectly in item 40 were 68 respondents.

From the research that I have done, there are 253 teachers, there are 2 items and teachers who are in the category of the most number of correct answers are in item 37 as many as 212 teacher respondents, and the most incorrect answers in item 40 are 68 respondents who answered incorrectly. At school, some teachers become places to learn and achieve development according to targets, as for counselling teachers or counsellors who have a role to help students prevent or deal with problems that are happening to them and overcome the

violence and sexual harassment they are experiencing.⁹

Find out the role of teachers and counsellors in guiding or solving problems. From the research I did, 253 teachers were consisting of 3 items that were included in the correct answer category, most of which were in item 33 as many as 248 respondents and teachers whose wrong answers were mostly found in item 34 with a total of 45 respondents. Regulations in the discipline given by schools such as implementing socialization for children about bullying and its consequences of bullying in student life at a later date.¹⁹ Teachers always assist students in the school environment both in the learning process and in behaviour outside of learning in school. Provide various kinds of learning models so that children can interact and work together and respect each other with other friends. Provide strict rules to prevent bullying and give sanctions to students who commit bullying.²⁰

Bullying in adolescents still exists in the school environment without any warning and sanctions given to the perpetrators, which causes much more bullying victims to come out. Teachers' role is very important to prevent bullying in the school environment; the explanations of bullying are needed to create a comfortable and safe environment and avoid bullying. There are many reasons for students to do bullying in school, first is that they do not care for each other between friends that makes the higher number of bullying; second, the perpetrators are also victims of bullying; the third is that the perpetrators do bullying so that they would be considered great and feared by many people, fourth is the need to do revenge.²¹ Another reason students do bullying because they do not know the impact of bullying behaviour; for students who know and understand the impact of bullying, they will not do it.²²

If the bullying case is not handled immediately, there will be more victims and

it will cause impacts such as fear, stress, anxiety, insecurity and suicide. According to the counselling teacher, students do not want to go to class because they often receive bullying from their peers. So many cases and forms of bullying.²³ The perpetrator will feel satisfied when the victim feels oppressed, the laughter of a group of perpetrators when playing with the victim reinforces the behavior.⁷ The teacher plays a role in shaping the characteristics of students in school, apart from being a role model, the teacher also acts as a motivator and inspirator, a teacher becomes an example of a figure to be digested and imitated by students when being an inspiration the teacher can help students develop and have potential, the teacher can also play a role in overcoming violence against school staff students also plays an important role in preventing bullying in the school environment.⁸

CONCLUSION

Teachers in junior high schools apply sanctions (guidance) for victims or perpetrators of bullying. Each school teacher also provides lessons about bullying and teaches good relationships between teachers, students, and other friends. The school applies discipline regulations such as Educating the students about bullying and its consequences in the future. Teachers always assist students in school, both in the learning process and students' behaviour outside of the school area's learning process. School provides various learning models for students to interact and work together and respect each other between friends. School provides strict rules to prevent bullying and give sanctions to students who commit bullying. Several schools have implemented regulations given by the Minister of Education and Culture (Mendikbud) to prevent bullying in schools.

ACKNOWLEDGMENTS

We would like to thank the teachers and friends who provided additional information for the school to prevent bullying. The school can do it well and correctly so that there will be no victims and violence in the school environment and a comfortable and safe environment is created.

CONFLICTS OF INTEREST

Every school is obliged to implement strict rules for preventing bullying if teachers do not pay attention to students or apply strict bullying regulations, it is feared that many students will become victims of bullying without the knowledge of teachers and other school members.

REFERENCES

1. Aini D. *Voor En Na de Oorlog*. Vol 6. s.n.]; 2018.
2. Darwin, Mubin MF, Hidayati E. Pengalaman Siswa Yang Mendapatkan Bullying Di SMAN 15 Semarang. *J Keperawatan Komunitas*. 2018;2(1):1-6.
3. Yuliani N. Fenomena kasus bullying di sekolah. Published online 2019.
4. Sutanti R. Hubungan pola asuh orang tua dengan kejadian bullying pada remaja di SMPN 06 Yogyakarta tahun 2018. Published online March 2019.
5. Nurbaiti AE, Affarah L, Sulistya W, Kadriyan H. Skrining dan Edukasi Pencegahan Bullying Pada Siswa SMA Negeri Di Kota Mataram. *J Pengabdian Magister Pendidikan IPA*. 2019;1(2). doi:10.29303/jpmp.v1i2.245
6. van der Ploeg R, Steglich C, Veenstra R. The way bullying works: How new ties facilitate the mutual reinforcement of status and bullying in elementary schools. *Soc Networks*. 2020;60(January):71-82. doi:10.1016/j.socnet.2018.12.006
7. Goleman D, Boyatzis R, Mckee A. Bimbingan Kelompok dengan Teknik Sociodrama Sebagai Upaya Mengatasi Perilaku Bullying di Sekolah. *J Chem Inf Model*. 2019;53(9):1689-1699. doi:10.1017/CBO9781107415324.004
8. Putri fellinda arini. *Strategi Guru Dalam Meningkatkan Minat B*. Published online 2016:62-76.
9. Kartianti S. Peran konselor dalam mengurangi perilaku bullying siswa di sekolah. *Hibualamo Seri Ilmu-Ilmu Sos dan Kependidikan*. 2017;1(1):34-37.
10. Citrawathi DM. *Pengembangan Model Pendidikan Kesehatan Integratif Dan Kolaboratif Di Sekolah*. Vol 0.; 2014.
11. Kharis A, Ain N. Dampak Bullying Terhadap Perilaku Remaja (Studi pada SMKN 5 Mataram). 2019;7(1):44-55.
12. Wibow AP. *Penerapan Hukum Pidana Dalam Penanganan Bullying Di Sekolah - Antonius P.S. Wibowo - Google Buku*; 2019.
13. Putra SR. *Panduan Riset Keperawatan Dan Penulisan Ilmiah*. (Rusdianto, ed.). D-Medika; 2012.
14. Prof. Dr. Soekidjo Notoatmodjo. *Ilmu Perilaku Kesehatan. Rineka Cipta*. Published online 2018:75.
15. Rambaran JA, van Duijn MAJ, Dijkstra JK, Veenstra R. Stability and change in student classroom composition and its impact on peer victimization. *J Educ Psychol*. 2020;112(8):1677-1691. doi:10.1037/edu0000438
16. Moffat AK, Redmond G, Raghavendra P. The Impact of Social Network Characteristics and Gender on Covert Bullying in Australian Students with Disability in the Middle Years. *J Sch Violence*. 2019;18(4):613-629. doi:10.1080/15388220.2019.1644180
17. Strindberg J, Horton P, Thornberg R. Coolness and social vulnerability: Swedish pupils' reflections on participant roles in school bullying. *Res Pap Educ*. 2020;35(5):603-622. doi:10.1080/02671522.2019.1615114
18. Stephen K, Aine M. UCC Library and UCC researchers have made this item openly available. Please let us know how this has helped you. Thanks! Published online 2019. doi:10.1080/15401383.2019.1623147
19. Bork-Hüffer T, Mahlnecht B, Kaufmann K. (Cyber)Bullying in schools—when bullying stretches across cON/FFlating spaces. *Child Geogr*. 2020;0(0):1-13. doi:10.1080/14733285.2020.1784850
20. Dardiri A, Hanum F, Raharja S. The bullying behavior in vocational schools and its correlation with school stakeholders. *Int J Instr*. 2020;13(2):691-706. doi:10.29333/iji.2020.13247a
21. Hellström L, Beckman L. Adolescents' perception of gender differences in bullying. *Scand J Psychol*. 2020;61(1):90-96. doi:10.1111/sjop.12523

22. Thornberg R, Delby H. How do secondary school students explain bullying? *Educ Res.* 2019;61(2):142-160.
doi:10.1080/00131881.2019.1600376
23. Kurniasih N, Wanabuliandari S, Ristiyani R. Bibliometrics Analysis in Articles of Verbal Bullying in Schools Nuning Kurniasih. *Libr Philos Pract.* 2020;4087(January):1-10.



Case Study

The Nursing Experience of Caring a Patient With Metastatic Brain Tumor in Surgical Pain Management Ward: a Case Study Report

Sun Sheng-Feng¹

¹ New Taipei City General Hospital Sanchong Branch, Taiwan

Article Info

Article History:

Submit Dec 2nd, 2020

Accepted Dec 27th, 2020

Published Dec 30th 2020

Keywords:

Nursing Care; Brain
Metastases; Pain
Management

Abstract

Brain metastases are related to the poor prognosis of patients. It is not clear why certain cancers are more likely to metastasize to the brain than others. Lung cancer, breast cancer and melanoma noted as the highest incidence of brain tumor metastasis. The purpose of this report was to describe the nursing care of a patient with malignant tumor on the left breast who received multiple chemotherapy and radiotherapy, targeted therapy and mastectomy, and the tumor metastasized to the right occipital lobe of the skull. This study was conducted in surgical pain management ward within 3 days observation. Gordon's eleven health function types' assessment framework was used. Observations, physical assessments, interviews, medical records were attempted to collect physical, psychological, social and spiritual data. Two specific nursing problems were found. Special attention need to be paid for the pain situation and take individualized nursing measures by evaluating individual patients.

INTRODUCTION

Regardless of the primary or metastatic lesions, brain metastases are related to the poor prognosis of patients. The one-year survival rate of patients with symptomatic brain metastases is less than 20%. It is not clear why certain cancers are more likely to metastasize to the brain than others. But lung cancer, breast cancer and melanoma have a higher incidence of brain tumor metastasis.¹ Among all malignant tumors, breast cancer ranks second in the incidence of metastatic cancer. The overall prognosis of breast cancer brain metastasis is poor, and the untreated survival period is only 2 to 27 months.² For cases of simple brain metastasis, although surgical resection may

be restricted by anatomical location, neurosurgical resection can help reduce the mass effect in symptomatic patients and is still the primary treatment option.³

This article describes the nursing experience of a patient with malignant tumor on the left breast who received multiple chemotherapy and radiotherapy, targeted therapy and mastectomy, and the tumor metastasized to the right occipital lobe of the skull. The patient's emotional fluctuations, doubts, and refusal to care for treatment due to tumor metastasis pain, postoperative wound pain, and catheter indwelling factors have triggered the author's motivation, hoping to help the case to establish correct pain management

Corresponding author:

Sun Sheng-Feng

alex810006@gmail.com

South East Asia Nursing Research, Vol 2 No 4, December 2020

ISSN:2685-032X

DOI: <https://doi.org/10.26714/seanr.2.4.2020.32-42>

cognition through the team care experience. It can effectively alleviate the discomfort of patients after surgery to improve the comfort of patients, and serve as the care experience and sharing of similar cases in the future.

Treatment and care of metastatic brain cancer from breast cancer

Breast cancer is the second most common source of metastatic brain cancer, accounting for about 14-20%. The typical metastasis of breast cancer is mostly in the lung, liver or bone. And metastatic brain cancer usually does not appear until two to three years after breast cancer is diagnosed.⁴ There are several risk factors for metastatic brain cancer in breast cancer patients: aggressive tumor behavior, negative hormone receptor status, young women, C-ERBB-2 excessive performance, and lung or liver metastases. Compared with other tumors, metastatic brain cancers mostly die from systemic diseases, and patients with breast cancer complicated with metastatic brain cancers mostly die from neurological diseases. Therefore, local control of metastatic brain tumors is very important for long-term survival.⁵

Treatment: Chemotherapy is not effective for brain lesions, because most drugs. Neither can enter the brain, so you must rely on surgery or radiation therapy. If you receive brain radiation therapy, it can increase your survival time by 3 to 6 months on average. If there is brain metastasis, consider radiotherapy. If there is edema or compression at the metastatic site and cause headache, you must use antihypertensive drugs and steroids at the beginning of radiotherapy to effectively reduce the symptoms.⁶ Because there are few systemic therapies that can penetrate the blood-brain barrier (BBB), the overall prognosis of brain metastases from breast cancer is poor. The most common symptoms of patients include headache (35%), vomiting (26%), nausea (23%), and hemiplegia (22%), vision changes (13%)

and seizures (12%). Most patients have multiple metastases (54.2%). The cerebellum and frontal lobe are the most common sites of metastasis (33% and 16%, respectively). The treatment of most patients usually adopts the following two or more multimodal methods: whole brain radiotherapy (52%), chemotherapy (51%), stereotactic radiosurgery (20%), surgical resection (14%). To reduce tumor angiogenesis or change blood permeability brain screen; factors affecting prognosis include tumor size and size, multiple metastases and extracranial metastases.³

Pain Care

Pain is a subjective and self-conscious symptom that not only stems from existing or potential physical or physiological factors, but also involves the direct or indirect influence of human life experience.⁷

Pain after craniotomy may affect hospital stay, medication costs, quality of life and the development of persistent pain.⁸ Although there have been considerable developments in drugs for postoperative sedation of pain, many drugs (Morphine, etc.) have the effect of inhibiting respiration and anesthesia, resulting in not widely used in patients after neurosurgery. Codeine has become a more accepted treatment option in recent years.⁹

Pain care can be classified as cognitive behavioral or physical therapy measures through non-pharmacological pain relief measures. The goal of cognitive behavioral measures is to change the patient's perception of pain, change the behavior of pain, and provide patients with greater control over pain. The goal of physical therapy measures is to provide comfort, adjust to physical dysfunctions, physiological responses, and reduce the fear of pain-related movement or activity restrictions.¹⁰

Patients with full-period surgery suitable for non-pharmacological treatment include: the patient has clear anxiety or fear, but the

anxiety is caused by a feeling of weakness caused by medical treatment or special treatment, and conditions that are good for avoiding or reducing drugs, such as: A history of adverse effects, physiological responses to avoid excessive sedation, conditions that may experience and need to cope with prolonged pain after surgery, and incomplete pain relief with medical measures.¹¹

Cognitive behavioral measures include: pre-operative teaching information preparation, simple relaxation, meditation (imagery), hypnosis (hypnosis), biological feedback (biofeedback), etc. Teach patients how to relieve their physical discomfort during activities. When fear or anxiety is present, it is important to evaluate psychological coping skills and provide pain management and maintain a positive view.¹² When the patient is anxious or afraid before the operation, cognitive behavioral strategies can be provided to assist the patient in choosing measures and teaching how to use it, such as simple relaxation techniques or meditation. For some patients, especially those with high anxiety, too much information or too many requests for decision making can worsen anxiety and fear. Therefore, the psychological evaluation of the patient is very important, including the patient's obvious disability or confusion anxiety symptoms, such as emotional instability, restlessness, inability to fall asleep, slow thinking, etc.

- Relaxation techniques
- Preparatory actions:
- Deep inhale/tension; exhale/relax; yawn for quick relaxation.
1. Clench your fists; take a deep breath; pause for a few seconds.
 2. Exhale slowly, as soft as a doll.
 3. Start yawning.
- Start action:
1. Take a deep breath slowly.
 2. When you exhale slowly,

you feel that you start to relax. Imagine the tension leaving the body with the exhale.

3. Now inhale and exhale slowly and regularly, at the speed you feel most comfortable, try abdominal breathing.
4. Concentrate on slow and regular inhalation and exhalation movements. When you breathe in, you say silently in your heart: "Inhale, 2, 3"; when you exhale, you say silently in your heart: "Exhale, 2, 3". I muttered in my heart: I am now "calm" or "relaxed".
5. Imagine yourself relaxing in a certain place, for example; you are lying on the beach and sunbathing, feeling very calm and relaxing.
6. Do steps 1 to 4 once or repeat steps 3 and 4 for 20 minutes.
7. Finally, take a slow and deep breath, and tell yourself when you exhale, "I feel relaxed."

Family support or tapes can also keep the patient's technique going. Relaxation strategies can also use informal music to distract. In order to significantly reduce the pain after surgery, you can choose the music that the patient likes or relaxing music. After the operation, listen to the music selected by the patient for 30-60 minutes, provide the patient with a relaxed posture, and provide the patient with earphones to listen with their eyes closed. The environment should minimize stimulation.

Physiotherapy measures

In addition to cognitive behavioral measures, there are several physical

therapy methods that can be used as pain management. Common items include: cold or hot application, massage and acupoint stimulation. The main function of these physical therapy methods is to achieve pain relief through external stimulation.

Therapeutic Massage can also relieve pain. The main benefit of this treatment is to stimulate the autonomic nerves and affect the physical, psychological and emotional levels through therapeutic contact. While relieving stress and pain intensity, it can also relieve long-term stress, anxiety and physical pain and discomfort. Scholars such as Nixon proposed that therapeutic massage can relieve pain in the following ways: (1) Massage soft tissues to promote blood circulation and remove pain-causing agents such as lactic acid and inflammatory substances; (2) Massage to stimulate secretion Inhibit large nerve fiber nerve impulse conduction material; (3) Stimulate endogenous analgesic morphine (Endorphin) and activate midbrain, brain stem and spinal cord neurons, so that the spinal cord releases Enkephalin to produce pain inhibition; (4) It can be induced by contact massage Feeling of comfort and tranquility.⁷

Therapeutic massage

1. For 20 to 45 minutes each time, the massage site can be "neck, face, neck, arms, legs, feet or back" and other parts of the body that have pain.
2. The massage environment must be quiet. Pay attention to the privacy of the patient when the massaged area is exposed; use low-sensitivity massage lotion or massage oil; avoid the tumor site, the surgical site, the surrounding invasive catheter or the radiotherapy site and other areas massage.

Massage techniques and methods: The depth of deep massage is about 4-6 inches or the pressure is 0.0090 kg/cm². (1) The purpose of effleurage is the starting action of the whole therapeutic massage

procedure. Use one hand or both palms to push on the patient's skin in all directions. When using both palms, both hands can be pushed synchronously or alternately. (2) The rubbing method (friction) is to press the ulnar side of the finger or palm against the skin, sliding the skin and the subcutaneous tissue, the sliding direction is perpendicular to the direction of the muscle fiber, and its purpose is to act on the skin and subcutaneous Between the tissues, loosen the sticky scar tissue. (3) Kneading works on deep tissues, especially muscles, and helps muscles to produce extension effects through the pushing effect. Nursing staff must put their hands close to the skin and push them in a circle to produce alternate squeezing and relaxation effects between the subcutaneous tissues and deep muscles; they can use both hands or one hand, the entire palm or fingertips. When drawing a circle, Squeeze with a heavier force in the direction of the center, and then release some pressure to return to the original point. During this process, the nurse's hands must be close to the skin, not sliding, and then gently slide to the next adjacent massage site. (4) Pressing: Applying a little heavier pressure than strokes to smoothly press on the patient's skin, so that the skin, subcutaneous tissue and deep muscles are pushed and twisted. (5) Stroking: applying heavier pressure and alternately tapping the skin at a slightly faster speed to produce a stimulating effect, which is different from the previous two methods for relaxation; in each course of treatment, the entire area to be massaged can only be used for one tapping method, and the tapping method cannot be used repeatedly at the same fixed point to avoid excessive stimulation.⁷

METHODS

This case uses Gordon's eleven health function types as the assessment framework. The nursing period is from April 1 to April 3, 2019. Use observations, physical assessments, interviews, medical records, etc. to collect physical,

psychological, social and spiritual related data of the case, and organize and analyze it.

RESULTS

Basic information of the case participants

Ms. H, a 42-year-old female, graduated from high school. She works as a housekeeper. She speaks Mandarin and Taiwanese. She lives with her husband, son and daughter. The main caregiver is her husband. The family tree is shown in the picture. No history of food allergy to special drugs.

Past medical history

Since the second child was born in 2013, the patient felt pain and discomfort in the left breast while breastfeeding. He was diagnosed with breast cancer in June 2014. Completed chemotherapy (2015-2017), mastectomy (2014), and breast reconstruction surgery (2014).

Medical treatment

The patient had symptoms of headache and vomiting since the beginning of March 2019, and underwent brain CT: occipital brain tumors have been tracked in the outpatient clinic one after another. He was admitted to the hospital on 3/31, 4/1 underwent tumor resection and was admitted to the intensive care unit for observation, and 4/3 was transferred to the general ward for continued treatment.

Nursing assessment

1. Health awareness and health management style

The patient was diagnosed with breast cancer in 2014, and has been followed up and treated many times in this hospital. Since the case was diagnosed in 2014, the case has paid considerable attention to their own health, regularly self-examined their breasts, and started regular exercises, using a treadmill for

about 30 minutes a day. Due to multiple hospitalizations for chemotherapy and radiotherapy, I am no stranger to the hospitalization process. This time I mainly hope that the headaches that have occurred since March can be improved after the operation. This assesses the patient's painful nursing problems.

2. Nutrition and metabolic patterns

The case was 164 cm tall, weighed 54 kg, and had a body mass index (BMI) of 20.08 kg/m²; he had regular exercise habits; he had repeated headaches and nausea since the beginning of March, and his diet was reduced and lighter. Assess the case with complete oral mucosa, red skin, warm limbs, no edema, jaundice, and pulse 2+. 4/01 After the operation, food can be taken by mouth, and there is no eating, swallowing disorder or coughing. Use N/C 3L/min, breath frequency: 15-21 times/min, blood oxygen concentration: 99-100%, normal breath sounds, smooth breathing and no effort, can spontaneously cough a small amount of sputum. Blood draw: Na: 139 mg/dl, K: 3.2mg/dl, iCa: 4.2mg/dl. Therefore, it is estimated that the patient has no special care problems with this system.

3. Excretion type

The case can urinate on its own about 6-8 times a day, without frequent urination and urination discomfort, and normal stools can be relieved daily, without the need for drug assistance. During the nursing period, the color of urine is clear and there is no sediment, and there is no abnormal secretion and peculiar smell at the urethra. Therefore, it is estimated that the patient has no special care problems with this system.

4. Types of activities and sports

The patient's occupation is a housekeeper. After the diagnosis of breast cancer in 2014, he began regular

exercise and used a treadmill for about 30 minutes a day. During the care, the patient has a clear consciousness, all limbs have 5 points of muscle strength, and can move according to the instructions. When the surgery was just performed on 4/01, due to postoperative wounds and duct pain, the patient did not want to move, did not want to eat, and was not willing to cooperate with turning over. It is conventional treatment such as urinary catheter care, and during the treatment activities, there will be shallow breathing, tight muscles throughout the body, and a painful expression on the face for a few minutes until the pain is relieved; the class chief complained that "the place behind the head is so painful" and "the tube" When can I pull it out, it hurts." "I knew that the operation would be so painful. I would not have it. It turns out that the head surgery is more painful than the chest cut before me." In addition, the patient constantly fiddled with the upper tube due to the feeling of a foreign body; After the transfer on 4/01, there were multiple headaches, nausea, and retching, and the patient's posture changed slightly, that is, severe nausea, a small amount of saliva, and reduced physical activities such as turning over. The patient was evaluated as having acute pain nursing problems.

5. Sleep and rest patterns

The patient usually falls asleep at about 10 to 11 at night, and sleeps for about 6-7 hours a day. There is no need to take medicine or sleep interruption. The main complaint of the patient: "I will wake up painful when I go to bed at night. I only slept for an hour. I have intermittent sleep and awakening." The pain was scored 8-9 by the Numerical Rating Scale (NRS). Because of the pain of the wound and the position of the pipeline, the patient stays asleep for less than an hour at night. This assesses the patient's acute pain care problem.

6. Cognitive and feeling patterns:

The language used in the case is Chinese and Hokkien, conscious, pupil reflex, both eyes are 2.0-3.0mm, pupil reflex, behavioral cognitive assessment: judgment, orientation, memory, abstract thinking ability, calculation ability, and hearing. After the operation, the patient complained of continuous tingling at the position behind the occipital surgery. The pain score was about 8-9. Moving or turning over would promote the increase in pain score, resulting in the patient's refusal to turn over, urinary tube care, and unwillingness to eat. Pain can be relieved slightly after being stationary or applying analgesics. Each time the pain lasts for about 10-20 minutes. I often ask whether I can apply analgesics. Codeine 30mg IV is administered every 4 hours. When visiting family members, they said that the patient usually has a good tolerance for pain, and he rarely complained of pain during the previous hospitalization. This assesses the patient's acute pain care problem.

7. Self-feeling and self-cognition patterns:

The patient said that he had a good tolerance for pain, and he had undergone mastectomy and reconstructive surgery. Only 1-2 times of painkillers were given. Therefore, it is estimated that the patient has no special care problems with this system.

8. Roles and relationship types:

In the case, the wife, mother (housekeeper) and daughter-in-law lived with her husband, son, and daughter. Because both children are still young (primary one and kindergarten), the focus of daily life is on the children; during the care, the patient is worried. Children who have been hospitalized for too long are worried, but relatively they don't want to let the children know too much. Usually, the decision maker at home is

the husband, and the couple get along well. The operation is also decided after discussion with the husband. There is no major conflict of opinion during the process, so it is estimated that the patient has no special care problems in this system.

9. Sex and reproduction patterns:

Both children of the case were delivered by caesarean section, and the husband had a harmonious sex life. There was no abnormal appearance of the reproductive organs, and no abnormal secretions and odors in the vagina. Therefore, it is estimated that the patient has no special care problems with this system.

10. Response and stress tolerance type

When faced with pressure or physical discomfort, exercise and listen to music will relieve stress. During the hospitalization period, the husband of the patient received frequent visits, informed the patient of the current situation of the child in the home, so that the patient was relieved, and followed the guidance of the nurse to give the patient a therapeutic massage and bring a music player to the patient. Therefore, it is estimated that the patient has no special care problems with this system.

11. Value and belief pattern:

The case has no specific beliefs, and the family is Taoist. The mother-in-law will put the peace symbol next to the bed, hoping to bless peace. Therefore, it is estimated that the patient has no special care problems with this system.

The nursing problems

Based on the evaluation and collection of the above-mentioned case data, it is established that the patient two specific nursing problems during this admission such as acute pain/postoperative wounds and pipelines; and impaired skin

integrity/wound. The acute pain is the most troubled nursing problem experienced by patient. The main causes of common pain in patients undergoing craniotomy are: increased intracranial pressure, wound pain, indwelling tubing, etc. Since the patient does not have an intracranial pressure monitor, it can be observed from vital signs and patient symptoms that the patient has no increased intracranial pressure Signs: changes in consciousness, restlessness, blurred vision, unequal pupils in both eyes, slower heartbeat and breathing, and increased blood pressure. It can be inferred that the patient's pain is mainly due to postoperative wounds and ducts. Here, the focus of care can be focused on this nursing problem:

Main nursing problems: Acute pain/postoperative wounds and pipelines (care date: 4/01-4/03)

Subjective and objective data	S1.4/1 "My head hurts, can I take painkillers?"
	S2 4/1 "Why did it hurt so much there after I had the operation (the area where the fingers were operated on the pillow)"
	S3 4/1 "I had known that the operation would be so painful, I would not do it. It turns out that the operation on the head is more painful than the chest operation before."
	S4 4/1 "When I move, I feel a tingling sensation on the back of the head. I feel pain for 8-9 minutes. I have to stop moving or take painkillers each time to relieve slowly. Each time the pain lasts for about 10 minutes."
	S5 4/1 "I don't want to move or wash the urinary tube, I don't want to move now, don't disturb me"

S6 4/1 "I don't want to eat now; can I talk about it tomorrow?"

S7 4/2 "I think today's pain is probably 7-8 points, but when the painkillers are used up, it will come down to 3-4 points."

S8 4/2 "I woke up with pain last night. I only slept for an hour. I would wake up intermittently in the middle."

S9 4/2 "How long will these tubes (CVC, ICP, H/V) be left? I always feel uncomfortable with something on my head."

S10 4/2 "When I was in treatment, hospitalized, or uncomfortable, I would listen to crystal music, then close my eyes and meditate."

O1 4/1 After the operation, the patient continued to frown and did not want to speak.

O2 4/1 The patient refuses to turn over, urinary tube care, and appears unwilling to eat

O3 4/1 When performing therapeutic activities, there will be rapid shallow breathing, tight muscles throughout the body, and painful expressions until the end of the activity.

O2 4/1 Pain Assessment
PQRST: Position: Behind Occipital, Quality: Tingling, Reaction: Move to promote pain/immobility or use analgesics to relieve pain, Severity: 8 points, Timing: for 10-20 minutes

O3 4/1 Because the patient was informed of postoperative pain before the operation, I had discussed with the patient and family members about the use of painkillers at their own expense after the operation. The patient also complained of pain in the recovery room after the operation. Use now

O4 4/1 The painkiller will be given every 4 hours

O5 4/1. Poor eating situation on the day: the small night shift and the large night shift only drank 130ml of water 2 times and did not eat anything.

O6 4/1-night shift sleeps and wakes up, every time you sleep for less than 1 hour, you will wake up.

O7 4/2-day shift patients often fiddle with the pipeline on their own and are afraid to move their bodies.

O8 4/2 Assist the patient to change the lying position. The patient will have deep breathing, physical exertion and frowning

O9 4/1-4/2 patient vital signs: body temperature 35.6-36.7°C,

Heartbeat: 67-105 beats/min, breathing 20-25 beats/min, blood pressure 110-144/50-69mmHg, SPO2: 99-100%

Care goals

1. Controlled pain score within 24 hours, the Numerical Evaluation Scale for Pain (NRS)

dropped to 4 points.

2. The pain of the patient before transfer can be relieved: (1) the patient can use 2 non-drug measures correctly, (2) the frequency of using analgesics can be reduced from 6 times a day to less than 2 times.

Nursing Evaluation

1-1. Introduce yourself to the patient and establish a good trust and care relationship with the patient.

1-2. Evaluate the patient's pain score every 2 hours, and re-evaluate each time 30-60 minutes after using analgesics.

1-3. Collect Chinese nursing care to reduce interference and interrupt the patient's rest time, and communicate with the patient for a good time before treatment, so that the patient is psychologically prepared, so that the patient can smoothly cooperate with the treatment

1-4. Assist the patient to adopt a comfortable lying position and adjust the position of the pipeline so as not to interfere with the patient's resting position.

1-5. Provide patient tubing and wound location to help increase pain tolerance.

2-1 Teach patients muscle relaxation techniques:

1. Clench your fists; take a deep breath; pause for a few seconds.

2. Exhale slowly.

3. Take a deep breath slowly.

4. When exhaling slowly, I feel that I begin to relax, imagine being nervous And the pain leaves the body with exhalation.

5. Slowly and regularly inhale and exhale to feel most comfortable Perform abdominal breathing at a high speed.

6. Concentrate on slow and regular inhalation and exhalation movements.

7. Imagine yourself relaxing in a certain place

8. Do steps 1 to 4 once or repeat steps 3 and 4

Maintain for about 20 minutes.

2-2 Teaching family members and assisting patients with massage:

1. There is pain in "neck, arm, back" etc. for 20 to 45 minutes each time The painful area.

2. Use low-sensitivity massage lotion or massage oil; avoid swelling Tumor site, surgical site, peripheral invasive catheter or radiation Massage the area to be treated.

3. Massage techniques and methods: The depth of deep massage is about 4-6 inches or

The pressure is 0.0090 kg/cm². (1) Pushing method

It is the starting action (2) of the therapeutic massage procedure to slide by rubbing

The direction is perpendicular to the direction of the muscle fiber to make it sticky scar group

Weaving loosened. (4)
Pressure method: apply one more weight than the stroke method

A little bit of pressure, steadily press on the patient's skin, making the skin,

Subcutaneous tissue and deep muscles are pushed
(5) Percussion method: slightly faster

The ground speed alternately hits the skin to produce irritation to the patient and discomfort

Therefore, it is not implemented.

2-3 Assess the patient's past experience in relieving pressure and pain. The medication measures are listening to music (crystal music), please bring home

Music player used

1. 4/2 Within 24 hours, the patient indicated that the pain was relieved, and the NRS assessment can be reduced to 2-3 points, and 0-1 points when immobile.

And the patient can cooperate with the nurse for treatment, and there is no rejection or discomfort during the process. In addition, the patient's appetite improved and he was willing to eat a small amount of soft food without nausea and vomiting during the process.

2. On 4/2, see the family members to help the patient with therapeutic massage. Family members help patients

It is equipped with a music player, and it can be seen that the patient uses it when relaxing.

3. 4/3 shows that the patient actively uses muscle relaxation techniques when painful and uncomfortable
Coincidentally, supplemented by music.

4. 4/3 of the patients only received intravenous painkillers once

DISCUSSION

This article describes the nursing experience of a patient with left breast malignant tumor metastasis to the brain and then surgical removal of the tumor. The patient has established nursing problems such as anxiety, pain, decreased intracranial adjustment ability, and impaired skin integrity due to factors such as tumor metastasis pain, wound pain, catheter indwelling and unknown prognosis. The patient's pain and mood swings, questioning and refusal to care for treatment behaviors have been established

The biggest benefit of this care is that through the care of this case, it is

with the case to establish a trusting relationship between the patient and the patient to assess the patient's awareness of the current disease and understand the patient's past pain experience. After intervention with medications and other medical measures, teach the patient to understand. After alleviating and enhancing the factors of one's own pain, aim and improve, and learn relaxation techniques, supplemented by non-drug nursing measures, to further improve the pain relief of patients.

CONCLUSION

understood that in the care of patients after surgery, not only drugs can relieve and

improve the comfort of patients, but there are also many non-pharmaceutical measures for us to use, the most important. The point is to understand the different characteristics of each patient to give individualized care.

The symptoms and probability of recurrence and metastasis of breast cancer patients cannot be assessed. Whether it is eradicated or not after the operation, follow-up is the limitation of the case care in this article. Follow-up can only be carried out through the cancer manager; however, it is recommended that such patients should be cared for in the future. Pay attention to the pain situation and take individualized nursing measures by evaluating individual patients.

ACKNOWLEDGMENTS

The author is thankful to New Taipei City General Hospital Sanchong Branch and the patient who took part in this study.

CONFLICTS OF INTEREST

The author discloses no potential conflicts of interest, financial or otherwise.

REFERENCES

1. Custódio-Santos T, Videira M, Brito MA. Brain metastasization of breast cancer. *Biochim Biophys Acta - Rev Cancer*. Published online 2017. doi:10.1016/j.bbcan.2017.03.004
2. Krishnan M, Krishnamurthy J, Shonka N. Targeting the Sanctuary Site: Options when Breast Cancer Metastasizes to the Brain. *Oncology (Williston Park)*. Published online 2019.
3. Rostami R, Mittal S, Rostami P, Tavassoli F, Jabbari B. Brain metastasis in breast cancer: a comprehensive literature review. *J Neurooncol*. Published online 2016. doi:10.1007/s11060-016-2075-3
4. Witzel I, Oliveira-Ferrer L, Pantel K, Müller V, Wikman H. Breast cancer brain metastases: biology and new clinical perspectives. *Breast Cancer Res*. 2016;18(1):8. doi:10.1186/s13058-015-0665-1
5. Owonikoko TK, Arbiser J, Zelnak A, et al. Current approaches to the treatment of metastatic brain tumours. *Nat Rev Clin Oncol*. 2014;11(4):203-222. doi:10.1038/nrclinonc.2014.25
6. Cheng H, Chen H, Lv Y, Chen Z, Li CSR. Prospective memory impairment following whole brain radiotherapy in patients with metastatic brain cancer. *Cancer Med*. Published online 2018. doi:10.1002/cam4.1784
7. Swarm R, Abernethy AP, Anghelescu DL, et al. Adult cancer pain. *J Natl Compr Canc Netw*. 2010;8(9):1046-1086. doi:10.6004/jnccn.2010.0076
8. Guilkey RE, Von Ah D, Carpenter JS, Stone C, Draucker CB. Integrative review: postcraniotomy pain in the brain tumour patient. *J Adv Nurs*. 2016;72(6):1221-1235. doi:10.1111/jan.12890
9. Chou R, Gordon DB, De Leon-Casasola OA, et al. Management of postoperative pain: A clinical practice guideline from the American pain society, the American society of regional anesthesia and pain medicine, and the American society of anesthesiologists' committee on regional anesthesia, executive commi. *J Pain*. 2016;17(2):131-157. doi:10.1016/j.jpain.2015.12.008
10. Hsu JR, Mir H, Wally MK, Seymour RB. Clinical Practice Guidelines for Pain Management in Acute Musculoskeletal Injury. *J Orthop Trauma*. 2019;33(5):e158-e182. doi:10.1097/BOT.0000000000001430
11. Rogers E, Mehta S, Shengelia R, Reid MC. Four Strategies for Managing Opioid-Induced Side Effects in Older Adults. *Clin Geriatr*. 2013;21(4):http://www.consultant360.com/articles/four-strateg.
12. Appukuttan DP. Strategies to manage patients with dental anxiety and dental phobia: literature review. *Clin Cosmet Investig Dent*. 2016;8:35-50. doi:10.2147/CCIDE.S63626



Case Study

Handover Nurse Monitoring and Evaluation In Meeting The SNARS Accreditation Standards 1.1

Kurnia Yuliastanti^{1,2}, Vivi Yosafianti Pohan², Tri Hartiti²

¹ Nursing Department, Sultan Agung Islamic Hospital Semarang, Indonesia

² Master of Nursing Program, Universitas Muhammadiyah Semarang, Indonesia

Article Info

Article History:

Submit Dec 10th, 2020

Accepted Dec 30th, 2020

Published Dec 30th 2020

Keywords:

Monitoring and Evaluation;
Nurse Handover; Nursing
Management

Abstract

Sultan Agung Islamic Hospital Semarang as one of the providers of health, education and research services must be supported by a strong organization and good management. The nurse plays an important role regarding the clinical outcome of the client, especially during the handover the process which has an impact on patient safety and the quality of the hospital. The implementation of monitoring and evaluation of handover in this hospital has never been implemented because there are no working tools and regulations that regulate it as a reference for implementation. This study uses the interviews and observations with the approach carried out on 7 - 19 December 2020. Participants consisted of the Responsible Person / Head of the Room, the Responsible Nurse (PPJA) and the Implementing Nurse (PP) in the Baitul Izzah 2 room of the Sultan Agung Islamic Hospital Semarang. This study found 3 themes were found, namely the absence of monitoring and evaluation of handover nurses, lack of understanding of nurses regarding the implementation of handover monitoring and evaluation, the absence of regulations and work tools regarding the handover monitoring and evaluation. Work tools and regulations are very helpful in the implementation of monitoring and evaluation of handover in providing nursing care in the inpatient room. As well as fulfilling SNARS 1.1 Accreditation standards.

INTRODUCTION

Sultan Agung Islamic Hospital Semarang as one of the providers of health, education and research services, aims to improve health status and is always oriented towards the interests of the community. For that, the hospital needs to be supported by the existence of a strong organization and good management oriented towards the quality of service for the community.

Nursing management is a process of working through members of the nursing staff to provide nursing care professionally. It is a special task that must be carried out by nursing managers to plan, organize, direct and supervise existing resources, both human resources, tools and funds so that they can provide effective nursing services to patients, families and communities.¹ Meanwhile, a nursing service is a form of professional service that is an integral part of health services based on

Corresponding author:

Kurnia Yuliastanti

kurniyuliastanti@gmail.com

South East Asia Nursing Research, Vol 2 No 4, December 2020

ISSN:2685-032X

DOI: <https://doi.org/10.26714/seanr.2.4.2020.43-47>

nursing knowledge and tips for individuals, families, groups or communities, both healthy and sick. Nursing practice is a service provided by nurses in the form of nursing care.²

Nurses as an integral part of health services are required to have strong managerial abilities so that the services provided can increase patient satisfaction. Nurses' managerial abilities can be achieved in many ways. One of them is by increasing reliable managerial skills based on innovation and evidence-based.³ The nurse must know the concept correctly and have a positive attitude and be prepared to apply the evidence-based practice. In the inpatient installation, the nursing staff are in the forefront of the health service system with the first and longest contact with the patient, which is 24 hours per day and 7 days per week, therefore nurses hold a key position in building the image of the hospital. Nursing services in the hospital are the biggest activity producers so that they reflect the quality of hospital services. This quality can be seen from one of them through the implementation of Handover nurses when weighing receipts between shifts.⁴

National Hospital Accreditation Standards (SNARS) 1.1. The Patient Safety Goal (SKP.2.2) requires that the hospital establish and implement a communication process "Handover" and develop effective, timely, accurate, complete, clear and understandable communication methods for recipients.⁵ Weigh-acceptance is a technique used to convey and receive reports in connection with the client's condition, which is carried out between nurses and nurses and between nurses and clients in an accurate and more real way, it must be clear, concise and complete. Acceptance weighing is carried out starting from preparation, implementation at the nurse station and continued beside the patient's bed or bedside handover, as well as post-consideration.¹

Patient handover is designed as a method to provide relevant information to the nursing team at each shift, as a practical guide providing information about the patient's current condition, treatment goals, treatment plans and determining priority services that are carried out in a timely, accurate, complete, and clear manner, so that it can be understood, and will reduce errors, and result in increased patient safety.⁶

Handover implementation in several hospitals in Indonesia is still not optimally implemented. This shows that the handover condition still requires a lot of improvement and recommendations to become a better process. Therefore, if the communication in handover is not effective, it can cause errors in the continuity of services and improper treatment and result in potential losses for patients.⁷

Baitul Izzah 2 room is an adult inpatient room led by a Person in Charge / Head of Room with 4 (four) Nurses in Charge of Care (PPJA). PPJA in implementing nursing care is assisted by 17 implementing nurses (Associate Nurse / PA). The room designated as a practice place for nursing management applications, is an adult care room for classes I and III with cases of Internal Medicine, Eyes, Nerves, ENT, Skin and genitals, and Teeth and Mouth. Has a capacity of 26 patient beds (TT). BOR for the last 3 (three) months averaged 73.5%. The number of nurses is 21 (twenty-one) with D3 Nursing Education amounting to 17 and Nurse Education: amounting to 4.

Based on the results of the assessment, through interviews and observations made to the Head of the Baitul Izzah 2 Room at the Sultan Agung Islamic Hospital, Semarang revealed that in the application of the second patient safety goal, namely increasing effective communication, manifested in the implementation of nurse handover between shifts. Handover is carried out at the nurse station then proceed to the patient's bedside (bedside

handover). For the handover the material, the nurse uses the patient's medical record data and uses a tool in the form of an SBAR-based Handover Form (Situation, Background, Assessment, Recommendation). The handover is routinely carried out and runs smoothly, however so far there has never been any monitoring or evaluation related to the implementation of the handover. This study aims to determine the implementation of Handover Nurse Monitoring and Evaluation In Meeting The SNARS Accreditation Standards 1.1.

METHODS

The scientific way to obtain data with specific purposes and uses.⁸ Activities carried out in obtaining data through observation and interviews, started with problem identification, then continued with problem analysis, determination of problem priorities, preparation of plans of action, implementation, and evaluation of structures, processes and results. The data is used in determining the problems identified using a fishbone diagram. The method used to determine the priority of several problems using the CAR method, which consists of:

- C = Capability, namely the availability of resources (funds, facilities and equipment)
 A = Accessibility, namely convenience, the existing problem is easy to solve or not. Convenience can be based on the availability of methods/methods/technology as well as implementation support such as regulations or implementation guidelines.
 R = Readiness, namely the readiness of the executive staff and the readiness of targets, such as expertise or ability and motivation.
 L = Leverage, namely how much influence the criteria have on one another in solving the problems discussed.

To get the priority value, that is by multiplying the value of each criterion. The higher the value of the product, the more priority the problem is to solve.

RESULTS

In determining the problem according to the CARL method, there are 2 (two) problems, namely:

1. Not yet implemented monitoring and evaluation of Handover by the Head of the Room (score 256)
2. Not yet implemented nursing supervision activities by the head of the room, the team leader in a structured manner (score 96)

Based on the highest score, the priority of the problem in the Baitul Izzah 2 room is "The Head of the Room has not carried out monitoring and evaluation of Handover".

Intervention implemented by conducting socialization/ refreshing about handover through zoom meeting. Followed by coordination and consultation with the Head of Nursing and the Head of the Room for making work tools in the form of monitoring forms, evaluation forms and making SPO Monitoring and SPO Evaluation handover.

On December 10, 2020, the form and SPO were socialized directly to the Head of the Room, PPJA and PP continued with implementation on December 11, 2020. Form and SPO were well received by all Baitul Izzah Room nurses 2. Implementation was carried out with continuous assistance

Interviews and observations to the Head of the Room and PPJA obtained data on the implementation of the monitoring form, evaluation form, SPO monitoring and SPO evaluation can be carried out smoothly. The form is filled in completely, the nurse also does not feel burdened in filling out the complete form. With this form, it makes it

easier for nurses to handover. Nurses are more able to focus and be structured on what things will be handed over to the next shift. The information provided is more accurate, which can minimize errors in communication that can harm patients.

DISCUSSION

Based on the results of interviews and observations, the patient's overall handover from the preparation, implementation, and post-consideration stages constitutes a unified process that becomes one of the activities that support nursing services on an ongoing basis and with integrity through reporting and documentation.¹ Following the purpose of the consideration and acceptance based on the SPO of the Sultan Agung Islamic Hospital Semarang which was issued on January 7, 2020, among others, is to improve communication skills between nurses so that there is a responsible collaborative relationship between members of the nursing team and can follow the complete development of clients and the implementation of nursing care towards clients on an ongoing basis.

Efforts to improve service quality following standards and following the latest hospital accreditation provisions Handover, in Baitul Izzah 2 room have been implemented following the existing SPO. Handover is carried out every shift change at the nurse station then continued to the patient's bedside (bedside handover). For the handover the material, the nurse uses the patient's medical record data and uses a tool in the form of an SBAR-based Handover Form (Situation, Background, Assessment, Recommendation). The method of implementing this weigh-and-receipt has been implemented since the issuance of the SPO as a reference for the implementation of the handover. There were no obstacles in its implementation. It was found that the handover had never been monitored and evaluated in its implementation. Whereas in the SNARS 1.1 Accreditation standard⁵

The Head of the Room, PPJA and PP do not carry out monitoring and evaluation due to lack of understanding and understanding, that handover must always be monitored and evaluated to find out any obstacles in its implementation for quality assurance and patient safety. The impact if this happens continuously and there is no improvement or improvement, it will have a negative impact on the implementation of the consideration itself, for the staff or nurses who carry out these activities and for the institution which is the container and provider of the facilities, and especially for patients as clients who involved in this activity. Thus, this activity will ultimately have an impact on patient safety goals which ultimately lead to patient satisfaction with the service and quality of the hospital institution.

With the existence of forms, SPO monitoring and evaluation handover, monitoring and evaluation are always carried out in every handover implementation. In interviews and observations to the Head of the Room and PPJA, the monitoring form, evaluation form, monitoring SPO and SPO evaluation were carried out properly. The form is filled in completely and the nurse finds it easy to carry out the contents of the form. Nurses can be more focused and structured on what things will be handed over to the next shift. the information provided is more accurate, which can minimize errors in communication that can harm the patient

The positive impact felt by the nurses themselves is to motivate to improve communication skills between nurses, to establish a cooperative and responsible relationship between nurses and to be able to follow the patient's development comprehensively⁹. Nurses' job satisfaction in nursing practice is achieved when the nurse feels that she has contributed, is considered important, has received support from existing sources, and many nursing outcomes are achieved.¹⁰

CONCLUSION

Activities run well and can increase the knowledge and skills of nurses in the application of monitoring and evaluation of handover nurses. It was shown from the results of the mentoring evaluation that the implementation of monitoring and evaluation of handover nurses had been carried out well with 100% achievement which previously did not exist. This was supported by the joint commitment of all nurses in the Baitul Izzah 2 care room to always carry out monitoring and evaluation of handover.

ACKNOWLEDGMENTS

The author is thankful to Sultan Agung Islamic Hospital Semarang and the nurses who took part in this study.

CONFLICTS OF INTEREST

The author discloses no potential conflicts of interest, financial or otherwise.

REFERENCES

1. Nursalam. Manajemen Keperawatan Aplikasi dalam Praktik Nursalam. (2011). Manajemen Keperawatan Aplikasi dalam Praktik Keperawatan Profesional Edisi 3. Salemba Medika.
<https://doi.org/10.1001/archinte.165.22.2659>
2. Keperawatan Profesional Edisi 3. Salemba Medika. 2011.
3. Budiono. *Konsep Dasar Keperawatan*. Kementerian Kesehatan Republik Indonesia; 2016.
4. Legita T. Pengetahuan, Sikap dan Kesiapan Perawat Klinisi Dalam Implementasi Evidence-Base Practice. *NERS J Keperawatan*. Published online 2012. doi:10.25077/njk.8.1.84-97.2012
5. Triwibowo C, Yuliawati S, Husna NA. Handover Sebagai upaya Peningkatan Keselamatan Pasien (*Patient Safety*) di Rumah Sakit. *J Keperawatan Soedirman*. Published online 2018. doi:10.20884/1.jks.2016.11.2.646
6. Komisi Akreditasi Rumah Sakit. *Standar Nasional Akreditasi Rumah Sakit*. KARS; 2017.
7. Faisal F, Syahrul S, Jafar N. Pendampingan Handover Pasien Dengan Metode Komunikasi Situation, Background, Assesment, Recommendation (SBAR) Pada Perawat Di RSUD Barru Kabupaten Barru Sulawesi Selatan. *J Terap Abdimas*. Published online 2019. doi:10.25273/jta.v4i1.3807
8. Kamil H, Keilmuan B, Dasar K, et al. Handover Dalam Pelayanan Keperawatan. *Idea Nurs J*. Published online 2011.
9. Sugiyono. Metodologi Penelitian. *Univ Pendidik Indones*. Published online 2003.
10. Aiken LH, Clarke SP, Sloane DM, et al. Nurses' reports on hospital care in five countries. *Health Aff*. Published online 2001. doi:10.1377/hlthaff.20.3.43
11. Marquis BL, Huston CJ. *Leadership Roles and Management Functions in Nursing: Theory and Application*.; 2017. doi:10.1097/00006216-200407000-00013



Case Study

Kangaroo Method Treatment Increases Baby's Body Temperature With Low Birth Weight

Fenny Dwi Kurniasih¹, Heryanto Adi Nugroho¹, Chanif Chanif¹

¹ Nursing Internship Program, Universitas Muhammadiyah Semarang, Indonesia

Article Info

Article History:

Submit Dec 5th, 2020

Accepted Dec 30th, 2020

Published Dec 30th 2020

Keywords:

Low birth weight; Kangaroo method; Increased body temperature

Abstract

Birth weight is less than 2500 grams which contribute to infant mortality especially during the perinatal period, one of the interventions that can be done with kangaroo method, this method can make the baby's body temperature stable because the baby who is in the care of the kangaroo method will feel like it exists in the uterus of the mother, in addition to the treatment of kangaroo methods aimed at helping to accelerate the process of increasing the baby's body temperature as well as being able to stabilize the body temperature in babies who experience low birth weight. The design of the study used is a descriptive method with a case study approach of nursing care using a pre and post-test design conducted on 2 respondents. Before being given the kangaroo method 1 respondent and respondent 2 experienced low weight measured using observation sheet for 3 days while after being given kangaroo method respondent 1 and respondent 2 experienced weight gain measured using observation sheet for 3 days characterized by normal weight. Kangaroo treatment therapy method can increase body temperature in babies with low birth weight in the perinatology room of K.R.M.T Wongsonegoro Hospital Semarang.

INTRODUCTION

Low Birth Weight (LBW) is a baby born with a bodyweight of fewer than 2500 grams, where babies with less weight are prone to illness or infection if this is not treated immediately will be at risk of experiencing delays in motor development and learning ability.¹

In terms of the relationship between the time of birth and gestational age, the baby's birth is grouped into three, including preterm (preterm) babies, namely babies born with a gestation period of fewer than 37 weeks (259 days), term babies, namely

babies born with a gestation period of fewer than 37 weeks (259 days), gestation between 37 to 42 weeks (259-293 days), and babies over months, namely babies born with a gestation period of > 42 weeks or more than 294 days.²

Based on Riskesdas (2018) Basic Health Research results, the prevalence of the Indonesian population having low birth weight problems is 3.27 %. The prevalence of the population in Central Java with problems according to the proportion of birth weight <2500 was 2.93 % and according to the diagnosis or symptoms experienced by the patient was 3.72 %,

Corresponding author:

Fenny Dwi Kurniasih

fennydwikurniasih98@gmail.com

South East Asia Nursing Research, Vol 2 No 4, December 2020

ISSN:2685-032X

DOI: <https://doi.org/10.26714/seanr.2.4.2020.48-53>

while the prevalence of Semarang city according to the diagnosis by health personnel was 4.47 %. The prevalence of low birth weight at the age of 0-59 months according to the city of Semarang is 5.39%.³

Low birth weight their adipose tissue and subcutaneous fat over a little and epidermis is thinner than in adults. The elasticity of the baby's body decreases over the surface area, thereby accelerating heat loss. This is influenced by the length of the baby, the ratio of body surface to body weight for the age of the baby, all of which can affect normal temperature limits.⁴ This is what causes LBW to need tools and methods, including by inserting the baby into an incubator, performing treatment with natural methods, namely by treating the kangaroo method to stabilize his body temperature to prolong life opportunities. The kangaroo method can meet the basic needs of LBW by providing situations and conditions similar to that of the uterus, thus giving LBW a chance to adapt well to the outside world. Given the various advantages, it can help to stabilize the baby's body temperature.^{4,5}

The kangaroo method has a big effect on the baby's body temperature to stabilize because babies who are in the kangaroo method care will feel like they are in the mother's womb.⁶ The kangaroo method is more effective at increasing body temperature, the heat transfer mechanism occurs in two mechanisms, namely conduction and radiation.^{4,5} The behaviour regulates the balance between heat loss and production or more commonly referred to as thermoregulation. The hypothalamus detects small changes in body temperature. The anterior hypothalamus regulates heat loss, whereas the posterior hypothalamus regulates heat production.⁷

The formulation of the problem in this nurse final scientific paper is that this case study aims to determine the Kangaroo Method Treatment for Increasing Body Temperature of Infants with Low Birth

Weight in the Perinatology Room of the KRMT Wongsonegoro Hospital Semarang.

METHODS

Methods of this case study use descriptive method nursing process performed on two patients in January 2020 in the Hospital KRMT Wongsonegoro Semarang. The application of the kangaroo care method was carried out for 3 days. This case study inclusion criteria that baby weight between 1200 - 2499 grams, no complications were serious such Acute Respiratory Distress Syndrome (ARDS), not undergoing phototherapy, while the exclusion criteria for this case study is temperature > 37°C, parents or family members who will perform fever kangaroo care method. Before caregiving kangaroo method of patients in the first measuring body temperature, after the patient has been measured body temperature then intervention Care Award kangaroo method to patients performed for 20 minutes, do the treatment for the condition asks the patient how to level s body temperature after being given Kangaroo method treatment with intervals of 15 minutes. The equipment used in the application of this case study is swaddling cloth, baby hats, baby socks, digital thermometer. Before the application first, measure the temperature of the baby's body and then record the results. Use of the kangaroo method care can be given every day and after that, the baby is measured again in temperature.

RESULTS

The subjects of this case study were 2 people consisting of male and female patients. Patient characteristics of both cases can be seen in Table 1 and the results of the assessment in both cases are shown in Table 2.

On January 11, 2020, the results of the assessment of data case of patient 1 gender woman, age 22 days premises n medical diagnosis LBW. The patient's mother said

that her child was still not fluent in drinking the mother's milk because she was not used to it. Based on objective data, bodyweight is 1600 grams, height/length 43 cm, head circumference 29 cm, chest circumference 24 cm, upper arm circumference 7c m, and physical examination results show pulse: 141x / minute, breath frequency 30 x/minute, the temperature of 36.3°Celcius. On January 12, 2020, the results of a case review of a patient with 2 sexes were female, 19 days old with a medical diagnosis low birth weight. The patient's mother said that her child was still not fluent in drinking the mother's milk because she was not used to it. Based on objective data weight 1550 grams, High/body length 41 cm, Round Head 27 cm, Bust 23 cm, Arm Circumference above 8 cm, and examination of physical showed the pulse of 138 x/min, the frequency of the hub axle 33 x / minute, temperature 36.5 ° C.

Nursing diagnoses in patient 1 and patient 2 show that hypothermia is associated with low birth weight. This is confirmed by the analysis of data obtained from the history and physical examination which is influenced by Hypothermia on LBW because the baby is still difficult to adjust outside the mother's womb and organs. baby's body that has not been functioning optimally. For babies weighing ≥ 1500 grams or less than 2500 grams, babies will lose up to 10% of body weight during the first 7-10 days. If LBW is given quality care, it can reduce the neonatal mortality rate. Kangaroo Method Care (PMK) is an easy, simple and effective way to treat LBW because kangaroo treatment is a practical, economical and very effective treatment to meet the most basic needs of babies, namely warmth, breast milk, protection from infection, stimulation, safety and compassion.⁸

Interventions were given to the patient 1 and patient 2 is monitor vital signs, especially temperature, provide warmth through the incubator, monitor the provision of methods kangaroo, teach

techniques of kangaroo appropriate method.

Implementation performed on the patient 1 and patient 2, namely the provision of kangaroo method to increase body temperature with a time of 20 minutes, to monitor the provision of kangaroo method, teaches techniques kangaroo method is how to position the baby's stomach and abdomen mother touching each other, monitors vital signs, especially body temperature. During the implementation stage, the nurse carries out the nursing care plan to help clients independently and in collaboration with other medical teams.

Evaluation in patient 1 and patient 2, namely body temperature in normal conditions, providing warmth through the incubator, collaboration with mother for breastfeeding. Based on the results of the evaluation, it can be analyzed that the nursing problem is partially resolved, it can be seen from the two patients experiencing an increase in body temperature, giving the kangaroo method is carried out for the child with low birth weight.

Table 2 The data obtained from the case study shows that before being given the kangaroo nursing intervention method, respondent 1 and respondent 2 did not experience a decrease in body temperature. Body temperature on the first day of respondent 1 and respondent 2 obtained a body temperature of 36.3 °C and 36.5 °C after the nursing intervention was given to respondent 1, it was found that body temperature was 36.4 °C and respondent 2 obtained body temperature of 36.5 °C. On the second day before the nursing intervention was given to respondent 1, the body temperature was 36.4 °C and respondent 2 was 36.5 °C. After the nursing intervention was given to respondent 1 and respondent 2 the body temperature was 36.6 °C and 36.7 °C. On the third day before the nursing intervention was given to respondent 1 and respondent 2, the result was a body temperature of 36.7

°C, after being given nursing intervention the results of respondents 1 and 2 were obtained 36.9 °C and 36.8 °C.

The results of the case study showed that the body temperature of children with low birth weight in the perinatology room of the KRMT Wongsonegoro Hospital in Semarang City experienced an increase in body

temperature by the number of 2 patients, in patients 1 and 2 experienced an increase in body temperature from 36.3 °C and 36.5 °C to 36, 9°C and 36.8°C. The success of the process can be seen by comparing the process with the guidelines or process plan, while the success of the action can be seen by comparing the level of independence of the patient's mother.

Table 1
Case Characteristics

Case I	Case II
Patient identity	Patient identity
Name: Baby Mrs S	Name: Baby Mrs D
Age: 22 days	Age: 20 days
Birthdate: December 19, 2019	Birthdate: December 21st, 2019
Female gender	Female gender
Name of parents: Mrs S	Name of parents: Mrs D
Islam	Islam
Tribe: Javanese	Javanese ethnic
Occupation: Housewife	Occupation: Self-employed
Address: Demak, Central Java	Address: Semarang
Medical Diagnosis: LBW	Medical diagnosis: LBW
Assessment date: 11 January 2020	Assessment date: January 12, 2020

Table 2
Body Temperature Before and After Kangaroo Method Treatment

Patient	Day 1		Day 2		Day 3	
	before	after	before	after	before	after
Patient 1	36.3°C	36.4°C	36.4°C	36.6°C	36.7°C	36.9°C
Patient 2	36.5°C	36.5°C	36.5°C	36.7°C	36.7°C	36.8°C

DISCUSSION

The results of these case studies show there is an increase in body temperature in children with low birth weight which experienced less weight than normal after a given method of storytelling for 20 minutes.

The results of this study are following the results of other studies which explain that the kangaroo method is more effective at increasing body temperature. The heat transfer mechanism occurs in two mechanisms, namely conduction and radiation.^{8,9}

Similar results are also explained in other studies which explain that there is an increase in body temperature and body weight after skin-to-skin contact using the kangaroo method.⁹

Similar results were also explained in another study which explained that the kangaroo method affected body temperature in infants with low birth weight as evidenced by an increase in body temperature for infants.^{10,11}

Birth weight is an important indicator of the health of the baby, a major factor for survival and a factor for the development and mental development of the baby in the

future. In terms of maternal factors, several factors affect LBW, including pregnancy and fetal factors. Maternal factors include malnutrition during pregnancy, maternal age (<20 years and > 35 years), a gestational distance too close, and illness from the mother herself. Pregnancy factors such as hydramnios and multiple pregnancies. Fetal factors that affect LBW, such as congenital defects and infections in birth. Other risk factors include parity, economic status, education and maternal occupation. Invalid sources specified.^{12,13}

Birth weight is an important indicator of the health of the baby, a major factor for survival and a factor for the development and mental development of the baby in the future. In terms of maternal factors, several factors affect LBW, including pregnancy and fetal factors.¹³ Maternal factors include malnutrition during pregnancy, maternal age (<20 years and > 35 years), a gestational distance too close, and illness from the mother herself. Pregnancy factors such as hydramnios and multiple pregnancies. Fetal factors that affect LBW, such as congenital defects and infections in birth.^{1,14} Other risk factors include parity, economic status, education and maternal occupation.¹⁵ For good for the mother's pregnancy is 20-35 years. Pregnancy under 20 years of age or more than 30 years is a pregnancy with high risk. Pregnancy at a young age is a risk factor because at the age <20 years the mother's condition is still growing so that food intake is mostly used to meet the needs of the mother. Pregnancies of more than 35 years are less fertile reproductive organs as well as increase the risk of birth with congenital disorders and birth are at risk for low birth weight infants.¹⁶

CONCLUSION

Kangaroo treatment method can increase body temperature, this is evident in patient 1 and patient 2 do not experience body temperature below normal. The kangaroo method is a simple way to care for a newborn where the mother uses her body

temperature to warm the baby. Kangaroo care is an effective way to meet the most basic needs of babies, namely warmth for the baby, exclusive breastfeeding, protection from infection, safety and compassion.

ACKNOWLEDGMENTS

Gratitude to ALLAH SWT, Director of Roemani Muhammadiyah Semarang Hospital, patient and family, Ns. Heryanto AN, M.Kep, Sp.Kom as the Head of the Nurse Study Program and as the supervisor of the Nurse's Final Scientific Work.

CONFLICTS OF INTEREST

The author disclosures no potential conflicts of interest, financial or otherwise.

REFERENCES

1. Lowdermilk DL, Perry SE, Cashion K. *Maternity Nursing*. 8th editio. Mosby/Elsevier; 2014.
2. Maryunani A. Ilmu kesehatan anak dalam kebidanan. *Jakarta Trans Info Media*. Published online 2010.
3. Kementerian Kesehatan RI Badan Penelitian dan Pengembangan. *Hasil Utama Riset Kesehatan Dasar 2018.*; 2018. doi:1 Desember 2013
4. Okinarum GY, Mawarti R. Pengaruh Perawatan Metode Kanguru Terhadap Perubahan Suhu Tubuh Pada BBLR Di RSUD Muhammadiyah Yogyakarta Tahun 2010. Published online 2011.
5. de Castro Silva MG, de Moraes Barros MC, Pessoa ÚML, Guinsburg R. Kangaroo-mother care method and neurobehavior of preterm infants. *Early Hum Dev*. 2016;95:55-59.
6. Feitosa MR, Gubert F do A, Tomé MABG, et al. Primary health care follow-up visits: investigation of care continuity of preterm newborns from a kangaroo-mother care unit. Published online 2017.
7. Corwin E. *Handbook of Pathophysiology.*; 2008.
8. Sari BM, Arismawati DF. The Effect of Kangaroo Care Method on the Change of Body Temperature in Low Birth Weight Infants (LBWI). *Int J Nurs MIDWIFERY Sci*. 2018;2(02):131-136.
9. Ramani M, Choe EA, Major M, et al. Kangaroo mother care for the prevention of neonatal

- hypothermia: a randomised controlled trial in term neonates. *Arch Dis Child*. 2018;103(5):492-497.
10. Yusuf N, Hadisaputro S, Runjati R, Suwondo A, Mashoedi ID, Supriyana S. The effectiveness of combination of kangaroo mother care method and lullaby music therapy on vital sign change in infants with low birth weight. *Belitung Nurs J*. 2017;3(4):352-359.
 11. Parsa P, Karimi S, Basiri B, Roshanaei G. The effect of kangaroo mother care on physiological parameters of premature infants in Hamadan City, Iran. *Pan Afr Med J*. 2018;30.
 12. Wong SPW, Twynstra J, Gilliland JA, Cook JL, Seabrook JA. Risk factors and birth outcomes associated with teenage pregnancy: A Canadian sample. *J Pediatr Adolesc Gynecol*. 2020;33(2):153-159.
 13. Amri I, Nur R, Harun H, Aulia U. Number pregnancy and low birth weight (LBW) babies in Anutapura Hospital in Palu City in 2016. *Enferm Clin*. 2020;30:219-222.
 14. Ricci SS, Kyle T. *Maternity and Pediatric Nursing*. Wolters Kluwer Health/Lippincott Williams & Wilkins; 2009. <https://books.google.co.id/books?id=gaYtFuND7VIC>
 15. Wang H, Xiao Y, Zhang L, Gao Q. Maternal early pregnancy vitamin D status in relation to low birth weight and small-for-gestational-age offspring. *J Steroid Biochem Mol Biol*. 2018;175:146-150.
 16. Rogne T, Tielemans MJ, Chong MF-F, et al. Associations of maternal vitamin B12 concentration in pregnancy with the risks of preterm birth and low birth weight: a systematic review and meta-analysis of individual participant data. *Am J Epidemiol*. 2017;185(3):212-223.