

Original Articles: Case Study

ANALYSIS OF NURSING CARE THROUGH WOUND CARE FOR POST-OP CA MAMMAE PATIENTS WITH NURSING PROBLEMS AT INFECTION RISK AMONG POST-OP CA MAMMAE PATIENTS IN ROOM G1 RSPAL DR. RAMELAN SURABAYA

Sarmi Djumati ^{1*}, Siti Nur Hasina ¹, Priyo Mukti Pribadi Winoto ¹, R. Khairiyatul Afiah ¹

¹ Department of Nursing, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya, Indonesia

Article history:

Received: September, 14, 2024

Accepted: December, 09, 2024

Correspondence:

Sarmi Djumati
Department of Nursing, Faculty of
Nursing and Midwifery, Universitas
Nahdlatul Ulama Surabaya,
Indonesia

Email:

1120022013@student.unusa.ac.id

Keywords:

Wound Care, Post Mastectomy, Ca
Mammae.

Page Number: 56-65

Abstract

Introduction: Ca Mammae postoperative patients experience wounds susceptible to infection if not treated properly.

Objective: This study aims to analyze nursing care through wound care for Post Op Ca Mammae patients with nursing problems at infection risk for Post Op Ca Mammae patients in Room G1 RSPAL Dr. Ramelan Surabaya.

Methods: The research design of this final scientific work uses the case method, with the subject being one patient with nursing problems and a risk of infection with a medical diagnosis of Ca Mammae. The research was conducted in Room G1 RSPAL Dr. Ramelan Surabaya for six days, using data collection methods including comprehensive assessment, diagnosis, intervention, implementation, and evaluation.

Results: The results of a case study on Ca Mammae with nursing problems of infection risk show that being given nursing care therapy with wound care can reduce the risk of infection so that the client looks fitter, the wound is covered with sterile gauze, the bleeding stops, the wound edges start to dry on the 7th day, the pain scale 3, no signs of redness, body temperature 36.3 0C, no swelling around the surgical wound, reduced odor, the middle wound is still wet and requires further care at home

Conclusions: Wound care can reduce infection risk in post-op Ca Mammae patients. Nurses are expected to be able to continue applying wound care to other clients who have the risk of infection problems and educate the public about post-cancer wound care while at home.

INTRODUCTION

Mammary Ca globally is the highest cause of death in women. (Kemenkes RI, 2018). Modifying Radical Mastectomy or MRM is a surgical procedure for treating Mammary Ca. Mastectomy can be performed on one breast or both, but mastectomy is not risk-free. Sometime after the mastectomy, pain, tenderness, or swelling will appear in the tissue around the surgical wound, hematoma, accumulation of clear fluid in the wound (seroma), or numbness in the chest or upper arm. Mastectomy surgery is

often chosen because the large number of mammary carcinoma patients who will be operated on have entered the final stage criteria, and the size of the tumor is large (Amelia et al., 2021). Post-operative patients need wound care. Wound care aims to clean the wound to prevent infection of Ca Mammae and aims to maintain and prevent the wound area from exposure to bacteria and microorganisms (Abdel-Aal et al., 2022).

Data from the Global Burden of Cancer (GLOBOCAN) released by the World Health Organization (WHO) states that the number of cases and deaths due to cancer up to 2018 was 18.1 million cases and 9.6 million deaths in 2018. Deaths due to cancer are estimated will continue to increase to more than 13.1 million by 2030. The WHO Southeast Asia Region reported approximately 2.2 million new cases and 1.4 million cancer-related deaths, accounting for more than 1 in 10 deaths in the Region. Among deaths due to cancer, lung cancer accounts for 10.6% of deaths, mammary cancer 9.4%, cervical cancer 8%, liver 6.6%, and lip and oral cavity cancer 6.4% of deaths (WHO, 2019). Riskesdas 2018 data states that the prevalence of cancer in Indonesia is 1.4% or estimated at around 347,792 people. East Java Province is the province with the third most cancer sufferers after Java Yogyakarta and Central Java, namely around 61,230 people (Kemenkes RI, 2022).

The results of a preliminary study in December 2022 showed that there were 17 Post Op Ca Mammary patients, of these 17 patients, 2 of them came back after 2 weeks post-op because of infection and fever.

Post-mammary Ca surgery patients can experience infection if the wound is not cared for properly. The first signs and symptoms of infection are a heat or burning sensation in the infected area, the second is heat or pain in the infected tissue, the third is the tumor, namely swelling in the infected area, the fourth is rubor or redness in the infected area, and the last s change. Tissue function is the changes that occur if an infection occurs in one of the body's organs, and then that organ will not function properly (Nurarif & Kusuma, 2016).

Efforts to reduce the risk of infection in Post Op Ca Mammae patients include wound care, monitoring wound characteristics such as wound area, odor, size, and color, and cleaning with NaCl or a non-toxic cleanser. NaCl was chosen as a wound cleaning fluid because it is isotonic, so it does not interfere with the wound healing process, apart from that, saline water has low toxic levels and does not cause allergies or changes in the presence of the skin. Provide a wound dressing with gauze according to the area of the wound and pay attention to sterile dressing techniques to avoid the risk of infection in the wound (Wintoko & Yadika, 2020).

Based on the description above, it is necessary to analyze nursing care for post-op Ca Mammae patients with wound care to overcome the risk of infection in the G1 Room at RSPAL Dr. Ramelan.

METHODS

Study Design

The research approach used was descriptive, using a case study approach. This case study explored the application of wound care to Post Op Ca Mammae patients with nursing problems at risk of infection in Room G1 RSPAL Dr. Ramelan Surabaya.

Settings

Location of application Wound treatment was carried out in Room G1 RSPAL Dr. Ramelan Surabaya. The research time for patient one was carried out from January 17, 2023, until January 22, 2023.

Research subject

In this study, one case was used in one patient with a nursing problem, risk of infection in a patient with a medical diagnosis of Ca Mammae with age criteria of 26 years and the main problem was risk of infection.

Instruments

Assessment sheets and patient medical records were the instruments used in this research. 0.9% Na Cal solution, bacitracin antibiotic, and sterile gauze were used for wound treatment.

Data collection

The researcher explained the client's wound care procedures. The researcher implemented two-way communication and conveyed the patient's wounds, asked if there were any complaints, observed temperature, pulse, respiration, and blood pressure, washed hands helped the patient to remove top clothes washed hands again, and prepared wound care tools to make them sterile. Researchers used swabbing and irrigation techniques to treat the breasts. The swabbing technique involved pressing while gently rubbing the wound on the breast with sterile gauze soaked in 0.9% NaCl, while the irrigation technique was used on breast wounds that were wet or prone to bleeding by slowly spraying 0.9% NaCl. Breast care was carried out once a day.

Data Analysis

Data analysis in research used qualitative methods, namely by conducting in-depth interviews, observing patients, and documenting patient medical records.

Ethical Consideration

This research did not use ethical considerations in the form of an ethical suitability test certificate, because the actions given were standard operational procedures for post-operative wound care for Ca Mammae implemented at RSPAL Dr. Ramelan Surabaya.

RESULTS

Assessment

The author observed from January 17, 2023, until January 22, 2023, with assessment data on 17 January 2023 at 08.00 WIB. Anamnesis was obtained from the patient's mother, the patient's husband,

and file No. Register 677xxx as follows, the patient was a woman named Mrs. N was 26 years old, Muslim, married, and the languages often used were Indonesian and Javanese. The patient lives in Sidoarjo, the patient's last education was high school, the patient did not work and was a housewife, was in charge of BPJS, the patient was blessed with 1 daughter aged 6 years. The patient lived at home with her husband and children. MRS patient on January 15 2023 at 10.30 WIB. The patient said that currently his body was weak after surgery and he felt pain in the surgical wound.

On January 15 2023 the patient came to the RSPAL emergency room, dr. Ramelan Surabaya at 08.00 WIB with complaints of weakness. At the RSPAL emergency room, Dr. Ramelan Surabaya underwent a blood test with HB = 12.30 g/dl BP = 120/90 mmHg, pulse = 80 x/minute, temperature = 36.2°C, SPO2= 98%, RR=20 x/minute. The patient said his body was weak because he had no appetite. The patient also said that she felt a lump in her breast and was diagnosed with Ca Mammae stage 3. Then, the patient entered room G1 at RSPAL Dr. Ramelan Surabaya at 10.30 WIB.

Main complaint: The patient said that currently his body was weak. Physical examination showed that on inspection the patient's skin color was olive yellow, there was redness on the skin, clean nails, dry skin turgor, no fractures, no deformities, there was a right mammary that had been removed (mastectomy), there were scars, odor, active bleeding. Laboratory examination showed high results in leukocytes, namely 15,900/ μ L, neutrophils increased, namely 82.90%, hemoglobin decreased, namely, 5.9 g%, and hematocrit decreased, 35.2%. This number shows there were signs of infection.

The therapy given was 3% NaCl Infusion 10-17 drops per minute by IV line to treat or prevent sodium loss caused by dehydration, excessive sweating, or other causes, Inj. Cinam 4x1.45gram IV to treat skin and skin structure infections, PRC blood transfusion Target Hb >10 g/dl one bag Infusion to treat anemia with Hb levels <7 g/dl, Inj. Ranitidine 2x1 ampoules IV for gastric ulcers, Inf. Gabaxa 1x1 mg/ml Fls as an amino acid solution supplement or amino acid suspended infusion regimen for patients with conditions requiring additional glutamine. MST injection to reduce pain.

Nursing Diagnosis

Based on the results of subjective and objective assessments, a nursing diagnosis was obtained, namely the risk of infection (SDKI, D.0142) as evidenced by the effects of the invasive procedure of mastectomy on the right mammary gland, which had been removed (mastectomy), there were scars, active bleeding. Laboratory examination showed high results in leukocytes, namely 15,900/ μ L, neutrophils increased, namely 82.90%, and hematocrit decreased, namely 35.2%. This number shows there were signs of infection.

Nursing Intervention

The intervention in this study aimed to follow nursing actions within 3 x 24 hours. The interventions provided are Observation, monitoring for signs of local and systemic infection, therapy by limiting the number of visitors, providing skin care in edema areas, washing hands before and after

contact with patients and the patient's environment, maintaining aseptic technique in high-risk patients, education by explaining the signs. And symptoms of infection, teach how to examine wounds, recommend increasing fluid intake, and collaborate on immunizations, if necessary.

Nursing Implementation

The implementation in this study was provided to reduce the risk of infection. The implementation of evidence-based nursing was wound care. The researcher explains the client's wound care procedures. The researcher implemented two-way communication and conveyed the patient's wounds, asked if there were any complaints, observed temperature, pulse, respiration, and blood pressure, washed hands, and helped the patient to remove top clothes, wash hands again, and prepare wound care tools to make them sterile. Researchers used swabbing and irrigation techniques to treat the breasts. The swabbing technique involves pressing while gently rubbing the wound on the breast with sterile gauze soaked in 0.9% NaCl, while the irrigation technique was used on breast wounds that were wet or prone to bleeding by slowly spraying 0.9% NaCl. Breast care was carried out once a day.

Nursing Evaluation

The results of the evaluation on Mrs. N after carrying out wound care as follows: the client looked fitter, the wound was covered with sterile gauze, the bleeding stopped, the edges of the wound began to dry on the 6th day, pain scale 3, no signs of redness, body temperature 36.3⁰C, no swelling around surgical wound, the middle wound was still wet and required further care at home.

DISCUSSION

Overview of Infection Risk Nursing Problem Analysis

Based on data obtained by Mrs. N, 26 years old, complained of weakness, pain from post-breast removal surgery, visible right mammary which had been removed (mastectomy), there was a scar, active bleeding, leukocyte level increased to 15,900/ μ L, hemoglobin level 12.30 g/d.

Post-mammary Ca surgery patients could experience infection if the wound were not cared for properly. The first signs and symptoms of infection were heat or burning sensation in the infected area, the second was heat or pain in the infected tissue, the third was a tumor, namely swelling in the infected area, the fourth was rubor or redness in the infected area and the last was change. Tissue function is the changes that occur if an infection occurs in one of the body's organs then that organ would not function properly (Nurarif & Kusuma, 2016).

The risk of infection could occur because the patient had a wound after surgery to remove the right breast so that the wound appeared wet with a smell, whereas a wet wound was a very favorable medium for germs to breed and cause infection.

Based on the results of subjective and objective assessments, a nursing diagnosis was obtained, namely the risk of infection (SDKI, D.0142) as evidenced by the effects of the invasive procedure of

mastectomy on the right mammary gland which had been removed (mastectomy), there were scars, active bleeding. Laboratory examination showed high results in leukocytes, namely 15,900/ μ L, neutrophils increased, namely 82.90%, and hematocrit decreased, namely 35.2%. This number shows there were signs of infection.

Modifying Radical Mastectomy or MRM was a surgical procedure for treating Mammary Ca. Mastectomy could be performed on one breast or both, but mastectomy was not risk-free. Sometime after the Mastectomy, pain, tenderness, or swelling would appear in the tissue around the surgical wound, hematoma, accumulation of clear fluid in the wound (seroma), or numbness in the chest or upper arm. Mastectomy surgery was often chosen because the large number of mammary carcinoma patients who would be operated on had entered the final stage criteria, and the size of the tumor was large (Amelia et al., 2021).

The diagnosis of risk of infection was made on the basis that the patient had experienced injury due to breast removal surgery, subjectively the patient complained of pain or signs of infection called dolor, the color of the wound area was reddish or rubor, swelling around the wound or tumor, even though there was no heat. Added to subjective data of increased white blood cell levels, the patient was at high risk of infection.

The intervention in this study aimed to follow nursing actions within 3 x 24 hours. The interventions provided are Observation, monitoring for signs of local and systemic infection, therapy by limiting the number of visitors, providing skin care in edema areas, washing hands before and after contact with patients and the patient's environment, maintaining aseptic technique in high-risk patients, education by explaining the signs and symptoms of infection, teach how to examine wounds, recommend increasing fluid intake, and collaborate on immunizations, if necessary.

The intervention was structured based on the Indonesian nursing intervention standards (SIKI), namely infection prevention (I. 14539) with the aim that after 3 x 24 hours of nursing action the glucose level of infection decreased and the expected outcome criteria were decreased fever, decreased redness, decreased pain, decreased swelling, and levels white blood cells decrease (Tim Pokja SIKI, 2019).

The intervention was prepared by researchers by SIKI (I. 14539), namely prevention of infection because it aims to prevent infection in post-mastectomy wounds with the hope that signs of infection found during the assessment could be reduced, such as the presence of dolor (pain), tumors (swelling around post-operative wound area), rubor (redness of the wound), and an increase in leukocyte levels above 11,000/ μ L, and maintaining body temperature within normal limits.

At the time of implementation, Mrs. N was given therapy according to the intervention that had been prepared previously. The researchers applied wound care therapy to reduce the risk of infection, which was carried out once a day using swabbing and irrigation techniques. Before providing therapy, researchers entered into a contract with Mrs. N for 6 days to provide wound care interventions.

Wounds that were wet or contained a lot of exudate were controlled by absorbing the exudate using absorbent gauze, a negative pressure vacuum, and washing or irrigating with sterile water to

reduce the number of bacteria and reduce the amount of exudate. Wound dressing was done to protect the wound from trauma and infection (Perdanakusuma, 2017). Optimal wound dressing maintains a moist and clean environment that prevents pressure and mechanical trauma, reduces edema, and stimulates recovery (Wintoko & Yadika, 2020).

Implementing wound care starts with maintaining client privacy, arranging the client's position, and instructing the client not to touch the wound area or sterile equipment. Wash your hands before and after the procedure/wound care, the wound care tools that would be used must be sterile (free from germs), clean the wound using septic and aseptic techniques, and the incision wound be closed again with verband. Researchers took action according to SOP by paying attention to treatment and injuries. From the first to the third day, wound care was carried out once a day using a gentle swabbing technique and cleaning the wound using NaCl solution. The wound was covered with sterile gauze, only showing improvement at the edge of the wound which was starting to dry out, the pus was no longer there, and the smell was reduced.

The evaluation stage was the final stage in the nursing process in which nursing actions were carried out by the action plan that had been prepared previously. So, the researcher assessed Mrs. N, namely the criteria that were carried out at the sixth meeting. The results of the evaluation on Mrs. N after carrying out wound care, the client looks fitter, the wound was covered with sterile gauze, the bleeding stopped, the edges of the wound began to dry on the 3rd day, the pain scale was 3, there was no sign of redness, the body temperature was 36.3°C, there was no swelling around the wound surgery, the middle wound was still wet and requires further care at home.

Wound healing was 50% faster in a moist atmosphere compared to dry wounds through increasing re-epithelialization, providing the atmosphere needed for local macrophage defense, and accelerating angiogenesis (Perdanakusuma, 2017). Moisture balance increases the activity of growth factors, cytokines, and chemokines that promote cell growth and stabilize the tissue matrix of acute wounds. Wound edge maceration could occur in an environment that is too humid, which could cause wound edge maceration. Cell death and failure of epithelial and matrix tissue migration could occur if the wound is in a less moist condition (Brant, 2020).

Wound care using swabbing, irrigation, and dressing techniques could help prevent infection because cleaning the wound reduces wound moisture which allows the growth of microorganisms that cause infection.

Analysis of Nursing Care for Post-Op Ca Mammae Patients with Wound Care to Prevent the Risk of Infection at Room G1 RSPAL Dr. Ramelan

The research began on January 17-22 2023. Wound treatment began with preparation from the researcher and an informed consent form for the client's family. Next, a time contract will be carried out, and the objectives and environmental preparations. Time contract, place and explain the objectives and environmental preparations by creating an environment that was as comfortable as possible. The

swabbing technique was used to treat dry wounds. This technique was carried out by pressing while gently rubbing the wound on the breast with sterile gauze soaked in 0.9% NaCl. Meanwhile, the irrigation technique was used on breast wounds that were wet or prone to bleeding by slowly spraying 0.9% NaCl. Wound closure was carried out using sterile gauze.

These results are based on research by Nadiva and Muafiro (2019), that wound care using wound cleaning techniques and soaking in 0.9% NaCl could provide 88.9% healing in post-mastectomy patients. This figure could be increased by using antibiotic ointment increasing wound healing by 99.3% in 6 weeks. Post-operative patients need wound care. Wound care aims to clean the wound to prevent infection of Ca Mammae and to protect and prevent the wound area from exposure to bacteria and microorganisms so as not to cause infection in the wound (Abdel-Aal et al., 2022).

Products used to maintain wound moisture were transparent dressing/film and hydrocolloid. Hydrocolloid was indicated for reddish wounds with minimal epithelization and exudate. In several meta-analyses, wounds treated with hydrocolloid dressings showed statistically significant improvement compared with sterile gauze. A layer of petroleum jelly or zinc oxide paste could be applied around the edges of the wound to avoid maceration. A product that could provide moisture to dry wounds was in the form of hydrogel. Hydrogel was used on necrotic wounds that were black or yellow with minimal or no exudate, whereas it should not be given to infected wounds or grade III-IV wounds. Products that could absorb fluid in wet wounds were absorbent gauze, calcium alginate, hydro-fiber, and foam. Calcium alginate was indicated for wounds with moderate to heavy exudate and was contraindicated for dry wounds with necrotic tissue. Indications for dressing wounds with foam or absorbance dressings were wounds with moderate to heavy exudate and should not be applied to wounds with minimal exudate and black necrotic tissue (Pösdek, 2023).

The better the wound care was carried out, the smaller the possibility of infection and post-operative wound bleeding, but conversely, the worse the wound care was carried out, the higher the possibility of infection and bleeding of the surgical wound. Good wound care must also comply with the operational standards set by each hospital. Clients who had had surgery should have their dressing changed 2-3 days later unless it had previously been dirty with blood, wound secretions, or external contamination such as dirty water or dust, then the surgical wound needs to be properly cared for immediately. The wound healing time required after surgery varies from person to person, depending on the presence or absence of infection, blood flow to the wound area, nutrition, and the disease suffered (such as diabetes mellitus, cancer, immune disorders, blood vessel/vascular conditions, etc.). Under normal circumstances, the healing of surgical wounds takes approximately six weeks. To support the surgical wound healing process, it was necessary to pay attention to the cleanliness of the surgical wound so that it did not become infected, limit activity (don't do activities that were too strenuous), and also pay attention to balanced nutritional intake. A good protein intake, vitamin A, and vitamin C could help the wound-healing process. Wet or moist wounds were the "enemy" of wound healing after surgery. Wet conditions become a breeding ground for bacteria which could cause inflammation and

delay wound healing after surgery. The main possible cause of bleeding from stitched wounds was this. The best way was to change the bandage/gauze wrap every time it got wet from sweat or bath water, the most important thing was to keep the wound dry.

LIMITATIONS

The limitation of this research was that the researcher only carried out wound care in the hospital when the patient's wound had not completely healed, where post-cancer surgery wound healing takes an average of 2-4 weeks, so it was still possible for infection to occur during treatment at home.

CONCLUSION

Description of nursing care for Post Op Ca Mammae patients with the results of the assessment showing that the 26-year-old female client had been suffering from Ca Mammae since 2021 and underwent mastectomy surgery on January 15, 2023. The results of the examination showed that the right mammary had been removed (mastectomy), there was a scar, odor, active bleeding, and increased leukocyte levels, namely 15,900/ μ L, and hemoglobin levels 12.30 g/dL so the patient was at risk of infection. Evidence-based nursing applies wound care with a frequency of 1 time a day from the 3rd post-operative day after changing the bandage since surgery. Wound care was carried out using swabbing, irrigation, and dressing techniques using sterile gauze. The wound was covered with sterile gauze, the bleeding stopped, and the edges of the wound began to dry on day 6, pain scale of 3, no signs of redness, a body temperature of 36.3 °C, and no swelling around the surgical wound, the middle wound was still wet and requires treatment more at home.

AUTHOR CONTRIBUTION

Authors' contributions: All the authors contributed equally to the study.

ORCHID

Sarmi Djumati : None.

Siti Nur Hasina : None.

Priyo Mukti Pribadi Winoto : None.

R. Khairiyatul Afiyah : None.

CONFLICT OF INTEREST

The authors declare that there was no conflict of interest.

ACKNOWLEDGEMENT

The author would like to express his deepest gratitude to the Supervisor, Head of the Nursing Professional Education Study Program, Dean of the Faculty of Nursing and Midwifery, Chancellor of

the University of Nahdlatul Ulama Surabaya, Head of RSPAL Dr. Ramelan Surabaya, Family, Respondent, and all parties involved in this case study.

REFERENCE

- Abdel-Aal, S. M., Elsayed, M. I. A., Abdelsalam, M. M., & Gertallah, L. M. E. (2022). Effect of Intraoperative Wound Irrigation with Topical Phenytoin on Postoperative Seroma Formation after Modified Radical Mastectomy. *Egyptian Journal of Hospital Medicine*, 86(1), 362–365. <https://doi.org/10.21608/EJHM.2022.212838>
- Amelia, S., Haniyah, S., & Utami, T. (2021). Gambaran Kerusakan Integritas Jaringan pada Ny. S dengan Post Operasi Kanker Payudara di RSUD Dr.R. Goeteng Taroenadibrata Purbalingga Suryani. *Seminar Nasional Penelitian Dan Pengabdian Kepada Masyarakat (SNPPKM)*, 533–538.
- Brant, J. (2020). Post-Operative Care Instructions for Mastectomy or Axillary Lymph Node Dissection. *Joseph Brant Hospital*, 2–3.
- Kemenkes RI. (2018). PNPk Tata Laksana Kanker Payudara. Jakarta: Kementerian Kesehatan Republik Indonesia, 2, 227–249.
- Kemenkes RI. (2022). Hari Kanker Sedunia 2022. <https://upk.kemkes.go.id/new/hari-kanker-sedunia-2022>
- Nadiva, D. H., & Adin Muafiro. (2019). Deskripsi Perkembangan Keadaan luka Kanker Payudara Post Mastektomi Setelah Perawatan Luka. *Jurnal Keperawatan*, XII(1), 49–56. <http://journal.poltekkesdepkes-sby.ac.id/index.php/KEP/article/view/1489%0Ahttp://journal.poltekkesdepkes-sby.ac.id/index.php/KEP/article/viewFile/1489/853>
- Nurarif, A. H., & Kusuma, H. (2016). Asuhan Keperawatan Berdasarkan Diagnosa Medis & NANDA NIC – NOC. Yogyakarta: Mediacion.
- Perdanakusuma, D. (2017). Cara Mudah Merawat Luka. Surabaya: Airlangga University Press.
- Tim Pokja SIKI. (2019). Standar Intervensi Keperawatan Indonesia. Jakarta: DPP PPNI.
- WHO. (2019). WHO statistics overview 2019. World Health Organization, 8(5), 1–9. <https://doi.org/.1037//0033-2909.I26.1.78>
- Wintoko, R., & Yadika, A. D. N. (2020). Manajemen Terkini Perawatan Luka. *Jurnal Kesehatan Universitas Lampung*, 4, 183–189.