

Personal Hygiene and its Effect on the Treatment of After Cesarean Section Debridement in NTB General Hospital

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Abstract

Personal hygiene is important for after cesarean patients because personal hygiene will affect one's health and psychological well-being. Patients with after cesarean wounds should be given immediate wound care by cleaning to prevent infection during the wound care. This will affect the wound healing process in cesarean surgery patients. This study aims to determine the relationship between personal hygiene and healing of after cesarean wounds in the NTB General Hospital. An accidental sampling technique of 52 patients with after cesarean section who experienced personal hygiene during wound care in the NTB General Hospital was used in this study using a prospective cohort study design. By using data analysis based on the chi-square test, the results showed that personal hygiene in after cesarean patients was mostly good category of 40 respondents (76.9%), cesarean section wound healing in after cesarean patients most of the categories were cured as much as 46 respondents (88.5%) and obtained a p-value of 0.002 < 0.05. The results of the study confirmed the relationship between personal hygiene and healing of after cesarean wounds in the NTB General Hospital. This study recommends that nurses and other health teams develop theories and guidelines for the implementation of personal hygiene that are more effective and efficient in order to reduce infection after cesarean section.

Keywords: *personal hygiene, debridement, cesarean section, chi-square, cohort.*

Introduction

Personal hygiene is important for patients after cesarean section.¹ Personal hygiene will affect one's health and psychological well-being. The purpose of personal hygiene is to provide comfort, relaxation and prevent infection. Personal hygiene also affects the wound healing process because germs can enter through the wound at any time.² In the treatment of wounds caused by surgery on the abdominal wall and uterus, the physiological process of wound healing goes through four stages: the stage of acute inflammatory response to injury, the destructive stage, the proliferative stage, and the stage of maturation.³ Patients with after cesarean wounds should immediately be given debridement

treatment by cleaning to prevent infection during treatment of the wound. This will affect the wound healing process in cesarean surgery patients. Cesarean section is surgery on the wall in the abdomen and uterus because surgery is easier and can be done faster.⁴ Based on data from the NTB General Hospital received 320 patients in 2014 after cesarean section (Table 1).

Table 1. Details of the number of after cesarean patients in the NTB General Hospital in 2014

Month	C-section
January	79
February	105
March	84
April	52
Total	320

Table 1 shows that the number of patients undergoing cesarean delivery is still quite high and the highest data occurred in February 2014. This is due to the lack of

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knowledge of patients about the risk of cesarean delivery.⁵ The large number of patients delivering by cesarean section is a challenge for nurses as professionals who have more time compared to other health care workers in the order of service required to improve quality nursing care.⁶ Meanwhile, in cesarean section patients, personal hygiene occurs due to an abdominal surgery. This will affect the wound healing process because germs can enter through the wound at any time if personal hygiene is lacking. This study examines the effect of personal hygiene on after cesarean wound healing, and the relationship of after cesarean wound healing related to personal hygiene

Method

Research methodology is a scientific way to obtain data with specific objectives and meanings based on rational, empirical and systematic.⁷ This type of research is quantitative research. This study aims to look for the relationship of personal hygiene with wound healing after cesarean section. This research method will describe the research subject, population, data collection techniques, identification of variables, frameworks and data analysis.

The subjects in this study were patients with after cesarean section who experienced personal hygiene during wound care in the NTB General Hospital. In this study, the sample was determined by sample criteria, namely patients who received after cesarean wound care, patients who experienced personal hygiene after cesarean section, and patients who were willing to become respondents. The number of samples in this study were 52 people.

This study was designed in the form of a prospective study (cohort) ie research observing the independent

variable of risk factors. The subjects were followed until a certain time to see the effect on the dependent variable.

For data collection and data processing techniques, observations were made by direct observation of research subjects to determine personal hygiene with wound healing. In addition, interviews and documentation were also conducted to analyze the relationship between personal hygiene and wound healing in the NTB General Hospital.

To determine the relationship of personal hygiene with after cesarean wound healing using the chi-square test with the SPSS program, it is said to have a relationship between personal hygiene with after cesarean wound healing indicated by p-value <0.05.

Results

This section presents the results of research and discussion on personal hygiene with after cesarean wound healing in the NTB General Hospital. The findings identified post cesarean wound healing by performing personal hygiene after being given wound care treatment and analyzed the relationship of personal hygiene with post cesarean wound healing in the NTB General Hospital. Specific data presents results that illustrate the relationship of personal hygiene with wound healing after cesarean section in the NTB General Hospital. Test results regarding the identification of patients' personal hygiene after a cesarean section in the NTB General Hospital, showed that patients who experienced good personal hygiene were 40 (76.9%), personal hygiene was as much as 9 (17.3%), personal hygiene less as much as 3 (5.8%). This happens due to lack of knowledge about after cesarean wound care.

Table 2. Identification of personal hygiene and wound healing in after cesarean section patients

Personal Hygiene	Freq.	Percentage (%)	Wound healing	Freq.	Percentage (%)
Good	40	76.9	Get well	46	88.5
Enough	9	17.3	Not cured	6	11.5
Less	3	5.8			
Total	52	100	52	100	

Furthermore, to identify wound healing in after cesarean patients in the NTB General Hospital, the results showed that 46 patients (88.5%) healed wound healing and 6 respondents who did not heal wound healing (11.5%). This happens because there are other diseases suffered by respondents such as nutritional status and consumption, personal hygiene, lack of mobilization, anemia, and DM (Diabetes Mellitus).^{8,9,10,11}

The results of the analysis of the relationship of personal hygiene with after cesarean wound healing, showed the relationship of personal hygiene with after cesarean wound healing based on the compilation of documentary studies, observation sheets and interviews conducted on respondents. The results showed that 40% of respondents experienced good personal hygiene (76.9%). Of the 40 respondents who experienced healing wounds healed as many as 39 (75%) patients and healing wounds not healed as many as 1 (1.9%) patients. Of the

9 respondents who experienced healing wounds healed as many as 6 (11.5%) patients, and wound healing did not heal as many as 3 (5.8%) patients. For respondents who experienced less personal hygiene, there were 3 (5.8%) patients. Of the 3 respondents who experienced healing wounds healed as many as 1 (1.9%) patients and healing wounds that did not heal as many as 2 (3.8%) patients. Statistical analysis using the chi-square test with the help of SPSS showed a significance level of 5% obtained p value 0.002 <0.05. This means that there is a relationship between personal hygiene and wound healing after a cesarean section in the NTB General Hospital. This study also suggests that to prevent the complications of childbirth by cesarean section of surgical site infections, health workers must provide health education about personal hygiene so that cesarean patients can implement this.¹² Thus, the incidence of infection in the surgical wound does not occur.

Table 3. Analysis of the relationship of personal hygiene with wound healing of after cesarean section

Personal Hygiene	Wound healing				Total	
	Get well		Not cured			
	n	%	n	%	n	%
Good	39	75	1	1.9	40	76.9
Enough	6	11.5	3	5.8	9	17.3
Less	1	2	2	3.8	3	5.8
Total		88.5	6	11.5	52	100

The results showed that the majority of post-operative personal hygiene in the good category were 40 respondents (76.9%), quite as many as 9 respondents (17.3%) and less as many as 3 respondents (5.8%). Before surgery, the client and the client’s family are given health education about the importance of personal hygiene as well as ways of performing personal hygiene after a cesarean section. Personal hygiene is self-care carried out to maintain health, both physically and psychologically.¹³ Cleanliness can provide a sense of comfort, relaxation, and prevent infection. Personal hygiene also affects the wound healing process because germs can enter through the wound at any time.

After surgery personal hygiene cleanses the dirt contained in the wound using povidone iodine,¹⁴ after

that the wound is wrapped using gauze and bandages that aim to cover the wound so as not to be contaminated with the environment around the patient and to keep the wound from becoming infected. Every patient who will be given wound care certainly hopes that the wound heals quickly. Therefore, nurses are required to provide wound care, the main thing is also needed physical and psychological readiness. Wound healing occurs when the patients do not feel heat, pain, redness, swelling, and decreased lip function.

The results showed that the majority of after cesarean wound heal healing categories were as many as 46 respondents (88.5%), not recovering as many as 6 respondents (11.5%). Observation to assess wound healing after cesarean section was done on the fifth day

after cesarean section. Injury is the destruction of normal anatomical structures and functions due to pathological processes originating from internal or external and affecting certain organs.¹⁵ Injuries due to cesarean section are intentional injuries because there is a clear purpose and purpose. A good wound healing or healing category will appear dry sores and there are no signs of infection. This is supported because the majority of after cesarean patients perform personal hygiene well, while wound healing is not good because patients do lack personal hygiene.

In cesarean section, there are injuries to both the abdominal skin and abdominal muscles and the uterine wall. The existence of after cesarean wounds is one of the factors that prolong the patient's after cesarean section care in the hospital. By doing personal hygiene, it is expected to affect the wound healing process because germs can enter through the wound at any time if personal hygiene is lacking. The opposite explanation, if the patient does not perform personal hygiene well after the cesarean section, the infection in the area of the surgical wound will hamper the process of wound healing. Poor healing of wounds or categories not healed will show symptoms of infection such as swelling around the wound, redness, pain, heat in the wound and the presence of pus or pus in the wound. Thus, the duration of treatment will increase and longer.

Conclusion

The results of the study showed that the personal hygiene of after cesarean patients was self-care carried out to maintain health, both physically and psychologically. Based on the results of the study it can be seen from the 52 patients who experienced good personal hygiene there were 40 (76.9%) patients, who experienced enough personal hygiene 9 (17.3%), and patients who experienced less personal hygiene and 3 (5.8 %). For wound healing in after cesarean patients, the results showed that after cesarean wound healing was mostly cured in the category of 46 respondents (88.5%), not recovering as many as 6 respondents (11.5%). Observation to assess wound healing after cesarean section was done on the fifth day after cesarean section.

Analysis of the relationship of personal hygiene with after cesarean wound healing showed the results of the chi-square statistical test on the relationship of personal hygiene with after cesarean wound healing in NTB General Hospital with a value of $16.18 > 5.991$. These

results empirically prove that there is a relationship between personal hygiene and wound healing after a cesarean section in the NTB General Hospital. These results confirm that good personal hygiene can accelerate the healing process of cesarean section wounds so that complications such as infection can be prevented and shorten the length of patient care in the hospital.

Ethical Clearance- The ethical clearance for this manuscript was taken from NTB General Hospital committee and approved by College of Health Science (Stikes) Mataram, West Nusa Tenggara, Indonesia.

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Conflict of Interest – There are no conflict of interests.

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