



## Nutritional status and anemia on wound healing process in post cesarean section patients

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### ABSTRACT

Sectio Caesarea is an action to deliver a baby weighing more than 500 grams, through an incision in the intact uterine wall. The increase in cesarean section rates has not been able to improve the final condition of the neonate and can even increase the risk of maternal mortality and morbidity. The purpose of this study was to determine the Relationship between Anemia and Nutritional Status with the Wound Healing Process in Postoperative Sectio Caesarea Patients in the Hospital Postpartum Room. This study was conducted based on analytical research methods using a cross-sectional approach. the results of the Chi-square test analysis obtained a value of  $\rho$  value = 0.001 ( $\rho < 0.05$ ), where Ha is accepted and Ho is rejected, so there is a significant relationship between Anemia and the Wound healing Process in Postoperative Sectio Caesarea patients in the Hospital Postpartum Room.

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### 1. INTRODUCTION

The healing of surgical wounds is strongly influenced by the supply of oxygen and nutrients into the tissue(Pebriyani, 2022), (Murtikasari, 2021). Research conducted by (Setianingsih et al., 2020) on the relationship between anemia and wound healing in Post Cesarean Section patients at the Hospital, showed there was a significant relationship between hemoglobin levels and wound healing in Post Cesarean Section patients (Warniati et al., 2019), (Pebriyani, 2022).

Malnutrition in general can result in reduced wound strength, increased wound dehiscence, increased susceptibility to infection, and poor quality scarring, certain nutrient deficiencies can affect healing (Utami Dewi, 2018), (Khoirunnisa & Munafiah, 2022). Research conducted by (Widjianingsih & Wirjatmadi, 2013) on Factors affecting wound healing Post Cesarean Section Surgery concluded that there was a significant relationship between nutritional status and wound healing (Siswandi et al., 2020), (Cahyaningtyas, 2020). The results of (UTAMI, 2017) on the relationship between nutritional

status with surgical wound healing and the length of hospitalization of digestive surgery patients in the surgical treatment room of Dr. Wahidin Sudirohusodo Hospital Makassar also concluded that there was a relationship between nutritional status and wound healing in postoperative patients (Meo, 2021), (Maharani et al., 2020). The wound healing phase is divided into 3 phases, namely the Inflammatory phase, the Proliferation phase, and the Remodeling or maturation phase (Primadina et al., 2019), (Suharto & Etika, 2019).

Factors that influence wound healing are local factors consisting of general factors including tissue perfusion and oxygenation, nutritional status, disease, drug therapy, chemotherapy and radiation as well as local factors including wound management practices, wound hydration, wound temperature, pressure and friction, the presence of foreign bodies, and wound infection, other factors are client lifestyle and mobilization and hemoglobin levels in the blood (Wijaya & Kep, 2018), (Hadinata et al., 2022).

## 2. RESEARCH METHOD

This type of research is analytical research, namely the type of research conducted to determine the relationship between the independent variable and the dependent variable. This research was conducted based on analytical research methods using a Cross Sectosional approach, namely a study to study the correlation between factors by approaching collecting data at one time (Sari & Sholihah'Atiqoh, 2020), (Nugroho, 2018). The sampling technique in this study was non-random sampling with a purposive sampling approach (Firmansyah, 2022), (Sumargo, 2020). Purposive sampling is a way of sampling which is based on a certain consideration made by the researcher himself, based on the characteristics or properties of the population that are already known in advance (Riza et al., 2019), (Rahmaan, 2022).

## 3. RESULTS AND DISCUSSIONS

**The results of the examination of hemoglobin levels during pregnancy in Postoperative Sectio Caesarea mothers are grouped into 2, namely, Anemia and Not Anemia.**

The following data is presented about the distribution of Anemia in Postoperative Sectio Mothers.

**Table 1.** Frequency Distribution of Anemia in Postoperative Sectio Caesarea

Patients in the Postpartum Room Hospital.		
Hemoglobin Level	N	%
Anemia	12	35.3
Not Anemic	22	64.7
Total	34	100

Based on table 4.2 shows that, Postoperative Sectio caesarea patients who experience Anemia are 35.3% (as many as 12 respondents), Not Anemia is 64.7% (as many as 22 respondents).

### Nutritional Status

The following data is presented about the distribution of nutritional status during pregnancy in postoperative sectio caesarea mothers.

**Table 2.** Frequency Distribution of Nutritional Status of Postoperative Sectio Caesarea Patients in the Postpartum Room Hospital.

Nutrition Status	N	%
Risk	7	20.6
Not at Risk	27	79.4
Total	34	100

Based on table 2, it shows that postoperative section caesarea patients who became respondents in the Risk category amounted to 20.6% (as many as 7 people), and not at risk by 79.4% (as many as 27 people).

#### 4. CONCLUSION

From the results of the research conducted with reference to the indicators and research variables, the research results are described in the following discussion: Relationship between Anemia and Wound healing Process in Postoperative Sectio Caesarea Patients. Based on Table 1 about the relationship between Anemia and the Wound healing Process in Postoperative Sectio Caesarea Patients shows that the results of the Chi - square test analysis obtained a value of  $\rho$  value = 0.001 ( $\rho < 0.05$ ), where Ha is accepted and Ho is rejected, so there is a significant relationship between Anemia and the Wound healing Process in Postoperative Sectio Caesarea patients in the Hospital Postpartum Room.

The relationship between nutritional status and wound healing process in postoperative sectio caesarea patients. Based on table 2, the relationship between nutritional status and the wound healing process in postoperative section caesarea patients, shows that the results of statistical analysis using the Chi-square test obtained a value of  $\rho$  value = 0.004 ( $\rho < 0.05$ ), where Ha is accepted and Ho is rejected, so there is a significant relationship between nutritional status and the wound healing process in postoperative section caesarea patients in the hospital's postpartum room. For further research, it is hoped that it will be able to carry out development with research using more than one independent variable by comparing two or more approaches to find out the most appropriate approach to use in problems such as cases.

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