

# Application of the Orlando Nursing Model for Patients with Respiratory Failure with Progressive Mobilization Interventions for Decubitus Incidence in the Intensive Care Unit

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## **Application of the Orlando Nursing Model for Patients with Respiratory Failure with Progressive Mobilization Interventions for Decubitus Incidence in the Intensive Care Unit of the RSU Prof. Dr. RD Kandou Manado**

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### **ABSTRACT**

Nursing services are a major part of health services with the largest number of health workers. Quality nursing services can be assessed through several indicators, one of which is nursing services in the Intensive Care Unit (ICU). Intensive care unit is a unit that functions to treat patients with critical illnesses who experience acute failure or more vital organs that can threaten the patient's life so that close monitoring is needed, special staff and special equipment. The incidence of decubitus in the ICU room, Prof. Dr. RD Kandou Manado in patients who are on mechanical ventilators based on the findings and observations during the department of specialization, namely three patients with pressure sores (16.7%) and two with a risk of pressure sores (12.5%) out of eighteen patients at this time. The purpose of applying evidence based nursing is the effect of progressive mobilization in respiratory failure patients on the incidence of pressure sores through the Orlando nursing theory approach in the ICU room of RSU Prof. Dr. RD Kandou Manado. The method used is descriptive with a case study approach. About giving progressive mobilization with a duration of 2-3 minutes every 2 hours for 5 days in 4 patients. The results of the evaluation carried out by researchers on the four clients, after giving progressive mobilization actions from the four respondents, the skin conditions of the two respondents showed no signs of pressure sores. The study concludes that progressive mobilization intervention can prevent decubitus in patients with respiratory failure in the ICU.

**Keywords: Orlando, Respiratory Failure, Progressive Mobilization, Decubitus.**

## BACKGROUND

Nursing services are a major part of health services with the largest health personnel. Quality nursing services can be assessed through several indicators, one of which is nursing services in the Intensive Care Unit (ICU) (Kress & Hall, 2014). According to the University of California Davis System, the intensive care unit is a unit that functions to treat patients with critical illnesses who experience acute failure or more vital organs that can threaten the patient's life so that close monitoring, special staff and special equipment are needed (in Aanti, 2020).

According to Musliha, the Intensive Care Unit (ICU) is an inpatient unit in a hospital that has special staff and equipment to manage patients with life-threatening illness, trauma or complications (in Padmiasih, 2020). ICU patients who are attached to assistive devices tend to have limited activity (mobilization) to immobilization (Zomorodi & Darlaopley, 2012). While patients who experience decreased mobility for a long time have a high risk of developing pressure sores.

Decubitus is a localized damage to the skin and or underlying tissue caused by pressure that usually occurs in protruding bone areas (National Pressure Ulcer Advisory Panel, 2014). The incidence of pressure sores in the ICU is still a serious concern throughout the world with the incidence prevalence ranging from 1% to 56%. The incidence of pressure sores in Europe ranges from 8.3%-22.9%, in North America as many as 50%, in Australia and Jordan there are 29% cases (Tayyib, Coyer, & Lewis, 2013).

The incidence of decubitus in the ICU room, Prof. Dr. RD Kandou Manado in patients who are on mechanical ventilators based on the findings and observations during the department of specialization, namely three patients with pressure sores (16.7%) and two with a risk of pressure sores (12.5%) out of eighteen patients at this time. .

Proper prevention of pressure sores is very necessary in the delivery of nursing services. The American Association of Critical Care Nurses (AACN) has introduced several pressure sores (decubitus) management techniques, one of which is progressive mobilization intervention (Suzanne & Delgado, 2018). Research related to the effect of progressive mobilization has been carried out by Padmiasih (2020), who stated that there was a difference in pressure sores after being given progressive mobilization with a p-value <0.05.

Based on the above background, the author describes the application of the orlando nursing model in patients with respiratory failure with the intervention of progressive mobilization effect on the incidence of pressure sores in the ICU room of Prof. Dr. RD Kandou Manado.

## **RESEARCH METHODS**

The design of this paper uses a descriptive case study type of research. Case study research is a research design that includes an intensive study of one research unit, for example a client, family, group, community, or institution. Although the number of subjects tends to be small, the number of variables studied is quite broad (Nursalam. 2016).

The population in this study were three clients with a diagnosis of respiratory failure in the ICU room of Prof. Dr. RD Kandou Manado in the last three months. The sample for this study is a total of 4 clients. sampling technique used in this study is the total *sampling technique*.

## **RESEARCH RESULTS**

Based on the studies conducted on the four clients, the authors applied an intervention according to the EBN journal, namely "*Effectiveness Of Progressive Mobilization Level I And II On Hemodynamic Status And Decubitus Ulcer Risk In Critically Ill Patients*" by Ni Wayan Rahayu Ningtyas S.Tr. Kep.

In the implementation of this EBN, the four clients/respondents were given progressive mobilization interventions aims to prevent the occurrence / reduce decubitus in clients with long bed rest.

## **DISCUSSION**

Prevention of decubitus is very important. Good preventive measures will improve the patient's quality of life. Right and left oblique mobilization is good for pressure ulcer prevention. According to Rosdahl & Kowalsk (2015) mobilization can accelerate blood circulation so as to accelerate wound healing, as well as maintain muscle tone and maintain body functions.

In the ICU room of RSUP Prof. Dr. R. D Kandou Manado the author studied 4 clients with long bed rest. The first week the author raised the case of a client on long bed rest with a diagnosis of respiratory failure, Myasthenia Gravis, Ny. IB is 44 years old with the main complaint that the whole body feels weak. In the second week the author raised a case of prolonged bed rest in a client with a diagnosis of Respiratory Failure, Pneumonia on Ny. AK is 52 years old with complaints of shortness of breath. The third week the author raised a case of prolonged bed rest in a client with a diagnosis of Peritonitis in Mr. ML is 68 years old with the chief complaint of abdominal pain. In the fourth week, the author raised a case of prolonged bed rest in a client with a medical

diagnosis of Hypovolemic Shock in Mr. HB is 21 years old with the main complaint of decreased consciousness.

Based on the assessment conducted by the author on the four clients, the author raised 6 nursing diagnoses. Each client consists of 3 nursing diagnoses, tailored to the main complaint of each client. The five diagnoses are Impaired Spontaneous Ventilation, Impaired Skin Integrity, Activity Intolerance, Impaired Spontaneous Circulation, and Impaired Gas Exchange. From the nursing diagnosis of Skin Integrity Disorder, the author applies a progressive mobilization action intervention which aims to prevent decubitus in clients with long bed rest.

Prior to progressive mobilization, all four clients were examined for pressure sores or pressure sores previously. Of the four clients, the results showed that 2 clients had no previous pressure sores, while in Mrs. IB and Mrs. AK has a decubitus wound on the client's back and the size of the decubitus wound is  $\pm 3.5$  cm and  $\pm 2$  cm there is no exudate.

This study was conducted for approximately 5 days, in which the four respondents with respiratory failure were measured the degree of decubitus first and would be given progressive mobilization for 2-3 minutes. After 2-3 minutes of giving progressive mobilization, the respondent's degree of decubitus was measured again. On the first day, the four clients were examined for pressure sores by looking for signs of pressure sores. Furthermore, on the third and fifth day, the four clients underwent a decubitus examination again, so that the total examination was 2 times.

After giving progressive mobilization from the four respondents, the skin conditions of the two respondents showed no signs of decubitus. While the client Mrs. IB and Mrs. In AK, the pressure sore that he had was slowly improving from Stage II to Stage I on the NPUAP Scale for Decubitus Grade Determination, and there were no signs of enlargement of the wound diameter or the presence of new wounds.

This is supported by the results of research from other EBN which states that the provision of progressive mobilization measures can prevent pressure sores. The results showed that before being given progressive mobilization on therapy, most of the respondents had grade I pressure sores, as many as 4 people. After being given progressive mobilization therapy, most of the respondents did not experience pressure sores, as many as 6 people. And it can be stated that there are differences in pressure sores after being given progressive mobilization. (Ni Wayan Padmiasih, 2020)

The intervention results from the four clients are directly proportional to the theory of Orlando Pelletier which states that nursing is unique and independent because it involves individual needs for help, real or potential, in direct situations. The nursing process of resolving this helplessness is active and pursued in a disciplined manner that

requires training. Orlando Pelletierl believes that one's actions should be based on reason not protocol (Nur Aini, 2018). So it can be said that the writer and the nurse who served in the ICU room of Prof. Dr. RD Kandau Manado Hospital succeeded in applying the theory of Orlando Pelletierl to the four clients because they succeeded in preventing/reducing the occurrence of pressure sores on the client.

## CONCLUSION AND RECOMMENDATIONS

### Conclusions

the Emergency Nursing Care that has been carried out The author can draw the following conclusions:

1. Assessment  
The results of the assessment obtained from 4 clients, 2 showed decubitus sores and 2 clients showed signs of decubitus sores on the client. In the examination of the risk of decubitus according to the NPUAP scale, it shows clients 1 and 2 at Stage II, while clients 3 and 4 at Stage I
2. Nursing Diagnosis  
. Each client consists of 3 nursing diagnoses, adjusted to the main complaint of each. From the six nursing diagnoses, it was found that there were similarities in nursing diagnoses between the four patients, namely that all four had the same 3 nursing diagnoses including spontaneous ventilation disorders, skin integrity disorders, and skin integrity disorders.
3. Planning  
Planning is an intervention that will be carried out by researchers both independently and collaboratively. In planning this nursing care, researchers focus on interventions, namely providing progressive mobilization actions as an *Evidence Based Nursing* (EBN) application according to the journal used
4. Implementation  
of nursing implementation is carried out based on planning nursing diagnoses made on the four clients. The implementation of the four clients is focused on providing progressive mobilization measures as an application of *Evidence Based Nursing* (EBN). Prior to intervention, the four clients were examined for pressure sores or pressure sores before. In the implementation process which was carried out for approximately 5 days, in which the four respondents with respiratory failure were measured the degree of decubitus first and would be given progressive mobilization for 2-3 minutes. After 2-3 minutes of giving progressive mobilization, the

respondent's degree of decubitus was measured again. On the first day, the four clients were examined for pressure sores by looking for signs of pressure sores. Furthermore, on the third and fifth day, the four clients underwent a decubitus examination again, so that the total examination was 2 times.

#### 5. Evaluation

The evaluation conducted by the researcher on the four clients carried out during hospitalization was made in the form of SOAP. The results of the final evaluation carried out by the researcher on the four clients, after giving progressive mobilization actions from the four respondents, the skin conditions of the two respondents showed no signs of decubitus. While the client Mrs. IB and Mrs. In AK, the pressure sore that he had was slowly improving from Stage II to Stage I on the NPUAP Scale for Decubitus Grade Determination, and there were no signs of enlargement of the wound diameter or the presence of new wounds.

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