



# The Influence of the TANDUR Learning Model on the Ability of Nurse Practices in Wound Nursing Care at Dr. H. Ibnu Sutowo Baturaja OKU Hospital

1<sup>st</sup> Sujati Ni Ketut  
Nursing Department  
Politeknik Kesehatan Kemenkes Baturaja  
Baturaja, Indonesia  
Email: ketut.sujati@poltekkespalembang.ac.id

2<sup>nd</sup> Aisyah  
Nursing Department  
Politeknik Kesehatan Kemenkes Baturaja  
Baturaja, Indonesia  
Email: Aisyahh050@gmail.com

Corresponding author: ketut.sujati@poltekkespalembang.ac.id

**Abstract** - Continuing education is needed by nurses to improve their competency. Education will succeed when using appropriate and fun methods, which ensures participants practice learning by presenting high interest. The syntax of the TANDUR model is the following abbreviation, Grow learning interest by knowing what benefits it is for me, Experience all processes, name it by identifying all the terms that exist, Demonstrate so as to obtain a psychomotor experience, repeat so that the memory process is deeper and celebrated. Issues that develop in nursing services related to the need for improvement in nurse competence are modern wound care known as the principle of moisture balance. The method developed and proven to be more effective is moist dressing. The research objectives are: Analyzing the effectiveness of TANDUR learning on the ability of nurses' practice in wound care nursing with the principle of Moisture Balance at Dr. H Ibnu Sutowo Baturaja OKU Hospital. **Research Method:** This study uses a quasi experiment method. Samples were taken from a random population of nurses in 21 case groups and 21 control groups. The data analysis of this study used the dependent and Independent t test obtained the results of P 0, 033, meaning that the TANDUR learning model effectively improved the nurse's practice ability in wound care. TANDUR learning models can be used in any learning in all learning activities. It is recommended that nurses develop themselves by applying the TANDUR learning model to the process of developing practical abilities.

**Keyword** - TANDUR, Injury care.

## I. INTRODUCTION

Introduction Nurses' practical ability in wound care is needed nowadays, because the prevalence of wounds (especially chronic wounds) is quite high. The association of wound caregivers in Indonesia, namely the Indonesia Wound Care Association (INWCCA), noted that 60% of injuries in modern wound care practices are chronic wounds [1]. Nurses' knowledge of modern wound care with balanced moist principles is still low (76.1%) of respondents show low knowledge of wound care, and low knowledge is associated with low behavior in nurses' practice in carrying out wound care with P 0.016 [2]. A growing issue in nursing services related to the need for

increasing nurse competence is modern wound care known as the principle of moisture balance. Wound care methods have developed rapidly in the last two decades. The method developed and proven to be more effective is moist dressing [3].

Traditional wound care emphasizes wound care on the principle of dry or wet, while current wound care uses a balanced moist concept. Wound care with the concept of moist, has now been developed based on evidence based, proven to support faster healing of wounds [4]. Increasing the ability to practice nurses can be done by learning in job training, so that hospital nursing staff can still carry out their duties and work systems in teams nursing care is not compromised. Continuous learning for nurses is needed as an effort to refresh competence and improve care that is avoidance base practice, a continuous learning approach for nurses on duty should be done with in-job training, so as not to neglect health services.

Research conducted by Siahaan on nurses at Bunda Hospital Medan reported that training had an effect on nurse performance [5]. One of the competencies that will be developed at the Dr. H Ibnu Sutowo Regional Hospital is wound care with the concept of moisture balance. Based on empirical data, the nurses at Dr. H Ibnu Sutowo Regional Hospital have never participated in an in-job training about modern wound care with the concept of moist balance. The learning process to achieve these competencies requires a workshop that is carried out with the application of an effective learning model.

Research conducted on high school students in Purworejo using quantum learning and qwanrum teaching approaches is effective and efficient in achieving competence in the field of science for students [6]. Each learning model has a syntax or steps that will be applied in learning. The syntax / steps for implementing the TANDUR learning model are as follows, Cultivate interest in learning by knowing what is in it for me, Experience all processes, Name by identifying all existing terms, Demonstrate 41 so that you get a psychomotor experience, repeat so that the memory process is deeper and celebrates [7].

The results of a review of the policy of training regulations at the Education and Training Center of the ministry of religion in Bandung by [8]. show that the principles of Quantum Learning are an approach that is commonly used in education and training, because the main training learning is to use the andragogical method. The andragogical

method in operation is not much different from the principles of Quantum Learning itself. With this study, it is hoped that a response will be received from policy makers to further strengthen learning in training by applying the principles of Quantum Learning, so that education and training learning will be more effective, quality, applicable, enjoyable and meaningful. In addition to learning methods that ensure good communication between trainers and trainees, trainee motivation can also be a determining factor for the success of a training [7].

Based on the above data, the authors are interested in examining the effect of the TANDUR learning model on the ability of nurses to practice nursing wounds. Moisture balance in Dr. H Ibnu Sutowo Baturaja Hospital.

## II. RESEARCH METHODOLOGY

This type of research is experimental with an observational design. The research was conducted at the Dr. H Ibnu Sutowo Baturaja Regional Hospital. The population of this study were all nurses (273 people) registered as employees of the DR H Ibnu Sutowo Regional Hospital. The sample is part of the population that meets the inclusion and exclusion criteria. Inclusion criteria include nurses who are active in carrying out wound nursing care, willingness to attend wound care workshops with moisture balance techniques. Work in Integrated Inpatient Rooms and Polyclinics or emergency units that provide wound care services. The exclusion criteria were nurses who worked in inpatient rooms where there was no wound care, and / or nurses who worked in management. Sampling was done randomly, using the Kretjie formula [9], with a 95% confidence level, so the number of samples is

$$n = \frac{\geq pq}{\delta_p^2} = \frac{(0.5)(0.5)}{[(0.7-0.5)/1.96]^2} = \frac{0.25}{0.0104} = 20.0292 \text{ or } 21 \text{ people}$$

The number of samples rounded off to 21 people in each group, namely the treatment and comparison groups.

The independent variable is TANDUR learning, the dependent variable is the skill of practicing wound care with the Moisture balance technique.

Data obtained through TANDUR learning activities and observation of the performance of wound care practices using the Moisture balance technique.

The data collection and retrieval procedures were carried out by submitting a concern inform, conducting a pre-test and post-test on the ability of wound care practices using the Moisture balance technique. Univariate data analysis to calculate the mean pre and post test of nurses' ability in wound nursing care in the control group and the treatment group. Meanwhile, bi-variate analysis was used to find the effect or effectiveness of learning on the practical ability of damam nurses to perform wound nursing care. Analysis by calculating the difference in the mean pre and post test of the control group and the difference in the pre and post test

of the case group, using the dependent t test. Furthermore, the mean difference between the case group and the control group post test was tested by using the independent t test.

## III. RESULTS AND DISCUSSION

| Description     | Treatment group |           | Control Group |           |
|-----------------|-----------------|-----------|---------------|-----------|
|                 | Pre Test        | Post Test | Pre Test      | Post Test |
| Mean            | 66.27           | 82.14     | 62.22         | 67.46     |
| Standar Error   | .397            | 1.116     | .450          | 1.182     |
| Median          | 65.00           | 83.33     | 61.67         | 65.00     |
| Standar Deviasi | 1.818           | 5.114     | 2.064         | 5.417     |
| Minimum         | 65              | 65        | 60            | 60        |
| Maksimum        | 70              | 90        | 65            | 77        |
| N               | 21              |           | 21            |           |

In the treatment group the pre-test average score was 66.27, after the post-test it increased to 82.14. Whereas in the control group the average pre-test score was 62.22 and during the post-test it was 67.46.

Difference in Mean Pre and Post Test of the ability to practice care in wound care for the group of nurses who did not receive the TANDUR model learning at the Dr. H Ibnu Sutowo Baturaja Hospital 2019

**Table 2.1 Differences in Mean Wound Care Practical Ability for the Nurse Group who did not receive the TANDUR model learning and the Nurse group who took the TANDUR model learning at the Dr. H Ibnu Sutowo Baturaja Regional Hospital 2019**

| Variabel             | Nurse Group                                     | Mean  | Std. Deviation | Std. Error Mean | P Value | N  |
|----------------------|---|-------|----------------|-----------------|---------|----|
| After Learning Model | Those who do not get TANDUR learning            | 67.46 | 5.417          | 1.182           | 0.0337  | 21 |
|                      | TANDUR Those who do not receive TANDUR learning | 82.14 | 5.114          | 1.116           |         |    |

From the table presentation above, the average value of the ability to practice wound care for the group of nurses who did not get the TANDUR model learning 67.46, the standard deviation was 5,417 and the group of nurses who took the TANDUR model learning at the Dr. H Ibnu Sutowo Baturaja Hospital 2019 was 82.14 with a standard deviation of 5,114. The results of statistical tests obtained P = 0.0337 means that at a 5% there is an effect of learning the TANDUR model on the ability to practice wound care at the Dr. H Ibnu Sutowo Baturaja Regional Hospital.

The TANDUR learning model used in training nurses in wound nursing care has improved the practice skills of nurses. In the group of nurses who took the TANDUR model learning before training the average score was 67.46 and after learning the average score was 82.14 with a standard deviation of 5.114.

The ability to practice wound care is needed in nursing practice. By improving the learning model, the ability to practice nurses will increase.

In the group of nurses who did not participate in the tandur model learning, the initial score was 62.22. and the final score of observation is 66.27. Nurse's practice skills that require remedial training, especially in wound assessment activities. Because the assessment is the basis for postponement decisions. The ability to

wash the wound affects the control of wound infection. Selection of the correct dressing maintains a balanced inertness so that the success of wound care will be better [4], [10], [11].

The TANDUR learning model is a humanist approach model and activates all senses, and invites participants to learn actively with learning motivation that begins with awareness of the benefits that will be obtained during learning. Allows participants to attend in full. A pleasant and friendly learning atmosphere by adjusting sitting positions, telling stories, asking questions to repeat and concluding with friends, is a learning model that invites trainees to learn naturally [12]. The TANDUR learning model improves the trainers' knowledge and motor skills. Sukerti reports that the TANDUR learning model is more effective than conventional learning in terms of improving the abilities of students [13].

Active learning using the TANDUR model approach actually also gives trainees the opportunity to be creative in facing unexpected situations in practice, and makes nurses use both of their brains to nurture clients smartly, wise and humanist [14].

#### IV. CONCLUSION

The ability of nurses to practice in wound nursing care increased both in the control group and in the treatment group. However, the group of nurses who received the TANDUR model teaching had a higher average practical ability than nurses who did not receive the TANDUR model. The TANDUR learning model used in learning activities when improving the competence of nurses' practice through workshops has proven to be effective in improving the practice of nurses, especially in wound nursing care. Nurses' practical skills need to be improved along with the increasing need for quality of service. A learning model is needed that is in accordance with the needs of nurses with natural adult learning but still puts forward the objectives of achieving competence in the learning process. The TANDUR learning model can be used as an approach in carrying out continuing education in the nursing profession.

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