

## The Effect of Nursing Care Documentation Training Based on Indonesian Nursing Standards

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### ABSTRACT

**Background:** Maintain accurate and full nursing documentation to meet patient safety criteria. Evidence links nurse documentation to the hospital setting. Nursing documentation is impacted by patient load, lack of time, and skill and training.

**Purpose:** This study examines the effectiveness of nursing documentation training based on Indonesian Nursing Standards (Diagnosis, Outcome, and Intervention) on nurses' knowledge.

**Methods:** The research method is quasi-experimental with a pre-test post-test design for a single group. Participants in this study are 150 nurses from state-owned hospitals in Jember Regency, East Java. Total sampling was employed as the sampling approach. Data were analyzed using univariate frequency distribution, and bivariate analysis using paired t-test.

**Results:** The average pre-test knowledge was 37.95 and the average post-test knowledge was 66.51. The p-value for the t-test analysis of the data was 0.000 ( $< 0.05$ ).

**Conclusions:** Effective nursing documentation training enhances nurses' abilities to document nursing care in accordance with the Indonesian Nursing Standards (diagnosis, outcome, and intervention).

**Keywords:** Training; Documentation; Nurses Knowledge; Indonesian Nursing Standards

## **BACKGROUND**

Poor communication between health workers is a factor in the likelihood of medical errors, according to a WHO survey. In addition, there is evidence that nursing documentation is associated with patient mortality (Kebede M, et.al., 2017). Consequently, it is crucial for nurses to comprehend and document nursing care that satisfies the medicolegal criteria of nursing practice.

As a professional nursing organization recognized by law, the Indonesian National Nurses Association (INNA) has established Nursing Care Standards to monitor the execution of optimal nursing care for individual clients, families, and communities. The Indonesian National Nurses Association (Persatuan Perawat Nasional Indonesia/PPNI) has developed standards that serve as guidance for nurses in the nursing process and relate to documentation standards as health service providers. These standards consist of the Indonesian Nursing Diagnosis Standards (Standar Diagnosa Keperawatan Indonesia/SDKI) (PPNI, 2017), Indonesian Nursing Outcome Standards (Standar Luaran Keperawatan Indonesia/SLKI) (PPNI, 2019), and Indonesian Nursing Intervention Standards (Standar Intervensi Keperawatan Indonesia/SIKI) (PPNI 2018).

Challenges and factors that impact nursing documentation include lack of time, inadequate standard operating procedures regarding nursing documentation, lack of staff, lack of knowledge about the importance of documentation, patient load, lack of training within the organization, and lack of leadership support (Tasew H, et.al., 2019). In Indonesia shows knowledge, education, attitudes, and motivation of nurses in relation to nursing documentation implementation (Agustina AM, et.al., 2021).

## **OBJEVTIVES**

This study aims to determine the effectiveness of nursing documentation training based on Indonesian Nursing Standards on the knowledge level of nurses.

## **METHODS**

This study used a quasi-experimental method with a one-group pre-test post-test design approach. The research subjects were nurses in the state-owned hospitals in Jember Regency, East Java, Indonesia. The sampling technique was carried out by total sampling method, with a total of 150 nurses as respondents. The intervention was carried out in the form of training in nursing care documentation with Indonesian nursing standards for one day. The training method uses lectures, discussions, and workshops on group nursing care cases. The results of the workshop were then presented and discussed together. The research instrument used a knowledge questionnaire that contained theories about Indonesian Nursing Standards (Diagnosis, Outcome, and Intervention). Data were analyzed using univariate frequency distribution, and bivariate analysis using paired t-test. The research instrument used a knowledge questionnaire that contained theories about Indonesian Nursing Standard.

## **RESULTS**

There were 150 respondents; the majority of nurses were female (55%) and had a Associate Degree in nursing (95%) as their educational background. According to Table 1, the average age of respondents was 39.23 years, and the average term of employment was 17.14 years.

Prior to the intervention, the majority of nurses' knowledge was less (66%), while just a minor part (3%) was good. After the intervention was implemented in the form of nursing documentation training utilizing Indonesian nursing standards, the majority of respondents' knowledge levels were good (47%) and enough (45%) (Table 2).

A bivariate analysis employing a paired t-test yielded a value of  $p = 0.000 (< 0.05)$ , indicating a correlation between nursing documentation training and Indonesian nursing knowledge requirements. The training instructed nurses on how to document care in accordance with Indonesian Nursing Standards (diagnosis, outcome, and intervention).

**Table 1.** Characteristics of Respondents

No	Characteristic	N (%)	Average (Min-Max)
1.	Age		39.23 (23-58)
2.	Length of working		17.14 (1-37)
3.	Gender		
	Male	68 (45%)	
	Female	82 (55%)	
4.	Education		
	Associate Degree	142 (95%)	
	Undergraduate Degree	8 (5%)	

**Table 2.** Pretest-Posttest Respondents' Knowledge Level

Knowledge level	N (%)	Average (Min-Max)	<i>p-value</i>
<i>Pretest</i>		37.95 (10-80)	0.000
Good	5 (3%)		
Enough	46 (31%)		
Less	99 (66%)		
<i>Posttest</i>		66.51 (10-95)	
Good	71 (47%)		
Enough	68 (45%)		
Less	11 (8%)		

## DISCUSSION

This study's respondents were nurses with a minimum of a Associate Degree in Nursing (Table 1). This is in conformity with the Hospital Minimum Service Standards outlined in Decree No. 129 of 2008 issued by the Minister of Health of the Republic of Indonesia (Ministry of Health RI, 2008). Similar to Law No. 36 of 2014, which mandates that health employees (other than medical staff) must have a Diploma III as a minimum qualification. With a minimum Diploma III background, nurses have met the Indonesian National Curriculum Qualification level, namely Level 5, so it can be concluded that nurses have mastered the theoretical concepts of certain fields of science in general and can formulate procedural problem solving, including knowledge and problem solving regarding the documentation of nursing care.

Prior to treatment, the majority of nurses lacked adequate understanding of nursing care standards based on Indonesian nursing standards (diagnosis, outcomes, and interventions)

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(Table 2). This may be due to the fact that the three criteria are relatively new and the hospital's former nurses have graduated. The Indonesian nursing standards (diagnosis, outcome, and intervention) were not a part of nursing education before to 2018, the year in which the three standards were established, meaning that nurses did not get lecture materials pertaining to them. Lack of expertise contributes to insufficient or nonexistent nursing documentation. This is consistent with the findings of (Ayele S, et.al., 2021) and (Zeru T, et.al., 2020), according to which knowledge is one of the elements influencing the application of nursing documentation.

The findings of the training pre-test indicate that the mean score of all participants is low (37.95; Table 2). This may be related to the above-mentioned problems in nurse education, as well as other factors, such as a lack of opportunity to attend seminars, workshops, or other kinds of continuing nursing education about nursing documentation, particularly Indonesian nursing standards (diagnosis, outcome, and intervention). (2) found that a lack of knowledge and training on documentation, the tendency of nurses to select frequently used nursing diagnoses, and a lack of accuracy in following up on interventions and conducting assessments all contribute to a lack of quality nursing care documentation.

After one day of training, nurses' knowledge and ability to document nursing care improved (a total of three training sessions, each attended by approximately 50 participants). The knowledge of the participants increased from 37.95 to 66.51, with a maximum score of 95. (Table 2). The study of the differences between the pretest and posttest averages using the t-test yielded a significant value of 0.000 ( $p < 0.005$ ; CI, 95%), indicating that there is a difference between the average score of knowledge before and after training regarding Indonesian nursing standards (diagnosis, outcome, and intervention). These results support earlier studies on the benefits of education and documentation training on nursing care documentation knowledge and quality (Ayele S, et.al., 2021; Etafa W, et.al., 2020; Awaliyani A, et.al., 2021)

Similarly, based on the documentation abilities, we may say that it has also increased. This may be demonstrated in the results of group work, through participant discussions and presentations, where there was an increase in the accuracy of data analysis formulation based on Indonesian nursing standards during the discussion and presentation process following training (diagnosis, outcome, and intervention).

Widespread use of nursing training has increased knowledge, skills, and practice in documenting nursing care. The American Nurses Association (2007 as cited in (Adubi IO, et.al., 2017) asserts that nurses will acquire adequate knowledge through conducting seminars or workshops, consistent in-house training, and higher (formal) nursing education, enabling them to more precisely identify diagnoses, care, and related factors.

This course includes workshops and case discussions as one of the modalities. Through this strategy, participants are required to use the knowledge gained through lecture and discussion in the prior session in an active and imaginative manner. As a result, discussion of this case will strengthen nurses' capacity for critical thought and can directly assist the growth of nurses' knowledge, particularly in nursing documentation (Zeru T, et.al., 2020).

## CONCLUSION

Age, gender, employment status, and marital status influence nurses' work-life balance. Burnout is influenced by various factors, including gender, marital status, and job environment. There is a favorable association between nurses' work-life balance and burnout. The more nurses perceive themselves and their work, the greater their sense of burnout. According to these findings, a high quality of work life can reduce the prevalence of burnout among nurses, which can directly affect both patients and nurses. Nurses' optimistic attitudes will facilitate the attainment of patient care.

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