

Factors Affecting Nurse Performance at Two Public Hospitals in South Kalimantan

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Abstract--- Many factors affect nurses' performance while working in hospitals. Knowing the dominant factors affecting a nurse's performance can help to identify the right policy to improve the quality of health services. Low nurse performance has an impact on the quality of services. In addition, the low performance of nurses also causes an increase in the expenses in the hospital. It is more than 5% of annual operating costs. The purpose of this study was to identify the factors that affect nurses' performance at two public hospitals in South Kalimantan. A quantitative research with cross-sectional approach was used involving 150 samples with consecutive sampling techniques from July to September 2019. Multivariate analysis of multiple logistic regression was used to identify the dominant factors affecting the nurses' performance. Factors that influence it are nurses' last education (0.06), and nurses' commitment to the hospital (0.00). Hospitals need to program further education and training for nurses to improve a good work climate and make commitments to improve nurse performance and quality of care in public hospitals in South Kalimantan.

Keywords--- Nurse Performance; Nurses' Commitment; Nursing Management

I. INTRODUCTION

A nurse is one of the health professions that play an important role in hospitals [1]. There are many factors that affect nurses' performance in nursing care implementation, including nurses' characteristics [2]. These are the educational background, employment status, length of work, and income. There is a significant correlation between continuance commitment and work experience ($p = 0.001$), staff position ($p = 0.01$) and work shifts ($p = 0.04$) [2]. Other factors that can affect nurse performance are nurse commitment, and nurse satisfaction.

Studies in Iran show that nurses' performance in hospitals is significantly related to commitment at work [3]. Commitment has a positive and significant effect on performance by 0.67 (44.89%) [4]. Low nurse performance leads to an impact in the form of increased hospital expenses by more than 5% of the annual operational costs of the hospital [5]. A common problem faced by health service hospital managers is the difficulty of finding health workers, including qualified nurses [6], namely nurses with educational backgrounds according to professional rules as professional staff and this can impact the quality of nurses' performance [7]. Nurse's work experience related to the length of work will also have an impact on performance.

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Efforts to improve employee performance or productivity include increasing employee commitment to the institution [8]. High commitment will have an impact on increasing job satisfaction and work productivity [9]. Previous studies have shown a positive and significant effect of the institutional commitment component on performance [10]. Preliminary studies were conducted in two public hospitals in South Kalimantan in March 2019. The results showed that the level of patient satisfaction was still below the average of the minister of health regulation standard. Moreover, there was a need to improve nurses' performance as reflected in patient satisfaction with the nursing services in the hospital. The purpose of this study was to determine the factors affecting nurses' performance in two public hospitals. It can help to determine the right way to improve the quality of health services, especially patient and family satisfaction and nurse performance.

II. METHODS

A quantitative research with cross-sectional approach was carried out in two public hospitals in South Kalimantan using 150 samples of nurses with consecutive sampling technique. This research was conducted from July to September 2019. The instruments were a questionnaire and an observation sheet consisting of a) demographic data questionnaire, b) nurse commitment questionnaire, c) nurse satisfaction questionnaire, and d) nurse performance observation sheet. The instrument was first tested for validity and reliability on 30 nurses in Banjarmasin at a public hospital with a validity $r = 0.495-0.910$ and a Cronbach's Alpha value is 0.965. Data analysis was performed by multivariate multiple logistic regression involving 6 of the 9 independent variables that entered as candidates by meeting the p value <0.25 . This study was approved by the ethical committee of the Faculty of Medicine Universitas Lambung Mangkurat.

III. RESULT

The respondents' characteristics are shown in the table below:

Table 1. The respondents' characteristics based on age, work experience, educational background, employee status, gender, career level, income, and marital status (n=150)

No.	Characteristics	Σ (%)
1	Age	
	< 21 years	5 (3.33%)
	21 – 40 years	121 (80.67%)
2	> 40 years	24 (16.00%)
	Length of work	
	> 0 – 10 years	82 (54.67%)
	> 10 – 20 years	56 (37.33%)
3	> 20 years	12 (8.00%)
	Educational background	
	Nursing diploma	98 (65.33%)
	Bachelor of nursing	7 (4.67%)
4	Professional nursing	45 (30.00%)
	Employee status	
	Public servant	68 (45.33%)
5	Contract (BLUD)	82 (54.67%)
	Gender	
	Female	112 (74.67%)
6	Male	38 (25.33%)
	Clinical Nurse Career level	
	Pre-Clinical Nurse	34 (22.67%)
	Clinical Nurse 1	62 (41.33%)
	Clinical Nurse 2	48 (32.00%)
7	Clinical Nurse 3	6 (4.00%)
	Income	

No.	Characteristics	Σ (%)
	> Rp.5,000,000	0 (0.00%)
	> Rp.3,500,000 – Rp.5,000,000	52 (34.67%)
	> Rp.2,500,000 – Rp.3,500,000	86 (57.33%)
	> Rp.1,500,000 – Rp.2,500,000	12 (8.00%)
8	Marital status	
	Not married	28 (18.67%)
	Married	122 (81.33%)

Table 1 above shows that the age in the productive range is 21-40 years, with as many as 121 people (80.67%). The length of work ranges from 0-10 years for 72 people (54.67%). The predominant educational background is a nursing diploma for 98 people (65.33%). The most common employment status is the contract (BLUD) for 82 people (54.67%). Most respondents are women, 112 (74.67%). The highest level of career is in Clinical Nurse 1, as many as 62 people (41.33%). Regarding income per month as many as 86 people (57.33%) have > Rp.2,500,000 - Rp.3,500,000. As many as 122 people (81.33%) are married.

Table 2. Correlation between factors influencing nurse performance (n=150)

Variable	Nurse performance		Total	P Value	OR (odd ratio)
	Less performance	Good performance			
Educational background					
Diploma	63 (60%)	42 (40%)	105 (100%)	0.00	6.938 (2.941-16.364)
Bachelor	8 (17.8%)	37 (82.2%)	45 (100%)		
Total	71 (47.3%)	79 (52.7%)	150 (100%)		
Employee status					
Public servant	49 (72.1%)	19 (27.9%)	68 (100%)	0.00	7.033 (3.422-14.458)
Contract (BLUD)	22 (26.8%)	60 (73.2%)	82 (100%)		
Total	71 (47.3%)	79 (52.7%)	150 (100%)		
Length of work					
≤ 20 years	51 (62.2%)	31 (37.8%)	82 (100%)	0.00	3.948 (1.987-7.845)
> 20 years	20 (29.4%)	48 (70.6%)	68 (100%)		
Total	71 (47.3%)	79 (52.7%)	150 (100%)		
Income					
≤ regional minimum salary	36 (69.2%)	16 (30.8%)	52 (100%)	0.00	4.050 (1.973-8.315)
> regional minimum salary	35 (35.7%)	63 (64.3%)	98 (100%)		
Total	71 (47.3%)	79 (52.7%)	150 (100%)		
Nurse commitment					
Low	53 (73.6%)	19 (26.4%)	72 (100%)	0.00	9.298 (4.423-19.548)
High	18 (23.1%)	60 (76.9%)	78 (100%)		
Total	71 (47.3%)	79 (52.7%)	150 (100%)		
Nurse satisfaction					
Satisfied	54 (71.1%)	22 (28.9%)	76 (100%)	0.00	8.230 (3.949-17.150)
Dissatisfied	17 (23%)	57 (77%)	74 (100%)		
Total	71 (47.3%)	79 (52.7%)	150 (100%)		

Table 3. Results of the bivariate selection for factors influencing nurse performance

Variable	P Value	OR	95% CI
Educational background	0.0001	6.938	2.941-16.364
Employee status	0.0001	7.033	3.422-14.458
Length of work	0.0001	3.948	1.987-7.845
Income	0.0001	4.050	1.973-8.315
Nurse commitment	0.0001	9.298	4.423-19.548
Nurse satisfaction	0.0001	8.230	3.949-17.150

Table 4. Results of the first model for factors influencing nurse performance

Variable	P Value	OR
Educational background	0.010	3.696
Employee status	0.999	0.000
Length of work	0.686	0.754
Income	0.158	0.358
Nurse commitment	0.999	11737348746.004
Nurse satisfaction	0.686	0.614

Table 5. The last results of the last model for factors influencing nurse performance

Variable	P Value	OR
Educational background	0.008	3.568
Nurse commitment	0.000	6.481

From Tables 3 to 5 above, it can be seen that the analysis series carried out initially involved six variables and there were candidates that influenced the nurse's performance, namely educational background, employee status, length of work, income, nurse commitment, and nurse satisfaction. After performing the multivariate analysis of multiple logistic regression using the Backward Stepwise (Wald) method, we noted the educational background and nurse commitment are the factors with the biggest impact on nurse performance. Both variables, educational background and nurses' commitment, significantly correlate to nurse performance, which means educational background correlation with nurse performance is 0.008, and commitment of nurses correlation with nurse performance is 0.0001. Both of them are the most influential factors on nurses' performance in the implementation of nursing care.

IV. DISCUSSION

The background of nursing education in Indonesia should be "Ners" (bachelor of nursing) if it would be said professional [11]. Nurses who are still educated below bachelor such as those with nursing diplomas are still called vocational nurses [11]. The Indonesia Nursing Association (PPNI) would suggest all Indonesian nurses take formal education, at least a bachelor in nursing to become professional nurses. In addition, nurse education is not only formal but also needs informal education such as seminars, workshops, training, etc. [12]. This background will certainly affect nurses' performance because of the competencies gained as nurses [2]. They will be better prepared professionally. In Indonesia, nursing education is still varied, consisting of senior high school for nursing major, diploma in nursing, bachelor of nursing, master of nursing, nursing specialist and doctor in nursing. The number of nursing diploma graduates is still widely produced by nursing education institutions in Indonesia.

The commitment of the nurses to their profession and workplace is a very important issue in their daily life. Previous studies showed a significant correlation between institutional commitment and climate ($r=0.269$, $p=0.01$) [13]. A significant positive relationship between institutional climate and affective commitment is 0.208 ($p=0.049$). The correlation between service and normative and continuance is 0.308 ($p=0.003$) [13]. Some institutions have included

elements of commitment as one of the requirements to hold the position offered. This shows the importance of commitment in the workplace including nursing work. A nurse's work commitment is inseparable from the relationship between the nurse and job or profession in the place of work. Many things affect commitment in the work place, including nurses' characteristics such as the educational background.

Institutional commitment includes the institution's appreciation and its willingness to create a good performance to achieve objectives; the higher the commitment of the institution, the higher the performance of nurses in practice. Committed employees will be less likely to be involved in things that can harm the institution because they have a high sense of loyalty [14]. Non-committed employees will show lower performance because they feel less loyal to the institution and also have a low level of attendance. Institutional commitment has a positive and significant effect on performance by 0.67 time (44.89%) [4]. Nurses who have loyalty and job satisfaction will show high commitment so as to increase professionalism, obey the rules, concern for patients and have good personal abilities in their daily life. This is in line with previous study which shows a positive correlation between professionalism ($p=0.001$), rules ($p=0.045$), attention ($p=0.000$), and independence ($p=0.000$) and job satisfaction [15].

In line with the results of this study that institutional commitment can significantly affect performance because nurses with high commitment are not just being passive members but actively giving all their efforts for the success of the hospital, in this case is patient care. An employee who has a high institutional commitment will perceive his or her goals and institutional goals as personal matters [16]. Committed employees will feel that the interests of the institution are their own interest; the problems facing the institution are problems that must be solved by themselves as well. Employees who also have a strong acceptance of the goals and values of the institution so they will support the operations of the institution. This is in line with previous research which revealed a positive and significant correlation between nurses' perceptions of the ethical work climate and their perception of institutional support, commitment, and job satisfaction [17].

Good performance will be very difficult to obtain if nurses do not have commitment to their work. Commitment is the nurse's reason for staying and working in her/his current workplace. Institutional commitment has an important relationship with performance, and an increased commitment causes individual performance to increase as well [18]. If the institution can manage its employees well, it will lead to a strong commitment from employees towards the institution. Conditions like this are very good to achieve institutional goals, because this way employees will be able to optimize their performance, in accordance with the expected results [19].

Based on the explanation above, it can be concluded that nurses' educational background and commitment can affect their performance while working in the hospital. Having a good education and high commitment to the workplace, a nurse will carry out his/her duties or work in an orderly and smooth manner per applicable regulations, so that his/her performance will improve and will also have an impact on patient safety and can certainly be achieved in an optimal.

V. CONCLUSION

It can be concluded that the factors that most influence nurses' performance are educational background (0.008) and commitment (0.0001). The hospital needs to manage nurses well to create a strong commitment so as to achieve patient satisfaction and improve the quality of the health care services. Then the nurse must optimize their performance in accordance with the expected results. Hospitals need to improve and develop the educational background of nurses, be it formal or non-formal, such as training, seminars, workshops, and other

activities that can help improve nurse performance. Combining the educational background and increasing the implementation of nurses' commitment by programming continuing education and training activities can improve the work climate and commitment. That is a good plan to be carried out continuously by hospitals to improve the quality of care and nurses' performance.

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CONFLICT OF INTEREST

No conflict of interest has been declared.

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