



ORIGINAL RESEARCH PAPER

Nursing

RELATIONSHIP ANALYSIS OF FACTORS WITH IMPLEMENTATION MEASURES COLLABORATION EFFECTIVE NURSE-PHYSICIAN

KEY WORDS: Collaborative factors, Effective collaborative implementation

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ABSTRACT

Background : Collaboration in health is very important because each health worker has knowledge, skills, keah lian, and different experiences that can improve performance in various aspects related to health care system. This study aims to determine the relationship of factors related to the effective implementation of nurse and doctor collaboration

Method : This research is a quantitative study with cross sectional design. The sample in this research is Team Leader at Inpatient Installation of Major General HA Thalib Kerinci General Hospital which amounts to 39 people with total sampling technique. Data collection using Nurse-Physician Collaboration Scale Questionnaire (NPCS) and Tang 2013. Bivariate data analysis with chi square and multivariate with logistic regression.

Results : The results showed that p-value = 0.042 and communication (p-value = 0.007) had relationship significant with the effective collaboration of nurses and doctors at Major General HA Thalib Kerinci General Hospital. Factors most related to the effective implementation of nurse and physician collaboration are the factors of communication

Conclusion : It is advisable to the Hospital need to improve the more effective communication between nurses and doctors.

INTRODUCTION

The current health care system, focusing on patient-centered and family centered services to provide quality care, patient satisfaction, and avoid unexpected events. Effective collaboration among health team members facilitates the delivery of quality services.¹ Improving the quality of service is determined by the quality of medical care services and nursing care. Qualified medical care can be provided by professional medical personnel in their fields and quality nursing care can be provided by nursing staff who are equipped with adequate knowledge and clinical skills and have the ability to maintain professional relationships with patients, collaborate with other health team members, carry out activities The collaboration of nurses and doctors is seen as an important factor in the provision of quality nursing care.²

Collaboration works well if each team member understands each other's roles and responsibilities, has the same goals, recognizes the expertise of each profession, exchanges information openly, has the ability to manage and perform tasks both individually and in groups in the team. Burtcher Research³ states that collaboration in interprofession improves the effectiveness of patient health and safety services. The collaboration of nurses and physicians improves clinical outcomes as well as patient satisfaction, can reduce hospital costs.⁴ and increase satisfaction for families of patients, nurses and doctors.⁵ More importantly, collaborative relationships between nurses and physicians can reduce patient mortality.⁶

Schdewlt study interpersonal et.al proves that the collaboration of doctors and nurses improves the quality of care to patients, shorter treatment periods, cheaper maintenance costs, and reduces the burden and stress of work on health professional teams.⁶ while interprofession is associated with reduced mortality, increased job satisfaction, and reduced maintenance costs.⁷ Based on the preliminary survey, nurses and doctors find it difficult or rare to meet, the lack of mutual understanding between nurses and doctors in collaboration, the interaction between nurses and doctors is more dominated by team leaders and doctors alone, doctors assume that nurses have not been competently invited to collaborate, considered and has no benefit, doctors have dominant authority in all health problems and nurse duty to do doctor's instructions, not free to discuss and give feedback, still not heard and appreciated. Based on the above description, the authors are interested in conducting research on "Analysis of factors related to the effective implementation of nurse and physician collaboration in Inpatient General Hospital HA Thalib Kerinci which aims to find out factors related to the implementation of effective nurse-doctor collaboration actions.

METHODS

This research is a quantitative research with approach cross sectional. Population and sample in this research are all team leader in Installation of Major General Hospital HA Thalib Kerinci

which amounts to 39 people, with sampling technique of total sampling. The data was collected using Nurse Physician Collaboration Scale and Tang 2013 questionnaire which consist of respondent characteristic, related factors and effective implementation of nurse-physician collaboration, with score from 1 to 4. In this research the researcher uses ethical consideration that is informed consent, Anonymity and Confidentiality. The data collected were analyzed using SPSS program with bivariate statistical test using chi-square and multivariate logistic regression.

RESULTS

1. Characteristics of Respondents

In the table below shows that the characteristics of the age of almost all respondents 25-35 years, Respondents are almost entirely female (87.2%) with the education level of some vocational respondents 59%, and the working period is mostly ≥ 5 year (74.4%).

Table 1 Characteristics of Respondents in Inpatient Installation of Major General Hospital HA Thalib Kerinci

Characteristic	f	%
Age		
25-35 years old	33	84.6
36-47 years old	6	15.4
Gender		
Male	5	12.8
Female	34	87.2
Education		
Professional	16	41
Vocational	23	59
Work Period		
New (< 5 years)	10	25.6
Old (≥ 5 years)	29	74.4

2. Factors relating to Collaborative Implementation Effective nurse-physician at RSUD Major General HA Thalib Kerinci

Based on table 2, factors related to the effective implementation of nursephysician collaboration include communication, mutual respect, unequal strength, professional roles, and task priorities. The nurse's assessment of communication is mostly good (64.1%), almost all respondents have a high degree of mutual respect (97.4%), partial unequal power (59%), professional role (51.3%), and high priority tasks (51.3%) in the effective implementation of nurse and physician collaboration.

Table 2 Factors Relating to the Effective Collaborative Implementation of Nurse-Doctor at Inpatient Installation of Major General Hospital HA Thalib Kerinci

No	Factors-factor	f	%
1	Communication		
	a. Less good	14	35.9
	b. Good	25	64.1

2	Mutual Respect		
	a. Low	1	2.6
	b. High	38	97.4
3	Power of unequal		
	a. Low	16	41.0
	b. High	23	59.0
4	Professional Role		
	a. Less Good	20	51.3
	b. Good	19	48.7
5	Priority task		
	a. Low	19	48.7
	b. High	20	51.3

3. Implementation Effective Collaboration of Nurse-Doctor

Table 3 below shows that the effective collaboration of nurse-physicians is categorized good (53.8%).

Table 3 Effective Collaboration Implementation of Nurse-Doctor at Inpatient Installation of Major General HA Thalib Kerinci

Effective collaboration implementation	f	%
Less Good	18	46.2
Good	21	53.8

4. Relationship Analysis Factors with the Effective Collaboration of Nurse-Doctors Installation of Inpatient RSUD Major General HA Thalib Kerinci

Based on the table below, the relationship analysis using chi square test found that related factors are communication (p-value 0.007) and unequal strength (pvalue 0.042)

Table 4 Relationship Analysis of Factors with Implementation Effective Collaboration of Nurse-Doctor at Inpatient Installation RSUD Major General HA Thalib Kerinci

No	Factors-factor	Effective collaboration implementation nurse-physician						p-value
		Less good		Good		Total		
		f	%	f	%	f	%	
1	Communication							0.007
	Less Good	11	78.6	3	21.4	14	100	
2	Good	7	28.0	18	72.0	25	100	0.462
	Mutual Respect							
3	Low	1	100	0	0	1	100	0.042
	High	17	44.7	21	56.3	38	100	
4	Power of unequal							0.145
	Low	11	68.8	5	31.2	16	100	
5	High	7	30.4	16	69.6	23	100	0.639
	Professional role							
6	Less good	12	60	8	40	20	100	0.145
	good	6	31.6	13	68.4	19	100	
7	Priority task							0.639
	Low	10	52.6	9	47.4	19	100	
8	High	8	40	12	60	20	100	0.639

5. Factors most related to Implementation Effective collaboration of nursephysician

Table 5 below, indicating that the factor most closely related to the effective implementation of nurse-physician collaboration is communication p = 0.026 (p < 0.05). The result of analysis shows that the highest OR is communication (OR = 6.503) so it can be concluded that communication is the factor most related to the effective implementation of nurse-doctor's effective collaboration. Value B = 1.872, because the value of B is positive, then communication has a positive relationship with the effective implementation of nurse-doctor's effective collaboration.

Table 5 Logistic Regression Analysis on factors related to the implementation of effective nurse-physician collaboration in the Inpatient Hospital Major General H. Talib Kerinci

Variable	B	P	OR	95%
Communication	1872	0026 *	6.503	33.689-1.255
Power of unequal	0969	0225	2.634	12.594-0.551
Constan	-4471			

DISCUSSION

The results of test analysis *chi square* showed that there was a significant relationship between communication with the effective implementation of nurse-physician collaboration with p-value 0.007 (p < 0.05). This result is in accordance with Anggreny's study that there is a relationship between communication with nurse and physician collaboration.⁸ Research Weller, on the perception of 720 nurses and 173 doctors from 84 hospitals in Northern California that nurses often fail to gather all relevant patient information before contacting a doctor. This unclear communication causes the doctors to speak roughly, which will affect the nurse's attitude toward patient care and hamper teamwork. In addition, observes that doctors and nurses often communicate through written patient care records, wherein information is not always delivered accurately or on time.⁹

According to the researchers, respondent age characteristics can also be related to communication in the effective collaboration of nurse-physicians where almost all (84.6%) of respondents have age 25-35 years. Age factor has a direct relationship with the logic of thinking and knowledge of a person. The more mature a person's age usually tends to increase his knowledge and maturity level. The ability to control his psychic emotions can reduce the occurrence of accidents so that performance increases.¹⁰, which means between mutual respect and the effective implementation of nurse-physician collaboration with p-value 0.938 (p > 0.05).

Based on the research results, the attitude of mutual respect between nurses and doctors in collaboration is good, it is supported that the education level of respondents mostly D3 nursing and 41% professional education level (S1 nursing). According to main research the attitude of doctors and nurses in collaboration is influenced by education, knowledge collaboration and understanding the role of each health profession owned by doctors and nurses. The higher the education the more professionalime will be and the better the implementation of the collaboration. Therefore it is necessary to improve education to a higher level so that the implementation of effective collaboration will be better.

The results of Rahamita's implementation of mutual respect and trust to gain trust from others, nurses want their contributions to the care of patients appreciated and recognized by doctors, as nurses appreciate and acknowledge the ability of doctors, but that is not always the case.¹¹ In fact, mutual respect and trust is expected to facilitate a dynamic process between people characterized by a forward desire to achieve the goal and satisfaction of each member to realize effective collaborative relationships.¹²

The result of t test analysis *ishi square* shows that there is a significant relationship between unequal strength with the effective implementation of nurse-physician collaboration with p-value 0,042 (p < 0.05). The results of this study in accordance with Anggreny that there is a relationship of power domination with peawat-doctor collaboration. Petri Research proves that doctors and nurses have decision-making, responsibility and power capacities.¹³ However, a descriptive comparative study by Nelson *et al.* (2008) reported that nurses do not feel confident or assertive to communicate and discuss patient care equally with doctors. The nurse senses a power imbalance between the two professions¹⁴. Hansson *et al.* explains that this unequal strength can be attributed to different levels of education, status and ability for each profession.¹⁵

According to Evan *et al* Organizational environmental factors (*systemic determinants*) are elements outside the organization, such as social systems, culture, education and autonomy (professional). Social systems that can hamper collaborative practice are 1) inequality between each profession, 2) gender differences in which men are more powerful than women 3) differences in economic status. Some cultural systems may impede a collaboration such as professional autonomy.¹⁶

The result of test analysis *chi square* showed that there was no

significant relationship between the professional role and the effective implementation of nurse-physician collaboration with *p-value* 0.145 ($p > 0.05$). The role of professionals is not good in implementing effective collaboration of nurses and doctors because there are still respondents who clarify the scope of professional expertise when requested by the doctor, not to inform the doctor about the scope of the field of nursing practice.

According to Robinson's research, *et. al* (2010), lack of understanding of each other's professional roles, and task priorities influence the nurse and physician collaboration factors suggests that a lack of understanding of the unique role of nurse professionals, will lead to ineffective collaboration between doctors and nurses. Nurse autonomy in the collaboration of doctors and nurses includes reading nurse records, participating in hospital programs and exchanging opinions in the treatment and nursing care of patients.¹⁷

The result of *chi square* test shows that there is no significant relationship between task priority and the effective implementation of nurse-physician collaboration with *p-value* 0,639 ($p > 0,05$).

Based on the results of the research the task priority is largely unfavorable (48.7%) in the effective implementation of nurse-physician collaboration, where nurses still exist who do not read the nurses' records and the nurse's integrated development note format, and judge that the primary duty of the nurse is to follow the physician's instructions. Based on reported research, that collaboration is influenced by various doctors and nurses authority with respect to patient care The results of this study indicate that the implementation of effective collaboration is good more on pimer nurse with a working duration ≥ 5 years. Mistuti' long study with nurses' ability to collaborate with doctors is closely related to the experiences gained during the task. The longer a person works, their knowledge will be better because it has adjusted to his job.¹⁸

CONCLUSION

It is advisable to the Hospital need to improve the more effective communication between nurses and doctors.

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