

Original Research Article

The relationship between communication of nurses and level of anxiety of patient's family in emergency room dr. Dradjat Prawiranegara hospital, Serang Banten, Indonesia

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ABSTRACT

Background: Critical condition of patient is trigger to the increasing of anxiety of family members. This situation is vulnerable of ineffective nursing care services provide by nurses in emergency room. Communication is one of abilities which nurse have to performed, and is recognized not that simple in its implementation. This study aimed was to identify whether or not there is a relationship between communications performed by the nurses and the level of anxiety of family members of patient in Emergency Room dr. Dradjat Prawiranegara hospital, Serang Banten, Indonesia.

Methods: This study was cross-sectional study with non-parametric analysis data used was Spearman's Rho. Data were collected through direct observation by 4 numerators and observational sheet of nurse's communication. Level of anxiety of family members was measuring by using State Trait Anxiety Inventory Y-1. Data were collected from 47 family members and 47 nurses who were selected by using accidental sampling technique.

Results: The study revealed that nurses performed eye contact, well informed consent, quick respond to the needs of patient and family members, clear voice, understandable language, introducing them self, active listening and emphatic, calm and friendly. Regarding anxiety of family members, 42.6% of them were showing moderate level of anxiety, whereas 34.0% of them were showing low level of anxiety. In bivariate analysis by using Spearman's Rho showed that p value was 0.000 and coefficient correlation -0.765. It was indicated that there was significantly relationship between communication of emergency nurses and the level of anxiety of family members. It was indicated that the more effective the communication performed by nurses, the less the anxiety level of family members.

Conclusions: Nurse is required to be able to perform their therapeutic communication skill effectively so that the anxiety level of family members is decreasing. As a result, the stable emotion of family members affect to the appropriate decision making of medical treatment.

Keywords: Anxiety, Communication, Emergency room, Family members, Nurse

INTRODUCTION

Emergency room is one of challenges rooms in regard to the resulting of distress and anxiety of patients and their relatives. The anxiety level in family members is varied,

including depression.¹ The impact of distress and anxiety are destruction of communication among family members and these will result to inability to concentrate and insufficiency of coping mechanism.² As a result, the changes of emotional status of the family members are

affecting to inadequate of family support to the patient.³ Communication is a process of adaptation between two persons, or even more in order to share idea, meaning and attention.²

To build an effective communication, Leech explained that a person at least must have the ability to read, to write, to hear and to speak. Furthermore, an effective communication is conducted if a communicator delivered a message to the receiver with a valid statement. Other things that need to avoid in effective communication are: analyzing, blaming, and judging.⁴

The communication in emergency room is ruled and dominated by nurse upon patient's relatives. According to previous study, 11 emergency nurses are included up to 18 times observation of their communication skill. The study revealed that 2.019 kinds of communication performed by nurses are involving patient relatives.⁵

The engagement of family in the nursing care of patient with emergency condition is included in American Association of Critical Care Nurse (AACN). AACN mentioned that one part of holistic nursing care is family decision which is equal to the responsibility of nurse. So that, good communication performed by nurse is needed through informed consent to family of patient, then the decision of medical intervention will be sign appropriately on the letter of agreement.⁶ The roles of emergency nurse to the family members of patient are containing to identify their strength, to communicate to them, be realistic and honest, to give positive hope and trust.⁶ Furthermore, communication recognized as a part of nursing care in order to help family through the adverse situation.⁷ One difficult situation that commonly increases the anxiety in family members of patient is due to vehicle accident. This situation suddenly triggers the fearness of changing the role either patient or family members in the future.⁸ In addition, this situation is further influencing the healing of the patient, because indeed family have the important role of decision upon medical intervention of the patient.⁹ Previous study found that patient relatives are oftenly involved in the decision making of medical intervention of the patient.¹⁰ Therefore, when the family members are in the hardship situation due to the condition of patient, it is important to nurse to perform an effective communication with them, so that the nursing care of patient will be optimum.

METHODS

This was a cross-sectional study. 47 respondents consist of nurses and family members of patient in Emergency Room dr. Dradjat Prawiranegara Hospital, Serang were selected by using accidental sampling technique. The criteria of samples were family who their relatives as a critical condition patient in Emergency Room dr. Dradjat Prawiranegara Hospital, Serang, Indonesia. Furthermore, the researcher investigated the samples based on the anxiety that related to communication.

Data collection

This study had been approved the ethical approval by Padjadjaran University. Data were collected on 01st – 15th July 2015 involving four numerators in this study as data collector after they were well informed and trained regarding the aims of the study. In advance, Inter-rater Numerator test and Kappa test conducted to investigate the perception between both numerators in this study. Direct observation of communication between nurse and family members of patient was conducted by using observational sheet. Based on the agreement of respondents, questionnaire of anxiety was distributed to be examined the level of anxiety of family members of patient.

Instruments

Anxiety

State Anxiety Inventory (SAI) consists of 20 items of question. This questionnaire is designed to examine the anxiety level.¹¹ There are negative questions including number 1,2,5,8,11,15,16,19 and 20, while positive questions are 3,4,6,7,9,10,12,13,14,17 and 18. Validity and reliability test of SAI after modified is showing cronbach's alpha 0.804.¹²

Communication

The questionnaire is adopted from previous study that used to investigate the nurse's communication, and then this questionnaire was modified in this study under advice and guidance by two experts.¹³ Options of answer of this questionnaire are dichotomy which is "yes" and "no". This instrument is used to determine the application of the emergency room nurse communication and this instrument is observation sheet conducted by the numerator when nurses performed communication with family members of patient. The results validity test of this instrument obtained minimum of 0.515 and maximum of 0.782. For the reliability test results obtained Cronbach's alpha 0.938.

Inter-rater reliability

Inter-rater reliability test of four numerators conducted on June 30, 2015 showed that Kappa coefficient values obtained minimum of 0.549 and maximum 0.866 with range of p Value 0.000 to 0.022.

Data analysis

Assumptions of normality of data were conducted by using Shapiro-Wilk test to the 47 respondents. After compared to the value of alpha (0.05), both data were found to be normally distributed equally obtained p value less than 0.05. The analysis of data in this study used non-parametric test with Spearman's Rho test by using α significance of 5%.

Ethical approval

This study has passed the ethical approval of Padjadjaran University with had no impact to the participant regarding ethics issue. Letter ethical clearance Number 276/UN6.C1.3.2/KEPK/PN/2015 and registration number of ethic 0415040276 from the ethics committee of the University of Padjadjaran issued on April 29, 2015.

RESULTS

In this section will be explained of communication of nurses, mean score and anxiety level of family members, and anxiety of family members based on the characteristics.

Table 1: Communication of nurses in emergency room of dr. Dradjat Prawiranegara hospital.

Questions	Results of Observations		Total
	Yes	No	
Eye contact while communicating to family of patient	40 (85.1%)	7 (14.9%)	47 (100%)
Distance of nurse and family of patient are 30-50 cm	40 (85.1%)	7 (14.9%)	47 (100%)
Open stance of communication	34 (72.3%)	13 (27.7%)	47 (100%)
Neat in communication	33 (70.2%)	14 (29.8%)	47 (100%)
Informed consent to family of patient	31 (66.0%)	16 (34.0%)	47 (100%)
Quick respond in every complaint of family of patient	31 (66.0%)	16 (34.0%)	47 (100%)
Clear voice and tone	30 (63.8%)	17 (36.2%)	47 (100%)
Understandable language	29 (61.7%)	18 (38.3%)	47 (100%)
Detail information	29 (61.7%)	18 (38.3%)	47 (100%)
Pleasant expression	28 (59.6%)	19 (40.4%)	47 (100%)
Introducing of identity	27 (57.4%)	20 (42.6%)	47 (100%)
Active listening of every complaint and statement from patient's family	27 (57.4%)	20 (42.6%)	47 (100%)
Empathy, calm and friendly	27 (57.4%)	20 (42.6%)	47 (100%)
Asking information of family patient	9 (19.1%)	38 (80.9%)	47 (100%)
Concluding of communication process between nurse and family patient	9 (19.1%)	38 (80.9%)	47 (100%)
Provide opportunity to ask	12 (25.5%)	35 (74.5%)	47 (100%)
No conflict to family of patient	15 (31.9%)	32 (68.1%)	47 (100%)

Based on Table 1, it showed that 85.1% of nurses performed eye contact on family members of patient while they were interaction each other with the distance of communication were about 30-50 cm. 72.3% of nurses were open stance in communication, and 66.0% of them provide well informed consent before the intervention of nursing care.

On the other hand, negative behaviour in communication were revealed in this study such as 80.9% of nurses did not asking the identity of family members, 74.5% of nurses were also did not provide opportunity to family members to ask, and 68.1% of nurses involved of conflict with family members.

Based on Table 2, it showed that from 47 respondents who were as family members of patient, 52.3% of them were in moderate level of anxiety before communicate to nurses, and 31.9% of them were in high level of anxiety. However, after they were communicate to nurses, the result showed that 34.0% of them were in low level of

anxiety and 42.6% of them were in moderate level of anxiety.

Table 2: The level of anxiety of family members before and after communicate with nurses in emergency room of dr. Dradjat Prawiranegara hospital.

Level of anxiety	Before		After	
	N	%	N	%
Low	7	14.9 %	16	34.0 %
Moderate	25	53.2 %	20	42.6 %
High	15	31.9 %	11	23.4 %
Total	47	100 %	47	100 %

According to Table 3, it showed that there was significantly different mean score of anxiety of family members between before and after they communicate with nurses. The mean score were 55.02 and 49.85 respectively, and $p < 0.01$.

Table 3: The difference means score of anxiety of family members before and after they communicate with nurse in emergency room of dr. Dradjat Prawiranegara hospital.

Anxiety	Mean	SD	SE	p value	N
Before	55.02	11.056	1.613	0.001	47
After	49.85	13.694	1.997		

Based on data shown in Table 4 that the majority (72.3%) of family members of patient were female who were in moderate level of anxiety (50.0%) and severe anxiety level (29.4%). Regarding the relationship with patient, 50.0% mother of patient showed severe anxiety. On the other hand, 100.0% family members of patient who

recognized as husband showed mild anxiety levels. Furthermore, from the characteristics of the age of the respondents found that 78.7% of respondents were aged over 20 years old with moderate and severe level of anxiety that are 45.9% and 29.7% respectively.

Based on Table 5, the results by using Spearman's Rho showed that there was a significant correlation between anxiety of family members and the communication performed by nurses in emergency room, with p value 0.000 ($p < 0.01$). Then the direction of correlation coefficient values indicated negative between the two variables -0.765. It means that the more effective the communication is made by nurses, the lower the level of anxiety experienced by the family members.

Table 4: Level of anxiety of family members based on characteristics.

Characteristics	Frequency (%)	Level of anxiety		
		Low	Moderate	High
Gender				
Male	13 (27.7%)	69.2%	23.1%	7.7%
Female	34 (72.3%)	20.6%	50.0%	29.4%
Relationship with patient				
Son/daughter	15 (31.9%)	46.7%	33.0%	20.0%
Father	1 (2.1%)	0.0%	100.0%	0.0%
Mother	6 (12.8%)	16.7%	33.3%	50.0%
Wife	19 (40.4%)	10.5%	63.2%	26.3%
Husband	6 (12.8%)	100.0%	0.0%	0.0%
Age				
< 20 years old	10 (21.3%)	70.0%	30.0%	0.0%
> 20 years old	37 (78.7%)	24.3%	45.9%	29.7%

Table 5: The bivariate analysis of relationship between communication of nurses and level of anxiety of patient's family in emergency room dr. Dradjat Prawiranegara hospital.

	Pearson (r)*	p value*
The application of nurse communication and level of anxiety of family patient	-0.765**	0.000

DISCUSSION

Description of communication of nurse in emergency room, dr. Dradjat Prawiranegara Hospital, Serang, Indonesia

In the process of implementation, the nurse in Emergency room of dr. Dradjat Prawiranegara hospital, Serang-Banten, despite the situation with high number of patients who enter Emergency Unit are not equal to the number of nurses, they are responsible and still perform effective communication. This is shown in which communicating

with the family most of the nurses to be open, to introduce themselves before communicating and dressed neatly as using attributes nurses while communicating, using clothes or uniform in accordance with the operational standards prevailing at the hospital. All these result are reflects that nurses are able and ready in creating a trusting relationship, because by introducing them self at the beginning to communicate is fundamental to build a trusting relationship as well as a part of a very important element in interpersonal relationships.

Dressed neatly showed self-concept of being good nurse. Nurse who dressed neatly can affect the perception of family to care / nursing care rendered, because each family had different point of view regarding how a nurse in appearance. So even with the nurses open stance in communication, but they are always reflects that nurses have a healthy personality, with their openness to the family, and family will feel safe when communicating with nurses. Open stance in communication of nurses in this study is described by the posture of nurse who does not fold his hands while communicating, responding to

respond and properly of every complaint disclosed to family, to communicate regardless of their ethnicity or race of the family as well as greetings, smiles. Shows empathy and friendly to what happened to a family emergency patients today is affect to get into family life in order to feel the thoughts and feelings they experienced without involving the emotions is the way nurses maintain a therapeutic relationship with the family.

Clarity of information regarding measures to be taken to the family of the patient in detail and clear and in a language easily understood by the family, resulting in the family will be easier to respond and digest the message and information delivered by nurses. It including make the family knowledge and information is one of the needs of families in the emergency unit will be expanded and increased, so that feelings of worry, anxiety and fear about the condition of the family members will be reduced. It is related with the previous research conducted, which revealed that a family needs information through communication between the nurse and them self.⁸

Level of anxiety of family patient before and after communicate with nurse in emergency room of dr. Dradjat Prawiranegara hospital, Serang, Indonesia

The results of this study support previous studies, which suggest that the emergency room is one of the most challenging and can lead to stress problem such as anxiety and depression for family members.¹ Likewise, another study were identified that not a few families who are experiencing emotional changes, such as anxiety, fear of death to family members as well as the changing role of the new environment for the family when he found one member families in emergency condition.⁸

Furthermore, some factors affect to the anxiety level of family in emergency room including the severity of disease, emergency situation, trauma neurology, heart disease and lung disease.¹⁴ The previous study showed that head injury is one of hardship situation for family patient. Related to Bantennese culture, if someone diagnosed head injury resulted in unpredictable situation. Both point of view between previous study and culture showed that head injury become situation which family of patient increase their anxiety due to the condition of their relatives who are in sick.¹⁵

In depth, the results of this study also identified that the anxiety of someone on the condition of patient suffered from pain, is affect to the level of anxiety of family. Data obtained from the results of this study revealed that respondents who identified as mother of patient experienced severe anxiety, unlike respondents as husband and father who are in moderate level of anxiety. In line with the previous research showed that mother is significantly more anxious than fathers.¹⁶ Basically, parent has the nature of a worrier, but many of them will

be more anxious during certain situations due to mother especially spend her time most with her child. In addition, many mothers are more sensitive to the risks that occur in children than in men.¹⁷

Relationship between communication of nurses and level of anxiety of patient's family in emergency room dr. Dradjat Prawiranegara Hospital

The Implementation of the communication of nurse involve eye contact, being open, empathetic, calm and friendly tone of voice and using clear and easily understood.² Through dimensional response when communicating which is very important in creating a touch, nurse can build trust with the family easily, including expressed and showed sincerity, honesty, openness and respond actively, respect and accept the family as they are, avoid judgmental, criticize and insult. On the other hand, through empathy is a way to build a therapeutic relationship to be able to reduce the anxiety experienced by the family. An effective communication of nurse is impact on decreasing the level of anxiety of the family patient. It because of family feels the interactions with nurses perceive as an opportunity to share knowledge, feelings and information in order to achieve optimal nursing care. Families will be able to explore feelings, concern in the face of such hardship situation and find out advice and knowledge with effective communication, as a result the family will be able to understand and accept the conditions of family members.¹⁸

Thus, the results of this study as a point of reference that effective communication of nurse in Emergency room is essential to perform as well as other skill competencies that nurse have to do, such as knowledge, technical skill and client assessment of patients. Effective communication recognized as major component of the part of nursing process in emergency room. In line with previous study showed that effective communication is a very important element in professional nursing practice and good communication skills will maintain effective relationships within the whole environment of professional practice and also help meet the service legally, ethical and clinical.¹⁹

Nurses who are able to build good critical thinking skills are a good communicator. They are also able to integrate their theoretical knowledge regarding communication with personal experiences, interprets the received messages, analyze the contents, concluded its meaning, evaluating its effects, explaining the reason for the purpose of communication techniques and personal communication skills will encourage good communication and effective.²⁰ If the nurse is evaluate the communication process, it is effect on the anxiety experienced by the family as well as specific problems or errors that could potentially be identified, because of the openness between nurses and families can reduce the level of anxiety.²¹

The high number of communication perform by the nurses in this study affect to the low levels of anxiety of the family, and therefore impact to the success of care and treatment of emergency patients.

The state of emergency is a transitional role, where the role will be mainly taken up by the family and one of them is decision-maker. As to what was stated in previous study that effective communication between nurses with a family of emergency patient can avoid the failure of decision-making of family. It is because of the rich information provided by the nurse through effective communication.⁸

Limitations

Even though this study has achieved the aims, however some limitation recognized to be solving in the future research. Multiple data collector supposes to be conducted in this study, but in implementation of this study, only one numerator as data collector. Therefore, the observation of the communication between nurse and family patient observe by one numerator.

CONCLUSION

The implementation of communication between nurses and patients' family in emergency room is important, so that the comprehensions of nursing care can be accomplish. This is because the effective communication significantly impact to the decreasing of level anxiety in patient's family when their relative under treatment in emergency room. Besides that, an inappropriate decision-making conducted by the family can be reducing through the effective communication between nurse and family of patient.

Recommendations

Nurse is required to be able to perform their communication effectively due to resulting in positive way of emotional of family, and this is encourage in order to avoid the mistakes in determining of decision-making.

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