



## FACTORS RELATED TO NURSE'S JOB STRESS AT HOSPITALS TYPE B BATAM

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### Abstrak

*Nurses often face to situations that can cause job stress Nurses often face to situations that can cause job stress. This study aims to determine the factors related to nurse's job stress at hospitals type B Batam in 2015. The study used descriptive analytic design with cross sectional approach. The sample consisted of 193 nurses by simple random sampling. The results showed more than half of the nurses experienced severe job stress (57%) were derived from heavy workload (64.4%), cases of death and dying (68.4%), emotional preparation inadequate (64.1%), uncertainty about treatment (71.8%), conflicts with doctors (73.9%), problems with co-workers (70.7%), problems with the supervisor (70.8) and problems with patient and family (66.7%). There is significant relationship of eight of job stress factors to nurse's job stress ( $p < 0,05$ ). The most dominant factor affected nurse's job stress is a problem with a co-worker. The study recommends that we need to improve communication among in nurses*

*Key words: Nurse's job stress, factors that can cause nurse's job stress*

## PENDAHULUAN

Stress in the nursing profession is an ongoing problem throughout the world. Nurses in performing their duties cannot be separated from stress due to stress problems and cannot be separated from the world of work. Nurses are required to improve the quality of health services to the community with more professional in providing health services to the community. The nurse is also a health worker with the highest intensity of interaction with the patient and family health services. The increasing demands of the task that owned a nurse and a high intensity between the patient and the patient's family, especially the difficult and complex is the trigger cause of work stress on nurses.

According to a survey in France (in Fraser, 1992) found that the percentage of approximately 74% incidence of stress experienced by nurses. While in Indonesia, according to research conducted by National Nurses Association of Indonesia (PPNI) (in Prihatini,

2007), there are 50.9% of nurses experiencing job stress.

Stress is the body's reaction influenced by individual differences and psychological processes to changes that require physical adjustment, psychological and behavioral (Luthan, 2011; Shivaprasad, 2013), while work stress is a reaction to the behavior of a person or the events in the job environment and make specific result of psychological, physiological and individual behavior (Gibson, 2000; Spears, 2008).

Nurses who work in the hospitals may experience stress from eight main source of stress associated with the physical environment, the psychological environment and the social environment hospital. Eight major source of stress. are cases of death and dying, conflicts with doctors, emotional preparation which was inadequate, problems with colleagues, problems with supervisors, workload, uncertainty about treatment, problems with patient and family (Ahmad M. Saleh, 2013; Prench, et al, 2000).

Prolonged stress can have an impact, on individuals and organizations (Fraser, 1992). The impact of stress on individuals can be worked pass the limits of ability, usually delays to start working, labor absenteeism, difficulty making decisions, careless mistakes, omissions complete the work, forget the promises that have been made and the failures themselves, difficulty relating to others, worries about mistakes made and show physical symptoms in the digestive tract, high blood pressure, inflammation of the skin, respiratory inflammation.

Stress on individuals also can have an impact on aspects of a person's body and system. Stress affects the emotional, cognitive, physiological and behavioral. Emotional impacts include anxiety, depression, physical and psychological pressure (Potter & Perry, 2005). Cognitive effects resulted in a decrease in concentration, an increase in distraction and reduced short-term memory capacity. Psychological impact on the result in the release of

*epinephrine* and *norepinefrin*, deactivation of system planner, rapid breathing, increased heart pulse and constricting blood vessels. The impact on behavior such as improving work absenteeism, disrupting sleep patterns and reducing the quality of work (Eysenck, 2009).

In the health care organization, job stress can affect the absenteeism and the movement of which both reduces the quality of nursing services (Shivaprasad, 2013).

Batam is one of the City in Riau Islands Province which has a population that is counted at most 1.14048 million inhabitants in 2014. Batam is a city with a very strategic location, in addition to being in the international shipping lanes, the city has a short distance to Singapore and Malaysia. Batam City community is a heterogeneous society consisting of diverse tribes and factions. The dominant tribe among other Malays, Javanese, Batak, Minangkabau and Chinese (Profile Batam, 2014). It is a challenge for the city of Batam to provide quality health care facilities and is able to compete with the State

of Singapore and Malaysia. Hospitals in Indonesia consists of some types that are A, B, C and D. Hospital type A is the most highest number of human resources that many, infrastructure and the type of service that is more complete than the hospital type C and D. However, there is currently not available hospital type A in Batam City. Hospitals in the highest Batam City hospital is type B.

Type B hospital is the referral center from the hospital type D and C as well as other health services in the Batam City. Patients are referred to the hospital type B is the patients with difficult and complex problems that nurses should have adequate emotional preparation and handling of cases of death and dying in terminal patients, hospital type B has a power specialists and sub specialists are a lot of in hospital, type C and D, in which patients with a diagnosis of complex diseases treated by several specialists and sub-specialists, This makes nurses will face a variety of conditions or problems with the doctors in charge of patients in inpatient room in terms

of treatment patients can be aligned and differ among doctors that responsibility to the patients. Type B hospitals also have nurses more than the hospital type C and D as well as consist of various professions. This makes the complexity of hospital management in type B so that nurses will face conditions and problems with co-workers and supervisors. Nurses also face the families of patients who heterogeneous both tribes and groups in providing care to patients. The above conditions can cause stress on nurses.

Stress in nurses is one health problem in the hospital. The source of the problem. According to Tuckman (1972) (in Purwanto, 2010) can be derived from experience (experiences), the deduction of the theory (deduction from theory), the relevant literature (related theory) and other sources of uneducated (non-educational sources).

Based on observations and personal experiences of researchers, where a nurse who worked at the hospital a lot of stress. Therefore, researchers are interested in knowing the factors associated with the nurse

work stress. To explore the experience, researchers conducted a pilot study in several places to see descriptive overview of the nurse work stress.

Results of a preliminary study in hospitals Budi Glory Batam, where the results of interviews with 20 nurses who work in inpatient hospital room can download the natural stress of the eight main sources of stress which found that 15 nurses expressed considerable workload, 13 states a lot of problems with the patients and their families and 11 people expressed their uncertainty about the treatment of the patient. The conditions above in accordance with the theory of French, et al (2000), nurses who work at home related to the physical environment, the psychological environment and the social environment hospital. Eight major source of stress is the case of death and dying, conflicts with doctors, emotional preparation is inadequate, problems with co-workers, the problem with the supervisor, workload, uncertainty about

treatment and problems with patient and family.

Stress in nurses could lead to high rates of migration of nurses in hospitals. It can be seen from the number of nurses in hospital turnover amounted of nurses in Awal Bros Hospital as 18.91% and Budi Kemuliaan Batam Hospital as 17.87%, which is not according to the standard (5-10%). This is consistent with the theory Shivaprasad (2013), the organization of health services can influence job stress against absenteeism and the movement of which both reduces the quality of nursing services (Shivaprasad, 2013).

If this situation is not to be taken seriously, conflicts with the physician, the preparation by the hospital management, will lowering quality of nurse services and the problem with and ultimately can reduce the quality supervisor, workload, the uncertainty of health care in hospitals. Based on the problems description above, the researchers are interested in doing research titled "factors that related to

the job stress of nurses in the hospital type B in Batam City at 2015”.

## **METODOLOGI**

Type of this research is descriptive analytical with cross sectional approach that aims to describe Pearson Product Moment correlation technique factors related to the 4 nurse job stress in hospital type B in Batam City at 2015. The population comprises the entire nurses which implementing in wards at 3 (three) hospitals type B in Batam City. The sample consisted of 193 nurses were taken by simple random sampling technique.

### **Study Questionnaire**

The tools that used for the collection was a questionnaire. The questionnaire contains of three parts, namely:

Part I: nurse characteristics include age, education, work experience and marital status.

Part 2: provides an overview of job stress of nurses. The questionnaire consists of 30 statements that contain symptoms of job stress with four alternative answers based on Likert scale:

almost never (1), sometimes (2) often (3) and always (4). The lowest value is 30 and the highest is 120. Interpretation of highest value based on cut of point grouped by using the median of 50

1. Severe stress  $\geq 50$
2. Mild stress  $< 50$

Part 3: contains factors that cause job stress of nurses using the Expanded Nursing Stress Scale (ENNS) (French, et al, 2000). The questionnaire consists of 50 statements that are classified into 8 (eight) sections consisting of cases of death and dying, conflicts with doctors, emotional preparation is inadequate, problems with co-workers, the problem with supervisor, workload, uncertainty about treatment and problems with patients and families of patients. The questionnaire comprises into four alternative answers based on Likert scale: almost never (1), sometimes (2) often (3) and always (4). Interpretation of values grouped into cut of point by using the median.

The second questionnaire was conducted by validity and reliability test. Validity test using Pearson

Product Moment correlation technique with a significance level of 0.05. Validity test is done in 30 samples with values of r table is 0.361. Reliability test performed by Cronbach alpha coefficient formula. Both questionnaires are very reliable where questionnaire 1 (r = 0.973 and the questionnaire 2 (r = 0.966).

### Data Analysis

Data analysis consist of univariate analysis in the form of a frequency distribution, bivariate analysis using the chi-square and multivariate analysis using multiple logistic regression.

## RESULT

**Table 1**  
 Frequency Distribution Inpatient Nurse Executive Nurse Characteristics Based on Type B Hospital Batam ( n = 193 )

No	Nurse Charac teristics	Category	f
1	Age	1. ≤30 years	130
		2. >30 years	63
2	Educati on	1. D3	168
		2. S1	25
3	Work experien ce	1. 1-5 years	112
		2. 6-10 years	43
		3. >10 years	38
4	Marital status	1. Married	113
		2. Single	80

The results showed that of the 193 nurses, most nurses aged ≤ 30 years (67.4%), nurse education D3 (87%), work experience nursing are in 1-5 years (58%) and marital status is married nurses (58.5%). (Table 1).

**Table 2**  
 Frequency Distribution of Work Stress Nurse Executive at the Hospital Inpatient Type B Batam ( n = 193 )

Variable	f	%
<b>Work stress</b>		
Severe stress	110	57
Mild stress	83	43

The result of the research showed that of the 193 were nurses, more than half of nurses experiencing severe stress (57%). (Table 2).

**Table 3**  
 Frequency Distribution Based Inpatient Nurse Executive Factors Causes of Job Stress in Hospital Bed Type Batam ( n = 193 )

No	Variable	f	%
1	Cases of death and dying	Yes	114 59,1
		No	79 40,9
2	Conflicts with doctors	There is	111 57,5
		Nothing	82 42,5
3	Emotional preparation is inadequate	Yes	128 66,3
		No	65 33,7

4	Problems with co-workers			8	Problems with patients and families		
	There is	123	63,7		There is	111	57,5
	Nothing	70	36,3		Nothing	82	42,5
5	Problem with supervisor						
	There is	120	62,2				
	Nothing	73	37,8				
6	Workload						
	Heavy	135	69,9				
	Light	58	30,1				
7	Uncertainty about treatment						
	Yes	110	57				
	No	83	43				

Most of the job stress in nurses caused by high workloads (69.9%), emotional preparation which is inadequate (66.3%), problems with co-workers (63.7%) and problems with supervisors (62.2%). (Table 3).

**Table 4**  
**Relationship Factors Contributing to the Work Stress Work Stress Nurse Executive at the Inpatient Hospital Bed Type Batam ( n = 193 )**

No	Factors that cause job stress	Work stress				Total		P value
		Severe		Mild		f	%	
		f	%	f	%			
1	Cases of death and dying							
	Yes	78	68,4	36	31,6	114	100	
	No	32	40,5	47	59,5	79	100	0,000
2	Conflicts with doctors							
	There is	82	73,9	29	26,1	111	100	
	Nothing	28	34,1	54	65,9	82	100	0,000
3	Emotional preparation is inadequate							
	Yes	82	64,1	46	35,9	128	100	
	No	28	43,1	37	56,9	65	100	0,009



4	Problems with co-workers							
	There is	87	70,7	36	29,3	123	100	
	Nothing	23	32,9	47	67,1	70	100	0,000
5	Problem with supervisor							
	There is	85	70,8	35	29,2	120	100	
	Nothing	25	34,2	48	65,8	73	100	0,000
6	Workload							
	Heavy	87	64,4	48	35,6	135	100	
	Light	23	39,7	35	60,3	58	100	0,002
7	Uncertainty about treatment							
	Yes	79	71,8	31	28,2	110	100	
	No	31	37,3	52	62,7	83	100	0,000
8	Problems with patients and families							
	There is	74	66,7	37	33,3	111	100	
	Nothing	36	43,9	46	56,1	82	100	0,003
	Total	110	57	83	43	193	100	

Results of analysis using the chi-square obtained significant relationship between factors that cause job stress (cases of death and dying, conflicts with doctors, emotional preparation is inadequate, problems with co-workers, the

problem with the supervisor, the workload, the uncertainty regarding the treatment, problems with patients and families) with nurses job stress in hospital type B at Batam City. (Table 4).

**Table 5**  
**Analysis Results of Multivariate**  
**Phase Model**

No	Independent Variables	B	Sig.	Exp (B) / (OR)
1	Conflicts with the doctor (F2)	1,004	0,005	2,729
2	Problems with co-worker (F4)	1,009	0,005	2.743
3	Problems with the supervisor (F5)	0,794	0,030	2,212
4	Uncertainty about treatment (F7)	0,809	0,024	2,246
	Constant	-5,398	0,000	0,005

Results of analysis using multiple logistic regression showed that the most dominant factor with work stress nurses in inpatient hospital type B at Batam City 2015 is a problem with a co-worker followed by conflict with doctors , uncertainty about the treatment and the problem with the supervisor (Table 5).

## DISCUSSION

The results showed that more than half of nurses in hospital type B at Batam City experiencing severe stress (57%). This study is in line with research Shivaprasad (2013) on Nurses Job Stress Multi Specialist Hospital in Pune City in 2013,

obtained a majority of caregivers experience severe stress an average of 28 people (56%) of the 50 nurses.

Job stress on nurses in hospital type B at Batam City can be seen from the symptoms of psychological, physiological and behavioral complained of the nurses. Job stress is a reaction in which a person's behavior or the events in working environment and pose special effects are psychological, physiological and behavior of individuals (Gibson, 2000; Spears, 2008).

Where the results of analysis of job stress questionnaire statement item indicates that the symptoms of job stress are the most complained nurses by nurses in hospitals type B at Batam City is a psychological symptom (46.67%), followed by biological symptoms (36.67% ) and behavioral symptoms (16.66%) of the 193 nurses. Psychological symptoms are the most common symptoms in individuals who experience job stress (Robbins, 2008)

Results of analysis were using the chi-square obtained

significant relationship between factors that cause job stress (cases of death and dying, conflicts with doctors, inadequate emotional preparation, problems with co-workers, the problem with the supervisor, the workload, the uncertainty regarding the treatment, problems with patients and families) with work stress nurses in hospital type B at Batam City.

These results are consistent with the research (Milutinovic, et al, 2012; AbuRuz, 2014), where there is a significant relationship between 56 eight sources of job stress by French, et al (2000) with work stress on nurses.

This research is also consistent with research of Andal (2006), where nurses can be stressful when they are faced with a situation or a source of stress eight nurses working in hospitals by French, et al (2000).

Based on observations and assumptions research that nurses in hospitals type B at Batam City experiencing eight sources of job stress nurses in hospitals that can cause job stress.

Results of analysis using multiple logistic regression showed that the most determinant factor with job stress nurses in hospital type B in Batam City at 2015 is a problem with a co-worker followed by conflict with doctors , uncertainty about the treatment and the problem with the supervisor. Multivariate analysis also showed that nurses are no conflicts with doctors , there are problems withco-workers, experiencing uncertainty about treatment and there is a problem with the supervisor may increase the stress of nurses by 15 %. Of the dominant factors are identified , it is known that the main problem that causes stress nurses working in hospital inpatient type B Batam is interpersonal conflict . Interpersonal conflict occurs between two people or more where the value , purpose , and different beliefs ( Nursalam , 2011) . Interpersonal conflict is also a conflict between individuals and groups as well as the conflict between the team ( Hariyati , 2014 ) .

Problems with co-workers and supervisors experienced by nurses in inpatient hospital room

type B Batam is a conflict between individuals and groups . It can be caused by unclear communications , environmental disharmony , as well as the ambiguity of roles and functions of the individual in the group ( Hariyati , 2014 ) . It can be seen from the results of the analysis of questionnaire items , where nurses in inpatient hospital room type B Batam who complain of tension in interacting with peers by 22 % and was criticized by the supervisor of 18.01 % . It can also be seen from the conditions on the ground at the time of researchers conducted a preliminary study , where nurses complained the lack of opportunity to talk openly and share experiences / feelings with colleagues in the room .

Nurses who experience uncertainty about treatment is one of the causes of conflict with the doctor. Conflicts with physicians experienced by nurses in inpatient hospital room type B Batam is a conflict between the teams . In the health care arrangements often conflicts between teams , for example, the conflict between the

nursing team with other health team . Conflict in health care often occur because of disharmony interprofesionalisme collaboration. Communication interprofesionalisme less run frequently because there are health professionals who feel higher in a health service ( Hariyati , 2014 ) . It can be seen from the results of the analysis of questionnaire items , where nurses in inpatient hospital room type B Batam who complain of tension in interacting with other health team at 21.01 % , was criticized by physicians at 24.36 % , conflicts with doctors 19.7 % and incomplete information from the doctor about the patient's medical condition is 12,2 % . It can also be seen from the conditions on the ground at the time of researchers conducted a preliminary study , in which 11 of the 20 nurses said there was uncertainty about the treatment of the patient . Researchers also found that one of the nurses looked upset after doctors accompany visite. The nurse scolded the doctor because they do not master the patient's condition simply because nurses can not answer a patient's laboratory

results were not yet completed . This suggests the existence of a conflict between nurses and physicians .

Interpersonal conflicts experienced by nurses in inpatient hospital room type B Batam can be overcome with effective coping mechanisms of the nurses , solutions and appropriate conflict resolution from the manager . Based on observations and assumptions of researchers that interpersonal conflicts experienced by nurses in hospitals Batam type B can be prevented and overcome by improving communication , cooperation and collaboration interprofesionalisme as well as the role of managers in determining solutions and conflict resolution to be a negotiator and mediator in the conflict resolution

## **CONCLUSION**

Nurses in hospital type B at Batam City were more than half experiencing severe levels of work stress originating from cases of death and dying, conflicts with doctors, inadequate emotional preparation, problems with co-workers, the problem with the supervisor,

workload, uncertainty about treatment and problems with patients and families.

The relationship between cases of death and dying, conflicts with doctors, emotional preparation which is not adequate, problems with co-workers, the problem with the supervisor, the workload, the uncertainty regarding the treatment, problems with the patient and family with work stress nurses in hospital Type B at Batam City.

The most dominant factor with the nurse work stress is a problem with a co-worker followed by conflict with doctors , uncertainty about the treatment and the problem with the supervisor.

The study recommends that need to perform and develop an effective stress management of job nurses, nurse assertive communication and therapeutic communication in patients. The study also recommends that further research is qualitative and performed in special rooms such as Emergency Department and Intensive Care Unit.

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