

Original Research Article

Analysis of the influence of workload and the quality of the nurse with the quality of medical services in the inpatient building B general hospital Royal Prima Medan 2019

Maulida Rahma*, Adrian Khu, Ermi Girsang, Marlinang Silalahi

Department Magister of Public Health, University Prima Indonesia, Medan city, North Sumatra, Indonesia

Received: 05 June 2021

Revised: 14 June 2021

Accepted: 15 June 2021

*Correspondence:

Maulida Rahma,

E-mail: maulidarahma97@yahoo.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Workload and quality of peer care has an important role in improving the quality of medical services in terms of patient satisfaction in hospital services, especially in the inpatient room. RSU. Royal Prima is a private type B hospital with a BOR of 87% based on the high number of patient visits in the inpatient room. The aim of the study was to determine the analysis of the influence of the workload and the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019.

Methods: This type of quantitative research with a correlation study research design. On the workload of nurses with a total sampling technique of 148 nurses. On the quality of nurses using a purposive sampling technique, a sample of 148 people was taken from one month's patient population.

Results: The results of this study on nurse workload from the measurement results based on the chi square test nurses workload has a statistically significant effect on the quality of medical services ($p=0.005$) and the quality of nurses has no influence on the quality of being able ($p=0.950$). Based on logistic regression odds ratio 1.025, which means nurses with light workloads will improve the quality of service 1.0 times compared to nurses with heavy workloads.

Conclusions: It was concluded that the heavy workload can affect the quality of inpatient services marked by the number of patients not proportional to the number of nurses so it is necessary to increase the number of nursing human resources in the inpatient room of B building at RS, Royal Prima Medan in 2019.

Keywords: Effect of workload, Quality of medical services, Royal Prima Medan 2019

INTRODUCTION

A hospital is a health care agency have the human resources that the quality is very instrumental in supporting the success of health services. The main function of the hospital is to carry out health services, management of human resources is the most important part in the management of the hospital administration. Service the complex needs to be managed in a professional manner. One of the most a provider of nursing services in a hospital which is one of the factors most dominant is human resources, among others, the nurse.¹ Nurses are

those who have the ability in the authority of the nursing action based on the knowledge they have acquired through nursing education.

The role and function of the nurse is a very influential for the survival of the patients in maintaining their health condition. In accordance with the role and functions of the nurse, the nurse has the ability and limitations in the running workload. One of the problems that often arise in the hospital is the workload of nurses that is not balanced. As it is known that the workload is executed nurses have a very significant impact on patient safety.

When the need for a nurse is not in accordance with the capacity it works then it is very risky for the quality of services provided. The higher the workload the accuracy and security of work decreases.²

The workload is a target of the work or the results to be achieved in a unit of time. Meanwhile, the workload of nurses is the whole of activities or the activities performed by a nurse during a stint in a unit nursing services.³

The problem of the workload of nurses has an impact for the institution of health services especially for the profession of nurse, such as research Carayon and Gurses in the United States that the workload of nurses that can cause lack of or poor communication between patients and nurses, impact on the poor quality of nursing services provided and frequent errors in nursing actions as well as the treatment. According to Kone stated that the hospital with the nurses will face the risk against things that harm for patients, as the incidence of infection, shock. But the number of nurses that management will reduce the risk of death, resignation and job satisfaction.

The workload that is too high will lead to poor communication between nurses and patients, the failure of communication between the nurse and the doctor, the high drop out/turnover nurse, and a sense of dissatisfaction nurse job. High workload will cause fatigue and work stress, Carayon and Gurses. Fatigue of nurses in the work can lead to the occurrence of deviation of work that will lead to a deterioration of the appearance of work. Job burnout of nurses can also have an impact on the upbringing of the services provided will not be optimal.

Based on data from the WHO year of 2016 obtained that the nurse is experiencing heavy workload of 82, 7%-85, 2% due to a shortage of nurses so that nurses face time constraints in the task, the amount of work that must be done (care and non-care), and the high level of complexity of the work or the care of the patient is done as well as the ratio of nurses is directly proportional to the population by 1:329. WHO itself recommends a ratio of nurses is directly proportional to population is 1:200 to countries such as Malaysia.

Studies over the past five years in Thailand found that the nurses in the hospital had a significant increase in workload caused by the rotation of the priority of work between duty of care and beyond the number of nurses involved in life and death situations experienced by the patient, and the pressure is high due to working on tasks that are outside their competence.

Nurses also face high workload in Indonesia around 85, 6%-89% due to the lack of the number of nurses where the ratio of nurses and the population is 94 versus 100,000 and distribution of nurses in a number of areas that are not evenly distributed, so that a nurse must serve many patients in one time. In addition, nurses also carry out tasks outside the main task causing the perceived workload was

the nurse becomes high.⁴ It is also in line with research Barahama et al about the relationship of workload with job satisfaction of nurses in the inpatient unit of the Hospital. GMIM Pancaran Kasih Manado obtained the majority of nurses have a heavy workload as much as 39 respondents due to the maximum amount of power coupled with the duty of care that is not related to the patient's needs.⁵

The results of previous research can be known that the workload of nurses in the inpatient Hospital Medan classified in the high category by 86, 9%-90, 31%. This result is in line with research Hutapea about the analysis of the workload of nurses in the inpatient unit RSUP H. Adam Malik Medan indicates the workload of nurses is high with respect to many different tasks and responsibilities of the nurse as well as the unsuitability of the number of patients increased with the number of nurses in the inpatient unit.⁶ Research Sembiring about the relationship of the workload of nurses on the performance of nurses in public hospitals. Melati Perbaungan obtained that the workload of the nurse's weight category as many as 29 of the respondents so that the nurse is not optimal to carry out nursing duties in accordance with the main tasks and functions.⁷

The problem of the workload of nurses have a broad impact so that should be a concern for institutional health services especially for the profession of a nurse. The workload of nurses that high can cause a decrease in the performance of nurses and lack of or poor communication between patient and nurse, affect the condition of the patient, so the impact on the poor quality of nursing care.

The quality of nursing care that is better is the hope for all the patients. The quality of the nurse is the application of medical knowledge appropriate for the care of the patient balance the risks inherent in the nursing interventions and expected benefits of nursing interventions. Nursing services quality if nursing services are provided in accordance with the set standards and lead to satisfaction as well as safety of the patient. However, at this time many found problems related to quality of care.

The problem of the quality of care is not only happening in Indonesia. In Kenya the quality of nursing care better by 51% with patient satisfaction by 67, 8%. In Central Java, the quality of nursing care that is good of 98.5% with patient satisfaction of 63, 2%. In Manado, the quality of nursing care better by 75% with the satisfaction of patients by 73%. In West Sumatra, the quality of nursing care better amounted to 55.8% with the satisfaction of patients was 53%.⁸ The results of the research Surbakti about the perception of patients about the quality of nursing services at Bhayangkara Hospital Level II Field shows the quality of nursing services in the category of not good as much as 54 people (61, 4%). Research Yahya on the influence of the quality of nursing care on patient satisfaction in hospital H. Adam Malik Medan shows the quality of nursing care better by 57.8% with the satisfaction of patients was 53%. The low quality of nursing care in line with the low satisfaction of the patient so it is necessary to

improve the quality of nursing services in order to improve patient satisfaction.⁹

Patient satisfaction is influenced by the quality of hospital services. Service quality of hospital is a health service that can satisfy every user of the services in accordance with the level of satisfaction of the average of the population as well as its implementation in accordance with the code of ethics and service standards that have been set. Of nursing services and patient satisfaction is the indicator of the success of the organizers of the medical services in the hospital.

Patient satisfaction will be fulfilled when the medical services provided in accordance with the expectations of the patient then the patient feel satisfied with the medical services at the hospital. The nurse must be able to provide nursing services that are optimal according to the standard of nursing care that has been there. It is because patient satisfaction is an indicator of the success of health care quality.¹⁰

The quality of the service is to show all forms of actualization of the service activities that satisfy people who receive the services specified in the five elements, namely in accordance with the responsiveness (responsiveness), requires the presence of the best (assurance), show evidence of physical (tangible), show empathy (empathy), and those that provide services in accordance with reliability given the consequences for satisfying those who receive services.¹¹

The quality of medical services is one factor determining the image of the health care institution in the eyes of society. Patient satisfaction is one indicator of the quality of medical services we provide and the satisfaction is a capital to get the patient more and to get the patient loyal. Patients who are loyal will re-use health services when they need more. Even has been known that patients are loyal will invite other people to use health care facilities the same.¹²

This research is in line with research Fitria about the relationship of the quality of medical services with patient satisfaction in the Hospital Bantul shows the quality of medical services in both categories amounted to 63.5% and the level of satisfaction of patients by 73%. Research Desimawati suggests patients are not satisfied with the medical services because not in accordance with the expectations of patients. It is reviewed from the aspects of attention, aspects of acceptance, aspects of cooperation and aspects of responsibility for medical services received by the patient. RSU, Royal Prima Medan is a hospital located in the middle of the city of Medan, and is easily accessible by transportation. This hospital is a hospital type B who develop health services in a professional manner to the public.

Based on a preliminary survey conducted by the researchers in July 2019 the obtained data that the RSU,

Royal Prima Medan has a number of nurse practitioner as much as 320 nurse consists of the number of nurses in Building A total of 172 nurses, while nurses in the inpatient building B 148 nurses. The capacity of beds in inpatient building B as much as 356 beds and the number of patient visits in the space of hospitalization in 2018 as many as 17.432 patients. Data on Bed occupancy rate (BOR) 87%, Average length of stay (ALOS) 5 days, Turn over interval (TOI) 3 days, Bed turn over (BTO) 51 times/year. This data suggests that the workload of the nurses in the Hospital. Royal Prima quite high.

According to Permenkes RI No. 56 Tahun 2014 about the classification and licensing of the hospital that the hospital type B have a comparison of nursing personnel and the bed by 1:1, but based on paragraph two of article 33 stated that the qualifications and competence of the nursing personnel as referred to in paragraph one about the comparison of nursing with the number of beds tailored to the needs of hospital services. If seen from the number that are in the hospital this leads to medical services has not run optimally. The researchers conducted interviews to 10 nurses in the inpatient hospital Royal Prima found the interview results the number of patients continues to increase is not comparable with the number of nurses per shift and not only carry out nursing duties but also carry out other activities outside the principal task of taking care of the administrative files of the patient, write the recipe and take care of medicines the patient's home.

In addition, the researchers also conducted interviews to 10 patients found the interview that nurses rarely ask the patient about his illness, the patient's complaints sometimes long to handle and nurses rarely give you the opportunity to ask the patient. Based on the explanation, the researchers are interested to do research on the analysis of the influence of workload and the quality of the nurse with the quality of medical services in the inpatient building B RSU, Royal Prima Medan.

Workload

Workload is the amount of work that must be borne by an office/organizational unit and is the result of time between the volume of work and the norm of the time. Understanding the workload is a set or a number of activities that must be completed by an organizational unit or office holders in a certain period of time. The measurement of workload is defined as a technique to obtain information about the efficiency and effectiveness of an organizational unit, or the holder of the office is carried out systematically by using the technique of job analysis, engineering workload analysis or management techniques other. More is also stated, that the measurement of workload is one of the techniques of management to obtain information office, through the process of research and studies conducted in the analysis. The information office is intended to be used as a tool to enhance personnel both in the field of institutional, management, and human resources.

The quality of nursing

The quality of nursing services is a process of activities performed by the nursing profession in meeting the needs of the patient in maintaining the state in terms of biological, psychological, social, and spiritual patient.¹³

The quality of medical services

Quality of service is the best service that is done by a person, group or institution that gives satisfaction to customers or the public, and in turn satisfaction it will create customer loyalty or society to a person/group/institution providing services such. Health services as the specifications of the public service itself according to Azwar that “Every effort is held individually or jointly within an organization to maintain and improve health, prevent, cure disease and restore the health of individuals, families, groups, or communities”.¹⁴

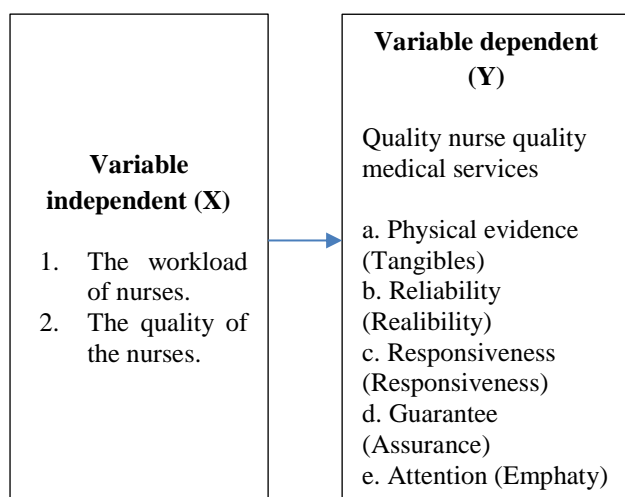


Figure 1: Conceptual framework.

Hypothesis

Based on the research background and the relationship between variables, the research hypothesis: (a) there is the influence of the workload of nurses with the quality of medical services in the inpatient building B General Hospital Royal Prima Medan; (b) there is the influence of the quality of the nurse with the quality of medical services in the inpatient building B General Hospital Royal Prima Medan; (c) the absence of the influence of the workload of nurses with the quality of medical services in the inpatient building B General Hospital Royal Prima Medan; and (d) the absence of the influence of the quality of the nurse with the quality of medical services in the inpatient building B General Hospital Royal Prima Medan.

METHODS

This research was a quantitative research design with research using correlation studies. Correlation studies is a study used to determine or influence the relationship

between the two variables to be studied simultaneously in a given time period.

The aim of the study was to analyze the effect of workload and the quality of the nurse with the quality of medical services in the inpatient building B General Hospital Royal Prima Medan. The measurement of the dependent and independent variable in this research is carried out simultaneously. Where this Research was conducted in the inpatient building B General Hospital Royal Prima Medan by the time of the study in July to September 2019. The population is the set of all individuals within a certain limit. The number of nurses in the inpatient building B RSU Royal Prima Medan as many as 148 people. The population in this study was a portion of the patient population undergoing treatment at the inpatient building B in the General Hospital Royal Prima Medan in 2018 as many as 17.432 people so that the average number of patients per month as much as 1.452 people. The sample on the workload of nurses is the whole or part of which is representative of the population. The sample in this study is the nurses who are undergoing a shift schedule in inpatient building B in the General Hospital Royal Prima Medan. The number of samples on the workload of nurses was the entire population. In this study using total sampling technique. The sample on the quality of nurses and the quality of medical services is the whole or part of which is representative of the population. if less than 100 is taken of the entire population. If the number of large populations can be taken between 10-15% of 1.450 of the population in one month. Then the samples were taken as many as 148 people with purposive sampling technique with univariate, bivariate and multivariate data analysis methods. Data collection method used in this research is primary data and secondary data. Primary data was data collected directly by the researcher and assisted by some of the personnel who have been trained to use the instrument of questionnaire and checklist. Instrument the questionnaire distributed to respondents to obtain data about the quality of nurses and the quality of medical services in the hospital. Instrument the questionnaire was made has been adopted from research Panjaitan about the load of work with the quality of service. Instrument the questionnaire, this test has been performed validation and reliability test by using chrombach alfa so that the instrument has been feasible for use in research. Secondary data was obtained from medical record data RSU, Royal Prima Medan.¹⁵

RESULTS

Univariate analysis

The workload of nurses

Based on Table 1, that as many as 146 people (98.6% of) the nurse said the nurse on duty per shift with the number of patients is not comparable with the level of dependence. Based on Table 2, that the workload of nurses in the inpatient building B RSU. Royal Prima Medan 2019 the results of the measurement of respondents' answers after

the categorized obtained that the workload of Nurses category of light as much as 36 nurses (24, 3%) and the

Weight category of 112 nurses (75, 7%) of a total of 148 nurses.

Table 1: Distribution of respondents nurse based on the description of the indicators of the workload of nurses in the inpatient building B RSU, Royal Prima Medan.

No.	Statement	Answer		
		Yes (%)	No (%)	Total (%)
1.	Nurse on duty per shift with the number of patients is not comparable with the level of dependence.	146 98, 6%	2 1, 4%	148 100%
2.	Nurse orienting the applicable regulations in the room to the family of the client.	130 87, 8%	18 12, 2%	148 100%
3.	The nurse can complete the given task on time	127 85,8%	21 14, 2%	148 100%
4.	Nurse has direct contact with clients on a continuous basis	114 77, 0%	34 23, 0%	148 100%
5.	The nurse performs nursing care and properly	127 85, 8%	21 14, 2%	148 100%
6.	Nurses take diet into the kitchen	0 0%	148 100%	148 100%
7.	Nurses share the diet to the patient	0 0%	148 100%	148 100%
8.	Nurses deliver patient X-ray of the room and took X-rays of the radiology unit	143 96, 6%	5 3, 4%	148 100%
9.	Nurse doing paperwork client	109 73, 6%	39 26, 4%	148 100%
10.	Nurses always carry out the orders of superiors for example ask for approval action to the district	20 13, 5%	128 86, 5%	148 100%

Table 2: Distribution of the proportion of the workload of nurses in the inpatient building B RSU, Royal Prima Medan 2019.

Workload	Frequency (f)	Percentage (%)
Lightweight	36	24, 3
Weight	112	75, 7
Total	148	100, 0

The quality of the nurse

Based on Table 3, that as many as 115 people (to 77.7%) said nurses are skilled in doing tindakan. While the who says Nurses can explain the results of the examination of the patient in detail as many as 8 people (5.4 percent).

Based on Table 4 that the quality of nurses in the inpatient building B RSU, Royal Prima Medan 2019 the results of the measurement of respondents' answers after the categorized found that the quality of nurse category less good as much as 110 people (74, 3%) and both categories of 38 people (25, 7%) of a total of 148 respondents.

Table 3: Distribution of respondents of the patient based on the description of the indicators of the quality of nurses in the inpatient building B RSU, Royal Prima Medan.

No.	Statement	Answer		
		Yes (%)	No (%)	Total (%)
1.	The nurse can explain the results of the examination of the patient in detail	8 5, 4%	140 94, 6%	148 100%
2.	The nurse gave an explanation about the disease of the patient	12 8, 1%	136 91, 9%	148 100%
3.	The nurse gives the opportunity to ask the patient about the disease	36 24, 3%	112 75, 7%	148 100%
4.	Nurses being friendly in patients	68 45, 9%	80 54, 1%	148 100%
5.	Nurse to understand the patient's problem	70 47, 3%	78 52, 7%	148 100%

Continued.

No.	Statement	Answer		
		Yes (%)	No (%)	Total (%)
6.	Nurses are often asked the state of the patient	70 47, 3%	78 52, 7%	148 100%
7.	Nurse easily found when the patient is no problem	39 26, 4%	109 73, 6%	148 100%
8.	The nurse provides time talking with the patient	45 30, 4%	103 69, 6%	148 100%
9.	Nurses often pay attention to patient	49 33, 1%	99 66, 9%	148 100%
10.	The nurse directs the patient in carrying out the treatment and administration	63 42, 6%	85 57, 4%	148 100%
11.	Nurses provide health education to the patient about the disease	42 28, 4%	106 71, 6%	148 100%
12.	Nurse patient enough in the face of the patient	25 16, 9%	123 83, 1%	148 100%
13.	The nurse can perform actions with the right	104 70, 3%	44 29, 7%	148 100%
14.	Nurse gives instructions with accurate	62 41, 9%	86 58, 1%	148 100%
15.	A nurse be calm to face the problem of the patient	36 24, 3%	112 75, 7%	148 100%
16.	Nurse to quickly perform actions on patient	50 33, 8%	98 66, 2%	148 100%
17.	Nurses always give an explanation that is quite complete on the instruction of the treatment/care.	99 66, 9%	49 33, 1%	148 100%
18.	Nurse skilled in the action	115 77, 7%	33 22, 3%	148 100%
19.	Nurses are around the patient	34 23, 0%	114 77, 0%	148 100%
20.	Patients receive adequate information about the action, so patients know what to do when home	60 40, 5%	88 59, 5%	148 100%

Table 4: Distribution of the proportion of the quality of nurses in the inpatient building B RSU, Royal Prima Medan 2019.

The quality of the nurse	Frequency (f)	Presentation (%)
Good	38	25, 7
Less is better	110	74, 3
Total	148	100, 0

Table 5: Distribution of respondents of the patient based on the description of the indicators of quality of medical services in the inpatient building B RSU, Royal Prima Medan.

No.	Statement	Answer		
		Yes (%)	No (%)	Total (%)
1.	Inpatient neat and clean	142 95, 9%	6 4, 1%	148 100%
2.	The appearance of the nurse clean and tidy	143 96, 6%	5 3, 4%	148 100%
3.	Have the medical tools that are quite complete	141 95, 3%	7 4, 7%	148 100%
4.	The bed has been prepared in a state of well-groomed, clean and ready to use	124 83, 8%	24 16, 2%	148 100%
5.	Inpatient patient comfortable	143 96, 6%	5 3, 4%	148 100%
6.	Nurse report all the detail changes of the patient to the doctor during visit	38 25, 7%	110 74, 3%	148 100%

Continued.

No.	Statement	Answer		
		Yes (%)	No (%)	Total (%)
7.	The nurse always give the drugs a patient is suitable procedure of granting of medicine	143 96, 6%	5 3, 4%	148 100%
8.	The nurse immediately contact a doctor about medicine and food	72 48, 6%	76 51, 4%	148 100%
9.	The nurse noticed the sigh of the family of the patient	9 6, 1%	139 93, 9%	148 100%
10.	The nurse tells the meaning and purpose of each time doing the action	86 58, 1%	62 41, 9%	148 100%
11.	The nurse noticed the needs and complaints of patients	38 25, 7%	110 74, 3%	148 100%
12.	The nurses always ask a sigh patient	26 16, 9%	122 82, 4%	148 100%
13.	Nurse gives a chance to ask the patient	26 17, 6%	122 82, 4%	148 100%
14.	The nurse gave an explanation about the disease	13 8, 8%	135 91, 2%	148 100%
15.	Sigh patient addressed by the nurse quickly	29 19, 6%	119 80, 4%	148 100%
16.	Nurse educated and able to serve patients	55 37, 2%	93 62, 8%	148 100%
17.	Maintenance affordable	49 33, 1%	99 66, 9%	148 100%
18.	Keep patient confidentiality during his time in the infirmity bed	142 95, 9%	6 4, 1%	148 100%
19.	Assured will heal a patient	109 73, 6%	39 26, 4%	148 100%
20.	Nurse in performing actions with full confidence without any hesitation.	135 91, 2%	13 8, 8%	148 100%
21.	Nurses always reminds security will save precious patients and their families	11 7, 4%	137 92, 6%	148 100%
22.	Entertain and provide a boost to the patient so that a speedy recovery and pray for them	30 20,3%	118 118%	148 100%
23.	The nurse took time to communicate with patients	12 8, 1%	136 91, 9%	148 100%
24.	The nurse tried to calm the anxiety of the patient against the illness	39 26, 4%	109 73, 6%	148 100%
25.	Nurses being friendly in providing services	49 33, 1%	99 66, 9%	148 100%

Table 6: Distribution of The Proportion Of Service Quality In The Inpatient Building B RSU, Royal Prima Medan 2019.

The quality of medical services	Frequency (f)	Presentation (%)
Good	61	41, 2
Less is better	87	58, 8
Total	148	100, 0

The quality of medical services

Based on Table 5 that as many as 143 people (96, 6%) say the appearance of the nurse clean and tidy, the space hospitalization of the patient was as well as the nurse give the patient medication according to the procedure of administration of the drug.

Based on Table 6 the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019. Based on the results of the measurement of respondents' answers regarding the quality of medical services and then categorized. Found that the quality of medical services with the good category as many as 61 people (41, 2%) and unfavorable category 87 people (58, 8%) of a total of 148 respondents.

Bivariate analysis

The results of the bivariate analysis were conducted to determine the influence between the independent variables on the dependent variable with the quality of medical services in the inpatient building B RSU, Royal Prima Medan. In this research used test chie-square can be seen in Table 7.

Based on Table 7, from the 36 nurses workload of the nurses on the quality of medical service light there is a description better as many as 15 people (41, 7%) and the workload of the nurses on the quality of medical service light there is a description less is better as many as 21 people (58, 3%). And of 112 nurses based on the workload of the nurses on the quality of medical service weight of the obtained information better as many as 46 people (41.1%) and workload of the nurses on the quality of medical service weight of the obtained description is less good as much as 66 people (58, 9%).

On the quality of nurses that of the 110 people the quality of nurses to medical services less good there is a

description of the good as much as 38 people (34, 5%) and the quality of the nurses on the quality of medical services is less well there is a description less is better as many as 72 people (65, 5%) while 38 people based on the quality of nurses on the quality of medical services of the description better as many as 23 people (60, 5%) and the quality of nurse terhdap the quality of the medical services of the description less is better as many as 15 people (39, 5%).

From Table 7, the variable has an influence that is statistically meaningful. The influence of workload based on the results of the chi square test, it was found that the load has the effect of work which is meaningful statistics on the quality of medical services in the inpatient building B RSU. Royal Prima Medan 2019 ($p=0.005$).

Based on the results of the Chi square test, it was found that the quality of the nurse does not have the effect that is statistically significant to the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019 ($p=0, 950$).

Table 7: Results of the bivariate analysis with chi square the influence of workload and the quality of the nurse with the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019.

Variables		The quality of medical services						Sig. (p)
		Good		Less is better		Total		
		F	%	F	%	F	%	
Workload	Lightweight	15	41, 7%	21	58, 3%	36	100, 0%	0, 005
	Weight	46	41, 1%	66	58, 9%	112	100, 0%	
Total		61	41, 2%	87	58, 8%	148	100, 0%	
The quality of medical services	Less is better	38	34, 5%	72	65, 5%	110	100, 0%	0, 950
	Good	23	60, 5%	15	39, 5%	38	100, 0%	
Total		61	41, 2%	87	58, 8%	148	100, 0%	

Table 8: Results of multivariate analysis of independent variables in the study.

Variable independent	Value B	Value SE	Exp (B)	OR (CI 95%)	
				Lower	Upper
The workload of nurses	0, 025	0, 389	1, 025	0, 478	2, 196

Multivariate analysis

Based on the results of the bivariate analysis were found to be variable, which is then analyzed by multivariate analysis of regression logistic to see how much influence among some of the Independent variables on the dependent variable. Based on the results of the analysis in table 4.10 it can be seen that there is a significant influence between the workload of the nurses on the quality of service. It is seen from the CI of 95%. It can be seen the value of Exp (B) is 1, 025, which means the nurse with the work load light will improve the quality of service 1, 0 times compared to nurses that work with heavy loads.

DISCUSSION

The influence of the workload of nurses with the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019

On the distribution of the proportion of the workload of nurses in the inpatient building B RSU, Royal Prima Medan 2019 the results of the measurement of respondents 'answers after the categorized obtained that the workload of nurses category of light as much as 36 nurses (24, 3%) and the weight category of 112 nurses (75, 7%) of a total of 148 nurses.

Based on bivariate analysis that of the 36 nurses workload of the nurses on the quality of medical service light there is a description better as many as 15 people (41, 7%) and the workload of the nurses on the quality of medical service light there is a description less is better as many as 21 people (58, 3%). And of 112 nurses based on the workload of the nurses on the quality of medical service weight of the obtained information better as many as 46 people (41.1%) and workload of the nurses on the quality of medical service weight of the obtained description is less good as much as 66 people (58, 9%).

Based on the results of the chi-square test, it was found the influence of a statistically that the workload of the nurse with the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019 ($p=0.005$).

Based on the results of multivariate analysis with the test regression logistic there is a significant influence between the workload of the nurses on the quality of service. It is seen from CI 95%, it can be seen the value of Exp (B) was 1,025, which means the nurse with the work load light will improve the quality of service 1,0 times compared to nurses that work with heavy loads.

The results of this study are not in line with Elisabeth Manuhu 2015 from the results of the study showed the majority (56,25%) has the burden of low working at the Hospital Prof Dr. R. D. Kondou Was. This influenced the balance of the number of nurses with a number of patients, a physical environment that is comfortable, a good relationship between nurses.

On the results of the study research Rendra Tri Saputra 2016 entitled the relationship of workload nurse with the quality of nursing care in the inpatient Hospital. Sultan Syarif Mohamad Alkadrie the city Was declared the results of research conducted in may the results of the test statistics shows that there is a connection or influence between the workload of nurses with the quality of nursing services with a value of $p=0.009$ ($p<0.05$). Then on the research Rendra is in line with the results conducted by the researchers.

The results of this study are in line with research Lisnawati Panjaitan (who stated from the results of the statistical test shows that there is influence of work load of the nurses on the quality of nursing care in the inpatient Hospital. Dr. F. L. Tobing with p value= 0.008 ($p<0.05$). Based on the workload of nurses in the inpatient hospital. Dr. F. L. Tobing majority were as many as 24 people (44,4%) of the 54 respondents.¹⁵

According to the assumptions of the researcher, the heavy workload in the review of the number of patients in the inpatient and the level of dependence is not comparable with the number of nurses in the inpatient building B RSU, Royal Prima Medan that can affect the quality of the medical services d of hospitalization. This research is in line with Patricia 2015 the results showed that the

workload of nurses as well as the unsuitability of the number of patients increased with the number of nurses in the inpatient unit in the hospital. H. Adam Malik Medan.

Based on the research conducted, the advice can be obtained for the RSU, Royal Prima Medan by considering the addition of a number of HR, especially medical personnel nursing based on the needs of each floor in the inpatient unit to reduce the workload on the nurses so they can maintain the quality of medical services in the inpatient unit. In addition, it can be done consideration of the increase in the rights and obligations based on the performance and longer working as well as can be done by regular evaluation and two-way communication so as to create a good cooperation in the health service institution or hospital.

The influence of the quality of the nurse with the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019

On the distribution of the proportion that the quality of nurses in the inpatient building B RSU. Royal Prima Medan 2019 the results of the measurement of respondents answers after the categorized found that the quality of nurse category less good as much as 110 nurses (74, 3%) and both categories of 38 nurses (25, 7%) of a total of 148 nurses.

On the quality of nurses that of the 110 people the quality of nurses to medical services less good there was a description of the good as much as 38 people (34, 5%) and the quality of the nurses on the quality of medical services is less well there was a description less was better as many as 72 people (65, 5%) while 38 people based on the quality of nurses on the quality of medical services of the description better as many as 23 people (60, 5%) and the quality of nurse terhdap the quality of the medical services of the description less was better as many as 15 people (39, 5%). Based on the results of the Chi square test, it was found that the quality of the nurse does not have the effect that is statistically significant to the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019 ($p=0,950$).

In this study are not in line with the research Azlika 2015 about the quality of nursing care with patient satisfaction in get as many as 51 people (57, 3%) say the quality of service of nurses, and as many as 38 people (42, 7) quality of service both in inpatient RSI Siti Maryam City of Manado.

From this research, in line with the research of Sarah 2015 in the get the results of research on quality nurse quality in RSUP. Adam Malik Medan of quality of service with the quality of medical services greatly affects patient satisfaction. In another study says the influence of the quality of nurse with patient satisfaction in the study Adisti 2015 obtained based on the statistical test shows the value of $p=0.001$.

According to the assumptions of the researcher, on the quality of nurses was less due to less lackadaisical attitude and less of the speed responsive to the complaints of the patient. The quality of the nurses said to be good when in the fulfillment of the needs of medical services to patients goes well.

Advice can be obtained for the hospital is to produce the quality of a good nurse can then be evaluated periodically in the routine of nursing care in accordance with the role and criteria of nurses, workload, experience of nurse itself and able to provide a caring attitude, ready response, capable of working and effective communication in the patient.

CONCLUSION

Based on the research objectives and the research results can be concluded as follows: the workload of nurses in the inpatient building B RSU, Royal Prima Medan 2019 the workload of nurses the Weight category of 112 nurses (75,7%) of 148 nurses. At 36 nurses workload of the nurses on the quality of medical service light there is a description better as many as 15 people (41,7%) and the workload of the nurses on the quality of medical service light there is a description less is better as many as 21 people (58,3%). And of 112 nurses based on the workload of the nurses on the quality of medical service weight of the obtained information better as many as 46 people (41.1%) and workload of the nurses on the quality of medical service weight of the obtained description is less good as much as 66 people (58,9%). On the quality of nurses from the measurement results that the quality of nurse category less good as much as 110 patients (74,3%) of the 148 respondents. Based on the regression logistic it is seen from the CI of 95%. It can be seen the value of Exp (B) is 1,025, which means the nurse with the work load light will improve the quality of Service 1,0 times compared to nurses that work with heavy loads; the influence of the workload of nurses with the quality of medical services in the inpatient building B RSU. Royal Prima Medan 2019 is statistically meaningful ($p=0.005$); there is no influence of the nurse with the quality of medical services statistically ($p=0,950$).

Recommendations

Suggestions researchers from the research that has been done is as follows: (1) For hospital- (a) make planning periodic evaluation of routinely every 3 months or 6 months of nursing care and service medical; (b) the preparation of the planning standards the role of the nurse and criteria about the medical services in the inpatient unit; (c) consider the making of the contract based on the experiences they have had, so nurses know what actions should be done to ensure patients in inpatient as well as raising salaries periodically according to the performance and long time working; (d) hold two-way communication in order to achieve effective communication; (e) consider the addition of a number of human resources (HR) because

of the high bed occupancy rate (BOR) so that can improve the quality of medical services in the inpatient unit; (f) adjust the rights and obligations of the nursing personnel in the medical services, particularly nursing personnel; (g) providing services homecar to improve the welfare of the medical personnel; (2) For educational institutions- in this study, can be comparison material about the workload and the quality of the nurse with the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019 with further research; (3) For further research- expected to be additional materials and the study of further research about what are the factors that affect the workload and quality of nurses on the quality of medical services in the inpatient building B RSU, Royal Prima Medan 2019.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Regulation of the Minister of Health of the Republic of Indonesia. Classification and Licensing of Hospital Number 56 of 2014, 2014. Available at: <http://bprs.kemkes.go.id/v1/uploads/pdf/files/peraturan/42%20PMK%20No.%2056%20ttg%20Klasifikasi%20dan%20Perizinan%20RumaSakit>. Accessed on 25 April 2021.
2. Freddy JMR. Nurse Workload, Jakarta. Available at: <http://lib.ui.ac.id/file?file=digital/2016-11/124814-Fredna%20J.M%20Robot>. Accessed on 25 April 2021.
3. Marquis, Huston. Nursing Leadership and Management. 4th ed. Jakarta: EGC; 2015.
4. Ministry of Health. Indonesian Ministry of Health's Data and Information Center, 2017. Available at: <https://pusdatin.kemkes.go.id/folder/view/01/structure-publikasi-pusdatin-info-datin.html>. Accessed on 25 April 2021.
5. Barahama KF, KatuK M, Orooh WM. Relationship between workload and job satisfaction. J Keparwatan. 2019;7(1)1-8.
6. Hutapea J. Analysis of the workload of nurses in the inpatient ward of H. Adam Malik General Hospital Medan, 2019. Available at: <http://www.repositoryusu.ac.id>. Accessed on 25 April 2021.
7. Sembiring. The Relationship between Nurse Workload and Nurse Performance in RSU. Perbaungan Jasmine, 2016. Available at: <http://www.repositoryusu.ac.id>. Accessed on 25 April 2021.
8. Saputra, Ernawati, Rachmadi. The Relationship Of Nurse's Workload With Quality Of Nursing Service In Inpatient Of Sultan Syarif Mohamad Alkadrie General Hospital Pontianak, 2016. Available at: <http://www.universitastanjungpura.ac.id>. Accessed on 25 April 2021.

9. Yahya SZ. The Influence of Nursing Service Quality on Patient Satisfaction in RSUP, H. Adam Malik Medan. DocPlayer. 2015.
10. Nursalam. Research Methods and Data Analysis Techniques. Jakarta. Salemba Medika. 2014.
11. Nursalam. Nursing management: application in professional nursing practice. 3rd ed. Jakarta: Salemba Medika; 2014.
12. Simamora R. Nursing Management Textbook. Jakarta: EGC; 2014.
13. Suarli S, Baktiar Y. Nursing Management. Tasikmalaya, PT: Primary Script Excitement; 2015.
14. Anwar A. Introduction to Health Administration. Jakarta: Binarupa Aksara; 2010.
15. Panjaitan, Lisnawati. The Effect of Nurse Workload on the Quality of Nursing Services in the Inpatient Room of RSU. Dr. F.L Tobing Sibolga. USU Faculty of Public Health. 2013.

Cite this article as: Rahma M, Khu A, Girsang E, Silalahi M. Analysis of the influence of workload and the quality of the nurse with the quality of medical services in the inpatient building B general hospital Royal Prima Medan 2019. *Int J Res Med Sci* 2021;9:1939-49.