The Influence of Knowledge and Workload on The Behavior of Nurse Compliance in Nursing Care Documentation

(Analytic Observational Study at Inpatient of Dr. Doris Sylvanus Hospital, Palangka Raya, Indonesia)

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Abstract- The nursing documentation is a record that contains all the information which is needed to determine nursing diagnoses, develop nursing plans, implement and evaluate nursing actions. Lack of compliance in documenting nursing care could be proven by several studies. Furhtermore it needs in-depth assessment regarding factors that could influence the compliance behavior of nurse in documenting. The goals of this study was to analyze the influence of knowledge and workload factors on the behaviour of nurse working compliance in nursing care documentation at in-patient of dr. Doris Sylvanus Hospital, Palangka Raya. The method of this research was cross sectional study. The sample in this study were 74 respondents which were choosen by simple random sampling. Independent variables in this study were the knowledge and workload of nurses, while the dependent variable was nurse compliance behavior in nursing care documentations. Bivariate analysis test that utilizied were chi square and multivariate analysis using multiple logistic regression. The result of this research shows that there was no influence of knowledge and there was significant influence of workload on the behavior of nurse working compliance in the nursing documentation at inpatient of dr. Doris Sylvanus Hospital Palangkaraya.

Index Terms— knowledge, workload, compliance, nurse behavior, nursing care documentation

I. INTRODUCTION

Nursing documentation is a record that contains all the information required to determine nursing diagnoses, develop nursing plans, implement and evaluate nursing actions, systematically, validly, morally and legally accountable from the law. In addition, nursing documentation is an evidence of patient record and report of the nurses in conducting nursing care which is helpful for the patients, nurses and health groups interests in providing services with an accurate and complete communication basis in written manner under the responsibilities of the nurse (Hidayat, 2004).

Nurses as spearheads in hospital services are posessed duties to provide nursing care such as reviewing patient needs, planning nursing actions, implementing action plans, evaluating nursing care outcomes, documenting nursing care and participating in counseling. Nursing documentation in hospitalization unit is not yet found the predetermined standards. This is consistent with the results of Martini's research (2007) in Salatiga Semarang that the documentation of standardized nursing care is available only 59% away from the standard of Ministry of Health of 75%. According to research conducted in Mardi Rahayu Hospital, Kudus, it is concluded that nurses' compliance in nursing documentation is influenced by factors of energy, supervision, training, motivation, means and punishment (Noorhidayah, 2015).

Compliance of nurses in the application of nursing service standards and standard operating procedures as one of nursing services measurement of success and is an important target in human resource management. The principle of standard operating procedures application of nursing service is in fact part of the individuals' performance and behavior in terms of working according to their duties within the organization, and usually related to compliance. Lack of compliance in nursing documentation can be proven by several studies, including research that hasbeen done (Diyanto, 2007) that indicates the management of filling the nursing documentation at Tugurejo Hospital in Semarang depicts three categories that less of 48%, moderate of 35% and good of 17%.

The research by Budianto shows that the implementation of nursing documentation in Faisal Islamic Hospital Makassar was in good category of 70%, moderate of 20% and less of 10% (Budianto, 2012). The research by Wirawan shows that the implementation of nursing documentation in Ambarawa hospital was 69.1% in either category (Wirawan, 2013). The research by Fatmawati at Syekh Yusuf Hospital Gowa shows that the completeness of nursing care documentation wa good of 51%-75% (Fatmawati, 2014). The study illustrates that compliance in nursing documentation is still a phenomenon in nursing care services.

According to Aminudin's research on nurse compliance in implementing operational standards of intravenous cannulation procedure at Dr. Kariadi Hospital, Semarang that there was a relationship between knowledge, attitude and motivation toward nurse compliance (Aminudin, 2012). Meanwhile, private research in the inpatient wards of Kelet Hospital of Central Java Province in Jepara stated that there was a correlation between knowledge, motivation and nurse perception about headroom supervision with the implementation of nursing documentation (Personal A, 2009).

Workload is the number of targeted works or targeted outcomes that must be achieved within a certain time frame (Ministry of State Apparatus, 2004). In fulfilling its role and function in the hospital, nurses are required to work effectively, efficiently and fulfill comprehensive patient needs that include bio-psycho-social-spiritual (Gafar, 2002). The nurse's workload not only embrace the patient care, but also indirect activities that could not be less important, such as completing and implementing detailed nursing and medical records documentation (Hidayat, 2001).

The nurse often experiences workloads that encountered in the weight category, especially for the ICU / ICCU nurses, the nurses are required to handle physical loads such as lifting patients, bathing patients and keeping track of patient progress in accordance with standard operating procedures (Douglas 1984).

The dr. Doris Sylvanus Hospital Palangka Raya is a B type hospital which is the one of the Government Hospital of Central Kalimantan Province. Although the nursing documentation is necessary for the benefits to patients and nurses but in fact the completeness of nursing document is still lacking attention, therefore, there are plenty of nursing documentation that was not yet complete. The report on nursing documentation study and preliminary study in in-patient wards of dr Doris Hospital in 2013 was 37% and in 2015 was 39.9%, with details of 40.5% of assessment, 25.6% of nursing diagnosis, 50.6% of action 51.3%, and 31.5% of the evaluation (dr. Doris Sylvanius Hospital Profile, 2015). Therefore, a study is needed to examine the factors of knowledge and workload that affect the behavior of nurses' work compliance in nursing documentation at inpatient wards of dr. Doris Sylvanus Hospital, Palangka Raya, Indonesia.

II. RESEARCH METHOD

The design of this study was an observational analytic using a quantitative cross-sectional study approach to analyze factors that affecting nurses' compliance behavior (where the dependent variable is the nurse group's compliance behavior in nursing documentation at inpatient wards of dr. Doris Sylvanus Hospital, Palangka Raya) while the independent variable is the knowledge and workload would be taken simultaneously at the same time. The sampling technique in this study is using a simple random sampling of Lemeshow formula, as a result, 67 respondents added 10% so it is obtained the minimum sample amount, 74 respondents. The research instrument used in this research is nurse compliance questionnaire in the nursing documentation, knowledge questionnaire and workload questionnaire with modification. Data were analyzed univariately with central tendency or proportion, bivariate with Chi Square test and multivariate with multiple logistic regression for the most dominant factor analysis.

III. RESULT

A. Knowledge

Based on the results of this study, the average age of respondents in this study is 31.77 years old with the youngest respondent aged 27 years old and the oldest respondent aged 40 years old. The average working period of respondents in this study is 8.04 years with the lowest working period is 5 years and the longest working period of the respondent is 19 years. Based on gender, a total of 62 people (83,8%) are women. This is greater than respondents with male gender of 12 people (16.2%). Based on the level of education, most of the research respondents have education level Diploma III, that is as many as 55 people (74.3%). The second highest education on the respondents of this study is S1 (Bachelor), which is as many as 11 people (14.8%). Respondents with education Diploma IV only 1 person (1.4%).

Based on the results, it was known that from 74 people, respondents who have good knowledge about nursing documentation were 48 respondents (65%) and respondents who have bad knowledge in nursing documentation as much as 26 respondents (35%). Knowledge of nursing documentation per question item is presented in figure 1.

Figure 1. The Percentage of Correct Answers Per Content Item of Knowledge
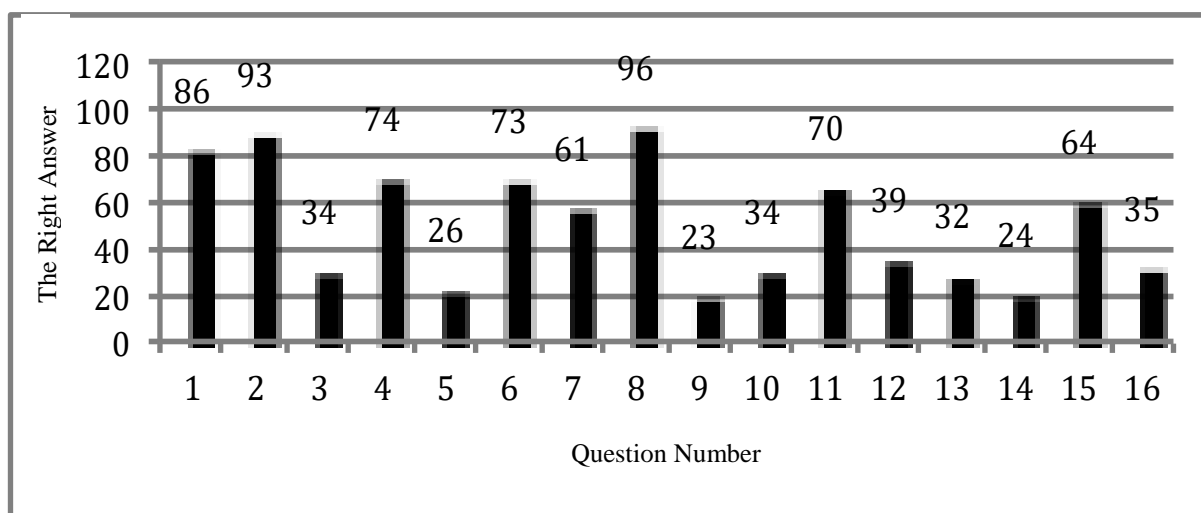
B. Workload

While for the workload, it is known that from 74 people, a total of 38 respondents (51.4%) have a light workload and 36 respondents (48.6%) have a heavy workload. The workload of nurses on the nursing documentation, if described per item of the question shows in the Figure 2.

Figure 2. The Percentage of workload Per Content Item of workload
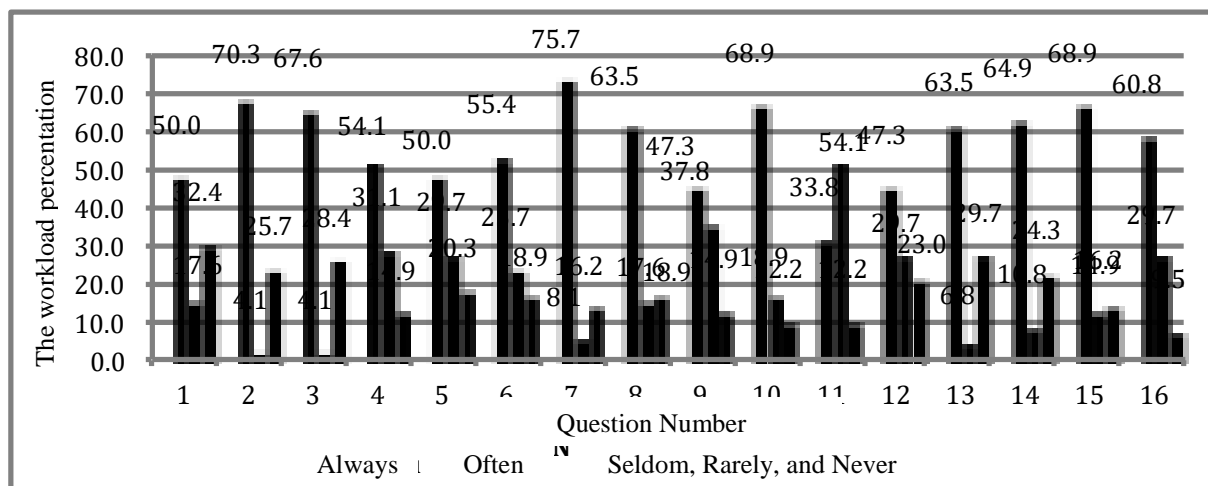
C. Compliance about nursing care documentation

The respondents who obediently in documenting nursing care as much as 25 respondents (33.8%) and respondents who are not obedient in documenting nursing care 49 respondents (66.2%). Compliance about documenting nursing care, described per question item in figure 3.

Figure 3. The Percentage of compliance Per Content Item of compliance
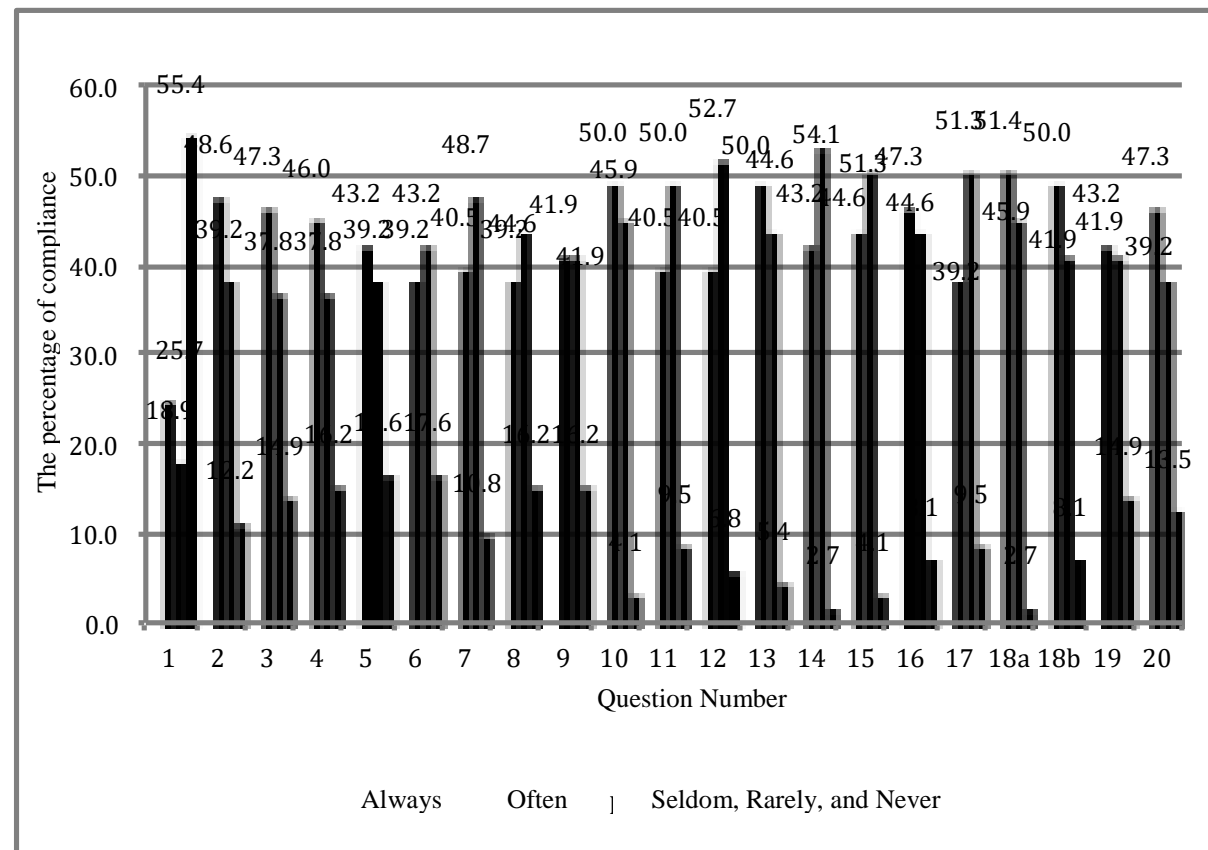
D. The Relationship of knowledge, workload, and compliance

Table 1. The Relation of Knowledge with The Nurse Compliance

Knowledge	Compliance				Total		P Value
	disobedient		obedient				
	n	%	n	%	n	%	
Poor	20	76.9	6	23.1	26	100	0.201
Good	29	60.4	19	39.6	48	100	

Based on Table 1, the result of the statistical test using chi-square test shows P value 0.201 with a degree of significance (α) 5%, therefore, the P value is greater than alpha value (> 0.05) or Ho accepted, meaning there was no relation between knowledge with nurse compliance in nursing documentation.

Table 2. The Relation of Workload with The Nurse Compliance

Workload	Compliance				Total		P Value
	disobedient		obedient				
	n	%	n	%	n	%	
Light	17	44.7	21	55.3	38	100	0.201
Heavy	32	88.9	4	11.1	36	100	

While based on table 2, the result of the statistical test using chi-square test shows P value 0.0000 with a degree of significance α 5%, so P value smaller than the alpha value (<0.05) or Ho is rejected, meaning there was a relationship between work load with nursing compliance in nursing documentation.

Based on the analysis of multiple logistic regression tests, it is found that the value of significance of knowledge variable is 0.130. This shows that for multivariate test the Knowledge variable is insignificant and not fit for modeling. While the workload variable has a significance value of 0.0000 with a value of 0.095.

Based on the result of the obtained analysis, multivariate analysis depicted that only the workload variable is related to documenting nursing care (p-value 0,0000), while the knowledge variable is unrelated (p-value 0,130,> 0,25). This result shows if the nurse wants to improve the performance of nurses in documenting nursing care, then the main thing to note is the workload in accordance with the field of duty instead of seeing it through knowledge increment.

IV. DISCUSSION

Knowledge-based behavior will be more lasting than behavior that was not based on a knowledge. But the knowledge increment did not always reflect behavioral changes. Some factors that influence a person's behavior were knowledge and attitude, but the formation of behavior itself is not solely based on knowledge but it was still influenced by a lot of very complex factors (Notoatdmodjo, 2003).

The highest percentage of correct answers was in question 8 regarding the definition of nursing documentation, which reached 96%. Questions about the benefits of the listing system as authentic records that can be made as evidence in legal matters occupy the second position of respondents' most correct answers with the proportion as much as 93%. Based on the results of a brief interview with the primary nurse, this high percentage is the result of knowledge recall that gained during their nursing school. The history of this nursing documentation process has started from Florence Nightingale, where she recorded all the actions performed on a file. This basic theory is obtained almost on all levels of nursing education.

In contrast to the findings of respondents' answers to question 13 that shows the less knowledge of the respondents regarding the utilization of nursing standards in solving patients problems, where 100% of respondents are found to be wrong in answering. Similarly, in question 14 about the main purpose of documentation, only 1.4% of respondents are correct in answering this question. Although each level of nursing education receives a basic theory of nursing documentation, the depth of understanding of learners will vary on every institution of nursing school graduates due to the absence of a solid standard of education for nursing schools.

Currently, there are still many nursing schools that produce inconsistent students' competencies, since the unclear standard of education including the diverse curriculum used as a reference for the implementation of education is still persistent. There are so many parties that take a part of nurse education curriculum, hence, making the quality of graduates diverse from one another. The many levels of nurse basic education such as nurse schooling, Diploma III, Diploma IV, and S1 (Bachelor), resulting from no distinction between duties and authority performed in providing nursing services. It can be said that there is no differentiation of duties at each level of nursing education (Lestari, 2014). This statement has a meaning, although there is a difference in nursing education level on respondents, the educational standard factors that have no clarity should be considered.

The Qualified nurses (professional nurses) can be realized if the nursing profession was built on three foundations, one of them is Patient Safety. Communities that served by nurses will gain a high level of security due to the quality of practice (Darmawan, 2013). The slightest mistake a nurse demonstrate will affect the overall nursing image and will be asked for responsibility by the consumer (Nursalam, 2008). Therefore, nurses should pay particular attention to the safety of each patient according to the condition, type of illness, number, fluctuations, and age despite other factors that increasingly burden the fulfillment of task demands to achieve certain goals such as lack of workforce in the hospital ward.

In-patient wards of dr. Doris Sylvanus Hospital Palangkaraya distributes nurses per shift as many as 3 nurses with a total of 20 beds. Current total nurses are 14 people since there are nurses who are continuing their educations. Thus, 1 nurse is sometimes responsible for 6-7 patients. The high rate of illness results in an increase in the number of hospitalized patients. The hospital policy that remains accepting patient even though the bed is filled, causing extra beds to occur, hence, it is increasingly burdensome nurse duty to provide nursing care with full attention to patient safety as well as legal aspects and law of nursing.

A heavy workload in nursing care, according to the respondent, the heaviest must be direct contact with patients in the room continuously during working hours. This is indicated by the results of the study, where as many as 98.7% of respondents admitted that direct contact indeed is a heavy

workload. As well as the workload in terms of therapeutic communication.

A total of 94.5% of respondents admitted heavy workload, especially on what patients do. The number and composition of nursing personnel and unsuitable job description of the nurses is a very influential factor in the results of these findings (Widyaningtyas, 2011). Inadequate working time, such as having to carry out strict observations patient during working hours, various types of work to be done for the health and safety of the patient, and continuous client nurse contact for 24 hours. So it takes a lot of time to complete a job (Supratman, 2009).

Nursing compliance in terms of planning, the percentage of obedient respondents have shown that standard format is being used by the majority of respondents in terms of recording all the nursing actions, which a total of 50% when being accumulated between the percentage of respondents who answered Always and Often. According to nurses, it is important to minimize errors in nursing actions in order to achieve the expected goals. The background of this format uniformity comes simply because of the effectiveness reasons in communication, also since nursing documentation is one of the communication media between nurses. Thus, with this standard format, it will certainly help the understanding of the patient condition for each nurse who is on duty.

Statistically, there is no influence of knowledge on documenting compliance. The level of education can affect the performance of the nurse. Education helps to define what a nurse can do and what the nurse's actions can expect. Nurse with Ners level (Nurse profession) is expected to have more knowledge than nursing staff with a D3 level of education. In the study by Allo (2014), the level of education has a statistically significant relationship to the principles and objectives of the nursing documentation. However, various factors can lead to non-compliance of nurses in the documentation despite having a good knowledge of documentation. Workload, work environment, teamwork, motivation, and ability can have a major effect on the nursing process.

Some nurses may consider documentation to be their enemy, as documentation steals nurse time in direct nursing care. The time and effort provided by the nurse for documentation are expected to ensure that patient records are more relevant, constantly updated, correct, and complete. However, awareness of what should be documented in order to obtain actual data from the patient's health status is essential to generate a strong motivation in documenting (Allo, 2014). In addition, this phenomenon occurs due to the limited workforce, while nurses have to do their work in other programs, thus causing the workload of nurses to be increased. Therefore, documentation can not be done completely though as many as 29 out of 48 people have good knowledge of nursing documentation.

This statement is supported by the theory of Martha E. Rogers (1962) on "Unitary Human Beings" which excludes knowledge in the stages of change. Rogers explains the five stages of change, namely: awareness, desire, evaluation, trial, and acceptance or also known as AIETA (Awareness, Interest, Evaluation, Trial and Adoption). Rogers believes that the process of acceptance of change is more complex. Especially in every individual that involved in the change process, they can accept or reject it. Although the change is acceptable, it may someday be rejected once the change is perceived as inhibiting its existence. Rogers says that effective change depends on the individual involved, interest, and how they always strive to develop and move forward as well as have a commitment to work and execute.

The workload can be either quantitative or qualitative. Based on the result of this study, there is an influence of workload toward compliance in documenting. Unplanned manpower management can lead to subjective complaints, heavier, ineffective and inefficient workloads that allow job dissatisfaction to emerge that ultimately results in lower performance. Therefore the quality of hospital services is determined by the performance of nurses in providing nursing care (Solang, 2014).

In this study, light workloads are more docile in documentation if compared to heavy workloads. According to Sitohang (2012), the low performance of nursing services related to the workload. Workloads that are not in accordance with the duties and functions of nurses based on nursing care (assessment, diagnosis, planning, implementation, and evaluation), lead to the ineffective implementation of work which further impact on the quality of nursing care. Based on the analysis, it turns out that the heavy workload occurs due to direct and indirect work that needs to be done by the nurse in providing nursing care. Nurse's direct work in dr. Doris Sylvanus Palangka Raya, for example, accepting new patients, interviewing patients, measuring vital signs, changing wound dressing, providing medication, helping with nutritional needs, providing health counseling, aiding visit doctors, and referring patients. Meanwhile, the category of activities that make the heavy workload on nurses is mostly nursing work.

Based on the results of a short interview from the nurses that the nurse with a heavy workload assumes that it is very burdensome and does not have enough time to do the documentation. This happens because of a lack of awareness from heavy workloads nurses to complete the nursing documentation columns, some nurses also assume that documentation does not adequately reflect nursing actions. In addition, the nurse said the documentation of nursing care is not checked by the supervisor on a regular basis so that the nurse feels no need to do a detailed documentation.

One of the factors that encourage nurses to abide in the nursing documentation is intense supervision that has been done in recent times since hospital accreditation is happening. This supervision aims to correct the extent of nurse's knowledge and methods of systematic documentation filling. On the other hand, teamwork is one of other reasons that cause this phenomenon to occur. Workload becomes light when it is done together with other nurses, but the lack of communication between nurses at such a high workload fluctuations time only results in negligence in completing patient records.

The workload is a description of the volume of work. At the hospital, the nurse's workload covers many aspects, some aspects related to the workload are the number of patients to be treated, the work capacity in accordance with the education obtained, the shift used to perform tasks in accordance with working hours that take place every day, as well as completeness of facilities that can help nurses work well (Soekamto, 2005). The workload is light but the performance is less, according to the researcher, it is because the duty of a nurse is very heavy. From one side, a nurse must carry out the duties concerning the survival of the patient he is taking care

of. On the other side, the psychological state of the nurse must also be kept awake. Such conditions can create an additional workload and sense of distress on the nurses, resulting in reduced their performance and indirectly affecting the organizations in which they work. However, the demand to be able to provide nursing services needs to be done properly (Solang, 2014).

In addition, based on observations result, at the time of the study, the researcher found things that are suspected to affect this study. The nurse is delaying the nursing documentation in the patient's status most of the time, the nursing documentation of the patient is done when the patient already planned to go back home instead. With a heavy workload, one shift just feels inadequate to perform the nursing action, moreover to complete the documentation. Lack of teamwork with light workloads nurses leads to incomplete documentation. There are nurses who do not fill their own nursing documentation, other nurses who are assigned as administrative have to do the task instead. This leads to poor documentation quality which can result in miscommunication. The nurse on the ward also uses a liaison book. There are even nurses who do documenting the nursing care of patients who are beyond their responsibilities. The number of patients who are not comparable with the number of nurses at the ward that only 14 people (6 people are continuing their study) often results in extra beds. The high workloads mentioned above often result in abandoned nursing actions due to the lack of concrete and clear documentation on the wards.

Documentation is an indicator of the nursing service quality, hence, if the nursing documentation has been implemented properly, the quality of nursing service is also good which leads to the satisfaction of nursing service or vice versa (Nursalam, 2008). Nursing documentation can create a place for new knowledge development in nursing and improved nursing performance as well as possibilities to provide data and information needed for nurse researchers to evaluate the quality of interventions and participate in the formulation of health care policies. Nursing knowledge positively affects patient outcomes and affects the actions of other health care providers. Therefore, nurses must be confident in documenting their professional knowledge and clinical insights. The solution to improving the contents of the nurse's records will depend on a clearer understanding of the issues associated with documenting nursing care itself (Allo, 2014).

V. CONCLUSION AND RECOMMENDATION

Knowledge has no effect on nursing documentation compliance, it caused by several things to be reviewed.

However, the workload is very influential on nursing documentation compliance. According to the results of this study, some things need to be considered in order to improve compliance in documenting nursing care. It is prominent to re-evaluate the nurse's workload at the inpatient ward of dr. Doris Sylvanus Hospital Palangkaraya, because a total of 50% nurses are found to carry out a heavy workload, therefore, the optimal nursing workload is expected so that the nursing care services could be excellently provided. On the other hand, the establishment of a team of nurse compliance monitoring in filling the standardized nursing documents by the hospital needs to be considered. Additional nurses to adjust to the number of patients received could not be underestimated as well. Finally, the headroom can take action to improve the compliance of nurses in carrying out their duties properly in filling the standardized nursing documentation.

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