The Effect of Service Standards and Clinical Pathways Application on Commitments and Performance of Doctor in Charge in Dr. Loekmonohadi General Hospital, Kudus

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*Abstract— **Background:** Accumulating evidence showed that the bad occupancy rate at the Dr. Loekmonohadi General Hospital, Kudus dropped to 75.06% in 2018. Interestingly, the value of the bad occupancy rate is much lower than in the previous two years. The elderly patient visitation data in 2018 also decreased (10,503 patients) compared to 2017. Importantly, the doctor in charge had the task to implement service standards, clinical pathways, commitments, and improving their performance optimally. This study aims to analyze the effect of the application of minimum service standards and clinical pathways to the commitment and performance of the doctor in charge of inpatient services at the Dr. Loekmonohadi General Hospital, Kudus. **Methods:** This research is explanatory research followed by survey methods. The population in this study were 198 nurses. Approximately 126 samples were taken based on existing inpatient rooms. Accordingly, the variables studied included the application of service standards, clinical pathways, commitment, and performance. Variable measurements are carried out through indicators developed based on the National Standards for Hospital Accreditation. The instrument of data collection is a questionnaire developed based on each exogenous and endogenous variable. Data collection is done by giving questionnaires to respondents. Data analysis was performed using the Structural Equation Modeling approach with Lisrel 8.80 software. **Results:** Based on our observation, the application of service standards, clinical pathways, commitments, and performance criteria of the doctor in charge at Dr. Loekmonohadi General Hospital, Kudus is good. However, there are still disadvantages in several aspects such as non-compliance with visiting hours (15.9%), not adhering to the diagnosis (11.1%), not adhering to providing education to patients during treatment and returning time (21-23%), length of stay still exist (11.1%),* *lack of commitment (11-19%), and poor performance (7-27%). The results of the analysis with Structural Equation Modeling show that clinical pathways significantly influence commitment with a coefficient value of 0.93; clinical pathways have a significant effect on performance with a coefficient of 0.45; commitment has a significant effect on performance with a coefficient of 0.49; and clinical pathways have an indirect and significant effect on performance through commitment with a coefficient of 0.49. **Conclusion:** This study concludes that clinical pathways influence the commitment and performance of the doctor in charge at the Dr. Loekmonohadi General Hospital, Kudus.*

*Keywords— **Clinical pathways, commitment, performance, hospital.***

I. INTRODUCTION

Dr. Loekmonohadi General Hospital, Kudus is a type B government hospital (non-education cluster) located in Kudus Regency that provides services to the community. This hospital has the position, main tasks, and organization functions that regulated by Kudus regional regulation No. 3/2016 concerning the establishment and composition of the regional apparatus of Kudus Regency. Dr. Loekmonohadi General Hospital, Kudus is located in an accessible area; besides Dr. Loekmonohadi General Hospital, Kudus has 435 beds (Kudus Regional Regulation No.3/2016).

The standard services provided in the Dr. Loekmonohadi General Hospital is regulated by the director regulation No. 440/901/23.02.01/2015. The regulation is concerning regional public hospital services policy which includes: standard of emergency services, standard of outpatient services, standard of inpatient services, standard of pharmacy service, standard of maternity room service, standards for central surgical

installation services, standard of intensive care services, standard of haemodialysis installation services, standard of medical rehabilitation services, standard of radiology installation services, standard of laboratory installation service, standard of blood bank service, standard of cashier service, and public relations and standards of spiritual installation service (Director Regulation No. 440/2015).

On the other hand, the data from the last three years showed a decrease in the bad occupancy rate that reaches to 75.06% (2018). The data about the visitation of elderly patients in 2018 also decreased (10,503 patients) compared to 2017. According to the national standard for accreditation of hospitals 1st edition, specialists of inpatient services served as the doctor in charge. Doctor in charge must set planning services to patients, provide clear and correct explanations about diseases, planning and treatment results, and routine treatments based on standard operating procedures (KARS, 2017).

To implement the roles and responsibilities of the doctor in charge, there is a policy implemented at the Dr. Loekmonohadi General Hospital, Kudus that concern in the minimum service standards and clinical pathways application. Based on decree of the Minister of Health No. 129/Menkes/SK/II/2008 stated that the doctor in charge is a specialist doctor with 100% standard, and the standard of medical visit hour is 100% (from 08.00 to 04.00 Western Indonesian Time) every working day (Minister of Health Regulation No. 127/ 2008).

Currently, the achievement of standard services for minimum visits of specialist doctors cannot yet be achieved optimally. The specialist doctor has to overcome several constraints, such as a large number of patient services and emergency condition during working hours. The doctor in charge of the patient in carrying out his duties implements complete medical care. Complete medical care means conducting medical assessments up to the plan implementation and follow-up according to the patient's needs. In carrying out the role and function, the doctor in charge must record the patient's medical condition followed with the name and signature of the doctor. The medical record document consists of patient assessment sheets, integrated development sheets, patient medical resumes, educational forms, pre-anesthetic assessment forms, post-surgical instructions, and consultation sheets. The initial assessment of hospitalization is done within 24 hours (Kudus General Hospital, 2016).

The results of evaluations in 2017 and 2018 showed there is still non-compliance with various indicators of the established clinical pathway such as the late diagnoses schedule, the allergic reaction to antibiotics, and length of stay. The doctor in charge is expert

professionals who have a significant role because almost all patients who visit the hospital have to meet with a specialist to solve their problems. Therefore, the performance of a specialist doctor as the doctor in charge will significantly influence the sustainability of the organization of the hospital. In carrying out their responsibilities and roles, the doctor in charge must commit to implementing the minimum service standards that previously have been implemented by the Ministry of Health and improving commitment to the compliance of the clinical pathway.

Organizational commitment addresses the closeness of employees to the organization. The concept of organizational commitment has three aspects, namely trusting and accepting the goals/values of the organization, willing to achieve organizational goals, and having a strong loyalty. Organizational commitment is things related to the involvement of loyalty. Organizational commitment is shown in the attitude of acceptance and a strong belief in the values and goals of an organization, as well as a strong urge to maintain membership in the organization to achieve organizational goals. Ethical commitment will undoubtedly support the optimal achievement of doctor performance (Robbins, 20013). Organizational performance is influenced by individual performance. Further, individual performance is influenced by personal job satisfaction, so that a single doctor's job satisfaction has a significant influence on hospital performance. The doctor's performance is affected by the comfortableness, and the comfortableness is gained if the doctor has job satisfaction (Muchlas M, 1997).

Based on these empirical and theoretical facts, this study aims to analyze the effect of the application of minimum service standards and clinical pathways on the commitment and performance of the doctor in the charge toward inpatient services at the Dr. Loekmonohadi General Hospital, Kudus. The analysis was carried out simultaneously using multivariate analysis by assessing the indicators of the variable implementation of service standards, clinical pathways, commitment, and performance of the doctor in charge.

II. MATERIALS AND METHODS

This research is explanatory research using survey methods. The study was conducted at the Dr. Loemonohadi General Hospital, Kudus, Central Java Indonesia. The study was conducted from March to May 2019. The population in this study were 198 nurses who worked in the inpatient room. About 126 nurses were taken as quota based on existing inpatient rooms. In this study, the doctor in charge who worked in the inpatient

room is the actual subject. To guarantee the objectivity of information to be obtained, the nurse is chosen as a source of information because they know all the activities carried out by the doctor in charge who work in each treatment room.

The variables studied included the application of service standards (exogenous 1), clinical pathways (exogenous 2), commitment (endogenous 1), and performance (endogenous 2). Measurement of variables is carried out through indicators developed based on the national standards for hospital accreditation. Exogenous variables applying service standards have three indicators (X1.1 to X1.3), clinical pathways variables have six indicators (X2.1 to X2.6), and commitment variables have three indicators (Y1.1 to Y1. 3), and the performance variable has six indicators (Y2.1 to Y2.6). The instrument of the collection is a questionnaire developed based on each exogenous and endogenous variable. The method of data collection is done by giving questionnaires to respondents with alternative answers on a Likert scale.

The validity and reliability test of the instrument is done by confirmatory factor analysis (CFA). Data analysis was performed using the structural equation modeling (SEM) approach with Lisrel 8.80 software. The significance test of the parameter results using T Statistics with a critical point value of 1.96. The value of validity, reliability, and parameter estimates are said to be significant if the value > 1.96.

III. RESULT AND DISCUSSION

A total of 126 respondents filled out the questionnaire in this study. Respondents in this study were nurses who worked in the inpatient room. Therefore, these nurses are used as a source of information to assess the implementation of service standards, clinical pathways, commitments, and performance carried out by doctors in charge at the Dr. Loekmonohadi General Hospital, Kudus. Most of the respondents were female (69.84%), the age range of respondents 31-40 years was 35.71%. The majority of respondents had professional nurse education qualifications (41.27%), the rest had bachelor and diploma degree of nursing education qualifications of 38.10% and 20.63% respectively. The results of the processing of the four variables are presented in Table 1.

Table 1. Description of variable implementation of standards, clinical pathways, commitments, and performance of doctors in charge at the Dr. Loekmonohadi General Hospital, Kudus in 2019

Code	Indicator	Answer (%)				
		Very did not agree	Did not agree	Hesitate	Agree	Very agree
Application of service standards						
X1.1	The competency of the person in charge of hospitalization is a specialist doctor	0(0.0)	2(1.6)	1(0.8)	17(13.5)	106(84.1)
X1.2	Compliance with doctor's visit hours	0(0.0)	4(3.2)	16(12.7)	74(58.7)	32(25.4)
X1.3	Customer satisfaction	0(0.0)	0(0.0)	13(10.3)	58(46.0)	55(43.7)
Clinical pathways						
X2.1	Compliance with diagnosis	0(0.0)	3(2.4)	11(8.7)	62(49.2)	50(39.7)
X2.2	Compliance with supporting diagnoses	0(0.0)	0(0.0)	14(11.1)	68(54.0)	44(34.9)
X2.3	Compliance with medical therapy	0(0.0)	0(0.0)	9(7.1)	66(52.4)	51(40.5)
X2.4	Compliance with the education of the doctor in charge	0(0.0)	1(0.8)	28(22.2)	52(41.3)	45(35.7)
X2.5	Compliance with patient education and control	0(0.0)	3(2.4)	24(19.0)	57(45.3)	42(33.3)
X2.6	There is no length of stay	0(0.0)	0(0.0)	14(11.1)	65(51.6)	47(37.3)
Commitment						
Y1.1	Affective commitment (emotional attachment)	0(0.0)	2(1.6)	23(18.3)	45(35.7)	56(44.4)
Y1.2	Continuous and sustainable (ready to accept the consequences)	0(0.0)	4(3.2)	11(8.7)	53(42.1)	58(46.0)
Y1.3	Normative (defensiveness in agency, having loyalty)	0(0.0)	2(1.6)	17(13.5)	53(42.1)	54(42.9)
Performance						
Y2.1	Patient care	0(0.0)	1(0.8)	15(11.9)	61(48.4)	49(38.9)
Y2.2	Medical/clinical knowledge	0(0.0)	1(0.8)	7(5.6)	59(46.8)	59(46.8)
Y2.3	Practice-based learning and improvement	1(0.8)	9(7.1)	25(19.8)	56(44.4)	35(27.8)
Y2.4	Skills for interpersonal / interpersonal and communication relationships	0(0.0)	0(0.0)	9(7.1)	67(53.2)	50(39.7)
Y2.5	System-based practice	0(0.0)	1(0.8)	16(12.7)	46(36.5)	63(50.0)
Y2.6	Professionalism	0(0.0)	2(1.6)	7(5.6)	66(52.4)	51(40.5)

The implementation of service standards must be carried out by the doctors in charge which includes three aspects, namely the competency of the doctor in charge of the patient, compliance with the hours of the doctor's vision, and customer satisfaction. Overall the implementation of service standards has been

implemented properly. This is indicated by the fact that most of the respondents said they strongly agreed that the doctors in charge had the competence as a specialist, obediently carrying out the hours of visitation, as well as giving satisfaction to patients with a percentage of 97.5%; 84.1%; and 89.7%.

However, there are still 15.9% of nurses who express disagreement and doubt if the doctors in charge adhere to the hours of visit. This figure can be assumed that there are still shortcomings or constraints not yet the maximum implementation of service standards, including the lack of a certain number of specialists. In emergency cases, the surgeon/obgyn/orthopedic specialists carry out surgery with a large number of patients, so that visitation time is carried out at noon beyond the time specified in the minimum service standards, likewise regarding aspects of customer satisfaction. Based on the information obtained from respondents, there are still as many as 10.3% of respondents who expressed doubts that the application of the standard of service provided by the doctor in charge had the satisfaction to his patients. Therefore, the compliance aspect of the doctor's visit and customer satisfaction needs to get attention and improvement in implementing future service standards by the hospital.

Clinical pathways are procedures that must be carried out by the doctor in charge of the patient in providing services from the clinical aspect to the patient. In general, clinical pathways have been obeyed by doctors responsible for patients that cover aspects of diagnosing, supporting diagnosis, medical therapy, education, patient education and control, and the length of stay. Based on table 1, it can be seen that most of the doctors in charge have carried out their duties based on the provisions of clinical pathways in providing patient services. This is indicated by the fact that most of the respondents (88.9%) agreed and strongly agreed that the doctor in charge was obedient to the flow of patient diagnosis. But there are still 11.1% who say the doctor in charge is not compliant in the determination of the patient's diagnosis. Another aspect of clinical pathways, most of the respondents (88.9%) strongly agreed that the doctor in charge complies with the support of the diagnosis. The component of adherence to the next clinical pathways after diagnosis is medical therapy. The results of the questionnaire showed that most respondents (92.9%) strongly agreed that the doctor in charge was obedient to the medical therapy measures that should be performed on the patient. In providing services to patients, the doctor in charge should provide education to patients related to the medical services standard. The results of the questionnaire showed that the majority of

respondents (77%) said that the doctor in charge complies with the information explanation to the patient during treatment at the hospital. However, there are still 23% of respondents who disagree and are hesitant if the doctor in charge is always obedient in providing education to patients during treatment.

Education approach was applied to the patient during their stay in hospital. The doctor in charge explained the information about diseases and proper management. The results of this study indicate that the majority of respondents (78.6%) strongly agreed if the doctor in charge had obediently provided enough information to the patient when returning home. However, there were still 21.6% of respondents who said they did not agree and were hesitant if the doctor in charge had provided the information to patients when the patient back home.

The sixth aspect of compliance from clinical pathways is the length of stay. The results of this study indicate that the majority of respondents (88.9%) strongly agreed on the absence of length of stay during the care of patients in the hospital. Indeed there are still some cases of the length of stay in this hospital. However, this number is relatively small (11.1%) based on information obtained from the questionnaire.

The shortcomings or weaknesses in the clinical pathways variable need to get serious attention from the hospital. Therefore, it can provide excellent service to all patients according to the concept of clinical pathways that have been established. For this matter, the doctor in charge has a tremendous responsibility to enforce compliance with the procedure by the clinical pathways that previously have been set.

Organizational commitment is one of the important elements to reach optimum performance. Every doctor in charge must show his commitment to carrying out his main duties to serve the patients. In general, the results of this study indicate that the commitment of the doctor in charge at the Dr. Loekmonohadi General Hospital is already good. This result is by the fact that most of the respondents (80.1%) expressed agreement and strongly correspond that the doctor in charge had an effective commitment (emotional attachment) in providing services to patients. However, there were still 19.9% of respondents who stated that the doctor in charge lacked affective commitment in providing services to patients. Another aspect of commitment is sustainability (ready to accept the consequences). The results of this study indicate that as many as 88.1% of respondents strongly agree that the doctor in charge is ready to maintain sustainability in providing services to patients. However, there were still 11.9% of respondents who

expressed disagreement and hesitation if the doctor in charge was ready to accept the consequences if it did not carry out the service and the flow of action determined by the hospital.

Another aspect of commitment is the normative aspect (loyalty). The results of this study indicate that the majority of respondents (85%) stated that the doctor in charge upholds the norms in hospital organizations. Accordingly, most of the doctor in charge has loyalty to the tasks that must be carried out in providing services to patients. This is indicated by a survive attitude and always being loyal as a member of a hospital organization to continue and provide services to patients as well as possible. Nevertheless, in the Kudus Hospital, there are still as many as 15% of a doctor in charge who have a lack of normative aspect.

Performance is the main output of the hospital in providing services to patients. The results of this study found that as many as 87.3% of respondents said that the doctor in charge had performed well in providing patient care. The care of patients is indicated by the compliance of the doctor in charge to clinical practice guidelines, formulary, conducting patient assessments within 24 hours of admission to the hospital, and the presence of the doctor in charge in patient visitation. However, there were still 12.7% of respondents who expressed disagreement. The second indicator of performance is the medical/clinical education update. The purpose of medical education is to update the current trend in medical studies. This is supported by information that the majority of respondents (93.6%) strongly agreed that the doctor in charge working in inpatient services had carried out scientific updating either through education, training, or seminars. Only a small proportion of respondents (6.4%) stated that the doctor in charge of inpatient services did not update their clinical/medical knowledge.

The next indicator of performance is practice-based learning. The results of this study indicate that the majority of respondents (72.2%) stated that the doctor in charge had carried out practice-based learning. In providing services to patients, the doctor in charge always writes diagnosis and therapy clearly and precisely, adherence to hand hygiene, as well as writing prescriptions correctly. But in this aspect, there are still quite a lot (27.8%) of respondents who disagree and doubt that the doctor in charge has learned from practice-based learning approach. This finding is supported by the existence of doctor in charge who have not adhered to hand hygiene, and the incidence of diagnosed resume writing is still pending. Interpersonal skill and communication relationships are one indicator of the performance of doctors in charge. The results of this

study indicate that the majority of respondents (92.9%) stated that the doctor in charge has good interpersonal and communication skills with their patients. Only a small percentage of respondents (7.1%) expressed doubts about interpersonal skills and communication of doctors with their patients.

System-based practice indicators include several things, namely the writing of a patient's medical record, taking into account the order of SOPs and the complete informed consent. The results of this study indicate that the majority of respondents (86.5%) strongly agreed that the doctor in charge had carried out system-based practices well. This means that the doctor in charge write the results of actions taken in the patient's medical record by applicable procedures and informed concentrations are filled in completely. However, there are still 13.5% of respondents who express disagreement and doubt whether the doctor in charge has written a medical record and informed consent thoroughly. Of course, this is a concern of the leadership and needs improvement efforts in the future.

The last indicator of performance is professionalism. Professionalism means every action based on the Standard Operating Procedure. The results of this study indicate that most of the respondents (92.9%) stated that the doctor in charge had provided action to the patient by the Standard Operating Procedure. However, there are still 7.1% of respondents who stated that some of the doctors in charge were not performing medical service based on the standard operating procedures.

The main objective of this study is to analyze the effect of the application of standardized services, clinical pathways to the commitment and performance of doctors in charge in a multivariate manner. But before performing the multivariate analysis, it is necessary to know the validity and reliability of each indicator. Confirmatory factor analysis was performed to determine the validity and reliability of each indicator. Based on the results of confirmatory factor analysis, it is known that all indicators of exogenous and endogenous variables are declared as valid value (statistical value T> 1.96). Whereas for reliability, there is one indicator that is declared as unreliable value (statistical value T <1.96), namely indicator X1.3 (customer satisfaction). However, this indicator is still used in multivariate analysis because this indicator is still valid.

To know the effect of variable service standards and clinical pathways on commitment and performance was conducted the Structural Equation Modeling (SEM) analysis using Lisrel 8.80. The results was shown on **Fig 1.**

In this study, we can identify the amount of coefficient estimate parameter of each variable, which shown in **Table 2.** Based on Table 2, the variables that have significant influence are clinical pathways to commitment, clinical pathways to performance, and commitment to performance with the respective coefficient of influence values of 0.93; 0.45; and 0.49. The results of this analysis also show the indirect effect of clinical pathways variables on performance through commitment with the effect coefficient value of 0.46.

With this coefficient of influence, structural equation models can be made as follows:

a) The effect of applying service standards and clinical pathways to the commitment of doctors (Y1):

$Y1 = -0,13*SPM + 0,93*clinical\ pathway$; with $R^2 = 0,71$

b) Effect of commitment, and clinical pathway on doctor's performance (Y2):

$Y2 = 0,45*clinical\ pathway + 0,49*$ commitment; with $R^2 = 0,82$

Theoretically, the variable implementation of service standards, clinical pathways has a direct influence on commitment, then the commitment will affect the performance of the doctor in charge in providing medical services to patients in the hospital. However, the results of this study indicate that not all exogenous variables significantly influence the commitment and performance of the doctor in charge.

The application of service standards statistically does not affect commitment. However, the application of service standards is an obligation carried out by the doctor in charge of providing patient satisfaction. This is done by the hospital by setting a specialist like a doctor in charge, as well as a doctor's visit on time to provide patient satisfaction as a customer. This must be done by the hospital by the Minister of Health Regulation of the Republic of Indonesia No. 129/Menkes/SK/II/2008 concerning hospital minimum service standards in each health service to ensure excellent service quality as the result of each service product (Minister of Health Regulation No 129, 2008).
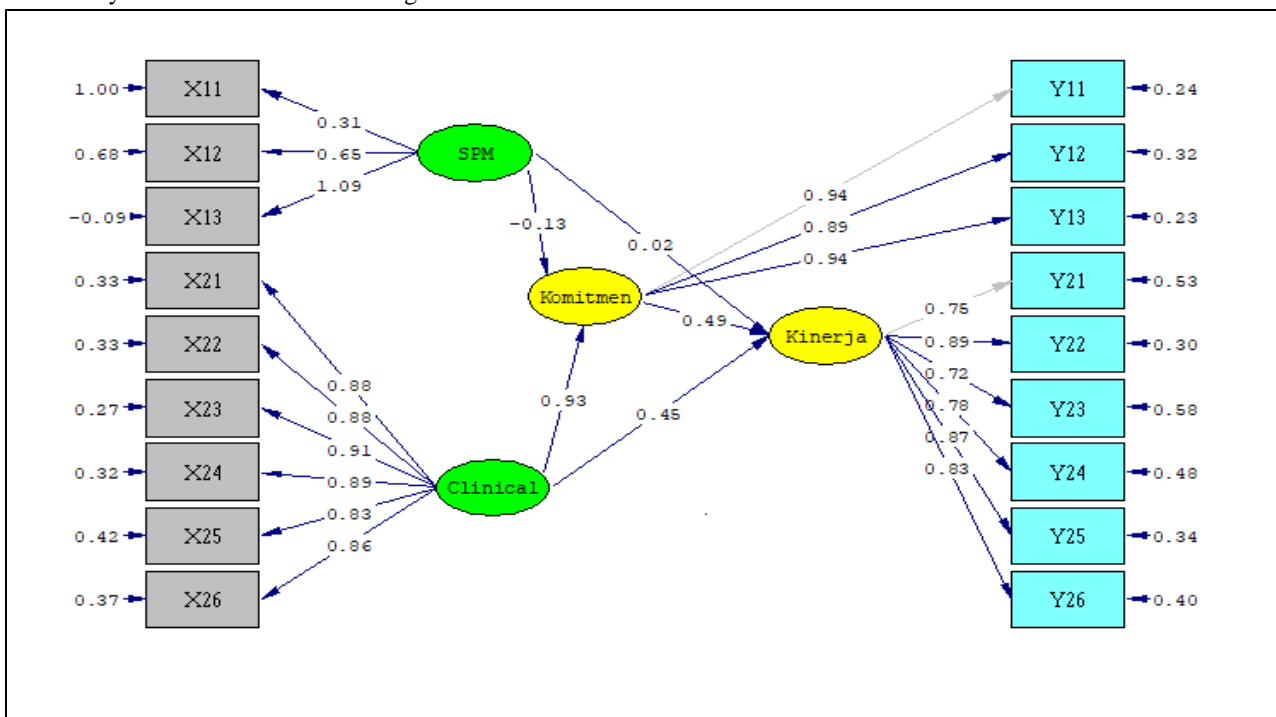

Fig 1. The analysis result of the effect of variable service standards and clinical pathways on commitment and performance with the Structural Equation Modeling approach

Table 2. The analysis of the effect of variable service standards and clinical pathways on commitment and performance with the Structural Equation Modeling approach

Variable	Coefficient estimate parameter	*T-Statistic*
Direct influence: the application of service standards to the commitment of the doctor in charge (X1 → Y1)	-0.13	-1.34
Direct influence: the application of service standards to the performance of doctor in charge (X1 → Y2)	0.02	0.22
Direct influence: clinical pathways to commitment (X2 → Y1)	0.93	7.78
Direct influence: clinical pathways on the performance of the doctor in charge (X2 → Y2)	0.45	2.89
Direct influence: commitment to the performance of the doctor in charge (Y1 → Y2)	0.49	3.77
Indirect influence: clinical pathways to performance through commitment (X2 → Y1 → Y2)	0.93*0.49=0.46	-

There are still as many as 15.9% of a doctor in charge who do not comply with the accuracy of the patient's visit time. Also there are still around 10.3% of respondents who stated that the implementation of the standard of service provided by the doctor in charge did not provide satisfaction to his patients. Therefore the hospital is expected to be able to improve the compliance of the doctor in charge towards the patient's visiting hours and encourage the doctor in charge to always prioritize patient satisfaction in providing clinical services. However, this effort will not change the activities of the visiting hours without corrective actions in real terms.

For this reason, it is necessary to supervise the compliance of the visiting hours and the workload regulation carried out by the doctor in charge. With this action, it is expected that in the future, it will provide a maximum level of customer satisfaction. This is emphasized because the results of research conducted by Brown stated that one of the factors that affect the quality of health services is technical competence, namely skills, abilities, commitment, and appearance of officers and the hospital quality team, and the implementation of service standards can guarantee service quality prime and quality, through commitment (Brown TJ, 1993).

In this study, the results showed that clinical pathways had a direct and significant effect on the commitment and performance of the doctor in charge at the Dr. Loekmonohadi, General Hospital with influence coefficient values of 0.93 and 0.45 respectively. This is also in accordance with the theory which explains that a good tool for evaluating the clinical pathway must have the following characteristics, organizational commitment, path project management, perceptions of the concept of pathways, document format, pathway content, multidisciplinary involvement, variation management, guidelines, maintenance pathway, accountability, patient involvement, pathway development, additional support for the system and documentation, operational arrangements, implementation, and management of outcomes and security. From these criteria, there are currently two instruments that are often used to conduct audits of the contents and quality of clinical pathways. The two instruments are The ICP Key Element Checklist

and The Integrated Care Pathway Appraisal Tool (Vanhaecht, 2007). Another theory also explains that the optimal filling and compliance with clinical pathways are influenced by the commitment of the doctor in charge himself, so if this has been possessed, the influence of the clinical pathway on the commitment of the doctors in charge of an organization can be more optimal (Brown and Peter, 1993).

This study also found that there are still several aspects of commitment that need to improve in the future such as 1) About 19.9% of doctor in charge lacked affective commitment in providing services to patients, 2) About 11.9% of respondents stated that the doctor in charge not ready to accept the consequences to not carry out services and the flow of action that has been set by the hospital, 3) About 15% of doctor in charge have not held normative well. These three aspects need to be paid attention by hospital management staff always to motivate to increase the commitment of the doctor in charge of giving servants to patients.

This study also found that the commitment variable had a significant effect on the performance of the doctor in charge of a coefficient of influence of 0.49. The results of this study are in line with Ismail's research, which states that employee performance is the level of success of employees in carrying out their duties and responsibilities. Employee performance is generally influenced by two factors, namely, internal and external factors. Internal factors are the type of factor that originates within employees, which include job satisfaction and organizational commitment while external factors are the type of factor that originates from outside the employee, which includes leadership, work safety and security, and organizational culture (Ismail and Iriani, 2008).

However, several aspects still need to be improved regarding commitment to the performance of doctors, including increasing the provision of patient care, increasing professionalism, and practice-based learning. So that it is expected that the commitment of the doctor in charge of the provision of services increases and the performance of the doctor is optimal. This is very important for hospital organizations to always maintain

the commitment of their human resources as a fundamental commitment of the organization because from several studies claiming the importance of organizational commitment is a determinant of the performance of an organization. Also, human resources have been considered as important determinants of the sustainability of the organization (Goh C.Y, 2015).

The results of the formulation of structural model equations show that clinical pathway variables have a significant effect on the commitment of the doctor in charge with coefficients about 0.94 and the determinant coefficient (R^2) of 0.71. This means that the increasing change in the commitment of the doctor in charge can be explained by the variable of clinical pathways as much as 71%. The effect of these clinical pathways indicates for hospitals always to ensure that the doctor in charge obeys them to reach the optimum performance. This is supported by studies that state that the existence of clinical pathways is a high organizational determinant of the performance of the hospital (Marielle Flor Aarnoutse, 2015). Also, the implementation of the correct clinical pathway will be very beneficial for patients because compliance with clinical pathways makes the doctor in charge. The patient will take steps in detail, based on facts, and treatment has been determined, including the name of the drug, dosage, and rules (Alan Balch, 2015).

Likewise, the variable clinical pathways and commitments together have a significant effect on the performance of the doctor in charge of the effect coefficient values of 0.45 and 0.49 with the determinant coefficient of 0.82. This means that increasing changes in the performance of the doctor in charge can be explained by clinical pathways and commitment variables of 82%. Therefore to improve the performance of the doctor in charge at the Dr. Loekmonohadi General Hospital, Kudus by improving the compliance of clinical pathways and their commitment to providing services to inpatients.

IV. CONCLUSION

This study concludes that the application of service standards, clinical pathways, commitments, and performance of the doctor in charge at the Dr. Loekmonohadi General Hospital, Kudus is good. Some shortcomings still need to be corrected by the hospital to improve the performance of the doctor in charge more optimal, with motivation and supervision on the implementation of service standards, clinical pathways, and commitment of officers. Variable clinical pathways and commitments significantly influence the performance of the doctor in charge.

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