Factors that influence the compliance of medical record filling by nurses in inpatient of Regional General hospital Dr. H. Moch. Ansari Saleh Banjarmasin

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Abstract

The hospital is one of the health service facilities that have an important role in improving the health status of the community. At the minimum hospital service standard, medical records are included in the category of health information quality, which is one of the parameters to determine the quality of health services in hospitals is data or information from good and complete medical records. The problem that often arises in filling out medical records in inpatient installations is incomplete filling, this situation will have an impact on internal and external hospitals, because the results of data processing are the basis for making reports. The purpose of this study was to analyze the factors that influence compliance with medical record filling by inpatient ward nurses, especially in relation to gender, education level, age, years of service, and employment status. The method used in this research is quantitative research, with an analytical observational research design through a Cross Sectional approach. The number of samples in this study were 104 respondents with the sampling technique using the proportion random sampling method. The results of this study indicate that there is a relationship between education level ($p = 0,018$), age ($p = 0,020$), and years of service ($p = 0,002$) on compliance with medical record filling by inpatient nurses. And there is no relationship between gender ($p = 0,479$) and employment status ($p = 0,230$) on compliance with filling out medical records by inpatient nurses. The dominant factor related to compliance in filling out medical records by inpatient nurses was the level of education ($p = 0,018$). The dominant factor related to filling out medical records by inpatient nurses is the level of education.

I. INTRODUCTION

At the minimum hospital service standard, medical records are included in the category of health information quality, which is one of the parameters to determine the quality of health services in hospitals is data or information from good and complete medical records. Indicators of good and complete medical record quality are completeness of content, accuracy, timeliness and fulfillment of legal requirements [1].

Complete and correct medical records can be obtained information that can be used for various purposes. These needs include, among others, evidence in court, education and training, records of patient history of previous illnesses, and can be used to evaluate the quality of services in hospitals. Given the many uses of medical records, it is necessary to control the filling of medical records [2, 3].

Many factors affect compliance with medical record filling, in accordance with the theory of factors that influence com-

pliance which is mentioned in the theory of [4], stating that organizational success is determined by the compliance of its employees, employee compliance can be seen from their achievements and work spirit [5, 6].

Based on data from the Minimum Service Standards (SPM) report, the number of incomplete medical records at Dr. RSUD. H. Moch. Ansari Saleh Banjarmasin, inpatient services from January 2017 to December 2017. The number of returned medical records was 20454 statuses in that period. Complete medical records of this amount were 13249 (65%) and the number of incomplete medical records was 7205 (35%). 2018 data after completion of inpatient services in January 2018 to December 2018. The number of returned medical records was 20113 status, the number of complete medical records was 12261 (61%) and the number of incomplete medical records was 7846 (39%). The data for 2 (two) years has increased the number of incomplete inpatient medical records and is getting further from the SPM target of 100%. This shows that the compliance target of health workers in filling out medical records is decreasing [7, 8, 9].

Taking into account the description, there have not been many studies on the factors that affect compliance with filling out medical records by inpatient ward nurses, especially in relation to gender, education level, age, years of service and employment status. Therefore this research needs to be done, because the medical record is a file that has important meaning for patients, doctors, health workers and hospitals.

II.   METHOD

This study is a quantitative study, with an analytical observational research design through a Cross Sectional approach to examine the effect of gender, education level, age, years of service and employment status on compliance with medical record filling by inpatient nurses. The number of samples in this study were 104 respondents with the sampling technique using the proportion random sampling method.

III.   RESULTS AND DISCUSSION

Based on the results of research on 104 inpatient room nurses at RSUD Dr. H. Moch Ansari Saleh Banjarmasin, obtained the frequency distribution and the percentage of respondents' characteristics as follows.

TABLE 1
FREQUENCY DISTRIBUTION

Variable	Frequency	Percentage (%)
Gender		
Women	61	58.7
Men	43	41.3
Level of Education		
DIII Nursing	43	41.3
Bachelor of Nursing	61	58.7
Age		
≤ 40 Years	46	44.2
≥ 40 Years	58	55.8
Years of service		
≤ 10 Years	44	42.3
≥ 10 Years	60	57.7
Employment status		
Not Civil Servant	56	53.8
Civil Servant	48	46.2
Nurse Compliance		
Less	37	35.6
Good	67	64.4
Total	104	100.0

Based on Table 1 above, it is known that out of 104 inpatient nurses, 61 women (58, 7% of the total sample data) and 43 men (41, 3% of the total sample data) were female. Based on the level of education, it is known that of the 104

inpatient nurses who have a DIII Nursing education level as many as 43 people (41, 3% of the total sample data), and Bachelor of Nursing education as many as 61 people (58, 7% of the total sample data).

In addition, based on Table 1, it is also known that of the 104 inpatient nurses who have an age less than 40 years as many as 46 people (44.2% of the total sample data), and ages more than 40 years as many as 58 people (55.8% of the total sample). Then from the period of service it is known that the tenure of ≤ 10 years is 44 people (42.3% of the total sample data), the service period of ≥ 10 years is 60 people (57.7% of the total sample).

Based on Table 1 above, it is also known that of the 104 inpatient nurses who have poor compliance, 37 people (35.6% of the total sample data) have good compliance, and 67 people have good compliance (64.4% of the total sample data).

TABLE 2
ANALYSIS OF THE RELATIONSHIP BETWEEN GENDER, EDUCATION LEVEL, AGE, PERIOD OF WORK, EMPLOYMENT STATUS WITH COMPLIANCE WITH MEDICAL RECORD FILLING BY INPATIENT NURSES

Variable	Nurse Compliance				*p*- value	Odd Ratio	95% (CI)
	Less		Good				
	N	%	N	%			
Gender							
Women	20	54,1	41	61,2			
Men	17	45,9	26	38,8	0,479	0,746	0,331-1,681
Level of Education							
DIII Nursing	21	56,8	22	32,8			
Bachelor of Nursing	16	43,2	45	67,2	0,018	2,685	1,175-6,135
Age							
≤ 40 Years	22	59,5	24	35,8			
≥ 40 Years	15	40,5	43	64,2	0,02	2,628	1,152-5,994
Years of service							
≤ 10 Years	23	62,2	21	31,3			
≥ 10 Years	14	37,8	46	68,7	0,002	3,599	1,551-8,347
Employment status							
Not Civil Servant	17	45,9	39	58,2			
Civil Servant	20	54,1	28	41,8	0,23	0,61	0,272-1,370

Based on Table 2 above, it was found that from 104 female inpatient room nurses with a level of compliance in filling out medical records less than 20 people (54, 1%) and the level of compliance in filling out medical records was good as many as 41 people (61, 2%), this figure is greater than that of 104 male inpatient room nurses with a level of compliance in filling out medical records less than 17 people (45, 9%) and a level of compliance in filling out medical records both as many as 26 people (38, 8%).

Based on the results of bivariate analysis using the Chi Square test, the *p* value of 0.479 > 0.05 means that H0 is accepted. It can be concluded that there is no significant relationship of the gender variable to the compliance of medical record filling by inpatient ward nurses. The Odd Ratio value is 0.746 (95% CI 0.331-1.681) which means that there is an increase of 0.746 times in the compliance of medical record filling by the inpatient nurse. This shows that male and female nurses have the same tendency in compliance with filling out medical records. The researcher argues that gender has no significant effect because male and female nurses have the same workload and responsibility in filling out patient medical records which is in line with Ruth Tiffani Barnhouse's theory [10] which states that there is no difference between workload and responsibilities between men and women.

Based on Table 2 above, it is also known that of the 104 inpatient nurses who have a DIII Nursing education level with the level of compliance in filling out medical records less than 21 people (56, 8%) and the level of compliance in filling out medical records is good as many as 22 people (32, 8%), this figure is smaller than that of 104 inpatient nurses who have a Bachelor of Nursing education level with the level of compliance in filling out medical records is less than 16 people (43, 2%) and the level of compliance in fill-

ing out medical records is good as much as 45 people (67, 2%).

Based on the results of bivariate analysis using the Chi Square test, the p-value of 0.018 <0.05, meaning that H0 was rejected. It can be concluded that there is a significant relationship between the education level variable and the compliance of medical record filling by inpatient ward nurses. The Odd Ratio value is 2,685 (95% CI 1, 175-6, 135), which means that there is an increase of 2,685 times in compliance with filling medical records by inpatient nurses. It can be assumed that the higher the level of education of a nurse, the higher the compliance in filling out medical records. Which is in line with the theory put forward by Gibson and Ivancevish Donnelly [?] which states that a high level of education can make a person more capable and ready to accept responsibility.

Based on Table 2 above, it was found that from 104 inpatient room nurses who were aged ≤ 40 years with a low level of compliance in filling out medical records as many as 22 people (59, 5%) and the level of compliance in filling out medical records was good as many as 24 people (35, 8%), this figure is smaller than that of 104 inpatient nurses who have an age of ≥ 40 years with a level of compliance in filling out medical records less than 15 people (40.5%) and a level of compliance in filling out medical records is good as much as 43 people (64, 2%).

Based on the results of bivariate analysis using the Chi Square test showed a p value of 0, 02 < 0, 05, meaning that H0 was rejected. It can be concluded that there is a significant relationship from the age variable to the compliance of medical record filling by inpatient ward nurses. The Odd Ratio value is 2, 628 (95% CI 1, 152-5, 994), which means that there is an increase of 2,628 times in compliance with filling medical records by inpatient nurses. It can be assumed that as the age of a nurse increases, there will be an increase in compliance in filling out medical records. Which is in line with the theory put forward by Gibson [11] which states that as a person's age increases, it will be accompanied by an increase in experience and skills.

Based on Table 2 above, it is also known that from 104 inpatient room nurses who have a working period of ≤ 10 years with a level of compliance in filling out medical records less than 23 people (62.2%) and the level of compliance in filling out medical records is good as many as 21 people. (31.3%), This figure is smaller than that of 104 inpatient nurses who have a working period of ≥ 10 years with a level of compliance in filling out medical records is less than 14 people (37.8%) and the level of compliance in filling out medical records good as many as 46 people (68.7%).

Based on the results of bivariate analysis using the Chi Square test, the p - value of 0,002 < 0.05, meaning that H0 was rejected. It can be concluded that there is a significant relationship between years of service and compliance with medical record filling by inpatient ward nurses. The Odd Ratio value is 3,599 (95% CI 1, 551-8, 347) which means that there is an increase of 3,599 times in compliance with filling medical records by inpatient nurses. It can be assumed that the longer the nurse's tenure, the higher the compliance in filling out medical records. Which is in line with the theory put forward by Robbins [12] which states that the longer the working period, the employees will produce high productivity.

Based on Table 2 above, it is known that of the 104 inpatient room nurses who have non-civil servant status with the level of compliance in filling out medical records less than 17 people (45, 9%) and the level of compliance in filling out medical records is good as many as 39 people (58, 2%), This figure is greater than that of 104 inpatient nurses who have civil servant status with a level of compliance in filling out medical records of less than 20 people (54, 1%) and a level of compliance in filling out good medical records as many as 28 people (41, 8%).

Based on the results of bivariate analysis using the Chi Square test, the p value of 0, 23 > 0,05 means that H0 is accepted. It can be concluded that there is no significant relationship of the variable of employment status to the compliance of filling out medical records by inpatient ward nurses. The Odd Ratio value is 0, 61 (95% CI 0, 272-1, 370) which means that there is an increase of 0,61 times in compliance with filling medical records by inpatient nurses. Which means that every nurse with non-civil servant or civil servant status has the same opportunity in filling out medical records.

TABLE 3
MULTIVARIATE ANALYSIS RESULTS

Independen Variable	B	Wald	Sig (*p*-value)	Exp (B)	95% CI	
					Lower	Upper
Level of education	1,183	6,335	0,012	3,263	1,299	8,197
Years of Service	1,108	5,922	0,015	3,029	1,241	7,394
Age	1,010	4,575	0,032	2,745	1,088	6,923

Based on the results of the analysis, the education level variable has a significant value (Sig.(*p* - value)) of $0,012 < 0,05$, so that the occurrence of Reject H0 occurs. This can be interpreted that the education level variable has a significant influence on compliance with filling out medical records by inpatient ward nurses. The Wald value of 6,335 and the regression coefficient of 1,183 is positive and it can be interpreted that the education level variable has a positive and significant effect so that the higher the level of education, there will also be an increase in compliance in filling out medical records by inpatient nurses. The magnitude of the effect is indicated by the Exponent Beta (Exp (B)) value of the education level variable of 3, 363. This can be interpreted that there is an increase of 3,363 times a nurse in compliance with filling out medical records in the inpatient room for every increase in the level of education.

The results of the analysis also show that the age variable has a significant value (Sig.(*p* - value)) of $0, 032 < 0,05$, so that H0 is rejected. This can be interpreted that the age variable has a significant effect on compliance with filling out medical records by inpatient ward nurses. The Wald value of 4,575 and the regression coefficient of 1,010 is positive and it can be interpreted that the age variable has a positive and significant effect so that the increasing age there will also be an increase in compliance in filling out medical records by inpatient ward nurses. The magnitude of the effect is indicated by the Exponent Beta (Exp (B)) value of the age variable of 2,745. This can be interpreted that there is an increase of 2,745 times for a nurse in compliance with filling out medical records in the inpatient room for every one year of increase in the age of nurses.

Then the variable period of service has a significant value (Sig.(*p* - value)) of $0, 015 < 0, 05$, so that the occurrence of Reject H0 occurs. This can be interpreted that the variable of service period has a significant effect on compliance with filling out medical records by inpatient ward nurses. The Wald value of 5,922 and the regression coefficient of 1,108 is positive and it can be interpreted that the variable of tenure has a positive and significant effect so that the increasing length of service will also increase compliance in filling out medical records by inpatient ward nurses. The magnitude of the effect is indicated by the Exponent Beta

(Exp (B)) value of the service period variable of 3,029. This means that there is an increase of 3,029 times for a nurse in compliance with filling out medical records in the inpatient room for every increase in the nurse's working period of one year.

So it can be concluded that from the independent variables (gender, education level, age, years of service and employment status), the most dominant variable in influencing compliance in filling out medical records by inpatient ward nurses is the education level variable (Sig. (*p* - value)) with an Exponent Beta (Exp (B)) value of 3,263, which means that there is an increase of 3,363 times for a nurse in compliance with filling out medical records in the inpatient room for every increase in education level.

IV.   CONCLUSION

The results showed that there was a relationship between education level, age, and years of service on compliance with medical record filling by inpatient nurses. Meanwhile, gender and employment status did not have a relationship with the compliance of medical record filling by the inpatient room nurse at Regional Public Hospital Dr. H. Moch. Ansari Saleh Banjarmasin. The dominant factor related to filling out medical records by inpatient nurses is the level of education. Recommendations based on the results of this study are the need for guidance regarding filling out medical records by inpatient ward nurses in order to carry out their duties and responsibilities better so that it is hoped that there will be increased compliance in filling out patient data for the quality of hospital assessments.

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