THE INFLUENCE OF DENTAL NURSES' KNOWLEDGE, ATTITUDE, AND BEHAVIOR ON THE IMPLEMENTATION OF PATIENT SAFETY TARGETS

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ABSTRAK : PENGARUH PENGETAHUAN, SIKAP DAN PERILAKU PERAWAT GIGI TERHADAP PENERAPAN SASARAN KESELAMATAN PASIEN

Keselamatan pasien adalah elemen vital dalam pelayanan kesehatan yang berfungsi mencegah serta mengurangi risiko cedera atau kesalahan medis. Di Rumah Sakit Gigi dan Mulut Pendidikan (RSGMP) Nala Husada, keselamatan pasien menjadi prioritas, mengingat peran perawat gigi yang berinteraksi langsung dengan pasien dalam lingkungan pelayanan kesehatan yang terintegrasi. Penelitian ini bertujuan untuk menganalisis hubungan antara pengetahuan, sikap, dan perilaku perawat terhadap pelaksanaan sasaran keselamatan pasien, sesuai standar akreditasi STARKES 2022. Metode penelitian menggunakan pendekatan kuantitatif dengan mengukur variabel pengetahuan, sikap, dan perilaku perawat gigi. Hasil penelitian menunjukkan bahwa sikap dan perilaku perawat berpengaruh signifikan terhadap pelaksanaan keselamatan pasien, dengan nilai signifikansi masing-masing 0,013 dan 0,035 (<0,05). Temuan ini menegaskan bahwa sikap positif dan perilaku yang baik dari tenaga kesehatan sangat memengaruhi kepatuhan terhadap prosedur keselamatan pasien. Analisis simultan juga menunjukkan pengaruh signifikan dari ketiga variabel terhadap pencapaian keselamatan pasien, dengan nilai signifikansi 0,00 (<0,05). Kesimpulannya, pengetahuan, sikap, dan perilaku positif dari tenaga kesehatan adalah faktor krusial dalam mencapai sasaran keselamatan pasien di RSGMP Nala Husada.
Saran Kombinasi antara pengetahuan, sikap, dan perilaku yang baik menciptakan sistem yang efektif dalam menerapkan kebijakan keselamatan pasien.

Kata Kunci : Pengetahuan perawat gigi, Sikap Perawat Gigi, Perilaku Perawat Gigi, dan Pelaksanaan Sasaran Keselamatan Pasien.

ABSTRACT

Patient safety is a vital element in health services that serves to prevent and reduce the risk of injury or medical errors. At the Nala Husada Dental and Oral Teaching Hospital (RSGMP), patient safety is a priority, considering the role of dental nurses who interact directly with patients in an integrated health service environment. This study aims to analyze the relationship between knowledge, attitudes, and behavior of nurses towards the implementation of patient safety targets, according to the STARKES 2022 accreditation standards. The research method uses a quantitative approach by measuring the variables of knowledge, attitudes, and behavior of dental nurses. The results showed that nurses' attitudes and behaviors had a significant effect on the implementation of patient safety, with significance values of 0.013 and 0.035 (<0.05) , respectively . This finding confirms that positive attitudes and good behavior of health workers greatly influence compliance with patient safety procedures. Simultaneous analysis also showed a significant effect of the three variables on achieving patient safety, with a significance value of 0.00 (<0.05). In conclusion, positive knowledge, attitudes, and behavior of health workers are crucial factors in achieving patient safety targets at RSGMP Nala Husada.
Suggestion
The combination of good knowledge, attitude, and behavior creates an effective system in implementing patient safety policies

Keywords : Dental nurse knowledge, dental nurse attitudes, dental nurse behavior, and implementation of patient safety targets.

INTRODUCTION

Patient safety is an important part of health care, playing a role in preventing and reducing risks, errors, and injuries during the service process (WHO, 2017; Rizkia et al., 2022). Based on the Regulation of the Minister of Health No. 11 of 2007, hospitals in

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Indonesia have made efforts to improve patient safety through comprehensive management guidelines (Wianti et al., 2021). RSGMP Nala Husada, a special type B health facility established in 2018 in Surabaya, provides dental and oral health services, as well as being a learning facility for health workers in accordance with the Regulation of the Minister of Health Number 1173/Menkes/Per/X/2004 and PP No. 93 of 2015. With 36 dental nurses, RSGMP Nala Husada places dental nurses as the party closest to the patient.

Nurses are the spearhead of the image of hospital services, including dental nurses at RSGMP who play an important role in ensuring patient safety and preventing injuries during treatment (Vaismoradi et al., 2020). Positive organizational behavior has a significant effect on nurses' affective commitment (Lestari et al., 2024). The knowledge, attitudes, and behavior of dental nurses are very important for the implementation of patient safety targets, where knowledge forms the basis for action, attitudes reflect behavioral tendencies, and behavior becomes real activities that support patient safety (Darsini et al., 2019; Widyatmojo et al., 2023).

Patient safety is the main standard that must be met by hospitals according to international accreditation such as JCI and STARKES, which includes six targets, including proper patient identification, effective communication, drug safety, safe surgical procedures, reducing the risk of infection, and preventing injuries due to falls. RSGMP Nala Husada recorded an increase in patient visits from 1,630 in 2021 to 12,298 in 2023, but reports of patient safety incidents were almost non-existent. This study aims to evaluate the relationship between nurses' knowledge, attitudes, and behaviors towards the implementation of patient safety targets according to the STARKES 2022 standard, considering the positive relationship found between safety attitudes and nurses' knowledge and work accidents (Pujiastuti et al., 2023).

RESEARCH METHODS

This study uses a quantitative approach with an explanatory method, aiming to analyze the relationship between variables. Data were collected through questionnaires distributed to 36 dental nurses at the Nala Husada Dental and Oral Education Hospital in Surabaya. The sampling technique used was purposive sampling, which is selecting samples based on certain criteria according to research needs. The questionnaire was designed with a Likert scale to measure the level of respondent agreement with relevant statements.

The research data consists of primary data, in the form of questionnaire results, and secondary data, obtained through literature studies. Respondents were selected based on inclusion criteria such as minimum education D1 and willingness to be respondents, while those who did not meet the requirements were included in the exclusion criteria.

The independent variables in this study include dental nurses' knowledge, attitudes, and safety behaviors, which are measured based on indicators from trusted sources such as WHO and SAQ. The dependent variable is the implementation of patient safety targets, with main indicators such as correct patient identification, effective communication, and reducing the risk of infection according to JCI standards. Data analysis was carried out using statistical methods to test the relationship between these variables.

RESEARCH RESULT

Descriptive Data

In this study, the initial section will present the background of the respondents, starting from gender, age, experience of participating in patient safety training, level of education, to the length of time they have worked.

The study showed that the majority of dental nurse respondents at RSGMP Nala Husada were male (58.33 %) with a maximum age of 32 years (13.89%). All respondents (100%) had attended patient safety training, and all had a DIII education level. Most dental nurses had work experience ≤ 10 years (50%).

Patient Safety Knowledge (X1)

Of the 36 samples, the average knowledge score of dental nurses was 66.81 with a standard deviation of 6.731, indicating an even distribution of values and low data deviation.

After conducting descriptive statistical analysis, it is continued with frequency distribution analysis to calculate and display the number of occurrences (frequency) of a particular value or category in the data set. The results can be seen as follows

Table 1
Descriptive Statistical Analysis of Safety Knowledge

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Dental nurse safety knowledge	36	52	78	66.81	6,731
Valid N (listwise)	36				

Table 2
Frequency Distribution of Safety Knowledge

Question	STS		TS		RR		S		SS		Total		Average
	F	%	F	%	F	%	F	%	F	%	F	%	
Knowledge													
1	0	0.0	1	2.8	2	5.6	20	55.6	13	36.1	36	100.0	4.25
2	0	0.0	0	0.0	5	13.9	21	58.3	10	27.8	36	100.0	4.14
3	0	0.0	2	5.6	7	19.4	22	61.1	5	13.9	36	100.0	3.83
4	0	0.0	0	0.0	6	16.7	23	63.9	7	19.4	36	100.0	4.03
5	0	0.0	1	2.8	4	11.1	20	55.6	11	30.6	36	100.0	4.14
6	0	0.0	0	0.0	7	19.4	22	61.1	7	19.4	36	100.0	4.00
7	1	2.8	2	5.6	9	25.0	17	47.2	7	19.4	36	100.0	3.75
8	0	0.0	1	2.8	11	30.6	18	50.0	6	16.7	36	100.0	3.81
9	1	2.8	0	0.0	15	41.7	20	55.6	0	0.0	36	100.0	3.50
10	2	5.6	4	11.1	10	27.8	20	55.6	0	0.0	36	100.0	3.33
11	1	2.8	0	0.0	15	41.7	20	55.6	0	0.0	36	100.0	3.50
12	1	2.8	0	0.0	15	41.7	20	55.6	0	0.0	36	100.0	3.50
13	1	2.8	1	2.8	14	38.9	20	55.6	0	0.0	36	100.0	3.47
14	0	0.0	4	11.1	8	22.2	20	55.6	4	11.1	36	100.0	3.67
15	0	0.0	0	0.0	14	38.9	15	41.7	7	19.4	36	100.0	3.81
16	0	0.0	0	0.0	16	44.4	16	44.4	4	11.1	36	100.0	3.67

Source: Author's Data Processing Results, 2024

Validity test is conducted to assess the validity of the questionnaire indicators, with the criteria: data is valid if the sig value (2-tailed) < 0.05 or r count > r table (0.3291). Conversely, data is invalid if the sig value > 0.05 or r count < r table.

Table 3
Safety Knowledge Validity Test

Variables	R count	R table	Information
Knowledge (X1)			
X1.1	0.864	0.3291	Valid
X1.2	0.905	0.3291	Valid
X1.3	0.908	0.3291	Valid
X1.4	0.793	0.3291	Valid
X1.5	0.847	0.3291	Valid
X1.6	0.901	0.3291	Valid
X1.7	0.897	0.3291	Valid
X1.8	0.905	0.3291	Valid
X1.9	0.782	0.3291	Valid
X1.10	0.848	0.3291	Valid
X1.11	0.886	0.3291	Valid
X1.12	0.892	0.3291	Valid
X1.13	0.817	0.3291	Valid

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X1.14	0.862	0.3291	Valid
X1.15	0.883	0.3291	Valid
X1.16	0.872	0.3291	Valid

The calculation results show a table r value of 0.000, which means that the Patient Safety Knowledge variable is declared valid. Reliability testing using Cronbach Alpha shows reliable data if the value is > 0.60 .

Table 4
1Safety Knowledge Reliability Test Results

Variables	Cronbach's Alpha	Reliability Standards	Information
Patient Safety Knowledge By Dental Nurses	0.893	0.60	Valid

The results of the reliability test show that the Patient Safety Knowledge variable has a Cronbach Alpha> 0.60 , so it is reliable for further research. The normality test is used to evaluate the data distribution, where the distribution is considered normal if the significance value> 0.50 .

Table 5
Results of Data Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		36
Normal Parameters [a,b]	Mean	,0000000
	Std. Deviation	4.96097513
Most Extreme Differences	Absolute	,165
	Positive	,122
	Negative	-,165
Test Statistics		,165
Asymp. Sig. (2-tailed)		,055 [c]
a. Test distribution is Normal.		
b. Calculated from data.		
c . Lilliefors Significance Correction.		

The test results show an asymp sig value (2-tailed) of 0.55 > 0.50, which means that the data is normally distributed for further testing. Multicollinearity testing is carried out to ensure that there is no high correlation between independent variables. Data is said to be free of multicollinearity if the tolerance value is > 0.10 and VIF < 10.00; conversely, if tolerance < 0.10 and VIF > 10.00, then multicollinearity occurs .

Table 6
Multicollinearity Test Results

Coefficients [a]							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	3,690	10,542		,350	,729		
Knowledge	,489	,238	,355	2,051	,049	,299	3,343

The test results show the VIF value for the Patient Safety Knowledge variable by Dental Nurses ≤ 10.00 and the tolerance value ≥ 0.10, which means there are no symptoms of multicollinearity, so the study can be continued. Furthermore, the heteroscedasticity test was conducted to ensure

there were no symptoms of heteroscedasticity in the study.

Table 7
Heteroscedasticity Test Results

Coefficients [a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	17,468	6,908		2,529	,017
	Knowledge	,480	,156	,819	,073	,504
a. Dependent Variable: Abs_Res						

The results of the analysis show that the sig value > 0.05 , which means that there are no symptoms of heteroscedasticity.

Patient Safety Attitude(X2)

From 36 samples, the attitude variable shows a minimum value of 48, a maximum of 77, a mean of 66.53, and a standard deviation of 7.185. A mean value greater than the standard deviation indicates that the data deviation is low and the distribution of values is even.

Next, a validity test is carried out to test the validity of the indicators in a questionnaire to later reveal something that the questionnaire has predicted .

Table 8
Descriptive Statistical Analysis of Safety Attitudes

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Dental nurse safety attitudes	36	48	77	66.53	7.185
Valid N (listwise)	36				

Table 9
Test of Variable Validity

Variables	R count	R table	Information
Attitude (X2)			
X2.1	0.893	0.3291	Valid
X2.2	0.867	0.3291	Valid
X2.3	0.878	0.3291	Valid
X2.4	0.764	0.3291	Valid
X2.5	0.867	0.3291	Valid
X2.6	0.897	0.3291	Valid
X2.7	0.897	0.3291	Valid
X2.8	0.928	0.3291	Valid
X2.9	0.773	0.3291	Valid
X2.10	0.842	0.3291	Valid
X2.11	0.858	0.3291	Valid
X2.12	0.899	0.3291	Valid
X2.13	0.862	0.3291	Valid
X2.14	0.865	0.3291	Valid
X2.15	0.881	0.3291	Valid
X2.16	0.889	0.3291	Valid

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From the calculation results above, the r table value in this study was obtained at 0.000. So that the Patient Safety Attitude indicator by Dental Nurses in this study was declared valid and could be continued to the next test stage. The following are the results of the reliable test calculations in this study:

Table 10
Reliability Test Results

Variables	Cronbach's Alpha	Reliability Standards	Information
Patient Safety Attitudes By Dental Nurses	0.893	0.60	Valid

The results of the reliability test in table 4.6.4 show that the variable has *a Cronbach Alpha* greater than 0.60 . Because of this, the Patient Safety Attitude variable by Dental Nurses has been reliable so that it can be continued to the next level of research.

Table 11
Data Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		36
Normal Parameters [a,b]	Mean	,0000000
	Std. Deviation	4.96097513
Most Extreme Differences	Absolute	,165
	Positive	,122
	Negative	-,165
Test Statistics		,165
Asymp. Sig. (2-tailed)		,055 [c]
a. Test distribution is Normal.		
b. Calculated from data.		
c . Lilliefors Significance Correction.		

the asymp sig value (2-tailed) was obtained as 0.55 , which is greater than 0.50, therefore the data in this study is normally distributed and can be continued to the next testing stage.

Table 12
Multicollinearity Test Results

Coefficients [a]								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	3,690	10,542		,350	,729		
	Attitude	,546	,208	,423	2,629	,013	,346	2,892
a. Dependent Variable: Patient Safety Goals								

From the test results above, it is known that the VIF (Variance Inflation Faction) value of each variable is ≤ 10.00 and the *tolerance* value is ≥0.10 which does not show symptoms of multicollinearity. With the results of the Patient Safety Attitude variable by Dental Nurses towards VIF and *tolerance,* it can be concluded that this study does not show symptoms of multicollinearity and can be continued to the next testing stage.

The heteroscedasticity test is a test to determine whether there are symptoms of heteroscedasticity in a study.

Table 13
Heteroscedasticity Test Results

Coefficients [a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	17,468	6,908		2,529	,017
	Attitude	,055	,136	,101	,406	,687
a. Dependent Variable: Abs_Res						

The results of the analysis show that the sig value > 0.05 , which means that there are no symptoms of heteroscedasticity.

Patient Safety Behavior (X3)

The behavioral variables of 36 samples can be seen that the minimum value is 58, the maximum value is 78 , the *mean value* is 67.31 , and the standard deviation is 5.686, which means that the *mean value* of the dental nurse's behavior is greater than the standard value so that the data deviation that occurs is low. Therefore, it can be said that the distribution of values is even.

Table 14
Descriptive Statistical Analysis of Safety Behavior

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Dental nurse safety behavior	36	58	78	67.31	5,686
Valid N (listwise)	36				

After conducting descriptive variable analysis, it is continued with frequency distribution analysis to calculate and display the number of occurrences (frequency) of a particular value or category in the Safety Attitude data set . The results can be seen as follows

The following are the results of the reliable test calculations in the study This:

Table 15
Reliability Test Results

Variables	Cronbach's Alpha	Reliability Standards	Information
Patient Safety Behavior By Dental Nurses	0.893	0.60	Valid

The results of the reliability test in table 4.7.4 show that the variable has *a Cronbach Alpha* greater than 0.60 . Because of this, the Patient Safety Behavior variable by Dental Nurses has been reliable so that it can be continued to the next level of research.

Table 16
Data Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		36
Normal Parameters [a,b]	Mean	,0000000
	Std. Deviation	4.96097513
Most Extreme Differences	Absolute	,165
	Positive	,122
	Negative	-,165
Test Statistics		,165

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Asymp. Sig. (2-tailed)	,055 c

a. Test distribution is Normal.
b. Calculated from data.
c . Lilliefors Significance Correction.

the asymp sig value (2-tailed) was obtained as 0.55 , which is greater than 0.50, therefore the data in this study is normally distributed and can be continued to the next testing stage.

Table 17
Multicollinearity Test Results

Coefficients a							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1(Constant)	3,690	10,542		,350	,729		
Behavior	,223	,237	,137	,944	,035	,425	2,352

a. Dependent Variable: Patient Safety Goals

From the test results above, it is known that the VIF (Variance Inflation Faction) value of the Patient Safety Behavior variable is ≤ 10.00 and the *tolerance value* is ≥0.10 which does not show any symptoms of multicollinearity.

The heteroscedasticity test is a test to determine whether there are symptoms of heteroscedasticity in a study.

Table 18
Heteroscedasticity Test Results

Coefficients a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	17,468	6,908		2,529	,017
	Behavior	,206	,155	,297	1,330	,193

a. Dependent Variable: Abs_Res

The results of the analysis show that the sig value > 0.05, which means that there are no symptoms of heteroscedasticity.

Patient Safety Goals (Y)

For the variable of patient safety target implementation, the average value (mean) is 87.67 , with a maximum value of 102 and a minimum of 57. The standard deviation value of 9.271 indicates that the mean is greater than the standard deviation, indicating low data deviation and an even distribution of values.

Table 19
Variable Validity Test

Variables	R count	R table	Information
Patient Safety Implementation Targets (Y)			
Y1.1	0.911	0.3291	Valid
Y1.2	0.901	0.3291	Valid
Y1.3	0.918	0.3291	Valid
Y1.4	0.736	0.3291	Valid
Y1.5	0.834	0.3291	Valid
Y1.6	0.873	0.3291	Valid

Y1.7	0.910	0.3291	Valid
Y1.8	0.926	0.3291	Valid
Y1.9	0.783	0.3291	Valid
Y1.10	0.818	0.3291	Valid
Y1.11	0.881	0.3291	Valid
Y1.12	0.887	0.3291	Valid
Y1.13	0.874	0.3291	Valid
Y1.14	0.854	0.3291	Valid
Y1.15	0.889	0.3291	Valid
Y1.16	0.898	0.3291	Valid
Y1.17	0.868	0.3291	Valid
Y1.18	0.924	0.3291	Valid
Y1.19	0.890	0.3291	Valid
Y1.20	0.900	0.3291	Valid
Y1.21	0.889	0.3291	Valid
Y1.22	0.898	0.3291	Valid
Y1.23	0.868	0.3291	Valid
Y1.24	0.924	0.3291	Valid

From the calculation results above, the r table value in this study was obtained at 0.000. So that the indicators used in this study are declared valid and can be continued to the next test stage. The following are the results of the calculation of the reliable test in the study This:

Table 20
Reliability Test Results

Variables	Cronbach's Alpha	Reliability Standards	Information
Patient Safety Implementation Targets	0.893	0.60	Valid

The results of the reliability test in table 4.8.4 show that the variable has *a Cronbach Alpha* greater than 0.60 . Because of this, the Patient Safety Target variable has been reliable so that it can be continued to the next level of research.

Table 21
Data Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		36
Normal Parameters [a,b]	Mean	,0000000
	Std. Deviation	4.96097513
Most Extreme Differences	Absolute	,165
	Positive	,122
	Negative	-,165
Test Statistics		,165
Asymp. Sig. (2-tailed)		,055 [c]

a. Test distribution is Normal.
b. Calculated from data.
c . Lilliefors Significance Correction.

the asymp sig value (2-tailed) was obtained as 0.55 , which is greater than 0.50, therefore the data in this study is normally distributed and can be continued to the next testing stage.

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Table 22
Multicollinearity Test Results

Coefficients [a]								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	3,690	10,542		,350	,729		
	Knowledge	,489	,238	,355	2,051	,049	,299	3,343
	Attitude	,546	,208	,423	2,629	,013	,346	2,892
	Behavior	,223	,237	,137	,944	,035	,425	2,352

a. Dependent Variable: Patient Safety Goals

From the test results above, it is known that the VIF (Variance Inflation Faction) value of each variable is ≤ 10.00 and the *tolerance value* is ≥0.10 which does not show symptoms of multicollinearity. With the results of the three variables on VIF and *tolerance,* it can be concluded that this study does not show symptoms of multicollinearity and can be continued to the next testing stage.

The heteroscedasticity test is a test to determine whether there are symptoms of heteroscedasticity in a study.

Table 23
Heteroscedasticity Test Results

Coefficients [a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	17,468	6,908		2,529	,017
	Knowledge	,480	,156	,819	,073	,504
	Attitude	,055	,136	,101	,406	,687
	Behavior	,206	,155	,297	1,330	,193

a. Dependent Variable: Abs_Res

The results of the analysis show that the sig value > 0.05 , which means that there are no symptoms of heteroscedasticity.

Hypothesis Test Results (H1)

Partial tests are used to determine the effect of each independent variable on the dependent variable. To interpret the coefficients of independent variables, *unstandardized coefficients* or *standardized coefficients can be used* . The basis for decision making is if the significance value is <0.05, then there is a partial effect (Chabachib & Abdurahman, 2020). The results of the t-test can be seen in the following table :

Table 24
Results of T-Test Hypothesis 1

Coefficients [a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1(Constant)	3,690	10,542		,350	,729
Knowledge	,489	,238	,355	2,051	,049

a. Dependent Variable: Patient Safety Goals

The influence of the knowledge variable on the implementation of patient safety targets is 0.049 (<0.05) , meaning that there is a significant influence of knowledge on the implementation of patient safety targets, so the first hypothesis is accepted .

H1 Determination Coefficient Test

Furthermore, the determination coefficient test (*R-Square*) aims to measure how much the independent variable is able to explain the dependent variable. An *R-Square value* approaching 1 indicates that the independent variable has a good ability to explain the dependent variable. Conversely, if the *R-Square value* approaches 0, then there are other variables outside the model that are more influential in explaining the dependent variable. The results of the determination coefficient test can be seen in the following table:

Table 25
Determination Coefficient

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.792 [a]	.627	.616	5,743

a. Predictors: (Constant), Total Knowledge Score

The results above show that the knowledge variable has an influence on the implementation of safety targets of 61.6 % compared to variables not studied in this study.

Regression Equation Test

According to Sugiyono (2009), regression linear simple is a equality Which describes the influence between one independent variable on the dependent variable. The results of the regression analysis obtained are as follows:

Table 26
Simple Linear Regression Test Results

Coefficients [a]					
	Unstandardized Coefficients		**Standardized Coefficients**		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
1 (Constant)	3,690	10,542		,350	,729
Knowledge	,489	,238	,355	2,051	,049

a. Dependent Variable: Patient Safety Goals

The regression coefficient of the dental nurse knowledge variable is 0.489, meaning that if the variable increases by one unit, the implementation of patient safety targets will increase by 0.489.

Hypothesis Test Results (H2)

The partial test aims to determine the effect of each independent variable on the dependent variable. The coefficient of the independent variable can be interpreted using unstandardized coefficients or standardized coefficients. Decisions are taken based on the significance value; if the significance value <0.05 , then there is a partial effect. The results of the t-test can be seen in the table provided.

Table 27
Results of T-Test Hypothesis 2

Coefficients [a]					
	Unstandardized Coefficients		**Standardized Coefficients**		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
1(Constant)	3,690	10,542		,350	,729
Attitude	,546	,208	,423	2,629	,013

a. Dependent Variable: Patient Safety Goals

The influence of the attitude variable on the implementation of patient safety targets is 0.013 (< 0.05) , meaning that there is a significant influence of knowledge on the implementation of patient safety targets so that the second hypothesis is accepted .

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Hypothesis Test Results (H3)

Partial tests are used to determine the effect of each independent variable on the dependent variable. To interpret the independent variable coefficients, *unstandardized coefficients* or *standardized coefficients can be used* . The basis for decision making is if the significance value is <0.05, then there is a partial effect (Chabachib & Abdurahman, 2020). The results of the t-test can be seen in the following table:

Table 28
Results of T-Test Hypothesis 3

Coefficients [a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1(Constant)	3,690	10,542		,350	,729
Behavior	,223	,237		,137	,944,035

a. Dependent Variable: Patient Safety Goals

The influence of the attitude variable on the implementation of patient safety targets is 0.035 (< 0.05), meaning that there is a significant influence of behavior on the implementation of patient safety targets so that the third hypothesis is accepted .

H3 Determination Coefficient Test

Furthermore, the determination coefficient test (*R-Square*) aims to measure how much the independent variable is able to explain the dependent variable. An *R-Square value* approaching 1 indicates that the independent variable has a good ability to explain the dependent variable. Conversely, if the *R-Square value* approaches 0, then there are other variables outside the model that are more influential in explaining the dependent variable. The results of the determination coefficient test can be seen in the following table:

Table 29
Determination Coefficient of Hypothesis 3

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691 [a]	.477	.462	4.171

a. Predictors: (Constant), Total Patient Safety Target Score

The results above show that the attitude variable has an influence on the implementation of safety targets of 46.2 % compared to variables not studied in this study.

Regression Equation Test

According to Sugiyono (2009), regression linear simple is a equality Which describes the influence between one independent variable on the dependent variable. The results of the regression analysis obtained are as follows:

Table 30
Simple Linear Regression Test Results

Coefficients [a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	3,690	10,542		,350	,729
Behavior	,223	,237		,137	,944 ,035

a. Dependent Variable: Patient Safety Goals

The regression coefficient of the dental nurse behavior variable is 0.223, meaning that if the variable increases by one unit, the implementation of patient safety targets will increase by 0.223. The fixed value of work discipline if not influenced by other variables is 6.471 .

Hypothesis Test Results 4

The F test assesses the simultaneous influence of independent variables on the dependent variable. Hypothesis H4 states that knowledge, attitudes, and behavior of dental nurses influence the implementation of patient safety targets. H4 is accepted if the significance is <0.05 or f count > f table; rejected if the significance is >0.05 or f count <f table. Formula for F count: F = (3; 32))

Table 31
F Test Results

ANOVA [a]					
Model	Sum of Squares	df	Mean Square	F	Sig.
1Regression	2146,605	3	715,53526	581,000 [b]	
Residual	861,39532		26,919		
Total	3008,00035				

a. Dependent Variable: Total_y

b. Predictors: (Constant), Total_x3, Total_x2, Total_X1

The results of the F test show a significance of 0.000 (less than 0.05) and F count 2.90 <F table 26.581, so H4 is accepted, indicating a significant influence between knowledge, attitudes, and behavior of dental nurses on the implementation of patient safety targets. The coefficient of determination (R^2) test measures the magnitude of the influence of the independent variable on the dependent variable, the closer to 1, the greater the influence .

Table 32
Determination Coefficient

Model Summary [b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,845 [a]	,714	,687	5,188

a. Predictors: (Constant), Total_x3, Total_x2, Total_X1

b. Dependent Variable: Total_y

The results above show that the variables of knowledge, attitude and behavior have an influence on the implementation of safety targets of 68.7 % compared to variables not studied in this study.

Multiple Linear Regression Analysis Test

According to Sugiyono (2009), regression linear multiple is a equality Which describes the influence of two or more independent variables on the dependent variable. The results of the regression analysis obtained are as follows:

Table 33
Results of Multiple Linear Regression Analysis Test

Coefficients [a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1(Constant)	3,690	10,542		,350	,729
Knowledge	,489	,238	,355	2,051	,049
Attitude	,546	,208	,423	2,629	,013
Behavior	,223	,237	,137	,944	,035

a. Dependent Variable: Total_ Patient Safety Goals

The regression equation Y = 2.690 + 0.489 X1 + 0.546 X2 + 0.223 X3 + e shows that increasing knowledge, attitudes, and behavior of dental nurses significantly affects the implementation of patient

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safety targets, with coefficients of 0.489, 0.546, and 0.223, respectively.

DISCUSSION

The Influence of Dental Nurses' Knowledge on the Implementation of Patient Safety at RSGMP Nala Husada

Health workers' knowledge has a significant influence on the implementation of patient safety in health institutions. The results of the study showed a correlation between the level of knowledge and the implementation of patient safety programs, with a statistical value of p = 0.049 (p < 0.05) . Adequate knowledge of safety protocols, health procedures, and related policies has been shown to improve the quality of services and reduce the risk of unwanted medical incidents (Sari et al., 2020; Sriningsih & Marlina, 2020).

A thorough understanding of correct patient identification, use of personal protective equipment (PPE), and risk management helps reduce the number of medical errors (Handayani et al., 2021; Wahyuni, 2019). In addition, regular training for health workers plays an important role in increasing compliance with safety protocols. Studies show that regular training can increase compliance rates by up to 30% (Kusuma & Anindita, 2022).

Knowledge also influences the attitudes and behavior of health workers in implementing safety standard operating procedures (SOPs). Research shows that health workers with high knowledge are more disciplined in carrying out procedures such as verifying treatment and using checklists before medical procedures (Rahmawati et al., 2023; Biresaw et al., 2020). Thus, targeted training and socialization programs are a priority to ensure that patient safety remains the main focus in health services (Widiastuti et al., 2020)

The Influence of Dental Nurses' Attitudes on the Implementation of Patient Safety at RSGMP Nala Husada

The attitude of health workers has a significant effect on the implementation of patient safety, with a significance value of 0.013 (<0.05) . Positive attitudes encourage compliance with safety procedures such as correct patient identification and infection prevention (Geller, 2016; O'Connor et al., 2017). Training that focuses on changing attitudes has been shown to increase commitment to patient safety through increased risk awareness and proper use of PPE (Alquwez et al., 2018). Managerial support and a conducive safety culture also play a role in shaping positive attitudes of health workers (Lee et al., 2019). In conclusion, attitude is a key variable in ensuring patient safety, so training and management support need to be continuously developed to improve the implementation of patient safety targets (Geller, 2016; O'Connor et al., 2017; Alquwez et al., 2018).

The Influence of Dental Nurse Behavior on the Implementation of Patient Safety at RSGMP Nala Husada

The behavior of health workers has a significant effect on the implementation of patient safety targets, with a coefficient value of 0.035 (p <0.05) . Positive behavior, such as compliance with protocols and proactive reporting of incidents, supports the achievement of optimal patient safety (Setiawan, 2020; Santoso et al., 2019). Discipline in SOPs and regular training has been shown to reduce the risk of nosocomial infections (Riyanto, 2021). Managerial approaches, such as training and reward systems, are effective in changing the behavior of health workers (Nurhayati, 2020). In conclusion, the behavior of health workers is key to improving patient safety in hospitals (Sutrisno, 2018; Sari, 2017).

The Influence of Knowledge, Attitudes, and Behavior of Dental Nurses on the Implementation of Patient Safety at RSGMP Nala Husada

Knowledge, attitudes, and behavior of health workers simultaneously have a significant effect on the implementation of patient safety targets (p = 0.00) . Knowledge underlies decision making, positive attitudes increase compliance, and proactive behavior supports the implementation of safety protocols. The three reinforce each other to create a safe and efficient service system. Continuous training and support from hospital management are needed to maintain consistency in the implementation of patient safety (Setiawan, 2020; Prasetya, 2018; Sari et al., 2019; Wulandari, 2021; Putri et al., 2022).

CONCLUSION

There is a positive and significant influence between the knowledge of dental nurses on the implementation of patient safety targets at RSGMP Nala Husada. This shows that the better the level of knowledge of dental nurses, the better the level of implementation of patient safety targets. In fact, dental nurses at RSGMP Nala Husada on average have knowledge that can be the basis for implementing patient safety targets in the hospital. Refresher and continuing education are important for health workers, especially dental nurses at RSGMP Nala Husada.There is a positive and significant

influence between the safety attitude of dental nurses on the implementation of patient safety targets at RSGMP Nala Husada. This indicates that a positive attitude of health workers can encourage active involvement in decision making related to patient safety and contribute positively to it. The better the patient safety attitude of dental nurses, the better the level of implementation of patient safety targets.There is a positive and significant influence between the behavior of dental nurses on the implementation of patient safety targets at RSGMP Nala Husada. This is in line with various studies that show that the behavior of health workers is key to maintaining and improving patient safety in hospitals. The better the patient safety behavior of dental nurses, the better the level of implementation of patient safety targets.There is a positive and significant influence between the knowledge, attitudes, and behavior of dental nurses simultaneously influencing the implementation of patient safety targets at RSGMP Nala Husada. The combination of good knowledge, attitude, and behavior creates an effective system in implementing patient safety policies. These three factors support and strengthen each other , thus minimizing the risk of errors in health services. Therefore, the hypothesis stating that there is an influence of knowledge, attitude, and behavior on the implementation of patient safety targets is accepted.

SUGGESTION

These three factors support and strengthen each other , thus minimizing the risk of errors in health services

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