

ANALYSIS OF THE EFFECT OF PAYROLL SYSTEM AND PATIENT SAFETY CULTURE ON NURSE PERFORMANCE WITH JOB SATISFACTION AS THE INTERVENING VARIABLE IN INPATIENT ROOM PREMIER BINTARO HOSPITAL TANGERANG SELATAN

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Abstract

This study is based on fluctuations in the risk of patients falling in the 2020 – 2021 period and the dynamics of performance problems in 2021 reflect problems regarding the performance of nurses in inpatient rooms in serving patients. The purpose of this study was to obtain evidence of the influence of the salary system and patient safety culture on the performance of nurses in inpatient rooms, with job satisfaction as an intervening variable. The research design used a cross sectional study, and made 135 nurses as the unit of analysis. The results of the study prove that the salary system and patient safety culture have a positive and significant direct effect on job satisfaction and performance, job satisfaction has a positive and significant direct effect on performance, and job satisfaction has a positive role in mediating the payroll system and patient safety culture on performance. By creating a sense of satisfaction for nurses with all aspects related to their work, they will be better able to present quality work results and achieve according to the standards set by the organization.

Keywords: Payroll system, patient safety culture, job satisfaction, performance

Abstrak

Penelitian ini didasarkan pada fluktuasi risiko pasien jatuh pada periode 2020-2021 dan dinamika masalah kinerja pada tahun 2021 yang mencerminkan masalah terkait kinerja perawat di ruang rawat inap dalam melayani pasien. Tujuan penelitian ini adalah untuk memperoleh bukti pengaruh sistem remunerasi dan budaya keselamatan pasien terhadap kinerja perawat di ruang rawat inap, dengan kepuasan kerja sebagai variabel intervening. Desain penelitian menggunakan studi cross-sectional, dan menjadikan 135 perawat sebagai unit analisis. Hasil penelitian membuktikan bahwa sistem remunerasi dan budaya keselamatan pasien memiliki pengaruh langsung positif dan signifikan terhadap kepuasan kerja dan kinerja, kepuasan kerja memiliki pengaruh langsung positif dan signifikan terhadap kinerja, dan kepuasan kerja memiliki peran positif dalam memediasi sistem remunerasi dan budaya keselamatan pasien terhadap kinerja. Dengan menciptakan rasa kepuasan bagi perawat dengan semua aspek yang terkait dengan

pekerjaan mereka, mereka akan lebih mampu menampilkan hasil kerja yang berkualitas dan mencapai sesuai dengan standar yang ditetapkan oleh organisasi.

Kata kunci: *Sistem remunerasi, budaya keselamatan pasien, kepuasan kerja. Kinerja*

INTRODUCTION

Performance is closely related to the results obtained by individuals through the efforts they make for their work, and the measure of a quality performance is the achievement of quality, quantity, efficiency and work effectiveness (Robbins, 2016). The factors that influence the performance of nurses in the health care sector are individual variables, psychological variables, and organizational variables (Bargeon, 2017). Performance describes the extent to which a person's activities in carrying out tasks and trying to achieve the goals set (Mohgaddam, Kazemi & Alimoradnori, 2019). The performance of nurses in the health care industry depends on their ability to work with quality, be able to accept many jobs, work efficiently using minimal resources and be able to create clinical effectiveness in accordance with the provisions imposed by management (Cohen, Coleman & Kangethe, 2016). This opinion clearly states that the nurse's performance measure is where they are able to do quality work, are able to carry out the amount of work assigned to them by completing the work using the resources provided by the organization but are able to produce work effectiveness as expected by the organization.

With regard to the performance of nurses, the importance of job satisfaction refers to the achievement of the expected performance of the organization for its members, a job satisfaction reflects the perception of the compensation system, the quality of supervision, co-workers and the work itself (Kreitner & Kinicki, 2016). Job satisfaction arises when there is a comparison of how well aspects of the work they carry out, are able to meet expectations for salary compatibility and other aspects (Lutans, 2016). A nurse feels satisfaction if the organization is able to meet her expectations or even exceed her expectations in comparison to her sacrifices and what she gets from the organization (Mealer, 2019). Aspects of job satisfaction will form a perception where nurses get what they expect from the organization where they work, so that satisfaction with these four aspects will form work behavior that results in an achievement or performance in accordance with the standards set by the organization (Kousar et al., 2018; Abbas, 2017; Al-Banna, 2018; Platis, Reklitis & Zimeras, 2017).

Organizational justice in the salary determination system can occur if the equality and equal distribution of treatment felt by employees occurs within the organization which refers to distributive and procedural justice (Greenberg & Baron, 2017). Organizations must be fair to the payroll system (Moliner, Cropanzano & Martinez-Tur, 2017), because the payroll system refers to the external motivation provided by the organization in order to create employee performance (Richmound, McCroskey & Powell, 2012). It has become an important thing in the organization, that the payroll system based on organizational justice is an important aspect that will shape nurses to be involved in supporting the achievement of organizational goals through their involvement in

delivering health services for patients (Hirsch & Schumacher, 2018), a fair remuneration system refers to internal justice and external justice (Owusu & Botcwey, 2021). The creation of justice in the payroll system will result in a satisfaction for nurses in carrying out their work (Singh & Loncar, 2022; Javanmardnejat *et al.*, 2021; Alboliteeh, 2020; Ozumba & Alabere, 2021), as well as a payroll system that is based on justice will shape the involvement of nurses in producing quality performance (Yao, *et al.*, 2018; Grissom & Mitani, 2017; Mendes *et al.*, 2017; Das, Gopalan & Chandramohan, 2017).

The importance of patient safety culture is a measure of the ability of nurses to deliver safe nursing care for patients based on a culture of openness, fairness, reporting, learning and information (Donaldson *et al.*, 2021). Nursing quality refers to the implementation of a patient safety culture, where nurses are able to provide quality care effectively and safely, and to make this happen, it is necessary to have the competence of nurses who are able to provide services in a timely, equitable, integrated and efficient manner (Youngberg, 2013). Prior to the creation of an assessment of performance, of course, the problem of nursing quality is a measure of work achievement for nurses, the achievement of nursing quality is based on their ability to implement a patient safety culture in hospitals (Delflingher *et al.*, 2018). Basically a service quality is based on aspects of tangible form, accuracy of service, speed of service, assurance and empathy (Parasuraman, 2014) and patient safety are things that must be a guarantee of quality of nursing for hospitals (Kubasiak *et al.*, 2020). When management is able to form nurses to implement a patient safety culture, it will provide job satisfaction for nurses (Abdullah *et al.*, 2021; Baysal & Yildiz, 2019; Inoue, Harada & Karima, 2017; Perry, Richter & Beauvais, 2018). And with the patient safety culture set by management, it will improve the performance of nurses in serving patients (Savitz, Jones & Bernard, 2018; Montalvo, 2017; Silveira, *et al.*, 2019; Gathra *et al.*, 2020).

The initial phenomena that underlie this research are several events that reflect the need to improve the performance of nurses in inpatient rooms, here are some of these phenomena that record events for the period 2020-2021. Some of the risks of patients falling in 2020-2021 in inpatient installations experience an increase in June 2021, which was as much as 300%, although in total there was a decrease of 1 case in 2021, but the fluctuation of the increase and decrease became a dynamic in the performance of nurses in the inpatient room. The fluctuation in the risk of falling patients indicates a problem regarding the performance of nurses in the inpatient room, it is predicted that there are problems of nurse satisfaction with the salary system, implementation of patient safety culture, and job satisfaction of nurses, so that the performance of nurses is not stable or even able to reduce risk. patients fall every month compared to the previous year.

The problem about the performance of nurses in the inpatient room at Premier Bintaro Hospital, is a very sensitive issue for the survival of the organization, because it is related to patient satisfaction which will shape perceptions about the hospital's performance in serving patients, here are some problems regarding the performance of nurses in the hospital. Premier Bintaro Hospital 2021:

Tabel 1. Dinamika Kinerja Periode 2021

Case	Amount
Nosocomial infection	8
Near injury incident	11
Delay in discharge of inpatients	9
Complaints about the friendliness of service by patients to nurses	11
Complaints about food delays for inpatients	13
Information delays in the availability of inpatient rooms so patients wait	8
Incidents of patients falling in the inpatient room	7

Source: Internal RS Premier Bintaro

Some of the dynamics of performance in the 2021 period should not occur, if the hospital management system is well organized like the system related to nurses' needs. One of the things related to work motivation that makes nurses able to be well involved is the payroll system, after initial interviews with 7 nurses in the nursing department, that they were not satisfied with the salary increase received in 2020. Referring to the information, the problems that occurred on the dynamics of performance in 2021 related to nurse satisfaction with salary increases, so that it has an impact on several unexpected events in 2021, because with reference to previous research that the payroll system has an effect on increasing job satisfaction (Singh & Loncar, 2022; Javanmardnejat et al., 2021; Alboliteh, 2020; Ozumba & Alabere, 2021), and a payroll system that refers to justice will improve the performance of nurses (Yao, et al., 2018; Grissom & Mitani, 2017; Mendes et al., 2017; Das, Gopalan & Chandramohan, 2017).

Some of the events in table 1 become a dynamic on the performance of nurses in the inpatient room which indicates the need for the implementation of a patient safety culture, so that with the establishment of an integrated nursing quality system, nurses are satisfied in carrying out their work, and with this satisfaction they will be easier to carry out their functions. as a nurse who is able to produce performance in accordance with organizational expectations. It has been empirically proven that patient safety culture can increase job satisfaction (Abdullah *et al.*, 2021; Baysal & Yildiz, 2019; Inoue, Harada & Karima, 2017; Perry, Richter & Beauvais, 2018), and able to improve the performance of nurses (Savitz, Jones & Bernard, 2018; Montalvo, 2017; Silveira, *et al.*, 2019; Gathra *et al.*, 2020).

From some of these relevant studies, it appears that there is no simultaneous integration of the payroll system and patient safety culture on nurse performance mediated by job satisfaction, so that this study becomes a novelty of research that combines the payroll

system and patient safety culture in influencing the performance of nurses by mediated job satisfaction. . Based on fluctuations in the risk of patients falling in the 2020-2021 period and the dynamics of performance problems in 2021, reflecting problems regarding the performance of nurses in inpatient rooms in serving patients, so this is an interesting problem to be studied in this study. Based on these problems, this study aims to empirically prove the influence of the salary system and patient safety culture on the performance of nurses in inpatient rooms with job satisfaction as an inner variable.

Effect of Payroll System on Satisfaction

The importance of job satisfaction refers to the achievement of the expected performance of the organization for its members, a job satisfaction reflects the perception of the compensation system, the quality of supervision, co-workers and the work itself (Kreitner & Kinicki, 2016). From this statement, it can be seen that the compensation system has an effect on job satisfaction for individuals in an organization, and one aspect of the compensation system is the payroll system. The description explains that with interprofessional collaboration, nurses will have empirically proven that payroll system collaboration is a source of employee satisfaction (Singh & Loncar, 2022; Javanmardnejat *et al.*, 2021; Alboliteh, 2020; Ozumba & Alabere, 2021), so it can be assumed the research hypothesis:

H1: Payroll system has a significant effect on job satisfaction

Effect of Patient Safety Culture on Job Satisfaction

Patient safety culture is a system established by the organization to be shared by its members which will prevent injuries due to errors in providing health services through an action or not taking an action, and patient safety is related to a culture of openness, fairness, reporting, learning and information between part (Donaldson *et al.*, 2021). The description illustrates that if the quality of nursing can be shaped by management through the application of a patient safety culture, then directly every way of working nurses will be more organized because management prioritizes a culture of openness, fairness, reporting, learning and information between departments so that nurses avoid mistakes in delivering quality health services for patients, so nurses will feel happy because they avoid mistakes. Several relevant research results have proven that patient safety culture can increase job satisfaction (Abdullah *et al.*, 2021; Baysal & Yildiz, 2019; Inoue, Harada & Karima, 2017; Perry, Richter & Beauvais, 2018), so it can be assumed the research hypothesis:

H2: Patient safety culture has a significant effect on job satisfaction

Effect of Payroll System on Performance

Organizational justice in the salary determination system can occur if the equality and equal distribution of treatment felt by employees occurs within the organization which refers to distributive and procedural justice (Greenberg & Baron, 2017). It has become an

important thing in the organization, that the payroll system based on organizational justice is an important aspect that will shape nurses to be involved in supporting the achievement of organizational goals through their involvement in delivering health services for patients (Hirsch & Schumacher, 2018). The description explains that with a fair remuneration system, it will encourage nurses to be more involved in producing work performance that is in line with organizational expectations, where nurses are able to work with quality, are able to accept many jobs, work efficiently with resources. modest and effective in producing clinical effectiveness. Several relevant research results have proven that the payroll system can improve performance (Yao, *et al.*, 2018; Grissom & Mitani, 2017; Mendes *et al.*, 2017; Das, Gopalan & Chandramohan, 2017), so it can be assumed the research hypothesis

H3: Payroll system has a significant effect on nurse performance

Effect of Patient Safety Culture on Performance

The importance of patient safety culture is a measure of the ability of nurses to deliver safe nursing care for patients based on a culture of openness, fairness, reporting, learning and information (Donaldson et al., 2021). Prior to the creation of an assessment of performance, of course, the problem of nursing quality is a measure of work achievement for nurses, the achievement of nursing quality is based on their ability to implement a patient safety culture in hospitals (Delflingher et al, 2018). The description illustrates that the quality of nursing based on a patient safety culture will create the professionalism of nurses in delivering quality services, quality service is a success for nurses in creating outstanding work results and standards on quality, quantity, efficiency and effectiveness. Several relevant research results have proven that patient safety culture can improve performance (Savitz, Jones & Bernard, 2018; Montalvo, 2017; Silveira, *et al.*, 2019; Gathra *et al.*, 2020), so it can be assumed the research hypothesis:

H4: Patient safety culture has a significant effect on nurse performance

Effect of Job Satisfaction on Performance

A nurse feels satisfaction if the organization is able to meet her expectations or even exceed her expectations in comparison to her sacrifices and what she gets from the organization (Mealer, 2019). The description explains that, nurse performance is shaped by individual, psychological and organizational factors, if the individual psychologically feels job satisfaction in the aspect of his work, then they are able to produce a quality, quantity, efficient and effective work result where the four measures are measure of achievement of outstanding work results. Several relevant research results have proven that job satisfaction can improve performance (Kousar *et al.*, 2018; Abbas, 2017; Al-Banna, 2018; Platis, Reklitis & Zimeras, 2017), so it can be assumed the research hypothesis:

H5: Job satisfaction has a significant effect on nurse performance.

METODE

This research has a cross sectional study design with a quantitative approach. The population in this study were all nurses in the inpatient room at Premier Bintaro Hospital, as many as 135 nurses. In this study, a saturated sample will be used, where the entire population is a sample, so the number of samples that will be used in this study is 135 respondents with a sampling technique using simple random sampling.

The instrument in this study consists of two exogenous variables, namely the payroll system (X1) and patient safety culture (X2) whose influence will be measured on the nurse's performance (Y), and among the three variables there is an intervening variable, namely job satisfaction (Z) which will play a role. as a mediating variable. Each of these variables adopts the indicators proposed by; (1) Payroll system with indicators adopted from Greenberg & Baron (2017) consists of distributive and procedural justice. (2) Patient safety culture adopts indicators from Donaldson *et al.* (2021), consists of a culture of openness. culture of justice. reporting culture. learning culture and information culture. (3) Job satisfaction adopts indicators from, consisting of Kreitner & Kinicki, 2016) which consists of indicators of compensation, supervision, co-workers, and the work itself. (4) Performance adopts with indicators adopted from Robbins (2016) consists of quality, quantity, efficiency, and work effectiveness.

In collecting the data needed for analysis of the four variables, a questionnaire formed according to the operational definition and indicators of each variable was used using a Likert scale point 1-4, and as a test tool used descriptive statistical analysis with a three box method approach that divided into three scale ranges, namely T (High), S (Medium) and R (Low) with the formation of the following scale:

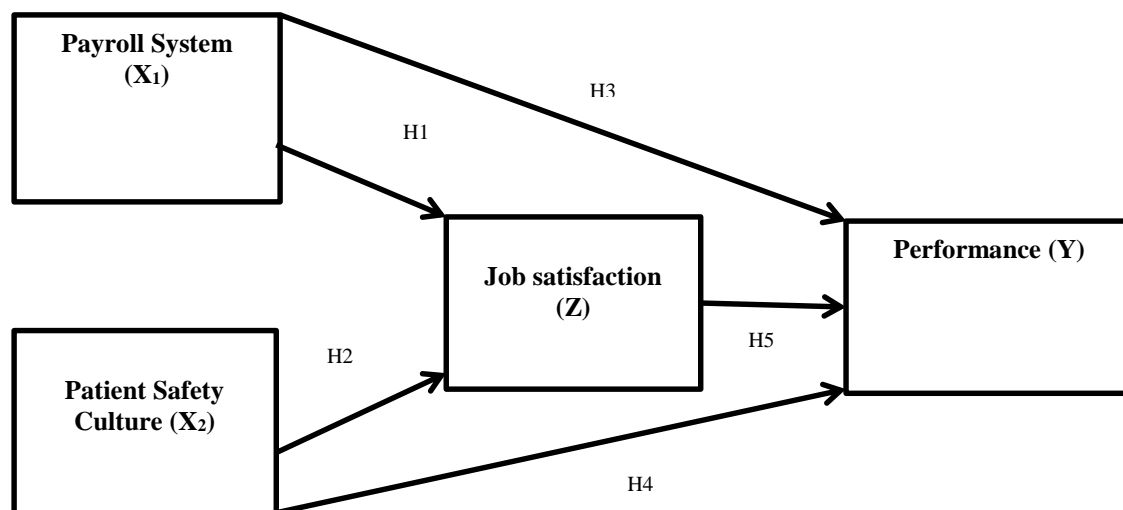
$$\text{Upper range} = \frac{135 \times 4}{4} = 135$$
$$\text{Lower range} = \frac{135 \times 1}{4} = 33,75$$

The resulting index number shows a lower range score of 33.75 and an upper range of 135. From these results, the upper range is then reduced by the lower range: $135 - 33.75 = 101.25$. The value of 101.25 is divided into 3 parts, resulting in a range of 33.75 for each part which will be used as a list of index interpretations as follows:

Table 2 Quality Interval Three Box Method

Index	Category	Code
33,75 – 67,5	Low	L
67,6 – 101,25	Midle	M
101,26 – 135	High	H

To reveal the research hypothesis that has been formulated, path analysis is used which will measure the direct and indirect effects, so that a total effect is found that will answer the role of the intervening variable in mediating the increase in the influence of the independent variable on the dependent variable. exogenous variables to endogenous variables:



RESULTS AND DISCUSSION

Respondent Profile

In this study, the respondents who were asked for their opinion through a questionnaire were nurses who served in the inpatient room as many as 135 respondents who were under the care of a nursing manager. The following is a recapitulation of the characteristics of the respondents based on the research results:

Table 3. Respondents by Gender

Category	Amount	Percentage
Male	0	0%
Female	135	100%

Source: 2022 primary data

Based on the results of the analysis, the total number of respondents is known to be 135 women. So it can be concluded that all respondents who participated in this survey were women only..

Table 4. Respondents by Age (Years)

Category	Amount	Percentage
< 25	19	14%
26 – 30	26	19%
31 – 35	31	23%
36 -40	27	20%
41 – 45	21	16%
> 45	11	8%

Source: 2022 primary data

On the criteria of respondents based on age, the age range <25 years amounted to 19 respondents with a percentage of 14%, the age range 26-30 years amounted to 26 respondents with a percentage of 19%, the age range 31-35 years amounted to 31 respondents with a percentage of 23%, the age range 36-40 years, there are 27 respondents with a percentage of 20% and the age range > 41-45 years, there are 21 respondents with a percentage of 16%, the age range > 45 years is 11 respondents with a percentage of 8%. So it can be concluded that the highest number of respondents based on age criteria is the age range of 31-35 years and the lowest is in the age range > 45 years.

Table 4 Respondents Based on Last Education

Category	Amount	Percentage
Diploma	63	47%
Bachelor	69	51%
Master	3	2%

Source: 2022 primary data

In the last education criteria, the number of respondents with the latest education is diploma as many as 63 respondents with a percentage of 47%, the last education is bachelor as many as 69 respondents with a percentage of 51%, and the last education is master's degree as many as 3 respondents with a percentage of 2%. So that it can be concluded that most respondents have the last education of bachelor, and the lowest with the last education of master.

Table 5. Respondents by Nursing Room

Category	Amount	Percentage
Kutilang	18	13%
Pinguin	16	12%
Perinatologi	12	9%
Cendrawasih	21	16%
Merak	15	11%
ICU	32	24%
Camar	21	16%

Source: 2022 primary data

In the nursing room criteria, the respondents who served in the finches room were 18 respondents with a percentage of 13%, in the penguin room there were 16 respondents with a percentage of 12%, in the perinatology room there were 12 respondents with a percentage of 9%, in the Cendrawasih room there were 21 respondents. with a percentage of 16%, in the peacock room there were 15 respondents with a percentage of 11%, in the ICU room there were 32 respondents with a percentage of 24% and in the seagull room there were 21 respondents with a percentage of 16%. So it can be concluded that the highest number of respondents are nurses who work in the ICU, and the lowest is in the perinatology room.

Table 6. Respondents Based on Years of Service (Years)

Category	Amount	Percentage
< 1	0	0%
1 – 5	28	21%
6 – 10	44	33%
11 – 15	19	14%
16 – 20	27	20%
> 20	17	12%

Source: 2022 primary data

On the criteria of tenure, respondents with a service period of < 1 year are 0 respondents, respondents with a service period of 1 - 5 years are 28 respondents with a percentage of 21%, respondents with a service period of 6 - 10 years are 44 respondents with a percentage of 33%, respondents 11 - 15 years of work totaled 19 respondents with a

percentage of 14%, respondents with a working period of 16 - 20 years amounted to 27 respondents with a percentage of 20% and > 20 years amounted to 17 respondents, with a percentage of 12%. So it can be concluded that the highest number of respondents is in the range of 7-9 years of service, and the lowest is in the range of <1 year of service.

Description of Research Instruments

Table 7. Analysis of the Three Box Method Payroll System

Dimension	Num	Statement	Score				SUM	IDX	Inf
			1	2	3	4			
Distributive justice	1	Management distributes salary on time every month	2	78	41	14	135	84.25	S
			2	156	123	56	337		
	2	Management distributes annual bonuses fairly to nurses	1	75	49	10	135	84.5	S
			1	150	147	40	338		
	3	Management distributes incentives fairly according to performance achievement	7	68	43	17	135	85	S
			7	136	129	68	340		
	4	Management distributes holiday allowances on time	3	76	43	13	135	84	S
			3	152	129	52	336		
	5	Management distributes overtime pay for nurses who work outside working hours	5	65	42	23	135	88.3	S
			5	130	126	92	353		
	6	Management is consistent in providing bonuses for nurses who do not take time off	6	65	49	15	135	85.8	S
			6	130	147	60	343		
The Average Index of Distributive Justice Dimensions								85.3	S
Procedural Justice	7	Management determines salary standards in	2	60	52	21	135	90.5	S
			2	120	156	84	362		

Dimension	Num	Statement	Score				SUM	IDX	Inf
			1	2	3	4			
				accordance with applicable laws					
8	Management provides salary increases for nurses who complete higher education	3	53	59	20	135	91.5	S	
		3	106	177	80	366			
9	Management gives annual bonus based on work achievement	2	57	52	24	135	92	S	
		2	114	156	96	368			
10	Management determines the date of distribution of holiday allowances based on government references	3	64	43	25	135	90	S	
		3	128	129	100	360			
Average Index of Procedural Justice Dimensions								91	S
Payroll System Variable Average Index								88.1	S

Source: 2022 primary data

The results of the analysis per item, the highest index is on question number 9 with an index of 92 in the medium category, which is in the dimension of procedural justice, while the lowest on questions number 2 and 1 with an index of 84.25 is in the medium category and is included in the dimension distributive justice. The results of the analysis are based on the dimension category, the highest on the dimension of procedural justice with an average index of 91 in the medium category, and the lowest on the dimension of distributive justice, with an average index of 85.3 in the medium category. Overall, the variable payroll system is in the medium category because it has an average index of 88.1.

Table 8. Three Box Method Analysis of Patient Safety Culture

Dimension	Num	Statement	Score				SUM	IDX	Inf
			1	2	3	4			
Open Culture	1	Management forms nurses who are able to convey their work experiences in meetings before handling inpatients	25	13	48	49	135	97.75	S
			25	26	144	196	391		

Dimension	Num	Statement	Score				SUM	IDX	Inf
			1	2	3	4			
	2	Management forms nurses who are able to convey their weaknesses in treating inpatients as materials for improvement	20	18	41	56	135	100.8	S
			20	36	123	224	403		
	Average Index of Openness Culture Dimensions							99.25	S
Culture of Justice	3	Management forms nurses who are able to apply the rules for visiting patients fairly to the patient's family	22	14	44	55	135	100.5	S
			22	28	132	220	402		
	4	Management forms nurses who are able to treat all inpatients in a humane manner	25	9	45	56	135	100.5	S
			25	18	135	224	402		
	Average Index of Cultural Justice Dimensions							100.5	S
Reporting Culture	5	Management forms intense nurses to report incidents experienced by patients during treatment	23	14	46	52	135	99.25	S
			23	28	138	208	397		
	6	Management forms nurses open to events experienced by patients to other parts during treatment	21	16	43	55	135	100.5	S
			21	32	129	220	402		
	7	Management forms nurses who are able to report the condition of inpatients intensively to the doctor on duty	22	14	56	43	135	97.5	S
			22	28	168	172	390		
	Average Index of Reporting Culture Dimensions							99.08	S
Learning Culture	8	Management forms nurses who are able to make nursing procedure errors a source of future improvements	17	16	54	48	135	100.8	S
			17	32	162	192	403		
	9	Management forms nurses who are able to improve their care patterns at any time in serving inpatients	20	18	41	56	135	100.8	S
			20	36	123	224	403		
	Average Index of Reporting Culture Dimensions							100.8	S
Information Culture	10	Management forms nurses who are able to inform the condition of inpatients before being treated by doctors	22	15	50	48	135	98.5	S
			22	30	150	192	394		
	11		20	18	46	51	135	99.5	S

Dimension	Num	Statement	Score				SUM	IDX	Inf
			1	2	3	4			
		Management forms nurses who are able to inform the condition of inpatients when handing over to other nurses	20	36	138	204	398		
Average Index of Information Culture Dimensions								99	S
Average Index of Patient Safety Culture Variables								99.72	S

Source: 2022 primary data

The results of the analysis per question item, the highest index is on questions number 2, 8 and 9 with an index of 100.8 in the medium category which is in the dimensions of openness culture and learning culture, while the lowest is on question number 7 with an index of 97.5 included in the medium category and included in the dimension of reporting culture. The results of the analysis are based on the dimension category, the highest dimension is on the learning culture dimension with an average index of 100.8 in the medium category, and the lowest dimension is in the information culture dimension with an average index of 99 in the medium category. Overall, the patient safety culture variable is in the moderate category because it has an average index of 99.72.

Table 9. Analysis of the Three Box Method of Job Satisfaction

Dimension	Num	Statement	Score				SUM	IDX	Inf	
			1	2	3	4				
Compensation	1	Management determines salary increase based on years of service	35	28	34	38	135	86.25	S	
			35	56	102	152	345			
	2	Management provides incentives for achieving work targets	25	34	42	34	135	88.75	S	
			25	68	126	136	355			
Compensation Dimension Average Index								87.5	S	
Supervision	3	The head nurse gives individual attention to the nurse on duty in the inpatient room	28	30	42	35	135	88.5	S	
			28	60	126	140	354			
	4	The head nurse gives the freedom to determine the best way to serve inpatients	26	36	32	41	135	89.5	S	
			26	72	96	164	358			
	Supervision Dimension Average Index								89	S
	Colleagues	5	The head nurse forms a collaboration between nurses to help each other when a patient complains in the inpatient room	31	37	27	40	135	86.5	S
31				74	81	160	346			
6		The head nurse facilitates the exchange of work time between nurses when needed	32	32	36	35	135	86	S	
			32	64	108	140	344			

Dimension	Num	Statement	Score				SUM	IDX	Inf
			1	2	3	4			
		7	The head nurse forms the ease of bureaucracy in inpatient services	28	30	37	40	135	89.75
28				60	111	160	359		
Coworker Dimensions Average Index							87.42	S	
The Work Itself	8	The head nurse promises a career path for nurses who work in inpatient rooms	26	44	32	33	135	85.5	S
			26	88	96	132	342		
	9	The head nurse pays special attention to nurses on duty in the inpatient room	24	37	34	40	135	90	S
			24	74	102	160	360		
	Average Job Dimension Index							87.75	S
Average Index of Job Satisfaction Variables							87.92	S	

Source: 2022 primary data

The results of the analysis per question item, the highest index is on question number 9 with an index of 90 being in the medium category which is in the dimension of the work itself, while the lowest in question number 8 with an index of 85.5 is in the medium category and is included in the dimensions of the job. alone. The results of the analysis are based on the dimension category, the highest dimension is the supervision dimension with an average index of 89 in the medium category, and the lowest dimension is the co-workers dimension with an average index of 87.42 in the medium category. Overall, the job satisfaction variable is in the medium category because it has an average index of 87.92.

Table 10. Three Box Method Analysis of Nurse Performance

Dimension	Num	Statement	Score				SUM	IDX	Inf	
			1	2	3	4				
Quality	1	Nurses get the job done with a small error rate	24	16	55	40	135	95.25	S	
			24	32	165	160	381			
	2	Nurses make mistakes as experiences for further improvement	36	10	37	52	135	93.75	S	
			36	20	111	208	375			
Quality Dimension Average Indeks								94.5	S	
Quantity	3	Nurses assist other nurses in serving inpatients when needed	24	11	55	45	135	97.75	S	
			24	22	165	180	391			
	4	Nurses work more than 8 hours in an emergency in the inpatient room	18	18	55	44	135	98.75	S	
			18	36	165	176	395			
	5	Nurses serve inpatients outside working hours when needed	25	24	44	42	135	93.25	S	
			25	48	132	168	373			
	Quantity Dimension Average Indeks								96.58	S
	Efficiency	6	Nurses serve inpatients by paying attention to time efficiency	30	19	40	46	135	93	S
30				38	120	184	372			

Dimension	Num	Statement	Score				SUM	IDX	Inf
			1	2	3	4			
	7	Nurses are able to carry out doctor's directions in treating inpatients	25	23	35	52	135	96	S
			25	46	105	208	384		
	8	Nurses are able to serve patients with resources according to standards	25	29	27	54	135	95	S
			25	58	81	216	380		
	Dimensional Average Index of Efficiency							94.67	S
	Effectiveness	9	The nurse immediately performs treatment after the patient enters the treatment room	21	29	28	57	135	97.75
21				58	84	228	391		
10		Nurses work according to standard operating procedures in inpatient rooms	20	34	31	50	135	95.25	S
			20	68	93	200	381		
11		Nurses comply with work principles to avoid service errors	30	26	28	51	135	92.5	S
			30	52	84	204	370		
The Average Index of Effectiveness Dimensions							95.17	S	
Average Index of Nurse Performance Variables							95.23	S	

Source: 2022 primary data

The results of the analysis per question item, the highest index is in question number 4 with an index of 98.75 in the medium category which is in the quantity dimension, while the lowest in question number 6 with an index of 93 is in the medium category and is included in the efficiency dimension. The results of the analysis are based on the dimension category, the highest on the quantity dimension with an average index of 96.58 in the medium category, and the lowest on the quality dimension with an average index of 94.5 in the medium category. Overall the nurse performance variable is in the medium category because it has an average index of 95.23.

Hypothesis testing

Table 11. Summary of Hypothesis Testing

Sub Structure Analysis 1				
Equality	Coefficient	Causality Test	Ad RSquare	Information
ρ_{zx_1}	0,314	$0,000 < 0,05$	0,536	H2 Diterima
ρ_{zx_2}	0,491	$0,000 < 0,05$		H3 Diterima
Sub Structure Analysis 2				
Persamaan	Koefisien	Causality Test	Ad RSquare	Information
ρ_{yx_1}	0,192	$0,001 < 0,05$	0,800	H5 Diterima
ρ_{yx_2}	0,159	$0,007 < 0,05$		H6 Diterima
ρ_{yz}	0,637	$0,000 < 0,05$		H7 Diterima

DISCUSSION

Effect of Payroll System on Job Satisfaction

The results of the analysis conclude that the payroll system has a positive and significant direct effect on job satisfaction, as evidenced by the path coefficient of 0.314 and the comparison of probability values of $0.000 < 0.05$, meaning that if the payroll system is increased by one unit, it will be the impact of increasing job satisfaction by 0.314. These results are in line with previous research from (Singh & Loncar, 2022; Javanmardnejat *et al.*, 2021; Alboliteeh, 2020; Ozumba & Alabere, 2021), which proves that the payroll system has a positive and significant effect on job satisfaction. These results reveal the suitability of the three box method analysis, where when nurses perceive that the payroll system applied by management is fairly fair based on distributive justice and procedural justice, then this will make nurses quite satisfied with all aspects related to their work such as the compensation system, patterns of supervision, relationships with co-workers, and satisfaction with the work they carry out.

But in reality the respondents considered that procedural justice was the weakest aspect compared to other aspects that had an impact on the lower aspects of co-workers, which in this aspect assessed the nurse's satisfaction with the head nurse management system in regulating relations between co-workers. If this aspect can be better implemented by management, then the job satisfaction will be higher for nurses, because distributive justice is related to the distribution and timeliness of compensation. This phenomenon is a revealer of the truth of the theory which states that job satisfaction arises when there is a comparison of how well the aspects of the work he is carrying out, able to meet expectations for salary compatibility and other aspects (Lutans, 2016). This means that when nurses feel that there is justice in the payroll system, with a comparison of the workload as a nurse in an inpatient room, the suitability of the results of the comparison makes them happy and satisfied with the payroll system implemented by management with a fair system.

Effect of Patient Safety Culture on Job Satisfaction

The results of the analysis conclude that patient safety culture has a positive and significant direct effect on job satisfaction, as evidenced by the path coefficient of 0.491 and the comparison of probability values of $0.000 < 0.05$, meaning that if the patient safety culture is increased by one unit, it will be the impact of increasing job satisfaction by 0.491. These results are in line with previous research from (Abdullah *et al.*, 2021; Baysal & Yildiz, 2019; Inoue, Harada & Karima, 2017; Perry, Richter & Beauvais, 2018), which states that patient safety culture has a positive and significant effect on job satisfaction. These results reveal the suitability of the three box method analysis, where when nurses perceive that they are quite effective with guidance from management and head nurses regarding patient safety culture, in shaping the quality of nursing care patterns, through a culture of openness, fairness, reporting, learning and information, then they will be quite satisfied with the aspects of their work, because with this direction, nurses avoid mistakes in the process of providing care to patients in the inpatient room.

But in reality the information culture aspect is the weakest aspect, if management is better at instilling an information culture in nurses, then this will also have an impact on increasing job satisfaction, because it will prevent it from being late in conveying patient-

related information to the doctor in charge and his work shift opponent. . This phenomenon is a revealer of the truth of the theory which states that the quality of nursing can be managed properly through the implementation of a culture of openness, fairness, reporting, learning and information (Donaldson *et al*, 2021). This means that, management's awareness of the importance of patient safety, makes them form a pattern of nursing care that is standardized at a certain quality. Through the leadership of the head nurse, management instructs the head nurse, so that nurses always apply a culture of patient safety in providing care to inpatients, it is intended that nurses avoid mistakes when providing care, so that by avoiding these mistakes, nurses will feel satisfied with the management's efforts in establishing a work pattern that is in accordance with the quality standards expected by management.

Effect of Payroll System on Nurse Performance

The results of the analysis conclude that the payroll system has a positive and significant direct effect on the performance of nurses, as evidenced by the path coefficient of 0.192 and the comparison of probability values of $0.001 < 0.05$, meaning that if the payroll system is increased by one unit, it will be the impact of increasing the performance of nurses by 0.192. These results are in line with previous research from (Yao, *et al.*, 2018; Grissom & Mitani, 2017; Mendes *et al.*, 2017; Das, Gopalan & Chandramohan, 2017), which concludes that the payroll system has a positive and significant effect on the performance of nurses. These results reveal the suitability of the three box method analysis, where when there is a fairly fair perception felt by nurses on a fair salary system based on distributive and procedural justice, then this will make nurses quite good at presenting quality work results, able to accept a lot of work. duties from superiors, efficient use of company resources, and able to work effectively in using their competencies in accordance with the expectations of hospital management in serving patients in inpatient rooms. However, based on the weakest aspect of the payroll system, namely distributive justice, it can be seen that this has an impact on the performance aspect, namely the quality of work which is lower than other performance aspects. This is predicted because there are still delays in the compensation system implemented by management, making the nurse's work quality aspect lower than other performance aspects.

These results reveal the truth of the theory which states that organizations must be fair to the payroll system (Moliner, Cropanzano & Martinez-Tur, 2017), because the payroll system refers to the external motivation provided by the organization in order to create employee performance (Richmound, McCroskey & Powell, 2012). This means that if the payroll system is carried out based on distributive and procedural justice, nurses will feel treated fairly by the organization where they work and also the position in which they are assigned, so that perception will be a motivation for them to sacrifice all the resources they have, in provide maximum care for inpatients, in order to answer the demands of the organization.

Effect of Patient Safety Culture on Nurse Performance

The results of the analysis concluded that the dimensions of nursing quality have a direct positive and significant effect on the performance of nurses, as evidenced by the path coefficient of 0.159 and the comparison of the significance value of $0.007 < 0.05$, meaning that if the patient safety culture is increased by one unit, it will have an impact on

increasing the nurse's performance by one unit. 0.159. These results are in line with previous research from (Savitz, Jones & Bernard, 2018; Montalvo, 2017; Silveira, *et al.*, 2019; Gathra *et al.*, 2020), that the dimensions of nursing quality have a positive and significant effect on the performance of nurses. These results reveal the suitability of the three box method analysis, where when management and head nurses are quite effective in shaping the ability of nurses to implement a culture of openness, fairness, reporting, learning and information, the effectiveness will make nurses quite capable of achieving quality work results. , able to accept a lot of work, efficient in the use of available resources, and able to effectively use their abilities in providing care to inpatients.

Looking at the weakest aspect of patient safety culture, namely the information culture, it has an impact on the lower quality of nurses' work. This happens because of the importance of information culture in informing the patient's condition to the doctor in charge and the work shift opponent, so that the quality of work of nurses in dealing with patients in inpatient installations can be achieved according to organizational expectations. In addition, the results of the analysis answer the theoretical evidence which states that the quality of nursing refers to the implementation of a patient safety culture, in which nurses are able to provide quality care effectively and safely, and to make this happen, it requires the competence of nurses who are able to provide services in a timely, equitable, and efficient manner. integrated and efficient (Youngberg, 2013). This means that, when management and head nurses are able to form nurses who are able to implement a culture of patient safety, it will form nurses who are able to provide work results that are in accordance with organizational expectations, where in these circumstances, nurses are able to provide quality care, able to receive a lot of care. duties of the leadership, frugal in using the resources provided, and able to effectively use their competence in treating inpatients.

Effect of Job Satisfaction on Nurse Performance

The results of the analysis conclude that job satisfaction has a positive and significant direct effect on the performance of nurses, as evidenced by the path coefficient of 0.637 and the significance test showing a comparison of the probability value of $0.000 < 0.05$, meaning that if job satisfaction is increased by one unit, it will have an impact on increasing the performance of nurses by 0.637. In addition, it is known that job satisfaction plays a positive role in mediating the payroll system and the dimensions of nursing quality on the performance of nurses, so the media effect is able to increase nurses' performance by 0.392 through the payroll system, and 0.472 through the nursing quality dimension. This result is in line with previous research (Kousar *et al.*, 2018; Abbas, 2017; Al-Banna, 2018; Platis, Reklitis & Zimeras, 2017) which states that job satisfaction has a positive and significant effect on nurse performance.

These results reveal the suitability of the three box method analysis, where when nurses feel quite satisfied with the compensation system, supervision pattern, relationships with co-workers, and are satisfied with the work they carry out, then these rights will make them able to work with quality, able to accept many tasks from the leadership, efficient in using the resources provided by the organization, and able to effectively use his competence in providing services for inpatients. In addition, when nurses are quite satisfied with aspects related to their work, it will form a defined salary system, and the dimensions of nursing quality formed by management, become more effective in

improving the ability of nurses in achieving work performance according to organizational expectations. And it can be seen that there is a relationship between the weakest aspect of patient satisfaction, namely about co-workers, which results in aspects of the nurse's work quality being lower than other aspects. Because basically the relationship between co-workers will create an integrated cooperation system that makes nurses and interprofessionals work together to achieve clinical effectiveness.

This result is a phenomenon due to the proven theory which states that the factors that influence the performance of nurses in the health care sector are individual variables, psychological variables, and organizational variables (Bargeon, 2017). This means that the performance of nurses can be formed and improved, if management is able to shape the quality of nursing through a patient safety culture system and is able to influence the psychology of nurses to perceive justice in the payroll system applied by the organization, then both of these things will make them work in accordance with the demands of the organization, and if the organization is able to provide support so that they feel pleasure in carrying out their work, then it will not only form nurses who work according to demands, but are able to form better involved nurses, who sacrifice all their resources, for the benefit of the organization.

CONCLUSION

From the whole series of analysis and analysis, it is known that job satisfaction is able to positively mediate the relationship between the salary system and patient safety culture on improving nurse performance. This is evidence that with a satisfied feeling of nurses, the salary system and patient safety culture are greater in improving the performance of nurses. Like the theory which states that job satisfaction is a feeling that employees feel for their response to all aspects of their work, and will make them willing to sacrifice all their resources for the achievement of organizational goals (Kreitner & Kinicki, 2016). Arinya that no matter how much the payroll system is implemented by management, and no matter how strong the patient safety culture is emphasized by management to be implemented by nurses, it will not make it a burden or work stress, but will lead to an increase in the quality, quantity, effectiveness and efficiency of nurses' work in serving patients. hospitalization, this happens because the satisfaction felt by nurses on aspects related to their work, makes them ignore the obstacles that occur, in order to achieve organizational goals through the work behavior of nurses.

In an effort to improve the performance of nurses in inpatient rooms, it is necessary to form a pleasant feeling for nurses in carrying out their work, where they are given justice in the payroll system, and are directed to implement quality care patterns through the implementation of a patient safety culture, which will prevent them from doing errors in providing care to inpatients. By creating a sense of satisfaction for nurses on all aspects related to their work, they will be better able to present quality work results and achieve according to the standards set by the organization with reference to quality, quantity, effectiveness and work efficiency.

Based on the limitations of the study, it is recommended for further research progress to conduct open interviews, and not only use questionnaires, so that the analysis results obtained are not biased, and involve doctors as the unit of analysis so that the total quality of work of health workers can be seen and not only from the nurses. . It is also recommended to involve work motivation variables, so that it can be seen what motives are able to make nurses satisfied so as to produce performance according to organizational expectations.

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