


# The Effect of Management Support, Team Work, and Monitoring & Evaluation Process on Implementing the Patients Identification

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Article information	Abstract
<p><b>Article history:</b>            Received: January 19<sup>th</sup>, 2024            Revised: May 13<sup>th</sup>, 2024            Accepted: June 01<sup>st</sup>, 2024</p> <hr/> <p><b>Corresponding author:</b>            Name: Sandra Dewi            Address: Jl. Arjuna Utara, Kebon Jeruk Jakarta            E-mail: <a href="mailto:sandra.dewi@esaunggul.ac.id">sandra.dewi@esaunggul.ac.id</a></p> <hr/> <p>International Journal of Nursing and Health Services (IJNHS), Volume 7, Issue 7, Issue 3, June 20<sup>th</sup>, 2024            DOI: 10.35654/ijnhs.v7i3.772            E-ISSN: 2654-6310</p>	<p><b>Background:</b> One of the efforts to fulfill patient safety targets is identifying patients correctly. Identification carried out incorrectly will have fatal consequences, triggering other errors. An important paradigm for reducing misidentification requires more than two patient identifiers. <b>Objective:</b> The study aims to analyze the influence of management support, team work, monitoring and evaluation process on implementing the patients' identification among nurses at Wisma Rini Pringsewu Hospital. <b>Method:</b> We conduct the cross-sectional study to examine the causalities of independent variable with dependent variable. <b>Result:</b> Management support has a direct effect on the implementation of patient identification. Management support also has an indirect effect on the implementation of patient identification, through monitoring and evaluation. Meanwhile, monitoring and evaluation can have a direct influence on the implementation of patient identification. Team work influences the implementation of patient identification, but the influence is small, so monitoring and evaluation is needed so that team work works well. Meanwhile, team work is formed due to the contribution of management support. <b>Implication:</b> Create monitoring and evaluation policies related to the implementation of quality improvement and patient safety activities</p>
	<p><b>Keywords:</b> management support, team work, monitoring and evaluation, patient identification</p> <p>This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non-Commercial CC BY-NC 4.0</p>

## Background

The accuracy of patient identification is one of the efforts to meet patient safety targets aimed at making the hospital undertake specific improvements that will affect the improvement of quality of service and patient safety (1).

Nurses have an important role in implementing patient safety because it is directly related to the care process (2). Nurses are responsible for improving patient safety because they are the leading health service providers and constitute the largest part of the health workforce (3).

The care environment such as patient safety culture and the nursing work environment can influence patient safety activities (4). Patient safety as evidence of efforts to prevent incidents that have a negative impact on patients, causing injury or complications (5).

The Institute of Medicine (IOM) reports that the United States experienced 98,000 deaths due to medical errors in 2020 (6). The National Reporting and Learning System (NRLS) also reported that there were 2,410,311 reports of patient safety incidents in England (7).

According to a report approved by the Joint Commission in Jakarta in 2016, the number of incidents in Indonesia reported 1,225 misidentifications from 9,632 incidents (8). The results of the preliminary study analysis also found that the majority of nurses did not identify patients before administering medication by checking twice (76.1%).

Accurate identification is very important because it has fatal consequences which can trigger other errors including death (9). Misidentifying patients can lead to a variety of medical errors, including inappropriate diagnosis and treatment (10).

To achieve patient safety targets with an appropriate patient identification process, management support, team work between health workers and continuous monitoring and evaluation need to be carried out well.

Management support is crucial for the successful implementation of patient identification systems. Management can foster a culture that values patient safety and encourages staff adherence to patient identification protocols (11).

Additionally, Effective teamwork is essential in healthcare settings, ensuring all team members are aware of and adhere to patient identification protocols. Team members must communicate clearly, support each other, and work collaboratively to ensure correct patient identification. This includes sharing patient information and confirming identities before administering care (12).

Monitoring and evaluation processes are necessary to assess the effectiveness of patient identification systems. These processes help identify areas for improvement and ensure that systems function correctly. Regular audits, feedback mechanisms, and quality improvement initiatives can be used to monitor and evaluate patient identification practices (13).

Management support, effective teamwork, and robust monitoring and evaluation processes are critical components that influence the successful implementation of patient identification systems in healthcare settings. These factors contribute to a culture of safety, enhance communication among healthcare providers, and ensure continuous improvement in patient identification practices.

Although, management support, teamwork, and robust monitoring and evaluation processes are crucial for identifying and addressing gaps in healthcare. These elements contribute to a culture of continuous improvement, ensuring that healthcare organizations can provide the highest quality of care and achieve the best possible patient outcomes. Few studies explore those factors on implementing the patients' identification among nurses. Therefore, this study would like to examine the association between management support, team work, monitoring and evaluation process on implementing the patients' identification among nurses

## OBJECTIVE

This study aimed to examine the association between management support, team work, monitoring and evaluation process on implementing the patients' identification among nurses.

## METHOD Design

A cross-sectional study design was applied to examine the association between management support, team work, monitoring and evaluation process on implementing the patients' identification. This study was conducted at Wisma Rini Pringsewu Hospita

### **Sample, sample size, and sampling technique**

The samples in this study are all nurses from Wisma Rini Pringsewu hospital. Five seven nurses were recruited in this study especially those who have working at least one year. The samples size was calculated based on the total sampling technique since limited number of nurses.

### **Data collection process**

The data collection process in this study was approached using the survey method which is completed the questionnaire. The data collection was conducted within 1 month. All respondents who participated in this study are required to complete the informed consent. The mechanism of research and objective of the study were explained prior completeness of data collection process. The details of instruments would be explained as follows:

**Management support questionnaire.** This questionnaire was used to measure how management provides the resources, authority or power necessary for the successful implementation of patient identification. The instrument consisted of four dimensions which are 1) Involvement in setting goals; 2) Involvement in selecting information system technology and human resource support and training; 3) Involvement in the improvement and problem-solving process; 4) Involvement in evaluation control. Likert scale was used to approach the perception of respondents with 1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree. The total item questionnaires are 12 with. The highest score was 48 and the lowest score was 12.

**Team work questionnaire** was used to measure cooperative efforts of nurses working in shifts, respecting each other, reminding each other to improve patient safety through the implementation of correct patient identification. This questionnaire consisted of 25 items questionnaire with five dimension such as 1) team structure; 2) leadership; 3) monitoring; 4) support; and 5)

communication. The total score of the study was 100. The highest score indicated the high team work and the lowest score was indicated the low team work.

**Monitoring and evaluation questionnaire** was used to measure monitoring activities which then produce information for analysis, as a reference for developing follow-up plans. The questionnaire consisted of five dimensions with 11 item questionnaires with four dimensions such as 1) effectivity; 2) efficiency; 3) relevant; 4) and impact. The total score of the study was 44. The highest score indicated the high quality of monitoring and evaluation activities and the lowest score was indicated the low monitoring and evaluation activities

**Patients' identification questionnaire** was used to measure the act of identifying patients with 2 identifiers, namely name and date of birth. This questionnaire consisted five item questionnaires with five dimensions such as 1) patients are identified prior to administration of medications, blood or blood products; 2) Patients were identified before blood and specimen collection others for clinical examination; 3) Patients are identified before administering treatment and actions or procedures (administration of drugs, procedures, diagnostics, and certain conditions); and 4) there is an SPO or patient identification procedure. The total score of the study was 20. The highest score indicated the implementation of patients' identification and the lowest score was indicated the low the implementation of patients' identification

### **Data analysis**

The descriptive statistic was used to describe the characteristic of respondents and using the mean, SD, frequency and percentage. Three-box method approached was used to analyze the distribution of respondents' answering from the questionnaire. The path analysis was used to measure the association between independent variables with dependent variables. The assumption should be met with the criteria before using the SEM statistic such as normally distribution, no auto correlation and multicollinearity. The 5% of significantly also used for this study.

## **RESULT**

### Characteristic of respondents

Table 1 described the characteristic of respondents. More than half of respondents were female (64.9%). Almost half of respondents are 31-40 years, following by 20-30 years (36.8%). Regarding the working duration, 38.6% have been working more than 10 years, following by 6-10 years (33.3%) and 1-5 years (28.1%). Most of respondents graduated from diploma III of nursing (84.21%). With regards of employment status, more than half of respondents are permanent employee.

**Table 1. characteristic of respondents**

No	Variables	n	%
1	Gender		
	Men	20	35.1
	Women	37	64.9
2	Aged		
	20-30 years	21	36.8
	31-40 years	27	47.4
	41-50 years	8	14
	50 years	8	1.8
3	Working duration		
	1-5 year	16	28.1
	6-10 years	19	33.3
	>10 years	22	38.6
4	Education		
	Diploma III	48	84.21
	Diploma IV	2	3.51
	Bachelor	4	7.2
	Professional nurses	3	5.26
5	Employment status		
	Permanent employee	29	50.9
	Contract employee	25	43.9
	Orientation employee	3	5.3

### Direct effect of management support, team work, monitoring and evaluation process on implementing the patients' identification among nurses

Table 2 described the direct effect of management support, team work, monitoring and evaluation process on implementing the patients' identification among nurses. The result found that there is positive correlation between management support (p-value<.05), team work (p-value<.05) and monitoring and evaluation process (p-value<.05) with implementation of patients' identification. Other findings showed the correlation between management support with monitoring and evaluation process (p-value<.05). The positive association also found Correlation between

team work with monitoring and evaluation (p-value<.05).

**Table 2. Direct effect**

Direct effect	β	p-value
Correlation between management support with implementation of patients' identification	.546	.000
Correlation between team work with implementation of patients' identification	.607	.000
Correlation between monitoring and evaluation with implementation of patients' identification	.709	.000
Correlation between management support with monitoring and evaluation process	.529	.000
Correlation between team work with monitoring and evaluation	.852	.000

### Multiple linear regression testing

Table 3 described multiple linear regression testing to describe the association between management support, team work, monitoring and evaluation process on implementing the patients' identification among nurses simultaneously. The findings showed the positive association between management support, team work, monitoring and evaluation process on implementing the patients' identification among nurses (F= 21. 503; p-value<.05).

**Table 3. ANOVA results testing**

Model	Sum of squares	df	F	p-value
Regression	374.22	3	21.503	.000
Residual	2525.77	53		
Total	5600	56		

The research regression equation can be created based on the results of the regression test in the following coefficient table

**Table 3. Multiple linear regression testing**

Model	B	t	Sig
Constant	9.268	1.728	.090
Management support	.278	2.346	.023
Team work	-.166	-.866	.291
Monitoring & evaluation	.703	3.992	.000

Based on the coefficient table, the regression equation for this research is as follows:

$$Y = 9.268 - 0.278 + (-0.166) + 0.703$$

- 1) Alpha constant value = 9.268, this shows that Management support, team work,

monitoring and evaluation are said to be constant.

- 2) The addition of a management support unit increases the implementation of patient identification by nurses by 0.278.
- 3) The addition of monitoring and evaluation increases the implementation of patient identification by nurses by 0.703.

#### **Determinant testing**

Based on the summary model, it is found that R Square is 0.523. It can be concluded that management support, team work, monitoring and evaluation simultaneously influence the implementation of patient identification among nurses with a percentage of 52.3%.

**Table 4. Determinant analysis**

Model 1	R	R square	Adjusted R square
1	.741	.549	.523

## **DISCUSSION**

### **Association between management support on the implementation of patient identification**

The result of this study showed that management support influences the implementation of patient identification. The implementation of patient identification systems such as patient portals, barcoding, and biometrics is crucial for enhancing patient safety and healthcare efficiency. These systems help in accurately identifying patients, thereby reducing medical errors and improving the quality of care.

The positive association between management support on the implementation of patient identification was due to management provides support through establishing patient safety policies by being involved in determining goals, policy decisions and support for HR, involvement in the process (14-15).

A literature review can help inform this process by identifying the various patient identification techniques used worldwide, such as unique patient identifiers (UPIs), algorithmic approaches (16). Another study also mentioned that Training is essential for healthcare professionals to understand and effectively use the patient identification system (17). Training should also cover the importance of patient safety and the correct implementation of patient identification policies.

The successful implementation of patient identification systems requires a comprehensive approach that includes careful planning, stakeholder engagement, thorough training, and continuous evaluation. By addressing these key components, healthcare organizations can enhance patient safety, ensure the appropriate use of resources, and foster successful data sharing and interoperability (16-17).

### **Association between team work on the implementation of patient identification**

The result of this study showed the positive association between team work on the implementation of patient identification. Effective teamwork in healthcare is crucial for patient safety and minimizing adverse events caused by miscommunication and misunderstandings of roles and responsibilities (18-19).

The previous studies mentioned that Teamwork has been linked to improved patient outcomes, reduced medical errors, and increased patient satisfaction (20-21).

Effective teamwork in healthcare is essential for the successful implementation of patient identification and overall patient safety. While there are significant barriers to achieving high-quality teamwork, various strategies and evidence-based frameworks can be employed to enhance team performance and overcome these challenges

### **Association between monitoring & evaluation process with the implementation of patient identification**

The result of this study showed the positive association between monitoring & evaluation process with the implementation of patient identification. The monitoring and evaluation (M&E) process is crucial in healthcare, particularly in the context of patient identification, as it ensures that interventions are effective, efficient, of high quality, and have a significant impact. The specific aspects of the M&E process that relate to patient identification.

Previous studies mentioned that Effectiveness in the M&E process refers to the extent to which patient identification leads to the desired outcomes. This could involve assessing whether the implementation of patient identification strategies results in

accurate matching of patients to their medical records and treatments, and whether it reduces medical errors (22-23).

Impact in the M&E process involves the long-term effects of patient identification on patient outcomes and the healthcare system as a whole. This could include measuring reductions in patient harm due to misidentification, improvements in patient satisfaction, and the overall enhancement of patient safety within the healthcare facility (22).

Another study reported that the integration of patient involvement in clinical practice can enhance the quality of patient participation and contribute to better healthcare outcomes (23). Quality in the M&E process pertains to the standard of patient identification practices. This includes the reliability and accuracy of identification methods, such as biometric systems or barcode scanning, and their integration with electronic health records. It also involves assessing the training and support provided to staff to ensure high-quality patient identification (24).

In summary, the M&E process is integral to the implementation of patient identification systems, ensuring they are effective, efficient, and of high quality, and that they have a positive impact on patient care and the healthcare system.

## CONCLUSION

Management support has a greater influence on the implementation of patient identification through monitoring and evaluation variables. Meanwhile, the team work variable was found to have a small influence on the implementation of patient identification so that to achieve the implementation of patient identification, the team work variable was needed monitoring and evaluation so that team work works better and the implementation of patient identification is carried out optimally. Management support influences the formation of an effective team so that strong team work will result contribute to management.

## IMPLICATION

It is hoped that this implication can realize the best service in efforts to ensure patient safety in hospitals as well as evaluation materials to improve the quality of other public services.

System for developing and increasing staff knowledge, namely by creating a routine agenda for implementing patient safety training, the target is to cover all hospital staff. Socialize the patient safety incident reporting system. Preparation of hospital quality indicators to refer to all components of patient safety targets. Create monitoring and evaluation policies related to the implementation of quality improvement and patient safety activities.

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