

# Training Needs Analysis (TNA) for Nurses at Ilaga Regional Hospital, Puncak Regency, Central Papua

Erik Suhendra<sup>1\*</sup>, Puput Oktamianti<sup>2</sup>, Dumilah Ayuningtyas<sup>3</sup>

Universitas Indonesia, Depok, Indonesia

Email: [erik.rsud.ilaga@gmail.com](mailto:erik.rsud.ilaga@gmail.com)<sup>1</sup>

correspondence: [erik.rsud.ilaga@gmail.com](mailto:erik.rsud.ilaga@gmail.com)\*

KEYWORDS	ABSTRACT
Gap Competency Analysis; Hennessy-Hicks Questionnaire; Organizational Analysis; Personal Analysis; Training Needs Analysis.	Nurse training at Ilaga Regional Hospital aims to improve nurses' quality, but its implementation does not have a significant impact. This must be addressed immediately, because the failure of ineffective, inefficient and irrelevant training to the needs of nurses at Ilaga Regional Hospital can hinder efforts to improve the quality of service at Ilaga Regional Hospital. This study aims to identify training needs at Ilaga Regional Hospital, using quantitative methods of survey data from the Hennessy-Hick's questionnaire (n = 29, purposive sampling), consisting of 25 questions (five categories). Qualitative methods use semi-structured interview data (n = 14) consisting of 42 questions (organizational analysis, task analysis, personal analysis). Training needs according to education level, agency of origin, age and length of service, namely administration and clinical skills. However, the competency gap is smaller in respondents S1 + Profession, the highest in IRNA, tends to decrease with age. and there is a variation in the gap in each category of length of service. The results of the organizational, task and personal analysis, there is a need for RME training, clinical skills, SOP training, and motivational training.

Attribution-ShareAlike 4.0 International (CC BY-SA 4.0)



## Introduction

Training for health workers has been proven to have many benefits. Various studies highlight the benefits of training, namely increased knowledge, skills, and performance of care. Zeller et al. (2021), in their experimental research, found that (Draiko et al., 2018, 2019; Munene et al., 2019; Nazeha et al., 2020; Sunguya, Poudel, Mlunde, Shakya, et al., 2013; Sunguya, Poudel, Mlunde, Urassa, et al., 2013; Zhao et al., 2020) mindfulness training had an impact on improving clinical performance in participants who took part in the training. The benefits of healthcare worker training are not limited to improving clinical performance alone but also to improving readiness and psychological support as well as increasing job satisfaction and retention rates among nurses (Waggoner & Waskosky, 2023).

Training Needs Analysis (TNA), according to Bee and Bee (1994), is "the process of determining the gap between the skills, knowledge, and attitudes of actual and in-demand employees.". Watkins and Kaufman (1996) define TNA as "a systematic process for identifying existing needs, as well as the most appropriate solution to address performance gaps in an



organization.". TNA is a process of identifying training needs through identifying gaps between the required performance and employees' actual performance. TNA is a systematic method to determine the gap between the performance of employees who are needed today and their actual performance through training to improve their performance in order to achieve organizational goals (Bee, n.d.; Kaufman et al., 1996; Brown, 2002; Blanchard & Thacker, 2023).

According to the Ministry of Health's TNA guidelines, the purpose of TNA is to measure the gap between the actual desired situation and determine the difference in results and sort priorities. This is the basis for preparing training programs, determining competency development priorities, and facing new policies and tasks (Directorate General of Health Personnel, Ministry of Health, n.d.).[Klik atau ketuk di sini untuk memasukkan teks.](#)

There are several TNA models, including the TNA McGehee and Thayer's Three-Level Analysis models, ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model Hennessy-Hicks, model Analysis DIF (Difficulty, Importance, Frequency). In this research, the Hennessy-Hicks model will be used and Model TNA McGehee and Thayer's Three-Level Analysis.

The Hennessy-Hicks model is a model that identifies training needs at different levels, such as individuals, groups, or organizations, and prioritizes the need for development in individuals who still lack certain competencies. The Hennessy-Hicks analysis model performs data processing and analysis that includes choices at the level of importance and ability to perform task descriptions/competencies. (Hennessy et al., 2006b)

McGehee and Thayer's Three-Level Analysis Model is a TNA model developed by McGehee and Thayer (1961) and includes three levels of analysis used to determine training needs, namely organizational analysis, task analysis and personal analysis.

Organizational Analysis is a strategy to improve HR competencies that are relevant to needs, thus helping to achieve organizational goals. According to Noe (2010) explained that in this analysis, training needs are identified based on the vision, mission, goals, strategies, and external and internal environment of the organization (Noe & Kodwani, 2018).

Task analysis focuses on employees' specific work or tasks and the skills and knowledge required to complete those tasks. Task analysis is used to identify important tasks in a job, as well as the competencies required to complete them successfully. Dessler (2013) explained that task analysis elaborates on the details of the information on a task so that the necessary skills or training can be determined (Dessler, 2019).

Individual Analysis focuses on health workers as individuals. Armstrong (2014) emphasized that Person Analysis is carried out by analyzing employee performance data, performance assessment results, and input from supervisor Personal analysis in the context (Armstrong and Taylor, 2020). of Training Needs Analysis (TNA) focusing on identifying training needs based on preferences, skills, and motivation, and individual goals. This approach allows organizations to design training programs that support the achievement of organizational goals as well as the development of individual careers and skills.

Nurses as the largest element of health workers at Ilaga Hospital greatly affect the quality of service at Ilaga Hospital. The quality of good nurses will be directly proportional to the quality of service at Ilaga Hospital. Therefore, Ilaga Hospital has tried to improve performance by improving the competence of nurses through training at training course institutions and



hospitals, both in Papua and outside Papua. However, the training that has been carried out is felt to have no significant impact on the service performance of the hospital.

This study aims to determine the need for nurse training in hospitals, using the Hennessy-Hicks questionnaire method, and McGehee and Thayer's Three-Level Analysis method. The novelty of this research lies in its multi-faceted approach, providing a deeper exploration of TNA in a rural hospital setting, which remains underexplored in the current literature. Specifically, this research contributes to the field by offering a detailed framework for understanding how factors such as age, gender, education level, and work experience shape the specific training needs of health workers. Additionally, it introduces the use of both qualitative and quantitative analysis to create a more robust, holistic view of training needs, which can guide the development of tailored, effective training programs. By addressing the unique challenges faced by nurses in remote or rural settings, this study aims to provide practical insights that can inform policy decisions, improve training programs, and enhance healthcare outcomes in similar contexts.

## **Research Methods**

The design of this study uses qualitative and quantitative methods. The qualitative method through interviews, is used to understand the structure, processes and internal and external factors that affect services at Ilaga Hospital, while the quantitative method through the Hennessy-Hicks questionnaire, is used to measure the gap analysis of nurse competencies at Ilaga Hospital.

The location and time of the research was carried out at Ilaga Hospital, Puncak Regency, Central Papua and was carried out in October – November 2024, with 29 nurse respondents determined by purposive sampling techniques, consisting of all active nurses in the Emergency Installation, Inpatient Installation, and Outpatient Installation.

The types of data used are qualitative and quantitative. The data collection method consists of a survey, which is used in this study by asking either directly or indirectly to the respondents with a closed statement. The data collection officer will be taken directly by the researcher.

The instrument used was the Hennessy-Hicks questionnaire. Questionnaires can be used to recognize the respondent's knowledge, experience, and motivation. The questionnaire comprised twenty-five closed questions; several alternative answers were provided, and respondents had to choose them. Questions can also be a mixture of the two. The data from the closed survey in the form of a scale is symbolized by the numbers 1-7. The interview followed the guidelines, consisting of forty-two semi-structured questions conducted on several respondents. Interviews will be conducted face-to-face for two weeks, according to respondents' willingness. Observation will be carried out at Ilaga Hospital for 2 weeks. Researchers will carry out observations during working hours.

## **Research Instruments**

The data will be analyzed qualitatively to understand the experiences, perceptions, and training needs of individuals and organizations more deeply. Quantitative analysis is carried out by analyzing survey data, questionnaires, or performance data to identify competency gaps and training needs. Quantitative analysis is carried out through quantitative data in the form of



questionnaires or surveys used to collect data from nurses regarding current competencies, satisfaction levels with previous training, and areas where they feel they need additional training. Questionnaire questions on a scale of 1-7, in which respondents assess their competencies or needs. Interview questions are structured and open-ended. Data on nurse performance includes response time to patients, error rates in medical records, and the number of patients treated. This data can be used to analyze the gap between actual performance and expected standards.

Before conducting research, the researcher will make a permit application letter from the FKM UI Ethics Assessment Team. Then, the researcher will get a license to conduct research from Ilaga Hospital. Before taking research data, the researcher will ask for informed consent from the respondents. All research data will be kept confidential for research purposes.

## Results and Discussion

### Characteristics Respondent

The Hennesy-Hicks questionnaire had 29 respondents. The majority of respondents were women, 25-30 years old and 30-35 years old. The distribution of respondents did not differ in terms of education level and length of work. Most respondents worked in the emergency room and IRNA, with the distribution of working hours almost evenly except for those who worked for more than 10 years.

The distribution of interview respondents consisted of 14 respondents. The majority of respondents were women, with the majority of all respondents being 30-35 years old and working for 3-4 years. The distribution of respondents is no different in terms of education level. The majority of respondents work in IRNA.

**Table 1. Characteristics Respondent**

Characteristics Respondent	Questionnaire		Interview	
	Number (n=29)	Percentage	Number (n=14)	Percentage
<b>Level of Education</b>				
D3	15	51,7	8	57,1
2. S1+ Prof	14	48,3	6	42,9
<b>Gender</b>				
Man	9	31	3	21,4
Woman	20	69	11	78,6
<b>Work Unit</b>				
IGD	12	41,4	4	28,6
IRNA	15	51,7	9	64,3
IRJ	2	6,9	1	7,1
<b>Age</b>				
20-25 Years	2	6,9	5	35,7
25-30 Years	12	41,4	-	-
30-35 Years	10	34,5	-	-
35-40 Years	3	10,3	6	42,9
40-45 Years	2	6,9	3	21,4



Length of Work				
<1 Year	6	20,7	2	14,3
1-2 Years	6	20,7	3	21,4
3-4 Years	8	27,6	6	42,9
5-10 Years	7	24,1	3	21,4
>10 Years	2	6,9	2	14,3

### Training Needs for D3 and S1+ Professional Respondents

In the study, it was found that the improvement of the level of education reduced the competency gap, where in most categories (audit and research, communication and teamwork, clinical skills, management and supervision), S1 + Profession nurses have a smaller competency gap than D3 nurses, except a larger gap in S1 + Profession nurses in the administration category.

**Table 2. Training Needs for D3 and S1 + Professional Responders**

Necessity Training	D3			S1 + PROFESSION		
	Importance	Performance	Gap	Importance	Performance	Gap
Audit and Research	6,23	5,17	1,06	6,14	5,61	0,54
Communication and Teamwork	6,58	5,48	1,1	6,7	5,93	0,77
Skills Clinical	6,38	4,97	1,41	6,42	5,1	1,32
Administration	6,6	5,03	1,57	6,32	4,61	1,71
Management and Supervision	6,51	5,51	1	6,21	5,31	0,9

### Training Needs for IGD, IRNA, and IRJ Respondents

This study found that IRNAs have a higher training need in general. IRNAs show the highest gaps in audit and research, clinical skills, and administration. IRJ has a high need for communication, teamwork, management, and supervision. Emergency rooms have a relatively consistent gap across all categories, with the greatest need for administrative and clinical skills.

**Table 3 Training Needs of Emergency Responders, IRNA, and IRJ**

Necessity Training	IGD			IRNA			IRJ		
	Importan ce	Performan ce	Gap	Importan ce	Performan ce	Gap	Importan ce	Performan ce	Gap
Audit and Research	6,14	5,61	0,54	6,27	5,53	0,73	5,5	5,25	0,25
Communication and Teamwork	6,7	5,93	0,77	6,62	5,77	0,85	6,63	5,25	1,38



Skills Clinical	6,42	5,1	1,32	6,57	5,11	1,46	5,68	4,25	1,43
Administration	6,32	4,61	1,71	6,6	4,8	1,8	5,75	4,25	1,5
Management and Supervision	6,21	5,31	0,9	6,18	5,36	0,82	6	5	1

### Training Needs for Male and Female Respondents

This study found that men have significantly higher training needs than women.

**Table 4. Training Needs for Male and Female Responders**

Necessity Training	Man			Woman		
	Importance	Performance	Gap	Importance	Performance	Gap
Audit and Research	6,11	4,39	1,72	6,23	5,83	0,4
Communication and Teamwork	6,53	4,94	1,58	6,69	6,04	0,65
Skills Clinical	6,31	4,4	1,91	6,43	5,32	1,11
Administration	6,61	4,17	2,44	6,4	5,13	1,28
Management and Supervision	6,19	4,63	1,56	6,45	5,77	0,68

### Training Needs in Respondents with Age Categories

The study found that young people need more training, with nurses aged 20–25 having the largest gap in all categories, especially auditing, research, and administration. This table also shows the decrease in the gap with age, where the gap in each category tends to decrease with age, indicating that competencies develop significantly through work experience. Then it can be seen that the >40-year-old age group has almost zero or very small gaps in all categories, reflecting maturity and mastery of competence.

**Table 5. Respondent Training Needs in the Age Category**

Necessity Training	20-25 years old			25-30 years old			30-35 years old			35-40 years old			>40 years		
	I	P	Gap	I	P	Gap	I	P	Gap	I	P	Gap	I	P	Gap
Audit and Research	6,75	4,75	2	6	5,38	0,63	6	5,38	0,63	7	6,5	0,5	6,5	6,5	0
Communication and Teamwork	6,75	5,38	1,38	6,52	5,58	0,94	6,52	5,58	0,94	7	6,58	0,42	6,75	6,75	0
Skills	6,61	4,93	1,68	6,25	4,92	1,33	6,25	4,92	1,33	7	5,86	1,14	5,89	5,82	0,07



Clinical															
Administration	6,5	4,5	2	6,21	4,42	1,79	6,21	4,42	1,79	7	6	1	6,25	6,25	0
Management and Supervision	6	5,33	0,67	6,22	5,28	0,94	6,22	5,28	0,94	7	6,44	0,56	6,5	6,5	0

### Training Needs for Respondents with Long-Term Employment Category

This study found that nurses with a working period of <3 years, there has been a larger gap in auditing and research. There was also a consistent gap in clinical skills across all working age groups. Then, there is a high gap in the administration group for the 1-2 year working period.

**Table 6. Respondent Training Needs in the Long-Term Working Category**

Necessity Training	<1 year			2-3 years			3-4 years			5-10 years			>10 years		
	I	P	Gap	I	P	Gap	I	P	Gap	I	P	Gap	I	P	Gap
Audit and Research	6,42	5,42	1	6,33	5,75	0,58	6,25	5,06	1,19	5,57	5,14	0,43	7	6,25	0,75
Communication and Teamwork	6,83	5,38	1,46	6,46	5,75	0,71	6,69	5,78	0,91	6,46	5,61	0,86	7	6,5	0,5
Skills Clinical	6,54	4,82	1,71	6,38	5,39	0,99	6,52	5,29	1,23	5,96	4,44	1,52	7	5,64	1,36
Administration	6,42	4,5	1,92	6,17	4,75	1,42	6,56	5,06	1,5	6,5	4,71	1,79	7	5,5	1,5
Management and Supervision	6,56	5,28	1,28	6,11	5,5	0,61	6,58	5,83	0,75	6	4,81	1,19	7	6	1

### Results of Organizational Analysis

In this study, problems at the organizational level related to nurse performance were found, including the lack of understanding of the hospital's vision and mission by all nurses of Ilaga Hospital, the not-yet-formal organizational structure of the hospital, such as the head of the installation and the person in charge of nurse training, and problems in implementing RME.

### Results of Task Analysis

In this study, problems were found at the duties related to nurse performance, including job descriptions and difficulties in implementing SOPs.

### Results of Task Analysis

This study found problems at the personal level related to nurse performance, including nurses' lack of motivation in carrying out their work and unclear career paths.

## Discussion

### Training Needs

According to research, the competence of nurses is influenced by the status of staffing, education level, length of work and training that has been followed. Likewise, where a 10% increase in the proportion of nurses with a bachelor's degree is associated with a 5% decrease in the likelihood of patients dying within 30 days of being admitted to the hospital. According



to the report, more registered nurses were associated with fewer hospital-related deaths, rescue failures, heart attacks, hospital-acquired pneumonia, and other adverse events (Aiken, 2003; Kane et al., 2007; Mulyaningsari et al., 2016).

In contrast to this study, the competency gap was not much different in respondents with D3 education levels (15 people), and S1+ Profession (14 people). Table 2 shows a smaller competency gap at the S1 + Profession education level, which shows that higher education levels generally provide better competency strengthening. However, the same type of training needs can be due to the lack of a different division of duties between D3 and S1+ Profession nurses at Ilaga Hospital, so the same competencies are needed in the job. The same results were obtained in the study, where a comparison of training needs at all three levels (SPK, D3, S1) resulted in only one difference between them ("building relationships with patients"). These results suggest that all levels of nurses have very similar developmental needs and that the provision of separate and tailored (Hennessy et al., 2006a) Continuous Personal Development (CPD) is not necessary.

The same is the case with research, where age affects the competence of nurses; in this study, young nurses (20-25 years) have the largest gap in all categories, especially auditing and research and administration. This can be linked to a lack of work experience and exposure to more complex responsibilities. In general, age affects the competence of nurses, as well as this study shows that the need for training is influenced by age; the gap in each category tends to decrease with age; it can be seen that the age group >40 years has almost zero or very small gaps in all categories, reflecting maturity and mastery of competencies showing that competencies develop significantly through work experience. Therefore, age is inversely proportional to the need for training (Mulyaningsari et al., 2016).

According to research, younger nurses, especially those ages 21 to 40, often strongly desire further training and professional development. This age group is characterized by high turnover and a higher desire for better chances. As a result, younger nurses may feel less prepared to face the demands of the job, thus encouraging them to take part in targeted training programs to address knowledge gaps and. It was then mentioned that the perception of the need for training for younger nurses is related to career paths and the working environment, highlighting the need for specific training. In contrast, nurses already entering middle age, between 31 and 50 years old, already have much practical experience but still need advanced training, particularly in areas such as evidence-based practice and leadership. Research shows that these nurses are motivated by a desire for career advancement and recognition, thus driving the need for nurse training. In addition, research has shown that mid-career nurses are more likely to engage in continuing education and professional development opportunities which are relevant and aligned with career goals (Belal et al., 2015; Miyata et al., 2013; Price & Reichert, 2017; Sudarmika et al., 2023; Wakaba et al., 2014).

The need for training is also influenced by the length of work, with variations in gaps that reflect the specific needs of each phase of work. New nurses need basic training, such as auditing and research, while experienced nurses need reinforcement in supervision and renewal of clinical skills. Therefore, a training strategy that takes into account the working period is necessary to ensure that each group can develop according to its responsibilities (Zuhri & Dwiantoro, 2017).



---

## Organizational Analysis

In this study, several problems were found that affect the performance of nurses, namely vision and mission problems that have not been understood and structures that are not yet formal. The vision and mission of the hospital have an important role in the performance of nurses. A clear vision and mission can guide nurses in their work. Pamungkas (2024), in his systematic review, mentioned that the mission and vision statement can improve the organisation's overall performance, including that of the nursing staff. Meanwhile, Wagiono's Wagiono and Gilang (2018) research stated that a clear vision and mission had an influence of 56.6% on the quantity of nurse performance, 57.9% on the quality of nurse performance, and 76.5% on the quantity and quality of nurse performance.

A mission statement not only explains the hospital's goals but also inspires and motivates nurses by explaining clear goals in a nurse's job. The motivational aspect is important because the research when nurses understand and are in line with the vision and mission of the hospital, the level of involvement and performance of nurses increases significantly. This is in accordance with the results of Newhouse et al. (2009) research where promoting a shared vision and accelerating involvement in quality and safety initiatives will result in an improvement in the nursing work environment in rural hospitals (Atta et al., 2019; Cronin & Bolon, 2018).

In this study, a complete organisational structure was obtained through the study of the Organizational Structure and Governance (SOTK) document of Ilaga Hospital. This is after the five main components of the organization, according to Mintzberg, namely:

1. The strategic apex consists of the top management responsible for the organisation's overall direction. In this context, the strategic apex is the director of Ilaga Hospital and the head of the section.
2. The Middle Line consists of middle-level management that connects the strategic peak with the operational core. In this context, the middle line is the head of installation (IGD, IRNA, IRJ, and other measures).
3. The Operating Core includes workers who carry out the organization's core tasks. In this context, the operating core is health workers, including nurses.
4. Technostructure consists of a team responsible for designing organizational systems and processes, such as planning experts and analysts. Technostructure in this context is the planning, human resources and finance section.
5. Support Staff: Support staff provide additional services to support the core operations. In this context, support staff include cleaning service personnel, office boys, and administrative personnel (Mintzberg, 1983).

Likewise, as a rational organizational structure, according to Max Weber, Ilaga Hospital already has the following main characteristics:

1. Clear Hierarchy: There is a formal chain of command.
2. Formal Rules and Procedures: The work process is determined by written rules.
3. Specialization: Each member has a specific role.
4. Impersonality: Decisions are based on rules, not personal preference.
5. Formal Qualifications: Recruitment based on competencies and qualifications (Hamilton, 1991).



However, in its implementation, the middle line position is a position without formal legitimacy, thus affecting the credibility of the role so that it impacts coordination and work effectiveness. In addition, informal positions that are not accompanied by position allowances cause low motivation to carry out positions. Therefore, the recommendation is to advocate for the ratification of structural positions through an official decree by the Regent so that the responsibilities and workload of the position are clearer.

In addition, intra-organizational coordination is needed at the hospital so that trainees' determinations consider the personal needs of each installation (Kamal Rezza, 2018).

### **Task Analysis**

The task analysis found that task descriptions, SOPs, and performance standards need to be socialized.

#### **1. Job Description**

The results of the interview of the research respondents revealed that respondents did not know the job description, even though the document was already available at Ilaga Hospital. This is crucial because without knowing the job description clearly, the nurses of Ilaga Hospital do not know the responsibilities, authorities, and limitations in carrying out the work.

A similar thing happened at Mbagathi Hospital in Nairobi, Kenya, where hospital workers could not know what was expected of them, what was allowed, and what skills they needed to do their jobs. This increases cases of misunderstanding about which work is their responsibility and reduces the instances of work being done. As a result, 17% of respondents in the study felt that the job was not by their knowledge and skills, and felt a loss of motivation (Musyokah et al., 2016).

This problem must be overcome by socializing the job description. The available job description documents need to be clearly conveyed to all nurses from the time of recruitment and selection through orientation training, meetings, or distribution of print/digital materials, re-evaluation of the description, and periodic monitoring and evaluation to ensure that nurses understand and carry out their duties according to the description.

However, there are some important notes; the job description, the same as the job description, according to Dessler, is a written statement that contains what the worker must do, how to do it, and under what conditions the work is done. Therefore, it must also be given in a written record, not just oral (Dessler, 2011).

#### **2. Standard Operating Procedure (SOP)**

According to the interview results of the research respondents, the SOP problem that occurred was the non-compliance of SOPs by nurses at Ilaga Hospital. This is crucial because SOP compliance by nurses is very important to improve hospital performance, especially in terms of patient safety and quality of care. Compliance with SOPs by good nurses will improve the quality of services at Ilaga Hospital; on the contrary, some studies have found that non-compliance with SOPs can lead to an increase in the number of infections obtained in hospitals, mistreatment and adverse events in patients, which ultimately endangers patient safety and quality of care. In addition, non-compliance with



---

SOPs, according to Marana, leads to an increase in health care costs (Fox et al., 2015; Maryana & Anggraini, 2021; Toale et al., 2024).

Many factors, including knowledge, workload, leadership, organizational culture, and psychological factors influence adherence to standard operating procedures (SOPs) by nurses. Understanding these factors is essential for improving compliance and ensuring patient safety.

3. One of the significant factors that affect compliance is the level of knowledge among nurses

Research shows that higher levels of knowledge are positively correlated with compliance with SOPs. Research by Sulawa et al. (2021) found that knowledge significantly affects nurses' compliance with fall prevention procedures. Similarly, a systematic review by Vaismoradi et al. (2020) emphasizes that knowledge deficits can lead to non-adherence to patient safety principles, highlighting the need for ongoing education and training.

4. Workload is another important factor that negatively impacts compliance

A high workload of nurses can lead to fatigue and decreased attention to SOPs, as shown in studies by which increased workload is associated with lower levels of adherence to hand hygiene and fall prevention procedures, respectively. This suggests that when nurses are overwhelmed with tasks, they may prioritize direct patient care over compliance with SOPs, which can compromise safety (Zhang et al., 2019).

5. Leadership and organizational culture also affect compliance with SOPs

Effective leadership can foster a culture of safety and compliance, and as Bouchoucha and Moore (2019) note, supportive supervision and leadership significantly influence compliance with standard precautions. In addition, research by Förberg et al. (2014) reinforces this by illustrating how a positive work environment and strong leadership can improve adherence to clinical guidelines among nurses. Conversely, a lack of support from management can lead to decreased motivation and compliance, as nurses may feel that their efforts are not recognized or appreciated.

6. Psychological factors, such as attitude and motivation, are crucial in determining the level of compliance

Aeni et al. (2023) highlighted that nurses' attitudes towards SOPs significantly affected their adherence, which suggests that cultivating positive attitudes towards adherence can increase compliance rates. Furthermore, research by Mohamad et al. during the COVID-19 pandemic showed that personal leadership among nurses is essential for improving adherence to infection prevention and control practices, emphasizing the role of individual motivation (Mohamad et al., 2022).

### **Personal Analysis**

The problem found in the task analysis was the lack of motivation of nurses at Ilaga Hospital. This must be overcome because research shows a relationship between motivation and nurse performance. A study revealed a significant relationship between nurse motivation and the implementation of therapeutic communication, with a p-value of 0.001, which showed that motivated nurses were more likely to engage effectively with patients. Then, Rosdyanti et al. (2023), in their research, found that motivated nurses showed greater resilience and commitment to their roles. Effendy, in his research, found that 60.8% of nurses with high work



motivation showed good performance in documenting nursing care. Similarly, another study noted that nurses' motivation significantly influenced their adherence to electronic nursing care documentation, which suggests that motivated nurses are more diligent and effective in their documentation practices (As et al., 2023; Imelisa et al., 2024; Prasetyowati et al., 2023; Rosdyanti et al., 2023).

Consistently high levels of motivation are associated with improved performance outcomes, emphasising the need for healthcare organizations to implement strategies that increase nurse motivation to ensure high-quality patient care. Therefore, it is important for Ilaga Hospital to increase nurses' motivation.

## Conclusion

The conclusion of the study shows that the training needs at Ilaga Hospital, based on the analysis of the Hennessy-Hicks questionnaire, include categories of administration, clinical skills, management and supervision, communication and teamwork, and audit and research, with variations in needs depending on the level of education, work installation, gender, age, and length of work of the respondents. The organizational analysis identified RME training as a priority to improve nurse performance. In contrast, the task analysis showed the importance of SOP training and emergency clinical skills, and the personal analysis highlighted the need for SOP training and motivation. To improve nurse training, it is recommended that training be implemented according to the priority of TNA results and the database of training needs and periodic evaluations updated. From the organizational side, efforts to share vision, advocacy for formal positions through the Regent's Decree, the appointment of the person in charge of training, preparation of job descriptions and SOPs, provision of training facilities, and development of nurses' career paths at Ilaga Hospital are needed.

## References

- Aeni, Q., Chasanah, N., Anggraeni, R., & Mustika Nurwijayanti Sekolah Tinggi Ilmu Kesehatan Kendal, A. (2023). The Relationship Between Application Operational Procedure (SPO) of the Right Principle of Drug Administration with the Standard Level of Patient Satisfaction. *Proceedings of the International Conference on Nursing and Health Sciences*, 4(1), 71–78. <https://doi.org/10.37287/PICNHS.V4I1.1684>
- Aiken, L. H. (2003). Educational Levels of Hospital Nurses and Surgical Patient Mortality. *JAMA: The Journal of the American Medical Association*, 290(12), 1617–1623. <https://doi.org/10.1001/jama.290.12.1617>
- Armstrong, M., & Taylor, S. (2020). *Armstrong's Handbook of Human Resource Management Practice*. Kogan Page. <https://books.google.co.id/books?id=g7zEDwAAQBAJ>
- As, M., Efendy, ad, & Puspita, M. (2023). The Relationship between Work Motivation and Nurse Performance in Documenting Nursing Care at X Hospital, Malang City. *Journal Of Nursing Practice*, 7(1), 169–175. <https://doi.org/10.30994/JNP.V7I1.430>
- Atta, M., Taha, Z., Abood, S. A., & Ali, R. M. N. (2019). Nursing Staff Perception Regarding Factors Influencing Their Performance in General Hospital. *Minia Scientific Nursing Journal*, 006(1), 183–189. <https://doi.org/10.21608/msnj.2019.187817>



- Bee, R. (n.d.). Training Needs Analysis & Evaluation. Universities Press.  
<https://books.google.co.id/books?id=XR1rg8gXCxEC>
- Belal, G. A. E.-S., Gaheen, M. A. S. A., & Mohamed, F. A. E. (2015). The educational needs among obstetrical and gynecological nurses in El-Gharbia Governorate. *Journal of Nursing Education and Practice*, 6(4). <https://doi.org/10.5430/jnep.v6n4p84>
- Blanchard, P. N., & Thacker, J. W. (2023). Effective Training: Systems, Strategies, and Practices. SAGE Publications. <https://books.google.co.id/books?id=70HVEAAAQBAJ>
- Bouchoucha, S. L., & Moore, K. A. (2019). Factors Influencing Adherence to Standard Precautions Scale: A psychometric validation. *Nursing & Health Sciences*, 21(2), 178–185. <https://doi.org/10.1111/nhs.12578>
- Brown, J. (2002). Training needs assessment: A must for developing an effective training program - ProQuest. *Public Personnel Management*, 31, 569–574. <https://www.proquest.com/docview/215929238/abstract?parentSessionId=gyYj%2BldE68ELo4q5pXSRUzcqu58lLf6wVvWDmosUyqs%3D&pq-origsite=summon&accountid=17242&sourcetype=Scholarly%20Journals>
- Cronin, C. E., & Bolon, D. S. (2018). Comparing Hospital Mission Statement Content in a Changing Healthcare Field. *Hospital Topics*, 96(1), 28–34. <https://doi.org/10.1080/00185868.2017.1366188>
- Dessler, G. (2011). Human Resource Management. Prentice Hall. <https://books.google.co.id/books?id=JyBstgAACAAJ>
- Dessler, G. (2019). Human Resource Management. Pearson. <https://books.google.co.id/books?id=kOJNuQEACAAJ>
- Direktorat Jenderal Tenaga Kesehatan Kementerian Kesehatan, D. (n.d.). PEDOMAN PELATIHAN DAN PENINGKATAN KOMPETENSI LAINNYA BIDANG KESEHATAN.
- Draiko, C. V., Yamarat, K., Panza, A., & Draleru, J. (2019). Evaluation of Retention of Knowledge, Skill and Competency of Health Workers One Year After Completion of the Helping Babies Breathe Training Program in South Sudan. *F1000research*, 8, 167. <https://doi.org/10.12688/f1000research.17560.1>
- Draiko, C. V., Yamarat, K., Panza, A., Draleru, J., Taban, M., Onyango, J., Akur, R., & Omega, R. A. (2018). Training Interventions on Helping Babies Breathe Among Health Workers in Tertiary Hospital of the Republic of South Sudan: A Non-Randomized Quasi-Experimental Study. *Healthcare in Low-Resource Settings*, 6(1). <https://doi.org/10.4081/hls.2018.7276>
- Förberg, U., Wallin, L., Johansson, E., Ygge, B., Backheden, M., & Ehrenberg, A. (2014). Relationship Between Work Context and Adherence to a Clinical Practice Guideline for Peripheral Venous Catheters Among Registered Nurses in Pediatric Care. *Worldviews on Evidence-Based Nursing*, 11(4), 227–239. <https://doi.org/10.1111/wvn.12046>
- Fox, C., Wavra, T., Drake, D. A., Mulligan, D., Bennett, Y. P., Nelson, C., Kirkwood, P., Jones, L., & Bader, M. K. (2015). Use of a Patient Hand Hygiene Protocol to Reduce Hospital-Acquired Infections and Improve Nurses' Hand Washing. *American Journal of Critical Care*, 24(3), 216–224. <https://doi.org/10.4037/ajcc2015898>



- 
- Hamilton, P. (1991). Max Weber: Critical Assessments 2 (Issue v. 2). Routledge.  
<https://books.google.co.id/books?id=wAzAu2---KoC>
- Hennessy, D., Hicks, C., Hilan, A., & Kawonal, Y. (2006a). Human Resources for Health The training and development needs of nurses in Indonesia: paper 3 of 3.  
<https://doi.org/10.1186/1478-4491-4-10>
- Hennessy, D., Hicks, C., Hilan, A., & Kawonal, Y. (2006b). The training and development needs of nurses in Indonesia: paper 3 of 3. Human Resources for Health, 4(1), 10.  
<https://doi.org/10.1186/1478-4491-4-10>
- Imelisa, R., Cahyandi, D. R., Wisnusakti, K., Setiawati, & Rohayani, L. (2024). The Relationship of Motivation with Therapeutic Communication of Nurses in One of The Public Hospitals in Cimahi City. HealthCare Nursing Journal, 6(1), 14–18.  
<https://doi.org/10.35568/healthcare.v6i1.4270>
- Kamal Rezza, M. (2018). Impact of Training Needs Analysis and Inter-Organizational Coordination on Training Effectiveness: A Study Case in Indonesian Customs and Excise Training Center.
- Kane, R. L., Shamliyan, T., Mueller, C., Duval, S., & Wilt, T. J. (2007). Nurse staffing and quality of patient care. Evidence Report/Technology Assessment, 151, 1–115.
- Kaufman, R., Keller, J. M., & Watkins, R. (1996). What Works and What Doesn't: Evaluation Beyond Kirkpatrick. Performance + Instruction, 35(2), 8–12.  
<https://doi.org/10.1002/pfi.4170350204>
- Maryana, M., & Anggraini, R. B. (2021). Nurses' Individual Characteristics Associated with Five Moments Handwashing Compliance. Jurnal Ners, 16(2), 135–141.  
<https://doi.org/10.20473/jn.v16i2.22399>
- Mintzberg, H. (1983). Structure in Fives: Designing Effective Organizations. Prentice-Hall.  
<https://books.google.co.id/books?id=8wCdPwAACAAJ>
- Miyata, C., Arai, H., & Suga, S. (2013). Perception gaps for recognition behavior between staff nurses and their managers. Open Journal of Nursing, 03(07), 485–492.  
<https://doi.org/10.4236/ojn.2013.37066>
- Mohamad, N., Pahrol, M. A., Shaharudin, R., Md Yazin, N. K. R., Osman, Y., Toha, H. R., Mustapa, N., Mohamed, Z., Mohammad, A., & Ismail, R. (2022). Compliance to Infection Prevention and Control Practices Among Healthcare Workers During COVID-19 Pandemic in Malaysia. Frontiers in Public Health, 10, 878396.  
<https://doi.org/10.3389/FPUBH.2022.878396/BIBTEX>
- Mulyaningsari, R., Juhariah, S., Surjadi, A., & Surjadi, A. (2016). Penerapan Training Needs Analysis dalam Upaya Peningkatan Kompetensi Perawat di Rumah Sakit Wawa Husada. Jurnal Kedokteran Brawijaya, 29(3), 291–299.  
<https://doi.org/10.21776/ub.jkb.2016.029.03.10>
- Munene, D., Alunyu, A. E., & Nabukenya, J. (2019). Towards a Digital Health Curriculum for Health Workforce for the African Region. <https://doi.org/10.21203/rs.2.13130/v2>
- Nazeha, N., Pavagadhi, D., Kyaw, B. M., Car, J., Jiménez, G., & Car, L. T. (2020). A Digitally Competent Health Workforce: Scoping Review of Educational Frameworks. Journal of Medical Internet Research, 22(11), e22706. <https://doi.org/10.2196/22706>



- Ndanu Musyoka, F., Atieno Adoyo, M., & Oluoch Ongombe, M. (2016). Felistus Ndanu Musyoka, Maureen Atieno Adoyo, Musa Oluoch Ongombe. Influence of Job Description on Performance of Health Workers in Public Hospitals: A Case of Mbagathi Hospital, Nairobi City County. *Science Journal of Public Health*, 4(2), 88–93. <https://doi.org/10.11648/j.sjph.20160402.12>
- Newhouse, R. P., Morlock, L., Pronovost, P., Colantuoni, E., & Johantgen, M. (2009). Rural hospital nursing: Better environments = shared vision and quality/safety engagement. *Journal of Nursing Administration*, 39(4), 189–195. <https://doi.org/10.1097/NNA.0B013E31819C9CD5>
- Noe, R. A., & Kodwani, A. D. (2018). *Employee Training and Development*, 7e. McGraw Hill Education. <https://books.google.co.id/books?id=VlakDwAAQBAJ>
- Pamungkas, T. (2024). The Effect of Vision and Mission Statement on performance of Hospital in Asia : A Systematic Review. *Journal of Advance Research in Medical & Health Science* (Issn 2208-2425), 10(2), 194–198. <https://doi.org/10.61841/8hkzz628>
- Prasetyowati, E., Widiyanto, P., & Nugroho, S. H. P. (2023). Nurse Compliance of Electronic Nursing Care Documentation in Inpatient Rooms. *JMMR (Jurnal Medicoeticolegal Dan Manajemen Rumah Sakit)*, 12(3), 300–311. <https://doi.org/10.18196/jmmr.v12i3.100>
- Price, S., & Reichert, C. (2017). The Importance of Continuing Professional Development to Career Satisfaction and Patient Care: Meeting the Needs of Novice to Mid- to Late-Career Nurses throughout Their Career Span. *Administrative Sciences*, 7(2), 17. <https://doi.org/10.3390/admsci7020017>
- Rosdyanti, T., Ribhan, & Hayati, K. (2023). The Effect of Implementation in Covid-19 Protocol and Workload: Nurses' Performance and Work Motivation as a Mediation Variable in Hospital (pp. 337–348). [https://doi.org/10.2991/978-2-38476-064-0\\_36](https://doi.org/10.2991/978-2-38476-064-0_36)
- Sudarmika, P., Santyasa, I. W., Tegeh, I. M., & Sudarma, I. K. (2023). How to assess nurse learning needs through training needs analysis. *International Journal of Health Sciences*, 7(1), 13–25. <https://doi.org/10.53730/ijhs.v7n1.13843>
- Sulawa, I. K., Wirawan, M. A., & Putri, W. C. W. S. (2021). Level of knowledge and workload are associated with nurse's adherence in implementing fall prevention procedures at Tabanan District Hospital, Bal. *Public Health and Preventive Medicine Archive*, 9(1), 72–76. <https://doi.org/10.15562/phpma.v9i1.333>
- Sunguya, B. F., Poudel, K. C., Mlunde, L. B., Shakya, P., Urassa, D. P., Jimba, M., & Yasuoka, J. (2013). Effectiveness of Nutrition Training of Health Workers Toward Improving Caregivers' Feeding Practices for Children Aged Six Months to Two Years: A Systematic Review. *Nutrition Journal*, 12(1). <https://doi.org/10.1186/1475-2891-12-66>
- Sunguya, B. F., Poudel, K. C., Mlunde, L. B., Urassa, D. P., Yasuoka, J., & Jimba, M. (2013). Nutrition Training Improves Health Workers' Nutrition Knowledge and Competence to Manage Child Undernutrition: A Systematic Review. *Frontiers in Public Health*, 1. <https://doi.org/10.3389/fpubh.2013.00037>
- Toale, K. M., Butler, G., Richardson, G., Beno, J., & Jawe, N. (2024). Improving Compliance with a Nurse-Driven Protocol for Unfractionated Heparin Infusions in Patients with Venous Thromboembolism. *American Journal of Nursing*, 124(6), 40–46. <https://doi.org/10.1097/01.NAJ.0001023968.05082.57>



- 
- Vaismoradi, M., Tella, S., A. Logan, P., Khakurel, J., & Vizcaya-Moreno, F. (2020). Nurses' Adherence to Patient Safety Principles: A Systematic Review. *International Journal of Environmental Research and Public Health*, 17(6), 2028. <https://doi.org/10.3390/ijerph17062028>
- Waggoner, J. K., & Waskosky, A. (2023). Benefits of an Integrated Nurse Residency Program in the Neonatal Intensive Care Unit. *The Journal of Perinatal & Neonatal Nursing*, 37(2), 148–152. <https://doi.org/10.1097/jpn.0000000000000681>
- Wagiono, C., & Gilang, P. (2018). Influence of A Clear Vision on Nurse Performance at Al Islam Hospital Bandung. *Global Medical & Health Communication (GMHC)*, 6(2), 122–129. <https://ejournal.unisba.ac.id/index.php/gmhc/article/view/2703>
- Wakaba, M., Mbindyo, P., Ochieng, J., Kiriinya, R., Todd, J., Waudu, A., Noor, A., Rakuom, C., Rogers, M., & English, M. (2014). The public sector nursing workforce in Kenya: a county-level analysis. *Human Resources for Health*, 12(1), 6. <https://doi.org/10.1186/1478-4491-12-6>
- Zeller, J. M., Johnson, A. M., Hoffman, A., Hoyem, R. L., Alexander, M. B., Yudkowsky, R., & Hicks, F. D. (2021). Mindfulness Training to Improve Nurse Clinical Performance: A Pilot Study. *Western Journal of Nursing Research*, 43(3), 250–260. <https://doi.org/10.1177/0193945920964938>
- Zhang, S., Kong, X., Lamb, K. V., & Wu, Y. (2019). High nursing workload is a main associated factor of poor hand hygiene adherence in Beijing, China: An observational study. *International Journal of Nursing Practice*, 25(2), e12720. <https://doi.org/10.1111/IJN.12720>
- Zhao, X., Wang, H., Li, J., & Yuan, B. (2020). Training Primary Healthcare Workers in China's Township Hospitals: A Mixed Methods Study. *BMC Family Practice*, 21(1). <https://doi.org/10.1186/s12875-020-01333-4>
- Zuhri, N., & Dwiantoro, L. (2017). Pengaruh Pelatihan Preceptorship Terhadap Adaptasi Perawat Baru.