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Handover Training Using Proin Ho On Self-Efficacy and Nurse Satisfaction at Anna Hospital, Bekasi City

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ABSTRACT
The quality of hospital services is focused on patient safety. The use of electronic technology in the form of health information improves patient safety through effective communication between health workers. A structured electronic handover process that can be used to support verbal handovers and reduce the risk of medication errors. This study aims to determine the effectiveness of the electronic Handover (Proin Ho) training program on nurses' self-efficacy and satisfaction. The research was conducted in June 2023. The research sample used a total sampling of 124 nurses with 62 respondents in each group. Quantitative Quasi Experimental research method with pre post with control group with criteria for nurses with PK level 2 and 3, following full training, willing to be respondents. The data collection tool is a questionnaire. Data analysis used t test and mutivariate backward LR linear regression. The research results showed that most of the nurses were <25-35 years old, women with D3 Nursing and PK III education. There are differences in Self-Efficacy from the 3 dimensions, most of them are good. There are differences in nurse satisfaction from the 4 dimensions, most of whom are satisfied. There was an influence on nurses' self-efficacy before and after being given the electronic handover program (Proin Ho) (p-value 0.001). There is an influence of satisfaction (p-value 0.000). Training and age are related to Self-Efficacy with p value: 0.000. Meanwhile, training ((pvalue: 0.000), age (pvalue: 0.001) and education (pvalue: 0.026) with nurse satisfaction (p<0.05).

Introduction

Minister of Health Regulation Number 11 /Menkes/Per/II/2017 article 5 paragraph 4 concerning patient safety in hospitals, one of which states that communication is the key for staff to achieve patient safety. Hospitals according to (Kirjanen & Paavilainen, 2013) stated that the main health care workers in hospitals are nurses, who interact

directly with patients with the highest intensity compared to other health workers . Nurses work in shifts because hospitals serve patients 24 hours a day. If a situation like this persists continuously, it will cause nurses to experience physical, emotional and mental fatigue, often called burnout, which can affect self-confidence in services, including in the implementation of patient identification. This not only impacts the services provided but also job satisfaction and self-efficacy of nurses (Baherimoghadam et al., 2021).

The quality of hospital services is focused on patient safety which is the main focus and basis of (WHO, 2020). To Err Is Human, Building A Safer Health System in a report put forward by (World Health Organization, 2020), that Adverse Events (KTD) were found to be 2.9% of unforeseen accidents in Utah and Colorado, of which 6.6% died. In New York, adverse events were found at 3.7% with a mortality rate of 13.6%, while in Europe, the incidence of patients at risk of infection was 83.5% and evidence of medical error was 50-72.3% (Lombogia et al., 2016). In 2017, the National Patient Safety Agency reported that there were around 1,879,822 adverse events. In Indonesia, based on the Hospital Patient Safety Committee (KKPRS), there were 877 unexpected incidents reported.

The use of electronic technology in the form of health information improves patient safety through effective communication between health workers (Uhm et al., 2019). Electronic Health Records (EHR) one of the electronic programs that includes personal biodata, medical history, test results, treatment plans (Noh & Lee, 2020) (Al-Hajjaji et al., 2021). The use of electronic technology in the form of health information can prevent delays in information such as updated examination results, thereby clarifying communication between health professions and thereby increasing patient safety (Hu et al., 2021). Use of EHR programs can reduce the number of medication errors due to poor communication between professionals and patients. The Joint Commission International (JCI) Standard Edition 5 of 2014 states that the International Patient Safety Goal (IPSG) 2.2 or second patient safety target (SKP) is that hospitals develop and implement a process for handover communication, as an effort to reduce the impact of delivery and receiving inappropriate information, namely by introducing effective communication that can be used in handover.

Handover is the process of transferring the main authority and responsibility for providing clinical care to patients from one nurse to another nurse, doctor on duty, assistant doctor, nurse on duty and nurse who has a functional rating. Handover without a good communication process can be detrimental to patients, especially in conveying information, so effective communication is needed in the handover process (Kao et al., 2020). Effective communication is one of the six patient safety targets contained in the national hospital accreditation standard, namely SKP 2. Communication is considered effective if it is timely, accurate, complete, unambiguous and accepted by the recipient of the information with the aim of reducing errors and improve patient safety (Sakit, 2011) (Munthe, 2019)

Handover prevalence based on data (World Health Organization, 2019) reported 25,000-30,000 cases of permanent disability in patients in Australia, 11% of which were due to failure to communicate . The results of a study conducted by Cohen & Hilligoss (2020) in several developed countries such as China, Japan and several European countries stated that 32% of 889 malpractice cases were caused by communication errors during handovers . In Indonesia, handover implementation itself is still not implemented well, there is data that 24-29% of errors occur due to poor handovers among medical personnel.

In practice, some handovers are manual, that is, handwritten without using formatted documentation, and some are electronic. The use of electronics in handovers, which is part of the care component for patient safety, is supported by Minister of Health Regulation No. 24 of 2022 which requires all health service facilities to use electronic medical records as documents in providing services at health facilities until no later than 31 December 2023. Completeness in filling out the handover form on the observation sheet must be completed to avoid errors in actions and provide important information that patients use in services that support the quality of service in the hospital (Christiani & Ilyas, 2020). Nurse compliance in completing the handover form is an action that can be observed and has a specific frequency, it is a key action that can be observed consciously or not. Compliance with a nursing service is a necessity for nurses to minimize errors. The most common difficulty experienced by nurses is a lack of handover guidelines and determining what information should be reported (Ningtias, 2020). According to (Zakariya, 2020), the problems surrounding the handover are due to the lack of a structured communication format, and the disintegration of electronic health records during the handover report.

The results of research conducted by (Manurung, 2019), stated that there was a significant difference in nurse satisfaction before and after intervention in inter- shift handovers carried out directly at the patient's side, which could provide satisfaction to nurses and could be used as a technique for providing nursing care in an integrated manner.

Optimal handover process can also be carried out using a structured electronic program which can be used to support handover verbally which helps nurses carry out nursing care in detail and if there are changes they can be updated at any time quickly and precisely and reduce the risk of medication errors .

Research conducted by (Anggraini et al., 2020), states that the benefits of using an Electronic Health Record (EHR) for nurses are shortening the time nurses carry out handovers , readability of data, ease of access and ease of decision making so that data storage is safe and increases nurses' ability to use technology. The advantages of using electronics in handovers can increase the effectiveness of nurses in the room, save costs, save time, exchange patient details and minimize patient errors (Sulastien et al., 2021).

Program in Handovers can improve patient safety, nursing care, and time efficiency (Kamila & Hananto, 2017). Research conducted by (Ghosh et al., 2021) stated that EHR acceptance was not related to the self-efficacy and characteristics of nurse users. Another study conducted by (Schunk & DiBenedetto, 2022) tested electronic-based handover tools in care units, the results obtained were that participants' assessment of the use of electronic-based handover tools was more efficient than verbal, but participants said that even though electronic efficient, verbal reports are still important to use.

Research (Anggraini et al., 2020) stated that the results of handover implementation were 46.8% influential on self-efficacy and nurse satisfaction. Implementing technology-based handovers is one of the caring practices in providing nursing care. Handovers Electronic Based (Proin Ho) is an IT technology-based application that supports documentation for helps nurses carry out complete handovers where all existing data is not recorded twice because the data system required by IT is directly connected to the handover data. This has a great influence on reducing errors in making decisions, preventing delays in information, work faster and improve coordination between nurses or other health teams.

Handover is the process of transferring primary authority and responsibility for providing clinical care to a patient from one caregiver to another, including the attending physician, physician assistant, nurse practitioner, registered nurse and licensed nurse practitioner (Ghosh et al., 2021). Handover without a good communication process can be detrimental to patients, especially in conveying information, so effective communication is needed in the handover process (Nursalam, 2013).

Handover is the oral communication of information about patients carried out by nurses at the change of shift. (Sanusi et al., 2020) states that the definition of patient handover is the transfer of information (including responsibility and accountability) during the ongoing transfer of care which includes opportunities for questions, clarification and confirmation about the patient. Handover also includes the mechanism for transferring information, the main responsibilities and authority of the nurse from the previous nurse to the nurse who will continue the care. Patient handover is the time when there is a shift or transfer of responsibility regarding a patient from one nurse to another nurse. The purpose of handover is to provide timely, accurate information about the patient's treatment plan, therapy, current conditions, and changes that will occur and are anticipated . The handover is carried out by the primary nursing nurse to the primary nurse (in charge) of the afternoon or night shift in writing and orally (Finley, 2016).

The main purpose of handover communication is to provide accurate information regarding nursing, treatment, services, the patient's current condition, changes that are occurring, and changes that can be anticipated. Information must be guaranteed to be accurate so that errors do not occur in the process of providing services to patients (Sulastien et al., 2021).

Table 1 Handover uses SBAR communications

Stage	Activity
Preparation	1. *Handovers* are carried out every shift change. 2. What needs to be considered are all new patients and patients who have problems that cannot be resolved and who require further observation 3. PA/PP provides *handover* to the PP of the next shift. What needs to be said: S : State the patient's name, age, date of admission and day of treatment, as well as the treating doctor. Mention medical diagnoses and nursing problems that have not been resolved or have been resolved/main complaints. B : Explain the interventions that have been carried out and the patient's response to each nursing diagnosis. Mention your history of allergies, history of surgery, installation of invasive equipment, and medications including intravenous fluids used. Explain the patient's and family's knowledge of the medical diagnosis. A : Explain in full the results of the latest patient assessment such as vital signs, pain score, level of consciousness, Braden score, restraint status, risk of falls, Pivas score, nutritional status, elimination ability and others. Explain other supporting clinical information. R : Recommend nursing interventions that have been and need to be continued, including discharge planning and patient and family education.
Implementation	*Nurse Stat ion* 1. Both service groups are ready (on guard duty) 2. The group in charge of preparing notes 3. Karu opened the overan event

Stage	Activity
	4. Short, concise, clear delivery by the nurse. 5. The nurse on duty can then provide clarification, ask questions and validate things that are not clear. Delivery during *handover* is brief and clear at the patient's bed. 6. Karu conveys greetings and asks about the patient's basic needs 7. The nurse on duty then reviews in full the nursing problems, needs and interventions that have/have not been implemented as well as other important matters during the treatment period 8. Specific matters that require careful detail should be noted to be handed over to the next shift
Post *handover*	1. Discussion 2. The report is written directly on the *handover form* , signed by the PP on duty and the next PP on duty, known to Karu 3. Closed by Karu

Currently, technology has developed rapidly, as has technology that has been developed to support nursing performance in terms of documentation in the form of an electronic nursing documentation system. Nursing documentation has been aimed at improving client records and maintaining the quality of nursing care (Bandura, 2015). Nursing documentation is a recording or electronic record of health-related information that includes patient information such as personal biodata, medical history, allergies, test results, and treatment plans (Li, 2020).

Self-efficacy was first introduced by Albert Bandura, a psychologist who was influential in the history of psychology. Self-efficacy is the nurse's ability to perform work to complete tasks, face challenges, and solve problems in the context of the workplace. Individuals with high Self-efficacy abilities are more likely to gain successful experiences to fulfill their roles in the organization (Fakhriani & Rimiyati, 2016). Self-efficacy can cause changes in behavior, especially in completing tasks and goals (Ardianti & Wanabuliandari, 2021). Individuals who have high self-efficacy will try to complete work to achieve certain goals by changing behavior. Self-efficacy consists of four variables, namely if the individual's self-efficacy is high and the environment is responsive, the result obtained is success. If the individual's self-efficacy is low and the environment is responsive, the result is that the individual experiences depression when other people successfully complete the task. which he said was difficult for him to complete. If an individual's self-efficacy is high and the environmental situation is unresponsive, the result is that the individual will try hard to change the environment. If an individual's self-efficacy is low in an unresponsive environment, the individual will feel apathetic, give up easily and feel hopeless.

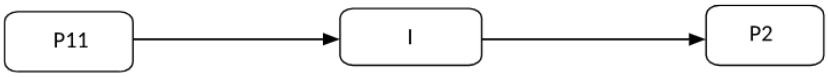
Bandura also explained that high self-efficacy will encourage individuals to make efforts to complete tasks as well as possible. On the other hand, individuals with low self-efficacy will feel doubtful and not confident in their ability to complete tasks. If the individual is faced with difficulties when completing a task, they will be slow to complete the task and give up easily (Fakhriani & Rimiyati, 2016). Nurse satisfaction is an attitude that arises based on an assessment of work situation, that satisfied nurses prefer their work situation to No liked it (Wahyuni, 2014). Satisfaction nurse defined as connection Which felt between What Which expected And obtained from work somebody And how much important or mark Which linked with work the (Ningtias, 2020).

Satisfaction nurse is attitude (positive) power Work to work, which arises based on an assessment of the work situation. Evaluation This can be done for one of the jobs. Assessment is carried out as a sense of appreciation in achieving one of the important values in work. Satisfied nurses liked their work situation more than nurses Which No satisfied, Which No like situation work (Wahyuni, 2014). Satisfaction Work interpreted as feeling emotional as well as expression behavior For something work. Feeling the influenced by a number of factor related work like wages, difference type allowance, confession, condition Work, connection with colleague Work And others (Murdani et al., 2020).

Nurse satisfaction is A construction Which try respond circumstances emotional or attitudes towards work experiences and the workplace (Finley, 2016). Satisfaction work is how people feel about their work or what emotions they have Which they experience in place Work, comfort they in work or that feeling experienced against their work (Suweko & Dwiantoro, 2020).

Research Methods

In this study, the research design used was a quasi-experiment with a pre-post test control group design approach where there were two groups selected at random and then given a pre-test and post-test to determine the initial conditions, whether there were differences between the intervention and control groups, the effect of the treatment. In this study, before and after treatment was carried out in the intervention group and control group.



Scheme 1 Paired difference test design with paired t test on quality of life before and after electronic handover program intervention (Proin Ho)

Information:
P1: *Self-efficacy* & job satisfaction of nurses before *the electronic handover* program (Proin Ho) in the intervention group
P2: *Self-efficacy* & job satisfaction of nurses after *the electronic handover* program (Proin Ho) in the intervention group
P3: *Self-efficacy* & job satisfaction of nurses early in the control group
P4: *Self-efficacy* & job satisfaction of nurses end in the control group

Population is the total number of members of a set whose characteristics you want to know based on inference or generalization or subjects who meet specified criteria (Supardi & Chanafi, 2020), (Hary et al., 2014). The population in this study were nurses at Anna Bekasi Hospital who were on duty in inpatient care. The total number of nurses was 126 people . The sample is part of the population to be studied or a portion of the characteristics possessed by the population (Hary et al., 2014). The sampling technique (sampling method) in this study uses *probability sampling* , meaning that each subject in the population has the same opportunity to be selected or not selected as a sample. Includes *Random Sampling* (simple random) (Supardi, 2013).

Results and Discussions

Univariate Analysis

Characteristics

Table 2 Frequency Distribution of Nurse Characteristics Based on Age, Gender, Education and PK Level at Anna Hospital, Bekasi City

Variable	Control		Intervention	
	amount	***%***	***amount***	***%***
Age				
<25-35 Years	33	53.2	46	74.2
45. Ahun	26	41.9	14	22.6
46. >45 years	3	4.8	2	3.2
Gender				
Man	4	6.5	2	3.2
Woman	58	93.5	60	96.8
Education				
D3 Nursing	40	64.5	43	69.4
S1/Nursing	22	35.5	19	30.6
Clinical Nurse				
PK I	12	19.4	11	17.7
PK II	23	37.1	15	24.2
PK III	26	41.9	34	54.8
PK IV	1	1.6	2	3.2
Total	**62**	**100.0**	**62**	**100.0**

Table 2 shows that the largest percentage of nurses aged less than 25-35 years in the control group was 53.2% and the intervention group was 74.2%. Most of the nurses were female (93.5% and 96.8%), had a D3 Nursing education, and were clinical nurses at PK III level in the intervention and control groups.

Nurse Self -*Efficacy*

Table 3 Distribution of Nurse *Self-Efficacy* in the Control and Intervention Groups at *Pre & Post* at Anna Hospital, Bekasi City

Self-Efficacy	Pre Control		Post Control		Intervention Pre		Post Intervention	
	n	%	n	%	N	%	n	%
Generally								
Not enough	7	11.3	12	19.4	39	62.9	0	0.0
Enough	43	69.4	42	67.7	23	37.1	31	50.0
Very good	12	19.4	8	12.9	0	0.0	31	50.0
Levels								
Not enough	35	56.5	24	38.7	14	22.6	0	0.0
Enough	27	43.5	38	61.3	30	48.4	13	21.0
Very good	0	0.0	0	0.0	18	29.0	49	79.0
Strength								
Not enough	27	43.5	17	27.4	17	27.4	0	0.0
Enough	35	56.5	39	62.9	39	62.9	44	71.0
Very good	0	0.0	6	9.7	6	9.7	18	29.0
Total	62	100.0	62	100.0	62	100.0	62	100.0

Table 3 shows the percentage of Nurse *Self-Efficacy questionnaires* before receiving Electronic *Handover Program* (Proin Ho) training from 3 dimensions (*General*, *Level* and *Strength*) The largest percentage of nurse satisfaction in the intervention group was good, while in the control group nurses who did not receive the Electronic *Handover*

Program (Proin Ho) which has been running using dimensions (*General, Level* and *Strength*) at Anna Hospital, Bekasi City with the largest percentage is quite good.

Nurse Satisfaction

Table 4
Distribution of Nurse Satisfaction in the Control and Intervention Groups at *Pre & Post* at Anna Hospital, Bekasi City

Variable	Control Pre		Post Control		Intervention Pre		Post Intervention	
	n	%	n	%	n	%	n	%
Appropriate placement according to expertise								
Less satisfied	27	43.5	12	19.4	20	32.3	0	0.0
Quite satisfied	35	56.5	42	67.7	39	62.9	44	71.0
Very satisfied	0	0.0	8	12.9	3	4.8	18	29.0
Work atmosphere and environment Less satisfied	32	51.6	15	24.2	33	53.2	6	9.7
Quite satisfied	30	48.4	39	62.9	29	46.8	25	40.3
Very satisfied	0	0.0	8	12.9	0	0.0	31	50.0
Equipment that supports the implementation of work Less satisfied								
Quite satisfied	29	46.8	6	9.7	29	46.8	0	0.0
Very satisfied	33	53.2	28	45.2	33	53.2	24	38.7
	0	0.0	28	45.2	0	0.0	38	61.3
Discipline								
Less satisfied	33	53.2	12	19.4	27	43.5	0	0.0
Quite satisfied	29	46.8	22	35.5	35	56.5	26	41.9
Very satisfied	0	0.0	28	45.2	0	0.0	36	58.1
Total	62	100.0	62	100.0	62	100.0	62	100.0

Table 4 shows the percentage of Nurse Satisfaction questionnaires before receiving Electronic *Handover Program* (Proin Ho) training from 4 dimensions (Appropriate placement according to expertise, work atmosphere and environment, equipment that supports work implementation and discipline) *Nurse* satisfaction in the intervention group had the largest percentage of satisfaction while in the control group nurses who did not receive the Electronic *Handover Program* (Proin Ho) which has been running using dimensions (appropriate placement according to expertise, atmosphere and work environment, equipment that supports the implementation of work and discipline) at Anna Hospital, Bekasi City, the largest percentage was quite satisfied.

Bivariate Analysis

Differences in nurses' *self-efficacy* scores between before and after being given the electronic *Handover* (Proin Ho) program at Anna Hospital, Bekasi City

Table 5 *Self-Efficacy* Scores Between Before and After Being Given Proin HO Training at Anna Hospital, Bekasi City

Group	N	Score before	Score after	Improved score	% Improved score	p-Value
Control	62	79.6	77.8	-1.8	-2.9%	0.428
Intervention	62	76.4	83.1	6.7	10.8%	0.001

Table 5 shows that *the self-efficacy* of nurses in the control group before Proin Ho was carried out decreased by -2.9% with a *P-value of 0.428 (pvalue:* >0.05) so there was no influence of the electronic *handover program* (Proin Ho) with nurse *self-efficacy* . The results from the intervention group showed that *the self-efficacy* of nurses in the intervention group after the electronic *handover program* (Proin Ho) increased by 10.8 % with a *P-value of 0.001 (p-value* : <0.05), which means that the electronic *handover program* (Proin Ho) had an effect with nurse *self-efficacy* . Based on this information, it can be concluded that there are significant differences and influences on nurses' *self-efficacy* before and after being given the electronic *handover program* (Proin Ho) at Anna Hospital, Bekasi City.

The difference in nurse satisfaction scores between before and after being given Proin Ho di Anna Hospital, Bekasi City.

Table 6
Nurse Satisfaction Scores Between Before and After Being Given Proin Ho Training at Anna Hospital, Bekasi City

Group	N	Score before	Score after	Improved score	% Improved score	ı-Value
Control	62	78.7	79.4	0.7	1.1%	0.687
Intervention	62	82.4	95.8	13.4	21.6%	0,000

Table 6 shows that nurse satisfaction in the control group before the electronic *handover program* (Proin Ho) experienced a decrease of 1.1% with a *P-value of 0.687 (pvalue:* >0.05) so there was no influence of Proin Ho on nurse satisfaction. The results of the intervention group showed that nurse satisfaction in the intervention group after Proin Ho was carried out, the increase was 21.6 % with a *P-value of 0.000 (p-value* : <0.05), which means that Proin Ho had an effect on nurse satisfaction . Based on this information, it can be concluded that there are significant differences and influences on nurse satisfaction before and after being given Proin Ho at Anna Hospital, Bekasi City.

Table 7 Relationship between HO Proin Training and Characteristics on Increasing *Self-Efficacy* of Nurses at Anna Hospital, Bekasi City

Variable	*Self-Efficacy*						P value
	Not Increasing		Increase		Total		
	f	*%*	*f*	*%*	*f*	*%*	
Electronic Handover Program Training (Proin Ho)	13	22.8	44	77.2	57	100.0	0,000
Not given	49	73.1	18	26.9	67	100.0	
Given							
Age							
<25-35 Years	49	62.0	30	38.0	79	100.0	
36-45 years old	7	17.5	33	82.5	40	100.0	0,000
>45 years	1	20.0	4	80.0	5	100.0	
Gender							
Man	2	3.5	4	6.0	6	100.0	0.420
Woman	55	96.5	63	94.0	118	100.0	
Education	40	48.2	43	51.8	83	100.0	0.304

D3 Nursing	17	41.5	24	58.5	41	100.0	
S1/Nursing							
Clinical Nurse	14	60.9	9	39.1	23	100.0	0.355
PK I	16	42.1	22	57.9	38	100.0	
PK II	25	41.7	35	58.3	60	100.0	
PK III	2	66.7	1	33.3	3	100.0	
PK IV							

Table 7 shows that the statistical test results use the *Chi Square test* shows that training and age are related to *Self-Efficacy* with a *p value* : *0.000* (*p<0.05)* which previously did not have a clear systematicity. Meanwhile, the characteristics of gender, education and PK are not related to nurse *self-efficacy* so they will be excluded from the multivariate influence test. The research results are in accordance with research conducted by Jannah, et al (2022) stated that gender and PK have no relationship with increasing nurse *Self-Efficacy* p-value=0.884. Meanwhile, age and training have a significant relationship (pvalue: 0.000) . Another study by Sadakah et al., (2020) stated that the nurse's age variable was related to their performance in carrying out their duties (pvalue: 0.001).

Physiologically, a person's growth and development can be described by increasing age. *Self-efficacy* can cause changes in behavior, especially in completing tasks and goals (Ardianti & Wanabuliandari, 2021).

Nurses aged >35 years who have high *self-efficacy will try to complete work to achieve certain goals by* changing behavior. Bandura also explained that high *self-efficacy* will encourage nurses to make efforts to complete tasks as well as possible. It is hoped that hospital management will ensure job satisfaction for nurses by creating a safe and comfortable work environment, preparing SOPs for actions that are easy to understand and easy to implement in accordance with nurses' competence, giving tasks to nurses, it is hoped that leaders can give tasks to nurses that are in accordance with the nurses' abilities, provide training and provide good infrastructure so that nurses can carry out their duties to the best of their abilities. Supported by research (Christiani & Ilyas, 2020) with analysis results showing that communication of *self-esteem and self-efficacy* on job satisfaction and nurse performance has a significant positive direct influence. that job satisfaction is able to increase or strengthen the direct influence of communication on nurse performance.

Table 8 Multivariate *Binary Logistic Regression* Analysis *of Back Ward* LR Method Effectiveness Proin Ho Training and Patient Characteristics to Increase Nurse *Self-Efficacy* At Anna Hospital, Bekasi City

Nurse *Self-Efficacy*		Sig.	Exp(B)	95% CIfor EXP(B)	
				Lower	Upper
Step 1 [a]	Electronic_Handover_Program_Training	**0,000**	.109	,048	,247
	Constant	**0,000**	34,728		
Step 2 [b]	Age	**0,000**	5,455	2,190	13,586
	Handover_Electronic_Program_Training	**0,000**	.111	,045	,270
	C *onstant*	0.165	3,395		

Table 8 shows the results of logistic regression analysis using the Back Ward LR Elimination *Method test*. The results of logistic regression with *Backward elimination testing* show a relationship between each independent variable (age and electronic

handover program) and the dependent variable (Nurse *Self-Efficacy*) where other variables that have no relationship are excluded in this relationship test. These results also show that the constant value has a positive sign, which states that if there are activities from the two independent variables (age and electronic *handover* program) that influence nurses' *Self-Efficacy* , then the Nurses' *Self-Efficacy* in Hospital Inpatient Care is positive. Based on the results of logistic regression analysis with *Backward elimination testing* , it was found that the variables age and electronic *handover program* had a significance value of <0.05. Thus, these variables statistically and individually have an influence on increasing *the self-efficacy* of nurses at Anna Hospital, Bekasi City.

The results of the study showed that training had an effect on increasing *the self-efficacy* of nurses at Anna Hospital, Bekasi City. Electronic *Handover Program* Training (Proin Ho) is the most influential variable on nurses' *self-efficacy*. The research results also show that *self-efficacy* is determined by effective training design and training retention. On the other hand, organizational support and supervisor support do not have a significant influence on *self-efficacy* and effectiveness of training transfer. EHR programs in *Handover* can improve patient safety, nursing care, and time efficiency (Allo, 2020).

Another study conducted by (Baherimoghadam et al., 2021) (Al-Hajjaji et al., 2021) tested electronic-based handover tools in care units, the results obtained were that participants' assessment of the use of electronic-based handover tools was more efficient than verbal, but participants said that even though electronic efficient, verbal reports are still important to use.

Table 9
The Relationship Between Proin HO Training and Characteristics on Increasing Nurse Satisfaction at Anna Hospital, Bekasi City

Variable	Satisfaction Level						P value
	Not Increasing		Increase		Total		
	f	%	*f*	%	*f*	%	
Electronic Handover Program Training (Proin Ho)							
• Not given	18	32.1	38	67.9	56	100.0	**0,000**
• Given	44	64.7	24	35.4	68	100.0	
Age							
• <25-35 Years	46	58.2	33	41.8	79	100.0	**0.001**
• 36-45 years old	9	22.5	31	77.5	40	100.0	
• >45 years	1	20.0	4	80.0	5	100.0	
Gender							
• Man	2	33.3	4	66.7	6	100.0	0.420
• Woman	55	46.6	63	53.4	118	100.0	
Education							
• D3 Nursing	43	51.8	40	48.2	83	100.0	**0.026**
• S1/Nursing	13	31.7	28	68.3	41	100.0	
Clinical Nurse							
• PK I	7	30.4	16	69.6	23	100.0	0.377
• PK II	20	52.6	18	47.4	38	100.0	
• PK III	28	46.7	32	53.3	60	100.0	
• PK IV	1	33.3	2	66.7	3	100.0	

Table 9 shows that the results of statistical tests using the *Chi Square test* show that training ((*pvalue:* 0.000), age characteristics (*pvalue:* 0.001) and education (*pvalue:* 0.026) are related to nurse satisfaction (*p<0.05)* which has previously been walking does not have a clear systematic. Meanwhile, the characteristics of gender and PK are not related to nurse satisfaction so they will be excluded from the multivariate influence test.

electronic health services in *handover* can increase the effectiveness of nurses in the room, save costs, time efficiency, exchange patients in detail and minimize errors and this is influenced by the training, education and age of nurses (Sulastien et al., 2021).

Satisfaction nurse is attitude (positive) power Work to work, which arises based on an assessment of the work situation. Evaluation This can be done for one of the jobs. Assessment is carried out as a sense of appreciation in achieving one of the important values in work. Satisfied nurses liked their work situation more than nurses Which No satisfied, Which No like situation work (Schunk & DiBenedetto, 2022).

Multivariate Analysis

Table 10 Results of Multivariate *Binary Logistic Regression* Analysis *Back Ward* LR Method Effectiveness of Proin Ho Training and Patient Characteristics on Increasing Nurse Satisfaction in RS Anna Bekasi City

Nurse Satisfaction		Sig.	Exp(B)	95% CIfor EXP(B)	
				Lower	Upper
Step 1 [a]	Age	**0,000**	3,947	1,832	8,502
	Constant	**0.002**	,188		
Step 2 [b]	Age	**0.002**	3,408	1,557	7,459
	Handover_Electronic_Program_Training	**0.003**	,300	.137	,658
	Education	0.051	2,359	,996	5,583
	Constant	**0.680**	1,419		

Table 10 shows the results of logistic regression analysis using the Back Ward LR Elimination *Method test*. The results of logistic regression with *Backward elimination testing* show a relationship between each independent variable (age, education and electronic *handover* program) and the dependent variable (nurse satisfaction) where other variables that have no relationship are excluded in this relationship test. These results also show that the constant value has a positive sign, which states that if there are activities from the three independent variables (age, education and electronic *handover* program) that influence nurses' *self-* satisfaction , then the satisfaction of nurses in hospital inpatient care is positive. Based on the results of logistic regression analysis with *Backward elimination testing* , it was found that the variables age and electronic *handover program* had a significance value of <0.05. Thus, these variables statistically and individually have an effect on increasing nurse satisfaction at Anna Hospital, Bekasi City.

The results of the study showed that age was the most dominant variable influencing the increase in nurse satisfaction at Anna Hospital, Bekasi City. Age is a period of time since a person existed and can be measured using time units from a chronological perspective. Normal individuals can be seen to have the same degree of anatomical and physiological development.

Conclusion

Based on the results of research on the effectiveness of handover training using Proin Ho on nurses' self-efficacy and satisfaction at Anna Hospital, Bekasi City, which was conducted in July-August 2023, it can be concluded that the training had a significant positive impact on nurses, especially in the aspects of self-efficacy and job satisfaction. Nurses who took part in the training showed an increase in the self-efficacy dimension, with a higher percentage of satisfaction compared to the control group.

The results of the analysis show that the variables age, education, and training are related to nurse self-efficacy and satisfaction. There was a significant difference before and after the implementation of the electronic handover program (Proin Ho), with the p value showing a real positive impact. Logistic regression analysis identified that age and Proin Ho training were the variables that had the most influence on self-efficacy, while age had the greatest influence on nurse satisfaction.

It is recommended that hospitals implement the Proin Ho handover training method to increase nurse self-efficacy and satisfaction. Nursing managers need to support and promote this training, as well as serve as role models for professional behavior. Nurses are expected to have awareness and responsibility in implementing electronic handover according to established guidelines. Nursing education needs to integrate Proin Ho training modules and provide learning about nurse self-efficacy and satisfaction. As a further step, future research could explore handover training methods that are more in-depth and involve larger amounts of data to dig deeper into their impact on nurses' self-efficacy and satisfaction.

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