

# Nurses' Attitudes and Motivation in Compliance With Standard Operating Procedures of Blood Transfusion at Yogyakarta Islamic Hospital PDHI

1<sup>st</sup> Arlina Dhian Sulistyowati  
Nursing Department  
Sekolah Tinggi Ilmu Kesehatan  
Muhmmadiyah Klaten  
Indonesia  
[arlinadhian@gmail.com](mailto:arlinadhian@gmail.com)

2<sup>nd</sup> Sri Handayani  
Nursing Department  
Sekolah Tinggi Ilmu Kesehatan  
Muhmmadiyah Klaten  
Indonesia

3<sup>rd</sup> Astri Wahyuningsih  
Midwife Department  
Sekolah Tinggi Ilmu Kesehatan  
Muhmmadiyah Klaten  
Indonesia

4<sup>th</sup> Dwi Kurniawati  
Nursing Department  
Sekolah Tinggi Ilmu Kesehatan  
Muhmmadiyah Klaten  
Indonesia

**Abstract**—The implementation of correct patient identification is a fundamental aspect of the prevention of patient safety incidents. There is a high risk of unexpected events and even death when the patient identification is not carried out. Some factors may affect the nurses' compliance in the implementation of blood transfusion standard operating procedures (SOP), such as individual, physiological, and psychological factors. The psychological factors may include attitudes and motivation. This study aimed to determine the correlation between nurses' attitudes and motivation, and the compliance in the implementation of blood transfusion SOP at Yogyakarta Islamic Hospital PDHI. This study was quantitative correlational research with a cross-sectional design. The samples were 82 nurses who were recruited using a total sampling technique. The data were analyzed using univariate and bivariate analyses. The results showed that the respondents were early adults and married. A majority of them were females and hold Diploma III education in nursing. The mean of working experience of the respondents was 3.06 years. There was a correlation between nurses' attitudes and motivation and compliance with the implementation of SOP for blood transfusion. (Abstract).

**Keywords**—Nurses, Attitudes, Motivation, Blood Transfusion

## I. INTRODUCTION

Hospital is a health service institution that conducts complete individual health services that provide inpatient, outpatient and emergency services. Plenary Health Services are health services that include efforts to promote health (*promotive*), prevention (*preventive*), healing efforts (*curative*) and health recovery efforts (*rehabilitative*). Patient safety is a system that prevents unexpected events (KTD) due to actions taken or not

carried out by medical personnel and non-medical personnel in hospitals [1]. IOM (*Institute of Medicine*) openly stated that at least 44,000 and even 98,000 patients die in hospitals in one year due to *medical errors* that could have been prevented. In 2000, IOM published report of *To Err is Human, Building a Safer Health System*. This report presented research at several hospitals in Utah and Colorado and New York on KTD. In Utah and Colorado KTD was found as 2.9%, 6.6% of them caused deaths, while in New York KTD was 3.7% with mortality reaching 13.6% [2]. The implementation of the patient identification process at the Hospital must be asked at least two things from three types of identity, those are the patient's name, medical record number and date of birth. Two forms of identification must be done when giving nursing or other actions to patients. One of the medical procedures that need to be identified is the patient's blood transfusion [3]. Hospital incidents related to patient identification include, potential injury conditions (KPC), near injuries (KNC), non-injury events (KTC), and unexpected events (KTD). Blood transfusion officers must receive training and carry out Standard Operating Procedures (SOP) of blood transfusion [4]. The impact of ignoring blood transfusion SOP is an error occurred in the administration of blood transfusions and can result in death of patients, according to the study [5]. Blood transfusion is the act of inserting red blood cells (fresh blood, *pack red cells*) into the body through veins. In accordance with Rodiani's research stated that blood transfusions are performed on patients with medical conditions such as large blood loss due to trauma, surgery, shock and malfunctioning of red blood cell formation [6].

Side effects of blood transfusion can be in the form of acute complications such as allergies, fluid overload, anaphylaxis, bacterial contamination, septic shock and TRALI (*transfusion associated acute lung injury*). It can also be in the form of slow complications such as slow haemolytic reactions, post transfusion purpura, iron overload and transmission of infectious infections through blood transfusions. Nurses in charge of giving blood transfusions must comply with Standard Operating Procedures (SOP) have prepared by hospitals to minimize the dangers that probably arise from blood transfusion reactions. Based on the research of Engel Brecht, Wood and Sinclair stated that the implementation of blood transfusion is risky, it needs to be carried out with proper protocol compliance [7]. The protocol is used to improve communication, facilitate the supply of adequate blood products, patient safety and reduce mortality. Compliance with blood transfusion SOP will result in quality and safe blood transfusion measures. Gibson's theory in Nursalam mentioned the factors that influence nurse compliance in the implementation of SOP are individual factors, psychological factors and organizational factors. Nurse psychology is a factor supporting nurses' compliance in implementing SOP including motivation and attitude [8]. The research conducted by Noch, Rompas, Kallo explained that there is a relationship between the level of education and nurses' attitudes towards adhering to the implementation of wound care SOPs in the Surgical Treatment Room of the Regional Hospital, Banggai Regency[9]. In accordance with research conducted by Pagala, Shaluhiah and Widjasena that the impact of nurses' disobedience in implementing SOP will lead to Unexpected Events (KTD) and lead to death [5]. The purpose of this study is to determine the relationship of the attitude and motivation of nurses towards compliance in the implementation of standard operating procedures of blood transfusion in Islamic Hospital Yogyakarta PDHI.

II. METHODS

This research is a quantitative correlational research with *cross sectional* approach. *Exclusion* criteria in this study include a) Nurses who were on leave during the study period; b) Nurses who were following further education; c) Nurses who were sick. This study using *Non-probability sampling* method with *total sampling*. The sample of this study were 82 nurses. This research was conducted in November to December 2018. The questionnaire in the study consisted of characteristics of respondents, a questionnaire about attitudes and motivation. The statistical test used in this study was *Chi-square*.

III. RESULTS AND DISCUSSION

A. Characteristics of Respondents

Respondent characteristics include age, gender, education and working period.

TABLE 1. AVERAGE OF NURSES AGE AND WORKING PERIOD AT RSIY PDHI

	Minimum	Maximum	The mean	SD
Age	22	41	27	4.65
Working period	<1	12	3.06	2.42

Table I shows that the average age of nurses is 27 years with the youngest age is 22 years and the oldest is 41 years. The nurses length of work with a mean of 3,06 years is at least <1 year and the longest is 12 years. This shows that respondents are included in the productive age. Productive age is a responsible age and based on its performance, the productive age is more optimal in doing work. Parmin explained that a person's productive age at work is aged 25-40 years, because at that age is the beginning of a individual career[10]. At the beginning of a career usually someone has a high motivation and idealism compared to workers who have aged 40 years and over. Respondents who were included in early adulthood affect adherence to the SOP, the more they age, the more respondents will know that running the SOP will be able to minimize the risk to the patient.

Younger nurses tend to have a high enthusiasm to seek more experience that can support self-actualization. This was also reinforced by Anugrahini who stated that the age of 20-40 years is the peak development of physical conditions in applying the knowledge and skills they have. Someone who has high motivation will be easier to be invited to work according to the rules or standards[11].

TABLE II. FREQUENCY DISTRIBUTION OF RESPONDENT CHARACTERISTICS AT RSIY PDHI

No	Characteristics	Frequency	%
1	Gender		
	Man	15	18.3
	Girl	67	81.7
2	Education		
	D III	77	93.9
	Ners	5	6.1
3	Marital status		
	Single	45	54.9
	Married	37	45.1
	Total	82	100

Based on table II, the majority of the respondents is female (81,7%). The majority of respondents education is D III (93,9%) and based on the marital status, the majority is unmarried as many as 45 people (54.9%). In general, women have a more sensitive and caring sense, so that female nurses easily obey the rules set by the hospital, as well as in terms of complying with blood transfusion SOP before taking nursing actions.

An education will be able to influence the performance of nurses because through an educational process that involves a series of activities, then an individual will gain higher knowledge, understanding, expertise and insight [12]. These results are in accordance with Khariyah's research which stated that the majority of nurse education is D III nursing. Education is very important in influencing one's mind. An educated person when encountering a problem will try to think of the best possible way to solve the problem. Educated people tend to be able to think calmly about a problem—in this study the compliance with the implementation of blood transfusion SOP[13].

Working period is related to work experience. Work experience will affect someone in interacting towards his work. The longer the work period of a person the more work experience he gets. The more work experience the more things are known about what should be done and what should not. This result is proven by Virawan's research that there is a significant relationship between gender with adherence to SOP. Most of nurses are unmarried, 54,9% and 45.1% are married. Unmarried nurses have fewer absences, experience lower schedule changes because they do not have dependents, have a high enthusiasm in obeying the rules of work for fear of getting sanctioned termination of employment contracts if they do not comply with existing rules at the Hospital[14]. The results of this study are not in accordance with Khariyah's research that the majority of respondents who had married status have a sense of responsibility towards the family so that they are motivated to work better[13].

**B. Attitude and Motivation**

TABLE III. DISTRIBUTION OF ATTITUDES FREQUENCY AND NURSE MOTIVATION IN YOGYAKARTA ISLAMIC HOSPITAL (PDHI) 2018

No	Independent Variable	Frequency	%
<b>Attitude</b>			
1	Negative	21	25.6
2	Positive	61	74.4
	Total	82	100
<b>Motivation</b>			
1	Low	23	28
2	High	59	72
	Total	82	100

Table III shows that the attitude of nurses was mostly positive (74,4%). Motivation of nurses was mostly high with a total 59 people (72%). Attitude is a reaction or response of someone who is still closed to a stimulus or object. Attitudes cannot be directly seen, but can only be interpreted in advance from closed behavior. The attitude clearly shows the connotation of the suitability of the reaction to a particular stimulus and in everyday life is an emotional reaction to a social stimulus [12]. Change is also obtained through the learning process, so attitude changes can also be done in the same ways as through personal experiences, associations or social learning processes. Changes in a person's attitude more or less also change humans. The performance shown by the employee is actually a picture or reflection of one's attitude, if the attitude is positive from the beginning of the individual was developed then the resulting performance is good, with a positive attitude it will create high performance and facilitate each job [8].

Motivation is one of the factors that can affect one's performance. Motivation can provide encouragement to staff so that it can improve performance. Someone who has high motivation will have a good performance, therefore work motivation must be developed and instilled in every staff, in order to create optimal performance. Building motivation to the staff is very important in order to improve nurse compliance. High motivation encourages someone to do their job

well. Work motivation is something that rise enthusiasm. Work motivation in work psychology is usually called work morale booster[15]. Strength or weakness of work motivation of a worker also determines the basis of his achievements, always maintaining his achievements, reputation, and position [16]

**C. Relationship between attitude and motivation towards compliance with Blood Transfusion SOP implementation at RSI Yogyakarta PDHI**

TABLE IV. RELATIONSHIP BETWEEN NURSES' ATTITUDES AND COMPLIANCE WITH THE IMPLEMENTATION OF BLOOD TRANSFUSION SOP AT THE YOGYAKARTA ISLAMIC HOSPITAL IN 2018

Attitude	Obedience				Total		P Value
	Obey		Disobey		f	%	
	f	%	f	%			
Negative	3	14.3	18	85.7	21	100	0.000
Positive	52	85.2	9	14.8	61	100	
Total	55	67.1	27	32.9	82	100	

Based on statistical test, it was obtained p value = 0,000. This means that there is a relationship between attitude and compliance with the Implementation of Blood Transfusion SOP at the Yogyakarta Islamic Hospital PDHI. Attitude is a factor that exists in humans and can cause human tendencies to act or behave towards the object at hand. These results indicate that a good attitude will encourage good behavior [17]. Behavior based on positive attitudes would be lasting[12]. Attitude is a determinant of behavior. In the form of mental preparedness, which is learned in a period of time and is organized by experience, and has a certain influence on how a person responds to other people, objects, and situations related to it[18].

TABLE V. RELATIONSHIP OF MOTIVATION WITH COMPLIANCE WITH THE IMPLEMENTATION OF BLOOD TRANSFUSION SOP AT YOGYAKARTA ISLAMIC HOSPITAL PDHI 2018

Motivation	Obedience				Total		P Value
	Obey		Disobey		f	%	
	f	%	f	%			
Low	0	0	23	100	23	100	0.000
High	55	93.2	4	6.8	59	100	
Total	55	67.1	27	32.9	82	100	

Table V shows that almost all nurses have high motivation as many as 55 people (93,2%) were included in the category of adherence to the compliance with the implementation of blood transfusion SOP. Based on statistical test results, it was obtained p value = 0,000. This means there is a relationship between motivation towards compliance on the Implementation of Blood Transfusion SOP at the Yogyakarta Islamic Hospital of PDHI. The results of the study are in accordance with Fitri Rachmawati that there is a relationship of motivation with the compliance of the nurses implementing the patient identification SOP. These results indicate that the higher the motivation, the more compliant in the implementation of blood transfusion SOP[19]. Motivation is important to encourage someone

to work because motivation is the energy that drives someone to carry out work tasks to achieve the goals set. Achievement of goals is influenced by the level of work motivation and ultimately will affect the results of the work done. The findings in this study found 4 people (6,8%) nurses with high motivation but not obedient. This is because there is no opportunity to gain experience and capacity building during work, so hospitals are expected to conduct training and SOP socialization. Motivation can be influenced by the incentive approach, which uses something that can attract someone to do something. So when someone has done something, that person gets rewarded. Rewards in this case can be in the form of praise, appreciation and material[12]

#### IV. CONCLUSION

Based on the results of the study it can be concluded that the characteristics of nurses with an average age of 27 years, education is D III, most of the respondents are women, with an average service life of 3.06 years, and most marital status is unmarried. Compliance with the implementation of standard operational procedures for blood transfusion by nurses in the compliant category. Attitudes and motivations are related to compliance with the implementation of blood transfusion SOP at the Yogyakarta Islamic Hospital PDHI.

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