# The Effectiveness of Head Nurse Direction with Coaching Method to Improve Nurse Compliance in Fall Risk Prevention

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## Abstract

Fall risk prevention is one indicator of the quality of nursing services that needs to be improved through the function of head nurse direction. Coaching as a method of direction is seen as more effective in increasing nurse compliance in fall risk preveention. The purpose of this study was to determine the effectiveness of head nurse direction with coaching method to improve nurse compliance in fall risk prevention. The design of this study was quasi-experimental, pre-post with control group design. The sample using purposive sampling technique were 42 in the intervention group and 45 control groups. The implementation of the head nurse direction with the coaching method begins with training and role play, the process of mentoring and implementation independently. The observation form is used to ensure that the implementation of risk fall prevention by the nurse goes well. The results of statistical test showed the difference mean in the intervention group and the control group with p-value = 0,000. This result indicated that the head nurse direction with coaching method in the intervention group improved nurse compliance in risk fall prevention compared to the control group that did not get intervention.

Keywords : Coaching method; Head nurse direction; Risk fall prevention

## Introduction

Patient safety has become an important global issue held by each hospital. It is a top priority to be carried out related to efforts to improve the quality and services of hospitals (Depkes, 2009). Improving the quality and hospital services for patients who are guaranteed safety is important for hospitals to be able to carry out continuous care for patients. Quality health services can only be realized by providing professional health services, as well as providing nursing care must be carried out with professional nursing practices (Mulyaningsih, 2013).

Patients fall is one of the most frequent incidents in the hospital setting. Since 2009 the Commission Sentinel Event has received 465 reports of patients falling with injuries that mostly occurred in hospitals. In 2014 the number of patients fall in the old adult age group reached 29 million with 7 million of them resulting in injuries. Estimates of the incidence of patients fall in 2030 will reach 74 million patients with 12 million of them re sulting in injuries. Every day there are 1.3-8.9 / 1000 patients who experience falls in the rehabilitation and neurology units (Oliver, 2010). Whereas from 100/1000 patients who fall in the United States Hospital there are 30–50% falling with injuries (Joint Committee International).

The incidence of falling patients has a detrimental impact on patients, one of the adverse effects is the impact of physical injury which includes abrasions, torn wounds, bruises, even in some cases severe falls can result in fractures, bleeding, and head injuries (Miake-Lye et al., 2013). The Center for Disease Control and Prevention in 2015 stated that in the United States of all age groups, there were 2.5 million recorded cases of patients falling from the adult age group. About 24,000 incidents of patients fall resulting in death, and another 700,000 cause fractures and head injuries (Cloutier et al., 2016).

The XII PERSI Congress in 2012 reported the incidence of patients fall in Indonesia included in the top three medical incidents in hospitals and was ranked second after medicine error. Based on data from the patient safety team at X Hospital in West Java in 2010 to 2011 there were 12 patients who fell, in January to August 2012 at risk patients fell around 2593 patients, but after there was a fall risk prevention program the incidence data was obtained patients fell from January to August in the hospital as many

as 4 patients. Other data from Y hospitals in East Java in 2013 were obtained from the average BOR (Bed Occupancy Ratio) of 80% where the patient fell out of bed 4 times and 3 times slipped and hit the window. This figure still has not reached the expected target in accordance with the hospital's minimum service standard, there is no incidence of falling patients with 100% disability / death or in other words 0% occurrence (Setyarini EA, 2013).

Patients fall prevention can increase trust in health care providers and can reduce health costs. One effort to promote the improvement of nursing service quality is the prevention of patients risk fall, which is one indicator in the quality of nursing services (Nursalam and Bagian, 2011). The results of the preliminary study conducted at the hospital found that there were standard operational procedures for patients at fall risk, training of all nurses about patient safety, there were indicators of patients risk fall, namely initial assessments and risk assessments falling with documentation achievements of 95% to 100%, and the physical environment is made according to hospital accreditation standards. However, not all nurses apply standard operating procedures to prevent the fall risk. This can be seen from the results of the preliminary study in the treatment room, out of 33 nurses 20 (61%) nurses who have implemented the standard operating procedures according to the risk category of fall patients.

The results of interviews were conducted on 3 room heads and 6 primary nurses and associate nurses at the time of the preliminary study indicating that in implementing risk fall prevention there were already standard operating procedures based on the director's decision on patient safety target policies, nurses had been given training in prevention of risk fall, the physical environment and supporting facilities, and supervision have also been carried out. Nevertheless, the supervision that has been carried out is still global in nature related to the quality of health services in which there are indicators of prevention of risk fall, in addition supervision carried out by the head of the room is not accompanied by guidance, observation and evaluation of the implementation of fall risk. The direction made by the head of the room has still not used a model that accommodates the functions of guidance, training and evaluation.

The improvement in the implementation of patient safety goals that must be further enhanced is the ability of nurses to carry out early prevention, risk detection and correction of abnormalities. The implementation of management functions is one of the functions of directing the head of the room which is one of the strategies to improve the quality of nurses 'behavior to increase the success of nurses' compliance in carrying out risk assessment falls on patients. According to the results of research conducted by Dewi, in Dr. Sardjito General Hospital, there is a relationship between the implementation of the management function of the head room and the application of patient safety, where the most influential factor is the directional function(Dewi, 2012). The Head Nurse as the coordinator of nursing care management in the nursing room is the one who mostly performs the directional function as one of the management functions in the nursing unit.

The implemention of directives is by coaching method which is a method used by the head of space in carrying out the directional function through training and guiding (Pramudianto, 2015). This coaching method can help a head of space in implementing evidance base practice in nursing clinical practice. Coaching in nursing is one of the competencies that must be applied in improving the quality of nursing services through the application of Performance Development Management-System for Professional Nursing Services (Kementerian Kesehatan RI, 2012).

Implementation of prevention of falling risk requires activities based on nurses' knowledge and skills. In implementing the directional function by coaching by the head of the room as a formal process that provides professional support and learning that allows nurses to develop knowledge and competencies more effectively when compared to mentoring, this is due to coaching there is the development of clinical, communication and professional competencies (Subramaniam A, Silong A, ULi J, 2015). Therefore, it is very important to

improve, develop, and optimize the direction of the headroom with coaching methods to improve nurses' knowledge and skills. Based on the background above, research is needed on the effectiveness of headroom direction with the coaching method to improve nurse compliance in the risk falls preeveention.

## Results

1. The Characteristics of Respondents

Table 1 The Characteristics of Respondents Based on Gender and Education in the intervention and Control Group

The results of the analysis in the two groups

| No | Charateristics | Group | | | | $X^2$ | *p value* |
|---|---|---|---|---|---|---|---|
| | | Intervention (n=42) | | Control (n=45) | | | |
| | | n | % | N | % | | |
| 1 | Gender<br>Male<br>Female | <br>9<br>33 | <br>21,4<br>78,6 | <br>14<br>31 | <br>31,1<br>68,9 | 1,<br>05 | 0,3<br>40 |
| 2 | Level of education<br>D3<br>S1 | 27<br>15 | 64,3<br>35,7 | 35<br>10 | 77,8<br>22,2 | 1,<br>94 | 0,2<br>36 |

describe the same results, the p value ≥ 0.05, which means that the intervention group and the control group have the same or homogeneous characteristics.

Table 1 The Characteristics of Respondents Based on Age and Lenght of Work in the Intervention and Control GroupCharacteristics

| | Group | *Mean* | ± SD | Min-Max | p *value* |
|---|---|---|---|---|---|
| Age | Intervention | 38,6 | 6,78 | 26-49 | 0,571 |
| | Control | 37,8 | 7,69 | 24-50 | |
| Length of work | Intervention | 10,7 | 7,11 | 2-29 | 0,759 |
| | Control | 11,2 | 8,18 | 1-33 | |

Table 2 showed the results of the analysis in the two groups illustrates the same results, the p value ≥ 0.05, which means that the intervention group and the control group have the same or homogeneous characteristics.

2. Head nurse direction with coaching method in intervention and control groups

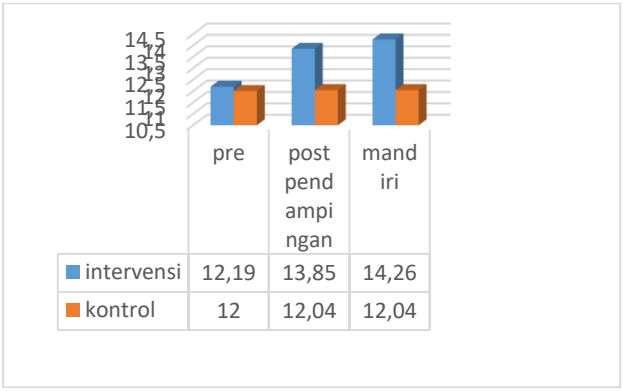


Figure 1 The Description of Head Nurse Direction with Coaching Method in Intervention and Control Hospital for 3 observations

Figure 1 showed that there was an increase in the application of headroom direction with the coaching method in the intervention group for three observations. Whereas in the control group there were no differences before and after. The room head coaching direction score in the intervention group was from 12.2 to 14.3, this indicates that the head of the room in the hospital intervened the ability to carry out the direction of the headroom with the coaching method experienced an increase. The room head directional score with the coaching method in the control group is from 12 to 12.04, this indicates that in the hospital the control of the ability to carry out the direction of the head of the room with the coaching method is fixed.

Table 3 The Difference in Implementation of Head Nurse Direction with Coaching Method in Intervention and Control Groups

| *Variable* | Intervention | | | Control | | | *p value* |
|---|---|---|---|---|---|---|---|
| | Mean | ± SD | Min-Max | Mean | ± SD | Min-Max | |
| Head nurse direction before intervention | 12,02 | 1,26 | 10-14 | 12 | 1,17 | 10-14 | 0,983** |
| Head nurse direction after intervention | 14,3 | 0,99 | 12-16 | 12,1 | 1.13 | 11-14 | 0,000** |
| p *value* | 0,000* | | | 0,083* | | | |

Table 3 showed the mean value of the room head directing function in the intervention group increased during the pre-test and post-test. The difference in the mean value of the headroom function when pre-test and post-test in the intervention group was statistically significant,

where the p value was smaller than the alpha value (0,000 <0,05). These results indicate that there are significant differences in the function of directional head space in the intervention group during pre-test and post-test. Thus it can be concluded that the function of directional headroom in the intervention group rose significantly after being given an intervention in the form of coaching method training.

3. Nurse Compliance in Risk Fall Prevention Before and After the Head Nurse Direction with Coaching Method

Table 4 The Differences of Nurse Compliance in Risk Fall Prevention in the Intervention and Control Group

| *Nurse compliance* | Intervention | | | | Control | | | | *p value* |
|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | ± SD | Min - Max | N | Mean | ± SD | Min - Max | |
| Before | 42 | 12 | 1,26 | 10-14 | 45 | 12,7 | 1,48 | 10-15 | 0,983** |
| After | 42 | 14,3 | 0,94 | 11-16 | 45 | 12,7 | 1.47 | 10-15 | 0,000** |
| *p value* | 0,000* | | | | 0,083* | | | | |

Table 4 showed the results showed differences in mean nurse compliance in preventing risk of falling in the intervention group and the control group at post test. The difference in the mean value of nurse compliance in the intervention group and the control group was statistically significant, where the p value was smaller than the alpha value (0,000 <0,05). These results indicate that there are differences in nurse compliance in preventing a significant risk of fall in the intervention group (given room head coaching training) and control (not given intervention) at post test. Therefore, it can be concluded that directing the head of the room with the coaching method in the intervention group can improve nurses' adherence in preventing the risk of falling compared to the control group that did not receive intervention.

The mean value of nurse compliance in preventing risk fell in the intervention group when the pre-test and post-test experienced an increase. The difference in nurses' adherence mean scores during pre-test and post-test in the intervention group was statistically significant, where the p value was smaller than the alpha value (0,000 <0,05). These results indicate that there are differences in nurse compliance in preventing the risk of falling significantly in the intervention group during pre-test and post-test. Thus it can be concluded that nurse compliance in preventing the risk of falling in the intervention group rose significantly after being briefed from the head of the room.

**Discussion**

The results showed that there were differences in the ability of the head of the room to carry out the directional function by the coaching method between the intervention groups that were given training with the control group who were not given training in post-training measurements with a significant p value of 0.000, <(0.05). This proves that there is an influence of coaching training in directing the head of the room to the ability of the head of the room to carry out the directional function by coaching method.

The results showed that the average coaching ability in directing the head of the room before being given training in the intervention group and the control group was 11 (scores 0-17). This means that the ability of coaching in directing room heads in the intervention group and the control group only reached 60%. This is in accordance with research conducted by Nurhayani (2011) that 60% of the headroom's coaching ability was still lacking. The results of research conducted by Syaikhul Islam (2007) also showed that the implementation of supervising the head of the room was still lacking ( Muliadi, Syahrir H, 2012). Coaching has not been carried out fully by a head of space. Organizational culture today still shows a manager in performing his duties and managerial functions only applying orders to his subordinate staff.

Empowering people to be like and want to work, meaning to make staff aware of what is assigned and responsible for carrying out without waiting for orders from superiors. Therefore for the success of the directional function, quality leaders are needed (Sutrisno, 2013). Leaders have a very important role in realizing the effectiveness of an organization. An organization in achieving its goals and meeting the needs of the wider community is very dependent on the leader. The leader has the skills in conducting guidance to the staff, which is known as the coaching method. Coaching is the key to unlocking a person's potential to

maximize his performance (Whitmore, 2003). Training can make someone open to innovating and breaking new things in the field of organization. The ability to direct the head of the room will reflect effective communication skills, techniques of motivation, supervision, delegation, and creating a high spirit or strong desire to work hard and maintain interpersonal relationships.

The results of the research conducted by Hariyanto state that training can improve conceptual, human, and technical skills. The research conducted by Siagian (2009) explains that the higher the level of training carried out will affect a person's work ability to understand a practical knowledge and its application in order to improve the skills, skills, and attitudes needed by an organization to achieve the expected goals. This also supported by research conducted by Dadge and Casey, who stated that training is able to provide support to strengthen mentality, develop new mechanisms that are better to maintain self-control and restore an adaptive balance, so as to be able to achieve a higher level of independence and be able to make decisions autonomous (Dadge, J., & Casey, 2009).

This result is also reinforced by the theory put forward by Marihot and Robbins, training is defined as a planned effort from the organization to increase knowledge (skills), skills (skills) and abilities (abilities) employees (Siagian SSL, 2015). Therefore, training is often used as a solution to an organization's performance problems. With the training activities, the head of the room has the opportunity to absorb new knowledge or values, so that with this new knowledge the head of space can improve his profession in carrying out the tasks assigned to him. Training is a very important thing that can be done by nursing so that staff nurses have knowledge, abilities, and skills. This implies that training helps the head of the room and nursing staff in carrying out their work in the present.

The results showed that there were differences in nurses' adherence in preventing the risk of falls between the intervention groups given the intervention in the form of coaching methods to headroom and the control group who were not given intervention in the measurement with a significant p value of 0.000, $<\alpha$ (0.05). This proves that there are differences in nurse compliance in preventing the risk of falling after being given an intervention.

Compliance is part of the behavior of the individual concerned to obey or obey something. Nurse's compliance in implementing fixed procedures is to always carry out activities in accordance with existing guidelines or regulations and understand nursing ethics where the nurse works. Compliance is the basic capital for someone to behave. Changes in attitudes and behavior in individuals begin with a process of obedience, identification and the final stage in the form of internalization (Whitmore, 2003).

Payle divided compliance into three, namely full compliance, partial compliance, and non-compliance. Full compliance is a condition where nurses consistently and consciously do what is suggested, partial obedience is a condition where nurses sometimes follow advice and sometimes not, and non-compliance is a condition where the nurse leaves advice and advice. Changes in new individual behavior can be optimal if these changes occur through an internalization process where the new behavior is considered positive for the individual itself and integrated with other values of his life (Anugrahini, 2010).

The results showed that there were differences in nurse compliance in preventing significant risk of fall in the intervention group during pre-test and post-test. In line with this, the results of the analysis also prove the existence of differences in nurse compliance in preventing significant risk of fall in the intervention group and the control group at post test. Based on the two analyzes it can be concluded that the implementation of the direction of the head of the room with the coaching method in the intervention group can improve nurse compliance. Directing the head of the room with the coaching method conducted by the head of the room in the intervention group had a high influence in increasing nurse compliance in preventing the risk of falling compared to the control group that was not given intervention.

Research conducted by Anugrahini (2010) states that there is a meaningful relationship between the leadership of the head of the room and nurse compliance in implementing patient safety guidelines. According to Riley, nurses have a major role in leadership to improve patient safety including preventing the risk of falling and achieving service quality good nursing in health service organizations (Nurhayani S., no date).

Another study that is in line with this study is a study by Mua et al (2011) which states that there are significant differences in nurse job satisfaction after being supervised by the head of the room who has been trained and guided by supervision (p-value 0.000). The better the supervision function that is carried out by the head of the room, the better the job satisfaction of the nurse nurses, and so should it (Astuty M, 2011). Coaching method training for the head of the room has given the head of the room the ability to plan, guide, coach and assessor of the tasks given to the nurse nurses (Mua EL, 2011).

Coaching is one of the most appropriate forms of guidance and evaluation because it becomes the key to unlocking one's potential to head the room to maximize its performance. Opinion Terry & Rue (2011) says that coaching is more about helping someone to learn than to teach them (Junaidi, Saleh A, 2014). Subramanian states that coaching is part of direction and coaching is the most effective method of direction compared to the mentoring method.

The method of coaching in the direction of the head of the room which is done in a planned, scheduled and continuous manner will create awareness for the nursing staff and the feeling of being unencumbered during the evaluation. Staff nurses will feel the direction carried out by the head of the room with the coaching method as a need to improve and maintain performance performance. This will increase the compliance of nurses, one of which is influenced by the ability of the head of the room.

The ability and leadership skills to direct and guide are important factors in manager effectiveness. Leadership includes activities that include directing, supervising actions, coordinating, and uniting the efforts of different individuals. According to Siswanto managerial leadership as a process of directing and influencing activities associated with the tasks of group members (Marquis and Huston, 2010).

Leadership has a very large contribution to nurse compliance in preventing the risk of falling in patients. This is in accordance with the theory which says that nurse managers have a very important role in preventing the risk of falling. Direction requires managers to communicate with their subordinates so that group goals can be achieved. A manager will be able to carry out management functions through interaction and communication with other parties. A manager's time is mostly spent on communication activities, whether face to face or through the media. The success of leaders in providing guidance is inseparable from the ability to communicate (Marquis and Huston, 2010; Swanburg, 2009).

## Conclusion

The results of the study showed that there were differences in the implementation of room head directional coaching in the intervention group and the control group at post test. This difference also affected nurses' compliance in preventing the risk of falls in the intervention group compared to the control group at post test. Coaching of headroom direction has been proven to be effective in increasing nurse compliance in preventing the risk of falling patients. So it is expected that this coaching method can continue to be developed as a useful modality for efforts to improve the quality of nursing services through improving patient safety, especially prevention of the risk of falling in the Hospital.

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