
ANALYSIS OF LINEN MANAGEMENT ON PREVENTION AND CONTROL OF INFECTION IN PRIVATE YOGYAKARTA HOSPITAL

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ABSTRACT

In improving the public health status the hospital has a very important role as a health facility. Many studies have shown incidents and inconsistencies of Healthcare Associated Infections (HAIs) over the past few decades. Based on the 2012 Hospital Roots (KARS) standard accreditation, the PPI 7.1 standard is a hospital with proper hygiene and sterilization guarantees and proper laundry and linen management. To learn the background of infection prevention and control of Private Yogyakarta Hospital. This research is explorative qualitative and case study research design. The informants in this study were all laundry or linen unit employees (11 people), along with 3 manager, namely linen supervisor, PPI IPCN committee, and household manager. The linen officer perspective on laundry linen management is good, where there were 6 (55%) employees who have good knowledge regarding linen management. Management perspectives on laundry linen management was good. The level of compliance of linen officers with operational standards for linen management procedures has not been implemented optimally. The constraints of linen officers in implementing operational standards for the management procedures of linen was the use of closed trolley facilities and high workload. © 2018JMMR. All rights reserved

INTRODUCTION

In improving the public health status the hospital has a very important role as a health facility. Many studies have shown undesirable events and complications from Healthcare Associated Infections (HAIs) over the past few decades (Fijan and Turk, 2012). Based on the accreditation standards of the Hospital Accreditation Committee (KARS) 2012, the PPI 7.1 standard is that hospitals reduce the risk of infection by ensuring adequate cleaning of equipment and sterilization as well as proper laundry and linen management.

The most common source of infectious agents related to health care caused by HAIs, was scientifically explained in 1,022 investigations which included factors of individual patients, medical devices, hospital environment, health workers, contaminated drugs, contaminated food, and contamination from patient equipment. Although the route of transmission from person to person is the most common, the role of the environment must not be ignored and hospital linen can contribute to the spread of HAIs (Fijan and Turk, 2012).

The Ministry of Health of the Republic of Indonesia in 2004 explained that improving the quality of hospital services in terms of medical support is very important, especially regarding the management of linen. Linen management is very important to do because it is one of the

service facilities related to patient comfort and satisfaction as a service user. If linen is not managed properly it may lead to disease transmission through HAIs or nosocomial infections (Aini, Nur 2010).

Research conducted on 69 linen samples in India found 20% *Pseudomonas* bacteria, and 20% aerobic spores on patient blankets. In bed linen found 16.7% *pseudomonas* bacteria and 16.7% aerobic spores. There was a 20% aerobic spore on the patient's pillowcase, 20% *klebsiella* in the patient's shirt, 20% aerobic spores in the surgical gown and 40% *pseudomonas* in the linen trolley (Singh, Dara et al 2009). Based on these data it can be seen that the transmission of infection in hospitals caused by linen is quite high.

The involvement of various health workers in hospitals is very important in the flow of linen management (Fijan & Turk, 2012). From the preliminary observation before the research was conducted at PKU Muhammadiyah Gamping Hospital, linen management / management had not been implemented as expected. The linen management policy and permanent procedures were written and socialized to the relevant hospital employees. Based on the reasons above, to conduct research on the management of linen against infection prevention and control at Private Yogyakarta Hospital.

METHOD

This research is explorative qualitative and case study research design. The informants in this study were all laundry or linen unit employees of PKU Muhammadiyah Gamping Hospital (11 people), along with 3 directors, namely linen supervisor, IPCN PPI chairman, and household manager. Data collection techniques were done using questionnaires, observation sheets and interview.

RESULT AND DISCUSSION

1. Exploring the perception and behavior of linen officers in managing linen against infection prevention and control in Private Hospital.

Infection Prevention and Control (PPI) is an effort aimed at preventing the transmission of infectious diseases in all health care places (Minnesota Department of Health, 2014). The implementation of prevention and control will be carried out well if the linen officer is able to manage linen optimally according to the operational standards applicable in a hospital.

One factor that influences the management of linen is the knowledge of officers. The results showed that 6 (55%) employees had good knowledge regarding linen management at Private Hospital. This is in line with Gultom's research, et al. (2015) that the majority of linen workers in Medan Martha Friska Hospital had good knowledge of 8 (80%). One factor that influenced the good knowledge of officers was education. The majority of linen workers at PKU Muhammadiyah Gamping Hospital were 73.0% high school educated and the rest were elementary and junior high school.

The higher the level of education of a person, the higher the level of knowledge and experience compared to officers with low education. According to Inayah (2015), education is one of the factors that influence one's knowledge because education is needed to obtain important information. The higher the education, the more information is obtained, thus the knowledge gained will be wider.

Even so, linen workers with low education do not necessarily have low linen knowledge because the increase in knowledge is not necessarily obtained from formal education. Length of work has a role in improving the habits and knowledge of officers in working. There were 82% linen workers with working period of > 5 years. This means that the majority of officers have worked as laundry managers for a long time, thus knowledge related to linen management has also been attached according to their working time.

Knowledge of good linen workers is inseparable from the role of the leader in providing material and non-material support. In this case the supervisor of the linen section is one of the parties that assists linen officers in providing optimal linen management performance. The role of the supervisor is in addition to providing emotional support, socialization in

order to improve the knowledge and skills of officers, as well as enforcing supervision so that officers do not make mistakes in carrying out their duties. Aini (2013) stated that the supervision of linen management will help officers know the amount of linen stock par in order to stay balanced and maintain smoothness and accuracy to meet the needs of service to patients.

Based on the results of observations and interviews it is known that the linen attendant's perspective on the management of laundry linen is good, they know the purpose of linen management, the guidelines used as a reference in carrying out linen management, linen requirements, and where the linen management guideline information is obtained.

2. Explore the perception of management about linen management for infection prevention and control in Private Hospital

Based on interviews, it is known that management has a good perspective in the management of linen against infection prevention and control in Private Hospital. The management knows the extent to which linen management activities take place and the application of reference standards used by hospitals in managing clean linen.

The success of the organization in achieving its goals depends on the leaders. If the leader is able to carry out properly, it is very likely that the organization will achieve its goals. One of the roles of leadership is to supervise employee performance. The management at Private Hospital is known to have given directions to linen officers to carry out their performance by referring to the SOP. The existence of the SOP can help officers in the risk of workplace accidents for employees, damage to equipment, or damage to linen can be controlled and can be accounted for.

Aside from being a work guide, the existence of SOP can also make employees to be more aware of the responsibilities they carry, thus they can be more disciplined in working. In line with the research conducted by Megantara (2010) that the Standard Operating Procedure affects the performance of employees. The more effective standard operating procedures applied, the more it will improve employee performance as well.

The management is known to have conducted information dissemination and information through a personal approach to supervisors to maintain and improve the ability of employees to manage laundry linen. The purpose of socialization is to improve the understanding of officers and motivate officers to work in accordance with operational standards, so as to create clean linen services.

Based on interviews, it is known that the management perspective on laundry linen management is good. In addition to increasing employee awareness to comply with SOP, the management has also carried out supervision activities to improve employee performance optimally. In this case, the management cooperates with the Head of

IPCN, Management, PPI and supervisors on infection prevention and control practices related to managing linen in hospitals.

3. To know the percentage of the number of linen officers who adhere to the operational standards of linen management procedures.

Linen used in health care settings can store a large number of potentially pathogenic microorganisms. It is important that appropriate precautions are taken to ensure that contamination to linen does not occur because this can cause the transmission of microorganisms to people or the environment that could potentially cause infection. These important precautions apply to all stages of linen management: storage, handling, packing, transport and washing (NHS, 2017).

The provision and management of laundry and linen services is an important function to enable the provision of ongoing patient care. Comply with the guidelines set by the hospital. Management of linen according to the SOP will minimize risks to health and safety, therefore linen workers are required to comply with infection control requirements and ensure the best service to increase patient confidence in using hospital services.

The operational standard procedure for handling linen laundry at Private Yogyakarta Hospital includes the stages of collection, acceptance, washing stage, drying stage, ironing stage, storage stage, distribution stage and transportation stage. The results of observation at the collection stage revealed that there were still some officers who did not collect and receive linen according to SOP, 100% officers did not record and sign information on linen collection when receiving dirty linen in the room, and 20% of officers did not separate linen based on the level of dirtiness.

At the washing stage there were 100% of the officers at the time of placing the dirty linen on the floor, 50% of the officers did not directly iron the linen that had been washed dry, 20% of officers did not use PPE like uniforms, hats, gloves, boots and masks completely. At the drying stage the linen attendant performed the standard operating procedure for 10 (100%) officers after the linen was washed immediately, 10 (100%) officers at the drying stage do not contact dirty linen. At the ironing stage there were 40% of officers who did not wash their hands first when ironing. At the storage stage there were 40% of officers who did not store linen in a closed place, 50% of officers did not wrap linen with plastic and 80% of officers did not take linen based on the FIFO system (*first in first*).

According to the results of the interview, that there were activities that have not been carried out according to SOP due to several factors, one of which is a high workload.

Aditya's research (2016) showed that employee workload has a negative and significant relationship to employee performance. The higher the employee workload, the lower the employee's performance, and vice versa, while the employee's workload is higher, the employee's performance is higher.

The high workload of linen workers is the impact of the lack of available human resources. At least linen power with so many patients hospitalized will make linen officers carry out a lot of management activities, resulting in the management of laundry linen not running optimally.

At the distribution stage there were 100% officers who did not hand over clean linen to the room attendant according to the receipt card, 100% of officers did not use the trolley for clean linen covered retrieval, and at the transport stage there were 100% of officers carrying trolley to the room and not lining the inside of trolley with plastic.

The interview results showed that most linen staff still has problems in using trolley, so the management of linen using trolley is still rarely used. One of the causes of the low skills of officers using hospital facilities is the lack of training. Aditya's research, et al (2015) showed that job training has a positive and significant relationship to employee performance. Training is an improvement process and an effort to improve the talents, skills, abilities and expertise of employees in facing their work tasks and in order to realize the goals of the company at the transportation stage there were 100% of officers carrying trolley to the room and not covering the inside of the trolley with plastic.

The results of the observation showed that the level of compliance of linen officers with operational standards for the linen management procedures of had not been implemented optimally. There were still some linen officers who did not carry out their duties in accordance with applicable operational standards. This is due to the high demands of work, the lack of linen workers and the lack of training from the hospital. In order to improve HR performance, hospitals need to improve the inhibiting factors of low performance of officers by conducting regular socialization and training with officials.

4. Exploring barriers to linen officers in implementing operational standards for managing hospital linen procedures and exploring operational support factors for linen management procedures.

Implementation of standard services at Private Hospital in Yogyakarta is known to have not been implemented optimally. There were still some obstacles that made linen officers not compliant in implementing linen management according to standard operating procedures. Based on the results of the interview, it is known that the barriers of linen officers in implementing operational standards for the management procedures of linen were the use of low trolley facilities and high workloads..

Workload is a workload which is a set or number of activities that must be completed by an organizational unit or office holder within a certain period. Satra's research, et al (2017) showed the influence of workload on employee performance. Excessive workload will cause physical and mental fatigue and emotional reactions such as headaches, indigestion, and irritability. While the workload which is too little where the work that occurs due to the reduction of motion will cause boredom and a sense of monotony.

To improve employee performance, one way that can be done is by paying attention to employee workload. If the workload of the employee is too heavy or light then it will have an impact on work inefficiency. Workload that is too light means there is an excess of labor. This advantage causes the company to pay more employees with the same productivity, resulting in cost inefficiency. Conversely, if there is a shortage of labor or the number of jobs with a small number of employees employed, it can cause physical and psychological fatigue for employees. Finally, employees become unproductive because they are too tired (Aditya, 2016).

Operational supporting factors for the management procedure linen include facilities, equipment and linen management materials. Even though the hospital has provided a variety of adequate infrastructure facilities, the lack of skills of linen workers in using facilities is an obstacle that makes linen officers not compliant in carrying out linen management according to standard operating procedures.

The role of the leadership in improving the knowledge and skills of linen officers is needed to reduce barriers to linen management in order to create optimal service according to applicable standards. Training for employees is very important to be implemented in a company. With the training, it is expected that employees will be able to work more effectively and efficiently especially to deal with changes that occur such as changes in technology, changes in work methods, demanding changes in attitudes, behavior, skills and knowledge (Aditya et al., 2015).

The results of the interviews showed that the management had conducted socialization and training activities to improve the skills of linen workers, but had not been carried out regularly. Although supervisors have provided information on linen management every morning, in practice there are still many officers who do not carry out management according to procedures. Through training, it is hoped that officers will understand and able to operate supporting infrastructure provided by the hospital. In addition to training, it is necessary to supervise and correct when there are officers who do not carry out the activities according to the existing standard procedures, so that linen workers can manage laundry linen optimally..

CONCLUSION

1. The linen officer perspective on laundry linen management is good, where there are 6 (55%) employees who have good knowledge regarding linen management. They know the purpose of linen management, the guideline used as a reference in carrying out linen management, linen requirements, and where linen management guideline info is obtained.
2. Management perspectives on laundry linen management is good. In addition to increasing employee awareness to comply with SOPs, the management has also carried out supervision activities to improve employee performance optimally.
3. The level of compliance of linen officers to the operational standards of Hospital management procedures has not been implemented optimally. The collection stage is 10 (100%) officers did not record and then signed the dirty linen collected. At the acceptance stage 10 (100%) did not record the linen received. In the washing stage 10 (100%) the officer placed the linen on the floor during sorting. The ironing phase consisted of 5 (50%) officers not directly ironing the dried linen, storing stage consisted of 4 (40%) officers did not store linen in a closed place (closet), the distribution stage there were 10 (100%) officers did not hand over clean linen to room attendant according to the receipt card, and at the transport stage there were 10 (100%) officers did not coat the inside of the trolley with plastic, as many as 10 (100%) officers did not use closed trolley when distributing clean linen.
4. The constraints of linen officers in implementing operational standards for Hospital management procedure are the use of clean closed trolley facilities and high workload.

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