

## ANALYSIS OF THE PLAN FOR THE CENTRAL STERILE SUPPLY DEPARTEMENT AT BMC MAYAPADA HOSPITAL IN 2019

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### Abstract

**Background and Objectives:** The sterilization center has a role as one of the links to the infection control process and also has a role in efforts to reduce the incidence of infection. In a preliminary study 7 patients in developed countries and 10 in developing countries out of every 100 patients admitted to the hospital will get at least one nasocomial infection. The European Center Disease Prevention and Control estimates that 4,131,000 patients are affected by nasocomial infections each year in Europe and cause an additional 16 million days of hospital care and 37,000 deaths caused by nasocomial infections. The purpose of this study is to evaluate the management of sterilization installations at BMC Mayapada Hospital in 2019. **Method:** This research is a research operational research using descriptive analysis with a qualitative approach. **Results and Discussion:** the results of research from HR still join the organizational structure of the operating room, for the room and CSSD location not in accordance with the standards of the CSSD guideline in 2009 and for facilities still sufficiently targeting the sterilization process at BMC Mayapada Hospital. **Conclusion:** the researcher can conclude that the central sterilization room at BMC Mayapada Hospital is not in accordance with the CSSD guidelines in 2009. **Suggestion:** this hospital need to have your own room for the sterilization center at BMC Mayapada Hospital

**Keywords:** Center for sterilization, location, room, hospital

### 1. INTRODUCTION

In the Epidemiology of Healthcare Associated Infections, Unahalekhaka (2016), nasocomial infections occur in all health facilities around the world. 7 patients in developed countries and 10 in developing countries out of every 100 patients admitted to the hospital will get at least one nasocomial infection. The European Center Disease Prevention and Control estimates that 4,131,000 patients are affected by nasocomial infections each year in Europe and cause an additional 16 million days of hospital care and 37,000 deaths caused by nasocomial infections.

As one of the indicators of success in running hospital services is the realization of low rates of nasocomial infections (Ministry of Health, 2009). In Yustiana and Mudayana's research sources in the Ahmad Dahlan University medical journal, the number of deaths per day throughout the world reached 1.4 million deaths and continues to increase by 1% in several European and American countries, in Asia, Latin America and Africa more than 40% of events have happen. So effective prevention of infection makes the key to being a protective patient from the process of transmitting infectious diseases as well as from certain conditions of care for patients who can cause the incidence of nasocomial infections in patients.

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transmitting infectious diseases as well as from certain conditions of care for patients who can cause the incidence of nasocomial infections in patients.

Infection prevention and control activities in hospitals must cover all parts of hospital services and include every officer in various units and services for example clinical service units, maintenance of facilities, food services, household affairs, laboratories, pharmacy and sterilization services, these are contained in Hospital Accreditation Standards of the Ministry of Health and the 2011 Hospital Accreditation Commission on Infection Prevention and Control.

Based on the 2009 Center Sterile Supply Department (CSSD) guidelines, Sterilization is a process of processing tools or materials aimed at destroying all microbial life forms including endospores and can be carried out by chemical and physical processes. So the sterilization center has a role as one of the links to the infection control process and also has a role in efforts to reduce the incidence of infection.

As a type C hospital, Bogor Medical Center (BMC) Mayapada Hospital is expected to improve service based on patient safety for its institutions, environment and for business. Based on data on the number of operations in 2018 at BMC Mayapada Hospital there were 750 general surgical operations, 347 uterine surgeries, 89 digestive surgeries, 67 orthopedic surgeries, 35 ear and nose surgery surgeries, 33 dental and oral surgeries, neurosurgery as many as 17, and urological surgery as much as 11. Then in 2018 it was found that the number of operations at BMC Mayapada Hospital was 1349 operations, which would have a role in the sterilization process at the hospital.

## **2. METHOD**

This research is a operational research using descriptive analysis with a qualitative approach. In this study the research subjects were staff in the management of BMC Mayapada Hospital who oversaw the sterilization center and staff working at the sterilization center. The main informant was the central sterilization officer and the key informant was the hospital management. The object of this research is facilities, infrastructure and service operational standards (SOP). The sampling technique was carried out using the purposive sampling method. In this study there were seven informants, one informant from management, one person in charge of the central sterilization installation, one surgical installation head nurse and four sterilization center staff. The procedures used in data collection include interview, observation, documentation study.

## **3. RESULT AND DISCUSSION**

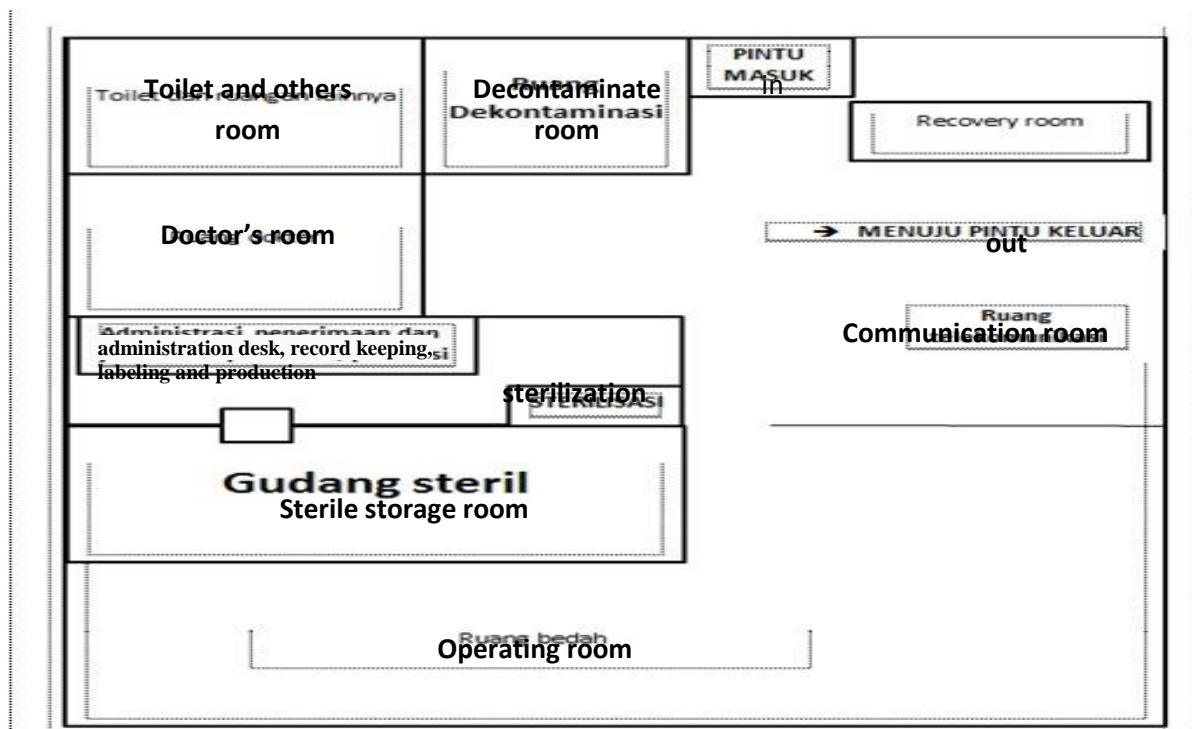
The sterilization center at BMC may provide Hospital with human resources that have met the criteria according to the 2009 CSSD Guidelines. Based on interviews and information about the responsible education background documents, D3 is in accordance with the requirements of the CSSD guideline. For CSSD officers from interviews and document review, it was found that their educational background was of high school equivalent. All of them have attended seminars on CSSD and only 2 people from CSSD officers attended training on CSSD. The number of people working at CSSD was 5 people, namely 1 as the person in charge and 4 people as CSSD officers, based on interviews for the number of CSSD officers felt less, it was felt when 1 officer was on guard and one officer was on vacation or on leave. then from interviews and document review for CSSD's organizational structure itself is still below the operating room structure, and the person in charge of CSSD is still under the head of the operating room nursing. For operational standards, the service officers carry out sterilization flow in accordance with operational standards made by BMC

Mayapada Hospital, although in their activities CSSD officers still work double as circular or sterile opening tools for operating room officers who are carrying out operations.

Table 1. CSSD employee characteristics of BMC Mayapada Hospital

Data	Category	Gender	
		male	Female
Age	<35 year	-	1
	>35 year	4	-
Education	Diploma	-	1
	Senior High School	4	-
Years of Service	< 5 year	-	-
	> 5 year	4	1
Training	Workshop of CSSD	4	1
	Training of CSSD	1	1

The current location of the BMC Mayapada Hospital sterilization center when viewed from the CSSD guidelines in 2009 based on interviews and observations in the hospital sterilisai center room is not appropriate because the placement of the room still joins the operating room which should have its own room and for each tool to be sterilized through the pre-operative patient's main entrance, the instrument was carried by the relevant units in the hospital who wanted to sterilize CSSD with precleaning beforehand and carried in a container box that had also been cleaned first by the nurse or officer from related units then the equipment must go through the postoperative patient recovery room. The size of this CSSD room is based on interviews, observations and document studies which are also not in accordance with the CSSD guidelines in 2019, namely the first room measuring 4.2 meters long and 2.4 meters wide for administration, recording, packaging, production, sterilization. The second room is a room with a size of 4.64 meters with a width of 3.34 meters for a warehouse of linen or new supplies and a distribution room for instruments and sterile goods. For the space, it is also joined by the operating room storage room for the operating room. Then the third room is a decontamination room that must pass through a postoperative patient recovery room with a length of 1.86 meters and a width of 1.38 meters consisting of a train / trolley decontamination room and equipment washing room. Based on interviews with BMC director Mayapada Hospital, data was obtained that there had been plans for hospital development and CSSD had become one of the rooms that would later be given their own space.



Picture 2. The Plan of CSSD in Operating Room BMC Mayapada Hospital

The facilities owned by CSSD's own room are based on interviews and document review, this room has 2 sterilizers with the Tuttnaver brand with a capacity of 5 liters for each tool, this sterilizer is still a one-door tool, from interviews with all information, namely sterilization officers 3 The informant said that the sterilization tool was able to pursue a fairly good and standardized process of reconciliation but 2 informants said that sterilization was still difficult to sterilize for plastic and plasma, but for 3 other informants said that it was not good enough because it was still not optimal for sterilizing equipment made from plastic and plasma. Then for physical infrastructure based on interviews and observations obtained data that for waste disposal there is no problem, it's just still joining the operating room. For water facilities there was also no problem with own aquadest, for electricity it was good, but 2 informants said that there had been a light switch and the electricity did not turn on immediately, waiting for about 10 seconds to turn on again, risking damage to the sterilizer. there's no problem it's just that these two devices are still joining the operating room.

#### 4. CONCLUSION

The sterilization center at BMC may provide hospitals with human resources that have met the criteria of good education. Based on interviews and for the number of CSSD officers there are still less for CSSD's organizational structure itself is still under the operating room structure, and the person in charge of CSSD is still under the head of the operating room nursing. For operational standards, the service officers carry out sterilization flow according to operational standards made by BMC Mayapada Hospital, although in their activities CSSD officers still work double as circular or sterile opening tools for operating room officers who are carrying out operations. The placement of the BMC Mayapada Hospital sterilization center at this time is not yet appropriate because the placement of the room is still joining the operating room. The size of this CSSD room is based on interviews, observations and document studies which are not yet in accordance with the

2009 CSSD guidelines. The facilities owned by the CSSD room are based on interviews and document review, this room has 2 sterilizers with the Tuttnaver brand with a capacity of 5 liters for each tool. but it is still not good enough because it is still not optimal for sterilizing plastic and plasma equipment.

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