

**BED USE IN THE INTENSIVE CARE UNIT DURING THE COVID-19 PANDEMIC ERA****Hesty Latifa Noor**

Medical Record and Health Information Study Program, Universitas Duta Bangsa, Jl. K.H Samanhudi No.93, Sondakan, Kec. Laweyan, Kota Surakarta, Jawa Tengah 57147, Indonesia

*hesty_latifa@udb.ac.id**ABSTRACT**

This study aims to compare the achievements of the Statistical Indicators in Intensive Care Units in hospitals between countries during the COVID-19 pandemic era. Specifically Analyzing the description of the Bed Occupancy Rate (BOR) in the Intensive Care Unit (ICU) Hospital during the Covid 19 pandemic era. This study carried out the preparation of a literature review with a systematic technique in selecting searches using international and national databases. Sources of data were obtained from journal searches using databases in journal applications. The library search technique uses keywords that match. Australia noted that the average BOR in the ICU of the Hospital was below the ideal standard of 27.4%, as well as what happened in Saudi Arabia, namely the BOR of the ICU room as much as 50%. Brazil and Canada in the ICU room BOR are at 80% and 80.5% which means they are still in the category of ideal standard values. In solo Indonesia, 98%, Yogyakarta Indonesia 82,72% and Surabaya Indonesia 99%. BOR in the ICU for patients with Covid 19 at the hospital is on average above the ideal standard of 75-85%. Australia noted that the average BOR in the ICU at the Hospital was below the ideal standard of 27.4% as was the case in Saudi Arabia, where the BOR in the ICU room was 50%. Brazil and Canada in the ICU room BOR are 80% and 80.5% and in Yogyakarta 82,72% which means they are still in the category of ideal standard values. The England recorded the BOR at 100% and solo and Surabaya Indonesia in the second wave the increase in Covid-19 cases reached 98% and 99%. BOR in the ICU room above the ideal number results in a decrease in the quality of service in the ICU increases the percentage of deaths in the ICU and increases the risk of stress for medical staff.

Keywords: bed occupancy rate, covid 19, intensive care unit**First Received**

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This study aims to compare the achievements of the Statistical Indicators in Intensive Care Units in hospitals between countries during the COVID-19 pandemic era. This study aims specifically Analyzing the description of the Bed Occupancy Rate (BOR) in the Intensive Care Unit (ICU) Hospital during the Covid 19 pandemic era.. The results showed that ICU needs had not been met from the second week of March to May 9th. The same situation is shown in France, Spain, Belgium, and New York State, USA, but not for South Korea and (Stang et al., 2020). Results with data through December 2020 for Lombardy, Italy are also expected to reflect the demand for hospitalization and ICU after the occurrence of the virus variant. Several studies have also used computer simulation models to address the allocation of ICU beds or beds for hospital services. ICU availability is a major concern for the community during the peak of the pandemic, in March and April 2020. In the UK in February 2021 data has shown bed occupancy rates. in the ICU has reached 100%. In this study also

found that in certain areas the availability of ICU is limited (Jen et al,2020). The drill is an indicator of the use of beds in hospitals so that by knowing the BOR value, spill of the percentage of bed use can be obtained and can be used as an evaluation of services such as adding beds or adding human resources in the care of COVID-19 patients in the ICU.

METHODS

This study carried out the preparation of a literature review with a systematic technique in selecting searches using international and national databases. Sources of data were obtained from journal searches using databases in journal applications. The library search technique uses keywords that match the research question. The keyword used in this research is Bed Occupancy Rate in Intensive Care Unit on Covid 19 Pandemic Era. Selected articles from 2020 to mid 2021.

RESULTS

Australia noted that the average BOR in the ICU of the Hospital was below the ideal standard of 27.4%, as well as what happened in Saudi Arabia, namely the BOR of the ICU room as much as 50%. Brazil and Canada in the ICU room BOR are at 80% and 80.5%, which means they are still in the category of ideal standard values. In solo Indonesia, 98%, Yogyakarta Indonesia 82,72% and Surabaya Indonesia 99%.

Table 1.
 Bed Occupancy Rate (BOR) in Intensive Care Unit (ICU)
 (Ideal standard = 75-85%)

No	Region	Percentage Bed Occupancy Rate (BOR) in Intensive Care Unit (ICU)
1.	England	100%
2.	Brazil	80%
3.	Arab Saudi	50%
4.	Australia	27,4%
5.	Kanada	80,5%
6.	Solo, Indonesia	98%
7.	Yogyakarta, Indonesia	82,72%
8.	Surabaya,Indonesia	99%

Definition of Bed Occupancy Rate (BOR) is the percentage of beds occupied in certain period. It means Bed Occupancy Rate (BOR) is the percentage of places beds that are filled from the capacity of the beds provided/available at inpatient services. In more detail, the Bed Occupancy Rate (BOR) is the ratio between inpatient service days or treatment days (HP) against inpatient bed count days or the number of beds in a given period. As for the unit of Bed Occupancy Rate (BOR) or Percentage Bed Occupancy (PBO) is a percent. Ideal value The BOR according to Barber Johnson's theory is 75 – 85% (Pecoraro et al., 2021). In various studies conducted in several countries describe the percentage level of bed use in the ICU

room is quite diverse. Australia in mid-winter 2020 shows a BOR value of 27.%, in Brazil the percentage of sleep use in the ICU reaches 80%, the high cases in UK resulted in 100% of beds in ICU occupied, in Canada occupancy rate beds in the ICU reached 80% and Saudi Arabia showed a 50% occupancy rate bed in the ICU.

The condition of the increase in the number of positive cases of Covid 19 in France led to a proposal from the French president to add a place 1000 TT in the ICU room, this is certainly not easy to implement considering the addition of beds must also be adjusted to the number of sources Human Resources or Medical personnel on duty. Additional bed must be followed by an increase in the number of medical personnel. In addition, it costs a lot not a few in the process of adding ICU beds, so the best solution offered is to change the non-ICU room into an ICU room. If you pay attention, it is only the UK that has the percentage of use the bed in the ICU room which is above the ideal number, this will result in Turn Over Interval (TOI) or the average days that the bed is not occupied from has been filled to the next very short charge time. Medical workers have to work more hard to clean the bed of patients who have been allowed to go home because the next patient waits in line to enter or use the bed. This of course will result in officer fatigue and increased stress levels work. In Australia, the percentage of bed occupancy in the ICU only reaches 27.4%. In general this describes the severity of COVID-19 in Australia well pressed. But this number does not mean a safe number for hospital, because the hospital also needs to consider the potential caused by the percentage of bed use which is below the number ideal. Brazil, Canada and Saudi Arabia the number of bed occupancy in the ICU room is still there Ideal number, but still have to be vigilant considering the high wave of the increase Covid-19 cases can occur at any time if the implementation of health protocols in these countries is not optimal.

DISCUSSION

BOR (Bed Occupancy Rate) Definition of Bed Occupancy Rate (BOR) is the percentage of beds occupied in certain period. It means Bed Occupancy Rate (BOR) is the percentage of places beds that are filled from the capacity of the beds provided/available at inpatient services. In more detail, the Bed Occupancy Rate (BOR) is the ratio between inpatient service days or treatment days (HP) against inpatient bed count days or the number of beds in a given period. As for the unit of Bed Occupancy Rate (BOR) or Percentage Bed Occupancy (PBO) is a percent. ideal value The BOR according to Barber Johnson's theory is 75 – 85% (Pecoraro et al., 2021). In various studies conducted in several countries describe the percentage level of bed use in the ICU room is quite diverse. Australia in mid-winter 2020 shows a BOR value of 27.%, in Brazil the percentage of sleep use in the ICU reaches 80%, the high cases in UK in 100% of beds in ICU occupied, in Canada occupancy rate beds in the ICU reached 80% and Saudi Arabia showed a 50% occupancy rate bed in the ICU. The condition of the increase in the number of positive cases of Covid 19 in France led to a proposal from the French president to add a place 1000 TT in the ICU room, this is certainly not easy to implement considering the addition of beds must also be adjusted to the number of sources Human Resources or Medical personnel on duty. Additional bed must be followed by an increase in the number of medical personnel.

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CONCLUSIONS

Bed Occupancy Rate (BOR) in the ICU for patients with Covid 19 at the hospital is on average above the ideal standard of 75-85%. Australia noted that the average BOR in the ICU at the Hospital was below the ideal standard of 27.4%, as was the case in Saudi Arabia, where the BOR in the ICU room was 50%. Brazil and Canada in the ICU room BOR are at 80% and 80.5%, and in Yogyakarta 82,72% which means they are still in the category of ideal standard values. The England recorded the BOR at 100% and in Solo and Surabaya Indonesia in the second wave the increase in Covid-19 cases reached 98% and 99%. BOR in the ICU room above the ideal number results in a decrease in the quality of service in the ICU, increases the percentage of deaths in the ICU and increases the risk of stress for medical staff.

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