



SALINAN

KEPUTUSAN DIREKTUR JENDERAL PENGUATAN RISET DAN PENGEMBANGAN
KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI
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NOMOR 10/E/KPT/2019

TENTANG

PERINGKAT AKREDITASI JURNAL ILMIAH PERIODE II
TAHUN 2019

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A Literature review on the Identification of Variables for Measuring Hospital Efficiency in the Data Envelopment Analysis (DEA)

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Abstract

The selection of input and output variables usually pose a problem when carrying out efficiency assessment in hospitals. Data Envelopment Analysis (DEA) is an instrument that is used to calculate the efficiency of a hospital using some inputs and outputs. Therefore, this study aims to identify the most frequently used hospital inputs and outputs from an existing paper, in order to assist the hospital management staffs in choosing the relevant variables that can represent available inputs, are easily accessible, and need improvement. It was conducted using keywords such as "hospital efficiency" and "DEA for hospital" to search for peer-reviewed journals in the PubMed and Open Knowledge Maps from the year 2014-2020. From, the 586 articles, 54 samples were obtained from the about 5-3504 hospitals which were analyzed from 23 countries. The results showed that, the five most used inputs were the number of beds, medical personnel, non-medical staff, medical technician staff and operational costs, while the most used outputs were number of inpatients, surgeries, emergency visits, outpatient service, and days of inpatients. These variables are often used for accessing the efficiency of hospitals in the DEA application.

INTRODUCTION

Resources of hospital are demanded to fulfil what patient wants. But in the reality, there are many hospital have not the same resources of each other so that makes inefficient resources of each hospital (Abdurachman et al., 2019). Efficiency assessment in hospital are rarely conducted like the other sector because of resources setting and limited control of outputs (Shettian, 2017). Beside that, raising efficiency are needed especially for health care in a low or medium human development index countries. One of health care efficiency assessment problem is on methodological step (Vivekanantham et

al., 2014). Efficiency is a condition when existing resources could make an usefull result. Hospital efficiency is about a hospital capacity to make a qualified result such as a well treated patient and have recovered discharged patient by using resources such as medical staff, non-medical staff, and finance. While unefficiency is a sign of low quality services which could affect a late treatment even an addition therapy (OECD, 2019). There are two type of efficiency, the first one is technical efficiency by combining or reducing input at certain level and economic efficiency by setting hospital finance (Samudro & Pratama, 2018).

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COVID-19 Pandemic: The Existing Challenges and Available Solution; Evidence from a Systematic Review

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Abstract

Coronavirus disease (COVID-19) is presently the most important topic worldwide. However, no vaccine or specific anti-viral treatment for the disease has been shown to be effective. In this emergency, identifying risk factors, preventive measures and estimating challenges which control available drug options for COVID-19 are key to mitigating the severity of the pandemic until specific drugs or vaccines become available. Therefore, this study aims to identify possible factors which affect these drug options. This study searched PubMed database using necessary Boolean operators from December 31st to March 31st 2020 in order to identify common risk factors, preventive measures, information regarding control challenges & evidence on the available drug options against COVID-19. Risk factors were found to be human-animal interactions, males, aged people and people with co-morbidity. Furthermore, protective factors comprised of personal hygiene etiquette maintenance, rapid identification, isolation and informing (3I tools) of the COVID-19 cases and media coverage on COVID-19. Till date, anti-viral drugs like remdesivir, chloroquine, lopinavir/ritonavir and traditional Chinese medicine (TCM) are available options to fight against COVID-19. More research is needed to determine other how to control the disease until specific treatment options are available as well as risk factors, and preventive measures.

INTRODUCTION

In December 2019 lockdown of Wuhan, a central city of China has alarmed the world that it is going to face one of the biggest threats by the third pathogenic coronavirus after Severe Acute Respiratory Syndrome-Coronavirus (SARS-CoV) and Middle East Respiratory Syndrome-Coronavirus (MERS-CoV), the disease due to this virus known as COVID-19. At first, the virus was known as “Wu-

han coronavirus” named by Chinese researchers. But currently, the International Committee on Taxonomy of Viruses (ICTV) designated it as SARS-CoV-2. This virus was first initiated in the Hunan seafood market, China, and in the first month, it caused 360 fatalities and over 20 000 suspected cases (Khan et al., 2020). Researchers revealed that the genome of SARS-COV-2 is 80% identical to Severe Acute Respiratory Syndrome (SARS)-like bat CoVs

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Modeling Social, Health, and Vaccines Intervention in Time of COVID-19 Pandemic Impacted in Jakarta - Indonesia

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Abstract

Since the first outbreak of SARS-CoV-2 worldwide, research on modeling and simulation has grown, particularly to estimate the peak and end time of the pandemic which has been exceeded in some cases. This study aims to model the current virus spread with discrete event simulation, using the case of Jakarta. About 2 million of Jakarta's susceptible population was used for the the model's input which ran for a year. The data was obtained from past records and were divided into three main timelines (i.e. initial stage, large scale restriction and new normal) in order to validate the model with real cases step by step. Scenario analysis was then performed by evaluating five possible interventions such as: existing scenarios, social and health intervention, mass vaccination and hybrid intervention. The results show that the model represents real cases with a variation of less than 5% during the timeline. Furthermore, scenario analysis showed that mass vaccination, hybrid and social intervention provide the least positive cases in the system. This study recommends that hybrid intervention should be used while the vaccine is being mass produced, and the implementation of social intervention should be highlighted.

INTRODUCTION

The government around the world has deployed various countermeasures in response to global spread of COVID-19. Modelling has been used to help the decision makers in order to understand the pattern and characteristics of pandemics, including to predict how various intervention may have impact on the outcome (Currie et al., 2020). Miller et al (2008) has implemented the Discrete Event Simulation (DES) to model and analyze the pandemic

influenza in San Antonio, Texas, by accommodating public health measure and hospital capacity. Their study developed models for simulating contact and diseases transmission process and for diagnosis and treatment process (Miller, Randolph and Patterson, 2008).

There are some efforts to model the pandemics in Indonesia (Yulida and Karim, 2020), which mainly aims to predict the time (peak or end) and number of cases (infected, dead and recovered

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Assessment of Patients' Understanding on Prescribed Medications at Outdoor Patient Department of Tertiary Care Hospital in Central Gujarat, India

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Abstract

Medication is an important part of a patient's treatment by clinicians and is one of the measures taken by them during the entire period of treatment. This descriptive cross-sectional study aims to assess patients' understanding about prescribed medication obtained after consultation with clinicians at the outdoor patient department of a tertiary care hospital in central Gujarat, India. 184 patients from different clinical departments were interviewed after their consultation with the clinician. Majority of the subjects (45.5%) were 25-44 years of age, while the rest ranged from 45-54 years of age group. Furthermore, 55.5% of the subjects were female, 20.4% were illiterate people, and 32.5% were educated up to primary level. The results showed that 84.3% of the patients were informed about proposed treatment duration, while 13.9% were informed about diet relation. Therefore, the patients had fair knowledge about the disease they were suffering from and proposed duration of treatment, but they were not aware of about the line of treatment. In conclusion, patients need to be educated about the correct use of medications by clinicians.

INTRODUCTION

Medications are an important part of treatment of patients by clinicians in addition to other measures to be followed by the patients during the entire period of treatment (Hendrayana, et al, 2017). They also prevent further deterioration of body thereby prevent future complications from the ongoing disease. Without having adequate knowledge about the use of medications, the patients cannot be effective partners in management of their own care, consequently, failure to comply with medication instructions commonly leads to serious adverse outcomes (Shani, et al, 2000).

A study by Segev Shani, Tal Morginstin and Amnon Hoffman in Israel to evaluate patients' perceptions of drug counseling by health professionals – the prescribing physician and dispensing pharmacist found that 60.4% were counseled by both physician and pharmacist, 33.6% by their physician only, and 4.2% were counseled by the pharmacist only. They also found that information on the medication's indication for use was given to 93.7% by the physician compared to 13.1% by the pharmacist (Shani, et al, 2000).

The physician, a trained registered nurse, or a health educator needs to spend time on explaining

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