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Original Article

An Overview of COVID-19 Patients in RSUD Bhakti Dharma Husada Surabaya from September 2020 to June 2021

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ABSTRACT

The COVID-19 pandemic has been lasting more than a year. Until now, research on the analysis of an overview of COVID-19patients has not been carried out at RSUD Bhakti Dharma Husada Surabaya. This study aims to describe the COVID-19 cases in RSUD Bhakti Dharma Husada Surabaya about the gender of patients, highest number of patients =, the most recovered patient, the highest death rate occurred, and Case Fatality rate (CFR). This study is a descriptive observational study with a case series approach. The data used in this study were COVID-19 data from the application of online Hospital ditjen yankes from September 2020 to June 2021. The majority of COVID-19 cases occured in women (53.04 %). The COVID-19 patients mostly came to the hospital in June 2021, about 241. The most recovered patients in Oktober were 255 patients. The highest death rates occurred in June 2021 ware 47 patients. Case Fatality rate (CFR) is at 5.79 % because in June 2021 the health facilities were full, and cause patients did not get help quickly. Many patients have been forced to self-isolate at home so that they have worsened and finally died. Most COVID-19 patients who were treated at the RSUD Bhakti Dharma Husada Surabaya from 2020 to June 2021 occurred in women and the most patients who were admitted was in June 2021.

Keywords: *Descriptive, overview, patient, COVID-19, hospital*

ABSTRAK

Pandemi COVID-19 telah berlangsung lebih dari satu tahun. Penelitian tentang analisis gambaran pasien COVID-19 di RSUD Bhakti Dharma Husada Surabaya hingga saat ini belum dilakukan. Penelitian ini bertujuan menggambarkan kasus COVID-19 yang ada di RSU Bhakti Dharma Husada Surabaya tentang jenis kelamin pasien, pasien yang paling banyak masuk rumah sakit, pasien yang paling banyak sembuh, angka kematian pasien paling tinggi dan Case Fatality rate (CFR). Penelitian ini merupakan penelitian deskriptif observasional dengan pendekatan case series. Sumber data pada penelitian ini adalah data OVID-19 terjadi pada perempuan (53.04%). Pasien COVID-19 paling banyak masuk pada bulan Juni 2021 sejumlah 241. Pasien paling banyak sembuh ada di bulan Oktober yaitu 255 pasien Terjadi angka kematian paling tinggi di bulan Juni 2021 sebanyak 47 pasien. Case Fatality rate (CFR) berada di angka 5.79 % sebab di bulan Juni 2021 fasilitas kesehatan penuh, sehingga pasien tidak segera mendapatkan perawatan. Banyak pasien yang terpaksa isolasi mandiri di rumah sehingga kondisinya semakin parah dan akhirnya meninggal dunia. PasienOVID-19 yang dirawat di RSUD Bhakti Dharma Husada Surabaya pada bulan September 2020-Juni 2021 paling banyak terjadi pada perempuan dan pasien paling banyak masuk pada bulan Juni 2021.

Kata kunci: *Deskrptif, gambaran, pasien,COVID d-19, rumah sakit*

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INTRODUCTION

COVID-19 is a communicable disease firstly reported as Novel Coronavirus is as a caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).[1] Since declared a pandemic by WHO starting on March 11, 2020, until now the COVID-19 pandemic is still ongoing.[2] After Indonesia reported the first case on March 2, 2020, COVID-19 cases in Indonesia at the end of December 2020 had reached 743,198 people. 611,097 patients were recovered and 22,138 patients died. Cases are increasing and spreading rapidly throughout Indonesia, including Surabaya. As of July 15, 2021, the Surabaya City Covid-19 Task Force reported 32,297 confirmed COVID-19 cases with 1,433 deaths.[3,6]

RSUD Bhakti Dharma Husada is one of the COVID-19 referral hospitals with a capacity of 164 beds for COVID-19 patients. SIRS.kemkes.go.id first version has been used to collect data on COVID-19 patients in hospitals from March 2020 to August 2020. In the first version, the data collection is name, email, phone number, address, gender, age, date admission, patient status, date of discharge, discharge status, NIK, type of patient (Suspect, Confirmation), diagnosis, and laboratory examination. Since September 2020, SIRS.kemkes.go.id the second version has been used where data collection is in the form of daily data for triage ER patients, daily data for patients admitted, daily data for patients treated with comorbidities, daily data for patients treated without comorbidities, and daily data for patients discharged.[4]

This study aims to provide an analysis of the description of COVIDid-19 patients at the Bhakti Dharma Husada Hospital Surabaya as an input in handling COVID-19 cases in the city of Surabaya especially the Bhakti Dharma Husada Hospital Surabaya.

MATERIALS AND METHODS

Materials

This research was an observational descriptive study with a case series approach. The source of data in this study is secondary data taken from the online hospital application of the Directorate General of Health and Health version 2 (two) where the data started from September 2020 until the data collection for this study ended in June 2021. This study describes the incidence of COVID-19 with a case approach, epidemiology by person, and time. The variables studied in this study were gender, admitted patients, recovered patients, and deceased patients at Bhakti Dharma Husada Hospital Surabaya. The case fatality rate (CFR) variable is the result of the division between the number of confirmed COVID-19 deaths in a certain period and the number of confirmed COVID-19 cases in that period multiplied by 100% (WHO criteria).

RESULTS AND DISCUSSION

In August 2020, RSUD Bhakti Dharma Husada had treated 554 confirmed COVID-19 patients (Figure 1).

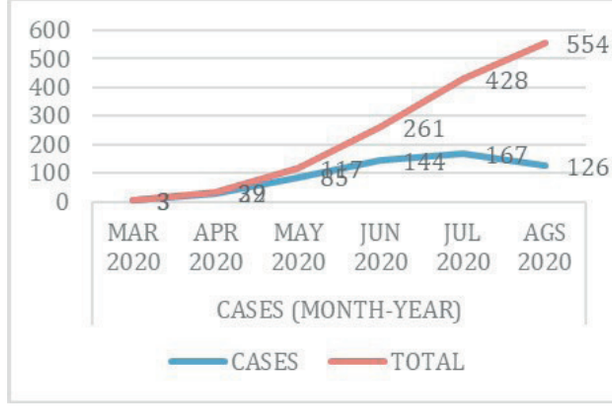

Figure 1. Coronavirus Cases March – August 2020

The numbers of COVID-19 patients who entered the Bhakti Dharma Husada Hospital in the period, March-August 2020 were the most in July namely 167 patients, and the lowest were in March with three patients.

The gender of COVID-19 patients who entered the Bhakti Dharma Husada Hospital in the period September 2020 - June 2021 the most were female, namely 436 patients (53.04%). Males gender was 386 patients (46.96%) as shown in Table 1.

The total numbers of COVID-19 patients who entered the Bhakti Dharma Husada Hospital in the period September 2020 - June 2021 were the most in June as many as 241 patients, and the lowest in March 2021 with 21 patients. The most recovered patients were in October about 255 patients, and the lowest in April 2021 with 15 patients. The highest death rate occurred in June 2021 namely 47 patients, the lowest in April and May 2021 namely 0 (zero) as shown in Fugre 2.

Table 1. Distribution of COVID-19 Cases Based on People at Bhakti Dharma Husada Hospital September 2020-June 2021

CASES BY PEOPLE	CASES (MONTH-YEAR)										AMOUNT	
	SEPT 2020	OCT 2020	NOV 2020	DEC 2020	JAN 2021	FEB 2021	MAR 2021	APR 2021	MAY 2021	JUN 2021		
Gender											n	%
Male	44	27	19	64	45	25	7	9	12	133	386	46.96
Female	59	34	40	60	66	23	14	14	18	108	436	53.04
Total	103	62	59	124	111	48	21	23	30	241	822	100

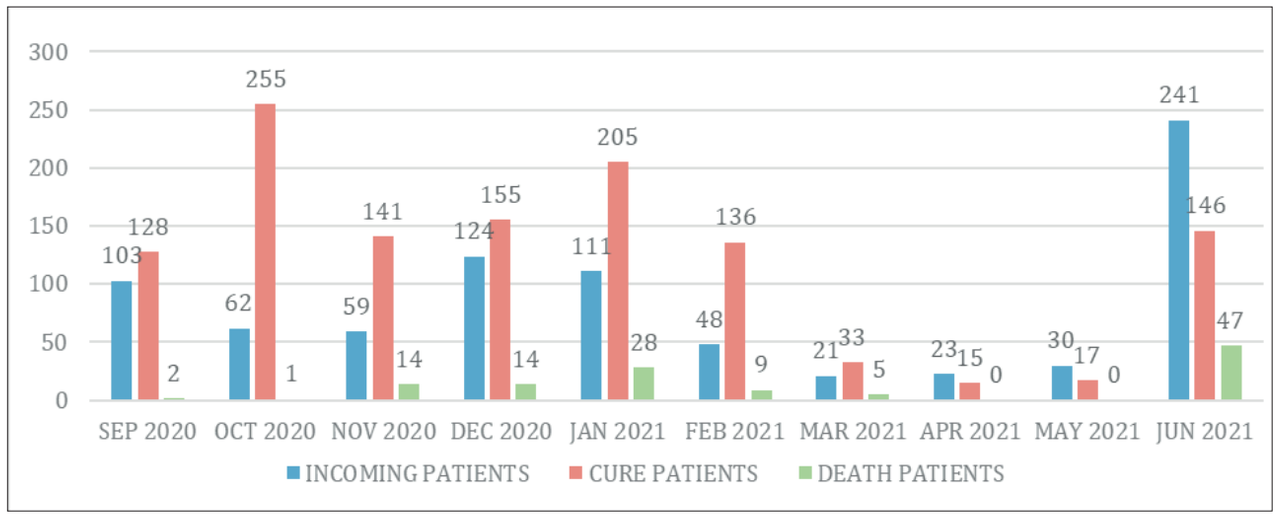

Figure 2. Distribution of COVID-19 Cases Based on Time at Bhakti Dharma Husada Hospital Surabaya September 2020-June 2021

Table 2. Distribution of Deaths of COVID-19 Patients at Bhakti Dharma Husada Hospital Surabaya September 2020-June 2021

No	MONTH	CONFIRMED DIED PATIENT	CONFIRMED PATIENT	CFR(%)
1	SEPTEMBER 2020	2	197	1.02
2	OCTOBER 2020	1	154	0.65
3	NOVEMBER 2020	14	187	7.49
4	DECEMBER 2020	14	344	4.07
5	JANUARY 2021	28	350	8.00
6	FEBRUARY 2021	9	162	5.56
7	MARCH 2021	5	96	5.21
8	APRIL 2021	0	80	0.00
9	MAY 2021	0	57	0.00
10	JUNE 2021	47	444	10.59
AMOUNT		120	2017	5.79

According to the revised Ministry of Health COVID-19 guidelines, COVID-19 deaths for surveillance purposes are confirmed/probable COVID-19 cases that have died. The Case Fatality rate (CFR) of the Bhakti Dharma Husada Hospital in the period September 2020 - June 2021 was 5.79 % as shown in Table 2.

COVID-19 case pattern based on gender

The gender of COVID-19 patients who entered the Bhakti Dharma Husada Hospital in the period September 2020 - June 2021 mostly were female, namely 436 patients (53.04%). It is also in line with WHO that the percentage of infection distribution in males is greater than in females (51% vs 47%) with some variations across age groups. Based on the data from 77, 000 deaths in the case-based reporting database (nearly 30% of all known deaths), there appear to be higher numbers of deaths (45,000 or 58%) in men. Geographical variations in infection rates and deaths among women and men of different age groups are probable; however, available data come from relatively few countries and are, therefore, skewed. Consequently, any interpretation of the gender differences across age groups and countries must be made with great caution. These limitations underline the urgent need for better and completed reporting of data by sex and age, as a minimum, for better identification and understand the key differences and disparities to inform a more effective COVID-19 response. Evidence from past epidemics, such as the SARS coronavirus outbreak in 2002−2003, shows that men and women are likely to have both different susceptibilities to the virus and different vulnerabilities to the infection as a result of both sex- and gender-related factors. Data (on persons tested, the severity of the disease, hospitalization rates, discharge [recovery], and health worker status) that are disaggregated at a minimum by sex and age – as well as by other stratifies such as socioeconomic status, ethnicity, sexual orientation, gender identity, refugee status, etc., where feasible – could help in identifying and addressing health inequities related to COVID-19.[27]

COVID-19 case pattern based on time

According to WHO Science in 5 on COVID-19, some factors are contributing to increased transmission around the world. The first are these variants of concern, including the Delta variant which rapidly takes off and spreads between people more efficiently than even the Alpha variant that was first detected around December to January 2021. The second factor is that we have increased social mixing and increased

social mobility, which increases the number of contacts that individuals have. The third factor is the relaxation or the inappropriate use of public health and social measures. Proven public health and social measures we know prevent infections, reduce the spread of somebody who is infected with the virus to others, and save lives. And the fourth factor is the uneven and inequitable distribution of vaccines.[9]

COVID-19 case fatality pattern

The results of the study show that more COVID-19 deaths occurred in June 2021 with 47 patients as shown in Table 2. One of the causes of the high number of cases of death is influenced by the increasing number of active cases in June 2021. This is because the health facilities were full, causing patients not to get help quickly. Many patients have been forced to self-isolate at home so that they have worsened and have been admitted to the hospital in severe conditions.

The results showed that, from September 2020-June 2021, the majority of COVIDd-19 cases occurred in June 2021, most patients recovered in October 2020 and most patients died in June 2021 as shown in Figure 2.

This study shows that the largest increase in cases and death rates of COVID-19 patients occurred in June 2021 where this occurred throughout Indonesia and the world.[3,5,6]

COVID-19 case fatality pattern

According to Table 2, the total mortality of confirmed patients who died was 120 people (CFR 5.79%). Age, occupation (entrepreneur and farmer/trader), contact history, symptoms (fever, dyspnea, cough, lethargic, and cold), and comorbidities (diabetes, COPD, hypertension, cancer, heart disease, neurological disorders, and immune disorders) were risk factors of COVID-19 confirmed died patients in DR. Kariadi Hospital. Meanwhile, gender, traveling history, and duration of symptoms were not risk factors for death in COVID-19 confirmed patients in DR. Kariadi Hospital. Adequate handling is needed to prevent death in patients with confirmed COVID-19 who have risk factors. In another article,the mean case fatality rate for adults aged under 60 is estimated to be less than 0.2%, compared with 9.3% in those aged over 80. Even if comorbidities increased mortality risk by five times, the risk would remain lower for younger people than for most older adults.[11]

CONCLUSIONS

The majority of COVID-19 patients treated at the Bhakti Dharma Husada Hospital from September 2020 to June 2021 were female ; 436 (53,04 %), The COVID-19 patients mostly came to the hospital in June 2021, about 241. The most recovered patients were in October namely 255 patients. The highest death rate occurred in June 2021 namely 47 patients. Case Fatality rate (CFR) is at 5.79 % because in June 2021 the health facilities were full, and cause patients did not get help quickly. Many patients have been forced to self-isolate at home so that they have worsened and finally died. the urgent need for better and completed reporting of data by sex and age, as a minimum, for better identification and understand the key differences and disparities to inform a more effective COVID-19 response. Assessment of the history of vaccine is very important. Based on what we know so far, vaccines are proving effective against existing variants, especially at preventing severe disease, hospitalization and death.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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