183

Waiting Times For Covid-19 Patients In The Emergency Department During The Pandemic: Experience From A Single Center In Malaysia.

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INTRODUCTION

The world has been hit by the Covid-19 virus and the WHO had declared a pandemic on the 11th of march 2020. Since then, Malaysia, like many other countries around the world, has had multiple episodes of lockdown named MCO, which affected many sectors, healthcare sector being one of them[1]. In response to the pandemic, some of the Malaysian hospital have been converted to hybrid COVID-19 hospitals to improve the services of hospitals while at the same time catering for COVID-19 patients who are ill and needing hospital admissions[2].

The emergency departments have created respiratory zones and non-respiratory zones to reduce the risk of covid-19 infection and transmission within the ED. Being the safety net of the hospital, the emergency department has to screen patients for COVID-19 before admission to the wards based on local hospital protocols[3].

Long waiting times in the emergency department is not something new. However, with the emergence of the pandemic of COVID-19, long waiting times of patients stranded and boarding in the ED increases the risk of exposure to health care workers and other patients in the ED to the virus. The conveyor belt approach and fast deposition of patients into the COVID-19 wards once tested positive will reduce the risk of transmission of the virus in the emergency setting[4].

MATERIALS AND METHODS

The data for this study was collected from daily reports, hospital statistics and electronic records. The data was collected for each day from the 16th of February 2021 until the 22nd of February 2021. The Emergency department is a tertiary hospital with an active call specialist in the ED daily, full lab facilities for 24 hours and 24-hour emergency medicine services.

RESULTS

PATIENT NUMBER	TIME OF ARRIVAL	TIME OF SWAB TAKEN	TIME OF SWAB RESULT	TIME OF ADMISSION TO WARD	TIME FROM ARRIVAL TO SWAB	TIME FROM TESTING TO RESULTS	TIME FROM RESULTS TO ADMISSION	TOTAL DURATION IN ED
1	0000H 15.02.2021	0800H 16.02.2021	1500H 16.02.2021	0015H 17.02.2021	(480 minutes) 8 HOURS	(420 minutes) 7 HOURS	(555 minutes) 9.25 HOURS	24.25 HOURS
2	1700H 16.02.2021	15.02.2021 IN KK BT ARANG	1900H 16.02.2021	0030H 17.02.2021	-	-	(330 minutes) 5.5 HOURS	7.50 HOURS
3	0340H 17.02.2021	0356H 17.02.2021	0500H 17.02.2021	1015H 17.02.2021	(16 minutes) 0.26 HOURS	(64 minutes) 1.06 HOURS	(315 minutes) 5.25 HOURS	6.58 HOURS
4	0111H 19.02.2021	1649H 19.02.2021	12.55am 20.02.2021	1000H 20.02.2021	(218 minutes) 3.63 HOURS	(486 minutes) 8.10 HOURS	(545 minutes) 9.08 HOURS	20.82 HOURS
5	1447H 19.02.2021	1730H 19.02.2021	12.55am 20.02.2021	(LO) 0040H 20.02.2021	(223 minutes) 3.71 HOURS	(445 minutes) 7.41 HOURS	No admission	11.13 HOURS
6	2300H 20.02.2021	0100H 21.02.2021	0800H 21.02.2021	1200H 21.02.2021	(120 minutes) 2 HOURS	(420 minutes) 7 HOURS	(240 minutes) 4 HOURS	13 HOURS
MEAN					3.51 HOURS	6.11 HOURS	6.61 HOURS	13.88 HOURS

DISCUSSION

The proportion of patients who turned out to be covid-19 positive in the ED was considered to be relatively low during the time of the study. However, the time that was taken to trace the Covid-19 test results, and subsequent admission was long. It is shown from the results that the average waiting time is 13.88 hours. The long waiting time for the Covid-19 test which was done will delay the time for definitive treatment for the patients and also delay the admission because the decision has to be made to either admit these patients to the respiratory wards/COVID-19 wards or general wards[5].

The long admission time of the patient who turn out to be COVID-19 positive is also evident. The long admission time will increase the risk of transmission of the COVID-19 virus within the emergency departments among the health care staff and also other patients in a busy and crowded ED where the optimal care for an infectious disease is a challenge[6].

There has to be a high quality of care for the critically and semi critically ill COVID-19 patients together with a high efficacy for admissions without increasing the risk of transmission to the staffs and other patients. By identifying the long waiting times, we can get an idea about the exposure risks that the ED faces daily during the pandemic. Our findings point to the importance of the conveyer belt approach to reduce waiting time for patients in the ED and also identifying the COVID-19 positive patients early by prioritizing the COVID-19 test for ED patients and also prioritizing admission of COVID-19 positive patients in the ED.

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DECLARATION OF CONFLICT FOR AUTHORS

None

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