

Emergency Room Disaster Preparedness Management of Mitra Delima Hospital in COVID-19 Pandemic

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ABSTRACT

COVID-19 still become a major problem for the entire world population, with the number of cases reaching 46 million as of October 2020. The COVID-19 widespread is one of a kind since of the scale, speed of spread, and need of logical information related to this unused disease. Hospitals, especially ER as an entrance for patients, are required to face various challenges related to this pandemic. However, the health service resilience system facing the COVID-19 pandemic is still looking for its optimal form so it is interesting to being researched further. Research was conducted using descriptive methods in ER Mitra Delima Hospital, type C private hospital which is non COVID referral. The research data was obtained from interviews with the Head Deputy of ER, COVID patient reports, policy changes and Operational Standards Procedures (SOP) as well as data on the use of Personal Protective Equipment (PPE) from March-August 2020. The COVID-19 pandemic led ER Mitra Delima Hospital to make several policy changes by changing patient flow, layout and screening of IGD to COVID and non-COVID, the addition of ER beds and staff, and changes to referral SOP and PPE to improve patient safety and ER personnel of Mitra Delima Hospital. Most health services, especially ER Mitra Delima Hospital, will face an increase in COVID-19 patients and must anticipate the consequences, including increasing the number of beds, personnel, and policy changes to guarantee the commitment of hospital management staff in order to improve the hospital's resilience to disasters, promote effective leadership, and provide a more structured communication path for the community and policy makers.

Keywords: *COVID-19, disaster preparedness management, emergency room*

1. INTRODUCTION

Disaster incidents are one of the most endangering events and emergency solutions are needed because of their sudden occurrence. Natural or unreal disasters will interfere with the activities of some organizations reminiscent of tending facilities. Typically, the capability of those facilities might not be ample to combat the physical and money harm they'll cause. though the flexibility to be prepared for disasters varies by country, it is aforementioned that within the last century, once the frequency and devastating effects of disasters have step by step increased, no country is absolutely ready and safe [1].

The current coronavirus disease 2019 (COVID-19) caused by coronavirus 2 (SARS- CoV-2) is spreading globally at an accelerated rate. World Health Organization (WHO) was declared COVID-19 as a

pandemic on March 11, 2020. As of 1 November, about 46 million cases and 1.2 million passings have been detailed all-inclusive. Indonesia detailed around 24.000 unused cases (88.1 per 1 million populace) within the final past 7 days and over 410.000 aggregate cases to date [2].

Due to the one of a kind challenges of the COVID-19 widespread and the fast spread of contamination, the Indonesia therapeutic community, for case, Mitra Delima Hospital, must adjust and actualize rapidly evidence-based best hones that are planned to progress quiet care as well as the restorative community's well-being and versatility. Be that as it may, a far-reaching selection of evidence-based hone rules from national restorative social orders can take a long time. Unused evidence-based COVID-19 hones must be actualized in weeks [3]. In these circumstances, wellbeing care experts confront a number of complexities, counting the got to make basic

choices in quickly changing and in some cases equivocal settings. They must oversee data over-burden coupled with extreme time weights, error-prone circumstances, unfavorable physical conditions, execution weights, and issues coming about from the require for different people from distinctive foundations to work viably [4].

Mitra Delima Hospital is C-type, private hospital, located in South Malang which “forced” to adapt during this COVID-19 pandemic. Despite being non COVID patient referral hospital, the ER of Mitra Delima Hospital has treated approximately 485 patients with suspected and 4 confirmed cases of COVID-19 since March-August 2020. In arrange to supply information on the hospital readiness and versatility of its wellbeing frameworks amid the COVID-19 widespread, we depict, at the clinic level, the key components of the reaction to COVID-19, counting the challenges and issues to expect taking after the involvement of ER Mitra Delima Hospital.

2. METHOD

Research was conducted using descriptive methods in ER Mitra Delima Hospital, type C private hospital which is non COVID referral. The research data was obtained from interviews with the Head Deputy of ER, COVID patient reports, policy changes and Operational Standards Procedures (SOP) as well as data on the use of Personal Protective Equipment (PPE) from March-August 2020.

3. RESULTS AND DISCUSSION

Table 1. Challenges encountered by the hospital and local solutions found as hospital preparedness management

Challenges	Local Solutions Found as Hospital Preparedness Management
Management of suspected and confirmed patient with COVID-19	a. Placing triage place outside ER b. Implementing COVID screening tools in triage c. Divide ER room into COVID and non-COVID to minimize the spread of infection d. Training frontline healthcare workers on the management of COVID-19
Managing and taking care of ER healthcare worker	Using level 2+ PPE
Expanded require for health workers	Mobilization staff inside the pool of hospital (case: included healthcare staff to ER from the internal unit)
Increasing the availability of beds	Added more standby beds in ER (from 7 to 11 beds) due to dividing ER room
Policies	a. Expecting the joins between pre-hospital and hospital care by recording and minimizing holding

Challenges	Local Solutions Found as Hospital Preparedness Management
	up time for each phone referral of COVID-19 cases b. Regularly gives vitamins and checkup rapid antibody to ER personnels c. Local adjustment of national and international protocols d. Normal emergency gatherings including healthcare laborers, head of the crisis office, and regulatory staff to guarantee a comprehensive and collective technique e. Having screening rapid antibody test for COVID-19 patients

3.1. Establishing the clinical management of suspected or confirmed patients with COVID-19

Advising all the healthcare workers (HCWs) of the modern rules could be a challenge that was found with normal data gatherings of the healing center. Instruction, preparation, and works out have been frequently organized since the starting of the episode for cutting-edge HCWs to guarantee that all HCWs caring for patients get satisfactory data and prepare on personal protective equipment (PPE) and clinical administration of the patients. Amid epidemics, facilitated and multidisciplinary administration between pros in infectious diseases (IDs), ERs, and infection prevention and control (IPC), conjointly hospital administration is of vital significance to supply ideal care [5].

3.2. Anticipating the pandemic

The ER of Mitra Delima Hospital had seven bedrooms before March 2020, but as the pandemic developed, more beds were added (11 beds standby) and ER room being divided into two rooms (for COVID an non COVID patients). Best endeavors must be made to disconnect patients with suspected or affirmed COVID-19 [6].

Screening tools like screening form for ER patients and checking all suspected COVID patients with rapid test antibody was being used to date and it brought consequences in the changing flow of the patients. To date, real - time invert transcription - polymerase chain response (RT - PCR) in respiratory tests is the current gold standard strategy for the diagnosis of COVID - 19. In any case, molecular testings are time-consuming and require specialized operators, components that constrain their utilize in genuine life when the quick conclusion is required for quick intercession choices [7].

The support of the hospital management staff was necessary during this pandemic. Including internal staff to ER to bargain with COVID-19 was one arrangement

that's taken in arrange to guarantee that healthcare was not disturbed and that specialists were not diverted from their missions.

3.3. Logistical Matters

Increasing expenses in PPE in Mitra Delima Hospital was also being noticed in this pandemic (March-August) as in Table 2. COVID-19 is for the most part spread by beads ousted by hacking or wheezing. Fecal or direct-contact defilement may moreover happen. ER staff ought to utilize standard contact and bead safety measures, counting confinement gowns, gloves, masks, and eye protection (shields or goggles).

Table 2. Expenses in PPE during COVID-19 Pandemic

Month	Expenses in PPE
March	Rp. 40.614.399
April	Rp. 13.500.000
May	Rp. 15.854.484
June	Rp. 35.973.310
July	Rp. 35.780.540
Augusts	Rp 78.224.264

4. CONCLUSIONS

Most health services, especially ER Mitra Delima Hospital, will face an increase in COVID-19 patients and must anticipate the consequences, including increasing the number of beds, personnel, and policy changes to guarantee the commitment of hospital management staff in arrange to make strides the hospital's flexibility to calamities, advance viable authority, and give a more organized communication way for the community and approach producers.

AUTHORS' CONTRIBUTIONS

TK: concept and design the study, data analysis, writing; AYN: data analysis, data collection, writing; DK: data collection, writing

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