

# COVID-19 handling report for pre-case, case (pre-hospital and hospital), and post-case phases in the elderly as vulnerable populations in 6 Asia Pacific countries

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**Abstract:** In this current COVID-19 pandemic, the elderly (60 years and over) are more vulnerable populations to be infected and become victims. In a disaster cycle, the various parts are usually divided into three stages, consisting of the pre-impact stage, the trans-impact stage, and the post-impact stage. It is necessary to explain how to handle the COVID-19 disaster for the elderly at each step (explain the meaning of pre-case, case (pre-hospital and hospital), and post-case phases, respectively). This paper presents the handling of COVID-19 for elderly in pre-case, case, and post-case phases in six Asia-Pacific countries (Indonesia, Thailand, Singapore, Malaysia, Vietnam, and Japan). The data and information come from COVID-19 official websites of each country, including information from World Health Organization (WHO), United States Centers for Disease Control and Prevention (CDC), mass media, and professional associations. The handling of COVID-19 in the pre-case phase has been done correctly for the elderly, especially in Indonesia, Japan, Thailand, and Singapore. In the case phase (pre-hospital and hospital), only Indonesia, Japan, and Thailand have followed special handling protocols for the elderly, particularly for those who have comorbidities and respiratory diseases. For the post-case phase, all countries have the same treatment protocol for all age groups, with none specific for the elderly.

**Keywords:** COVID-19, elderly, Asia Pacific, handling, risk

## Introduction

COVID-19 is a disease caused by the SARS-CoV-2, with the first case appearing in Wuhan City, China, in December 2019. On Wednesday, 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic after the virus spread rapidly all over the world. The initial statement about the pandemic was retrieved from the WHO website when COVID-19 had spread to 118 countries and had infected more than 121,564 people with at least 4,373 deaths in Asia, Europe, the Middle East, Africa, and America. As of 31 July 2020, there are over 17,064,064 cases in 215 countries, and 668,073 deaths have been reported from COVID-19 (1).

In Indonesia as of 8 August 2020, the fatality rate of COVID-19 in age group of 60 years and above is

18% and it is the highest and above all other age groups (2). In other Association of Southeast Asian Nations (ASEAN) countries such as Singapore, it is known as of 8 May 2020 that around 80% of deaths because of COVID-19 are above 60 years old (3).

In Malaysia, the incidence rate of COVID-19 is 13.4% for those aged above 60 as of 18 May 2020 (4). The fatalities that have been recorded so far show that 62.6% of the deaths are from those aged 60 years and above. Regarding comorbidity factors, it was found that 80.7% of the cases that ended in deaths had underlying chronic diseases, such as diabetes, high blood pressure, kidney disease, heart disease, *etc.* (5). In Thailand, data on incidence rates and fatality rates among the elderly is 43% (6). According to information provided by the Government Centre for COVID-19, although the elderly accounted for a small proportion of infections,