The impact of facilitated quarantine on mental health status of non-severe COVID-19 patients

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Dear Editor,

It has been shown that quarantine is important to reduce the incidence and mortality during COVID-19 pandemic [1]. However, quarantine has consequences towards mental health. From previous outbreaks, several negative psychological effects such as post-traumatic stress symptoms, confusion, and anger were observed [2]. In Indonesia, several cases of suicide death of COVID-19 patients in quarantine facilities have been reported, and being quarantined in quarantine facilities is suggested to be the main cause. Nevertheless, no study has confirmed whether being quarantined in quarantine facilities in fact worsen the mental health status of COVID-19 patients.

We did a prospective observational study involving confirmed non-severe (asymptomatic and mild) COVID-19 patients who were quarantined at Indrapura Emergency Field Hospital, the largest quarantine facility in East Java province, a province with the highest mortality rate for COVID-19 in Indonesia [3]. All patients over 18 years who started their quarantine in this quarantine facility between 1st and 14th November 2020 were included. The respondents were asked to fill in the questionnaire two times: 1) prior to their admission (pre-quarantine), and 2) prior to their dismissal from the quarantine facility (post-quarantine).

Mental health status was evaluated using validated Indonesian version of Depression, Anxiety, and Stress scale (DASS-21) [4]. A detailed explanation of DASS-21 has been described elsewhere [5]. Collected data were analyzed using IBM SPSS Statistic for Windows version 25.0 (Armonk, NY: IBM Corp.). This study was approved by relevant Institutional Reviewer Board (201/EC/KEPK/FKUA/2020). All respondents gave written informed consent prior to their inclusion.

From 232 patients that started their quarantine during the study period, 206 respondents were included in the analysis (supplementary table 1). Pre-quarantine, there were 8 (3.9%) respondents with depression, 30 (14.6%) with anxiety, and 16 (7.8%) with stress. Post-quarantine, there were 11 (5.3%) respondents with depression, 20 (9.7%) with anxiety, and 17 (8.3%) with stress. The prevalence of depression, anxiety, and stress between pre- and post-quarantine was not significantly different (all p > 0.05) (supplementary table 2). Compared to pre-quarantine, anxiety and stress subscales scores and total DASS-21 scores post-quarantine were significantly lower (all p < 0.001) (supplementary table 3).
To our knowledge, we are the first to prospectively evaluate the mental health status of COVID-19 patients pre- and post-quarantine. Contrary to popular opinion, we found that being quarantined in quarantine facilities did not worsen the mental health status of asymptomatic and mild COVID-19 patients. Therefore, in the event of suicide death of asymptomatic and mild COVID-19 patients in quarantine facilities, being quarantined is less-likely to be the main cause of suicide. However, future study still needs to be done to evaluate the impact of facilitated quarantine in COVID-19 patients with more severe condition.
References


