infection, 7.6% and 16.6% presented anxiety and feelings of

anger symptoms, respectively, during the quarantine period.

Even four to six months after the end of the quarantine peri-

od, 3.0% and 6.4% patients persistently presented with symp-

toms of anxiety and anger, respectively.7 Thus, after the MERS-

nCoV infection outbreak ended in Korea, it was proposed that

the infected patients, quarantined individuals, healthcare work-

ers, and public require emotional care and support during an

To the best of our knowledge, the detailed mental health

problems of the patients infected with COVID-19 pneumonia and healthcare workers treating the infected patients have not

yet been reported. However, it is suggested that both con-

Mental Health Care Measures in Response to the 2019 Novel Coronavirus Outbreak in Korea

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Since the 2019 novel coronavirus (COVID-19) pneumonia outbreak (previously referred to as "Wuhan pneumonia") that originated in Wuhan, China on December 1, 2019 spread to Korea, an arduous march has just begun in Korea.1 After the spread of the atypical COVID-19 pneumonia from Wuhan, China to Korea by a patient was first reported,2 a communitybased spread has occurred in Korea. Although the epidemiological and clinical characteristics of COVID-19 pneumonia in China have been rapidly reported,3 its early phase characteristics, prediction of progress from upper respiratory infection to pneumonia, and other information have not yet been clearly understood. Based on the information regarding the outbreak cases, upgraded quarantine and isolation measures has been suggested to resist the spread of the COVID-19 in Korea.⁴

An outbreak of the Middle East respiratory syndrome coronavirus (MERS-nCoV) infection between May and December 2015 in Korea resulted in 186 cases of infection, 38 deaths, and 16,692 exposed individuals who were quarantined. Despite the elapsed time since this outbreak, a high risk of posttraumatic stress disorder symptoms were reported by healthcare workers who treated the MERS-nCoV infected patients and by hemodialysis patients in quarantine.5 Additionally, the negative emotion and stress experienced by the healthcare workers who treated the MERS-nCoV infected patients were characterized by trigger events categorized into mistake, missing, delay due to communication failure, and others. Therefore, the identification of the trigger events was suggested as an important hospital management guideline during an infectious disease outbreak.6 Moreover, among the exposed individuals in quarantine not diagnosed with the MERS-nCoV firmed and suspected COVID-19 patients may experience the fear of the consequences of this infection, including death and severe physical disability. Furthermore, boredom, loneliness, and anger could be experienced by individuals in quarantine. It is also suggested that anxiety symptoms and distress may be worsened not only by the infection symptoms, but also by the adverse effects of the treatment. The infectious disease outbreaks commonly cause anxiety and fear, uncertainty, and stigmatization that can be prevented by medical and psychiatric treatment.8 The need for mental health care during the COVID-19 outbreak has been emphasized in Korea. Since 528 and 173 Koreans who escaped from Wuhan due to the COVID-19 outbreak in China have been guaran-

infectious disease outbreak.

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tined in Asan and Jincheon, respectively, in Korea, the mental

health professionals, including psychiatrists from the National

Mental Health Center have been deployed to provide psychological counseling to individuals in quarantine. Moreover,

mental health care services for the COVID-19 outbreak are

being provided by national hospitals and community mental

health centers throughout the country. The National Center

for Disaster Trauma distributed leaflets promoting mental

health care against the distress caused by infectious disease

outbreaks.9 According to this leaflet,9 somatic symptoms, in-

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somnia, anxiety, anger, rumination, decreased concentration, low mood, and loss of energy are listed as the warning symptoms that should be evaluated and managed by mental health professionals. Especially, focusing on the reliable information, permitting the expression of your negative emotions, keeping in touch with family, friends, and colleagues, maintaining regular life activities, participating in pleasurable activities, and maintaining your pride are listed as the coping skill recommendations for the individuals in quarantine. It is of utmost importance that this information is disseminated to the masses on a larger scale. It is also necessary that the detailed mental health problems of the confirmed or suspected COV-ID-19 patients, healthcare workers treating the infected patients, and public should be collected to update the information regarding the distress caused by infectious disease outbreaks and provide more advancedmental health care for COVID-19 pneumonia.

In terms of the mental health care response to the COV-ID-19 outbreak in China, Xiang et al.8 suggested three important factors: 1) multidisciplinary mental health teams (psychiatrists, psychiatric nurses, clinical psychologists, and other mental health professionals), 2) clear communication with regular and accurate updates about the COVID-19 outbreak, and 3) establishment of secure services to provide psychological counseling (e.g., electronic devices and applications). These suggestions by Xiang et al.8 could be a good reference for providing mental health care in response to the COVID-19 outbreak in Korea. Furthermore, following the 2014 Sewol ferry disaster, 2015 MERS-nCoV outbreak, and 2017 Pohang earthquake, the mental health care system to combat distress caused by national disasters has been gradually established and improved. 10 Thus, the COVID-19 outbreak raises the question of how provision of psychological support during national disasters has increased and what is still lacking in Korea.

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