

## “Suicide CARE” Is Proactively Required to Reduce the Suicide Death Rate in the Identified Hotspots in South Korea

Lee et al<sup>1</sup> have reported remarkable findings on the spatiotemporal patterns of suicides in South Korea from 2009 to 2019. Here, the age-adjusted suicide rate per 100 000 people has gradually and continuously decreased from 29.1 to 22.0. Using the geographic information system, among the 229 regions, 27 hotspots were identified or detected from emerging hotspot analyses of the age-standardized suicide rate in South Korea. In addition, the 27 hotspots were divided into 2 new spots: 1 persistent spot, 23 sporadic spots, and 1 oscillating spot. However, the reason why the 27 hotspots were identified in South Korea over 11 years has not been thoroughly explained. Moreover, the sociocultural factors that contributed to the identification or detection of these hotspots were not explained. Despite these limitations, the findings suggest that these regions are potentially important management areas for reducing suicide rates from the viewpoint of public mental health policy in South Korea.

South Korea has reported the second-highest suicide rate after Lithuania over the 11 years, among the Organization for Economic Cooperation and Development countries.<sup>2</sup> Thus, suicide has been regarded as the most important public mental health issue in South Korea. Herein, by the Ministry of Health and Welfare of South Korea, the “National Suicide Prevention Action Plan” has been established to decrease the suicide death rate to less than 20 per 100 000 and total suicide completions to less than 10 000 persons per year. To the best of our knowledge, several systematic reviews have proposed restricting access to lethal means, school-based awareness programs, proper pharmacological and psychological treatments for depression, gatekeeper training programs, education of physicians, and Internet and helpline support as evidence-based suicide prevention strategies.<sup>3</sup>

Most of all, “Suicide CARE” has been the most widely used domestic gatekeeper training program for the early detection of suicide completion danger signals in South Korea. The program consists of 3 parts: “Careful observation (detecting verbal and non-verbal signals for suicide intention),” “Active listening (actively hearing the cause of suicidal intention),” and “Risk evaluation and Expert referral (referring the suicidal persons to psychiatric professionals).” Hence, after the re-examination of the suicide rate hotspots in South Korea, it is suggested that using “Suicide CARE” programs more actively in the detected hotspots, and mediating the intervention of individual community mental health and welfare centers may contribute to reducing the suicide completion rate.<sup>4,5</sup> In addition, among 223 South Korean patients with depressive disorders, a network analysis has revealed that punishment feelings and suicidal thoughts or wishes are the third-most central node and the ninth-most central node, respectively, within the estimated network structure of the 21 Beck Depression Inventory items.<sup>6</sup> Moreover, among 531 East Asian patients with depressive disorders, another network analysis has revealed that guilt or self-blame and suicidal thoughts or acts are the most central node and the third-most central node, respectively, within the network structure of the 10 diagnostic criteria for depressive episode.<sup>7</sup> From a viewpoint of network analysis, it is presumed that central symptoms may have greater influences on the whole network and more facilitating impacts on the interrelated symptoms than peripheral symptoms.<sup>8-9</sup> Herein, it is speculated that more focused pharmacotherapy and psychotherapy for suicide intentions and related factors may be required for depressive disorder patients in the identified hotspot to reduce suicide death rates and improve other depressive symptoms.



### Seon-Cheol Park<sup>1,2</sup>

<sup>1</sup>Department of Psychiatry, Hanyang University College of Medicine, Seoul, Republic of Korea

<sup>2</sup>Department of Psychiatry, Hanyang University Guri Hospital, Guri, Republic of Korea

Corresponding author:  
Seon-Cheol Park  
✉ psc76@hanyang.ac.kr

Cite this article as: Park S. “suicide CARE” is proactively required to reduce the suicide death rate in the identified hotspots in South Korea. *Alpha Psychiatry*. 2023;24(2):56-57.



Copyright@Author(s) - Available online at alpha-psychiatry.com.  
Content of this journal is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

Finally, it may be necessary to further study the spatiotemporal pattern changes in suicide in South Korea during the COVID-19 pandemic. Several studies have reported no significant difference in the suicide incidence before and after the COVID-19 pandemic. The findings may be explained as follows. The public's positive attitude toward the COVID-19 government response may have reduced the proportion of participants with depressive symptoms in the early period of the pandemic. Owing to social distancing in response to COVID-19, self-employed workers and others in South Korea have experienced severe economic difficulties. In addition, according to a report by the Korean Suicide Prevention Center, approximately two-thirds of complete suicide victims in South Korea suffered from economic problems. Despite the slight change in suicide incidence, suicidal behaviors, including suicidal ideation, suicide attempts, and self-harm, have evidently increased during the pandemic.<sup>10-14</sup> Herein, the findings of Lee et al<sup>1</sup> suggest that more focused and active suicide prevention strategies need to be established and performed through the intervention of individual community mental health centers in the identified hotspot regions in South Korea. In addition, the potential impact of the COVID-19 pandemic on the spatiotemporal patterns of suicide in South Korea requires further study.

## References

1. Lee D, Park J-H, Kim B-J, et al. Spatiotemporal patterns of suicide in Korea from 2009 to 2019 using geographic information systems. *Alpha psychiatry*; 2023.
2. Organization for Economic Cooperation and Development (OECD). Data. Suicide rates. <https://data.oecd.org/healthstat/suicide-rates.htm>; 2023. Paris: OECD.
3. Zalsman G, Hawton K, Wasserman D, et al. Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry*. 2016;3(7):646-659. [\[CrossRef\]](#)
4. Park SC, Na KS, Kwon SJ, et al. Suicide CARE. *Psychiatry Investig*. 2020;17(9):911-924. [\[CrossRef\]](#)
5. Na KS, Park S-C, Kwon S-J, et al. Contents of the Standardized Suicide Prevention Program for Gatekeeper Intervention in Korea. Version 2.0. *Psychiatry Investig*; 2020;17(11):1149-1157.
6. Park SC, Kim D. The centrality and anxiety symptoms in major depressive disorder determined using a network analysis. *J Affect Disord*. 2020;271:19-26. [\[CrossRef\]](#)
7. Park SC, Jang EY, Xiang YT, et al. Network analysis of the depressive symptom profiles in Asian patients with depressive disorders: findings from the Research on Asian Psychotropic Prescription Patterns for Anti-depressant (REAP-AD). *Psychiatry Clin Neurosci*. 2020;74(6):344-353. [\[CrossRef\]](#)
8. Borsboom D. A network theory of mental disorders. *World Psychiatry*. 2017;16(1):5-13. [\[CrossRef\]](#)
9. Cramer AO, Waldorp LJ, van der Maas HL, Borsboom D. Comorbidity: A network perspective. *Behav Brain Sci*. 2010;33(2-3):137-50; discussion 150. [\[CrossRef\]](#)
10. Wichers M, Wigman JTW, Myin-Germeys I. Micro-level affect dynamics in psychopathology viewed from complex dynamical system theory. *Emot Rev*. 2015;7(4):362-367. [\[CrossRef\]](#)
11. Park SC, Park YC. Mental health care measures in response the 2019 Novel coronavirus Outbreak in Korea. *Psychiatry Investig*. 2020;17(2):85-86. [\[CrossRef\]](#)
12. Park SC, Park YC. Secondary emotional reactions to the COVID-19 outbreak should be identified and treated in Korea. *J Korean Med Sci*. 2020;35(17):e161. [\[CrossRef\]](#)
13. Park SC. Viral anxiety should be properly detected and managed among healthcare workers in Korea during the COVID-19 pandemic. *J Korean Med Sci*. 2022;37(21):e178. [\[CrossRef\]](#)
14. Park SC. Commentary: how can we detect and manage COVID-19 worry and related factors? *Alpha Psychiatry*. 2022;23(6):284-285. [\[CrossRef\]](#)