Lethality of the chosen method during a suicide attempt is a strong risk factor for completion of suicide. We examined whether annual changes in the pattern of suicide methods is related to annual changes in suicide rates among older adults in South Korea and the United States. We analyzed annual the World Health Organization data on rates and methods of suicide from 2000 to 2011 in South Korea, and from 2000 to 2010 in the United States. We found that, for both Korean male and female older adults, there was a significant positive correlation between suicide rate and the rate of hanging, and a significant negative correlation between suicide rate and the rate of poisoning. Among older adults in the U.S., annual changes in the suicide rate and the pattern of suicide methods were less conspicuous, and no correlation was found between them.

The results of the present study suggest that the increasing use of lethal suicide methods has contributed to the rise in suicide rates among older adults in South Korea. Targeted efforts to reduce the social acceptability and accessibility of lethal suicide methods might lead to lower suicide rate among older adults in South Korea.