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Letter to the Editor



Has COVID-19 affected suicides among graduate students in Japan?

The COVID-19 pandemic caused university students in Japan to be locked out from their campuses and for stay-at-home orders to be issued (Nomura et al., 2021a). The then Prime Minister declared the first state of emergency in April 2020. Thus, all classes and seminars at their laboratory launched online from the beginning of the academic year in April or from the very first day for the first-year students. However, a survey conducted at a university in central Japan reported that new students' anxiety and depression levels were lower in April–May 2020 compared to the previous year, with academic distress being higher (Horita et al., 2021). This unexpected result might be because they were not stressed about building interpersonal relationships in a new environment. In a survey conducted in May–June 2020 at a university in northern Japan, 13 % of students showed moderate or severe depression, and 6.7 % showed suicide-related ideation (Nomura et al., 2021a). According to a nationwide survey in France, 11.4 % of university students had suicidal thoughts under confined measures (Wathelet et al., 2020). There seems to be a certain risk that stay-at-home situations may induce suicidal thoughts in students. Among the general population in Japan, the number of suicides increased by 4.5 % in 2020 compared to 2019—the first increase in 11 years—primarily influenced by the rise among women and young people in their 20 s (Ministry of Health, Labor and Welfare and National Police Agency, 2021).

What is the state among the graduate students?

The Japanese National University Council of Health Administration Facilities has conducted a survey on reasons for non-graduation among national university graduate students every year since 2002. (Marutani et al., 2021). The data reflect about 60 % of the graduate students in Japan. We conducted an urgent survey on the status of suicide in the 2020 academic year (April 2020 to March 2021). We asked all national universities with graduate schools to cooperate in the survey by e-mail and obtained data from 86 universities (100 % response rate). The survey items included the number of enrolled students, and the attributes of the students who died, their causes of death, and the specific circumstances behind their deaths. In addition, we asked the respondents to indicate their estimated motives for suicide (multiple answers were allowed) and their estimated association with COVID-19 (direct, indirect, none, unknown). This study was approved by the Ethics Review Committee of the Japanese National University Council of Health Administration Facilities.

The number of enrolled graduate students was 149,820 (105,158 male, 44,662 female). Suicide or suspected suicide cases were in 20

students (18 male, 2 female), and the other causes such as disease, an accident, and unknown causes were in 9, 4, and 6 students, respectively.

The suicide mortality rate (per 100,000 students) was 13.3 overall, 17.1 for males, and 4.5 for females. The total number of students who committed suicide was 20, of which 13 were aged 25 or less. The estimated motives for suicide were: career concerns, 2 students; personal relationships with friends/professors, 2 students; life hardship, 1 student; isolation/loneliness, 3 students; worry/effects of illness, 4 students; and unknown, 12 students. Associations with COVID-19 were indirect association, 3 (male students only); no association, 4; and unknown, 13. The annual trends in the suicide mortality rate since 2002 (Marutani et al., 2021) are shown in Fig. 1. There were only three cases of mental illness; however, 13 were unknown.

The suicide mortality rate slightly increased for total and for males but not for females compared to the average of the preceding five academic years (total, 12.9; male, 16.0; female, 4.9) (Fig. 1). Our results showed that at least three suicidal deaths of male students were influenced by COVID-19. We have to emphasize that suicide has complex reasons and excessive causal association with COVID-19 should be avoided (Tandon, 2021). Still, we can estimate that there might be many more high-risk students that exist that were devastated by the pandemic. Our result is inconsistent with the increase among the general female population whose suicide rate increases have resulted from a rise in violence against women and in their unemployment in non-regular works in which they are more likely to engage (Nomura et al., 2021b). Our data for female students are consistent with a previous survey stating that campuses offer a protective environment (Silverman et al., 1997). We mention that the total number of female students was well under 100,000, which means an increase or decrease of one or two students influences the mortality rate greatly.

As the impact of COVID-19 continues into the current academic year and it can cause delayed psychological responses (Forte et al., 2020), we need to continue to monitor the situation and provide health-care services and educational intervention online and on campus for suicide prevention.

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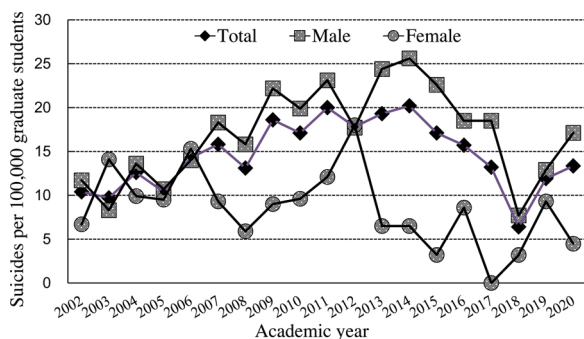


Fig. 1. Suicide rates of graduate students in Japan from 2002 until the 2020 academic year.

Declaration of Competing Interest

The authors report no declarations of interest.

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