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Perspectives

Mental health impact of the COVID-19 pandemic in Taiwan

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The ongoing coronavirus disease 2019 (COVID-19) pandemic has adversely impacted a wide range of life domains worldwide since January 2020. Given the evolving nature of the virus, the challenges for vaccine development and infection control are immense. The protracted and unpredictable nature of the pandemic has raised concerns over its mental health impact.¹ Existing studies pointed out that fear of contracting the virus, self-isolation, physical distancing, and loss of (or fear of losing) employment may be the key factors contributing to psychological distress during the outbreak.¹ Surveys conducted in China and several high-income countries have shown a high prevalence of psychological distress in the general population during the pandemic.^{2,3} The prevalence rates of experiencing stress, anxiety, and great sadness too severe to be coped with during the outbreak were reported to be 33% in the U.S., 26% in the U.K. and Canada, and 23% in Australia and New Zealand.² An online survey conducted in China

among 1210 respondents showed that 53.8% of the participants rated the psychological impact of the outbreak as moderate to severe.³ Overall, existing evidence strongly supports a substantial mental health impact due to the COVID-19 pandemic.

To understand the mental health impact of COVID-19 in Taiwan, a dual-frame survey combining landlines and cell-phones with random digit dialing was undertaken between June 1st and July 31st, 2020. Among a representative sample of 1087 Taiwanese, we explored psychiatric morbidity, suicidal ideation in the preceding month, and respondent level of worry during the pandemic. Psychiatric morbidity was measured with the BSR5-5 (Brief Symptom Rating Scale), a 5-item rating scale tapping into symptoms of anxiety, depression, hostility, inferiority, and insomnia.⁴ The instrument was previously validated, with a score of 6 or higher indicating psychiatric distress.⁴ An additional question on suicidal ideation in the preceding month was also included. Respondents were also asked to rate how worried they were for themselves and/or their family with regard to financial problems, job loss, and mental health in the midst of the pandemic on a scale of 1–5 (1 indicates not worried at all and 5 indicates very worried). The prevalence rate of psychiatric distress was estimated by the proportion of the respondents who scored 6 or higher on the BSR5-5.

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Table 1 Distribution of psychiatric distress, suicidal ideation, and worries during the COVID-19 pandemic in Taiwan.

	Total		Male		Female	
	N	%	N	%	N	%
Psychiatric distress (BSRS ≥ 6)	132	12.14	56	10.14	76	14.21
Past month suicide ideation (34)	18	1.66	7	1.27	11	2.06
Worries (scored 4 or 5)						
Me or my family being in financial trouble	94	8.65	50	9.06	44	8.22
Me or my family lose jobs	111	10.21	56	10.14	55	10.28
My mental health	92	8.46	43	7.79	49	9.16

The proportion of participants who scored 4 or 5 on questions regarding worries over finances, employment, and mental health was also calculated.

Table 1 shows the distribution of psychiatric distress, suicidal ideation in the preceding month, and worries over the impact of the pandemic by gender. Approximately 12% of the respondents screened positive for psychiatric distress, and less than 2% reported suicidal ideation in the preceding month. About 10% of the respondents scored 4 points or higher on worries over financial troubles, employment, and mental health conditions. The study was approved by the Research Ethics Committee of the Taipei City Hospital (TCHIRB-10803013).

The survey results indicate that the prevalence rate of psychiatric distress was much lower than that reported in other countries, where approximately 1/4 to 1/2 of the population experienced a prominent mental health impact after the outbreak^{2,3}; although a direct comparison could be limited by different methodologies and definitions used in the surveys. Moreover, the estimated prevalence of suicidal ideation in the current study did not differ substantially from previous surveys conducted in Taiwan.⁵

Taiwan has been credited as one of the most successful countries in battling COVID-19.⁶ As of October 9th, 2020, Taiwan experienced 527 confirmed cases (55, 10.4%, from local Taiwan) and 7 deaths out of a population of 23 million⁷; this is in contrast to global cases exceeding 36.8 million and over 1 million confirmed deaths by the same date. Taiwan never instituted lockdown measures; both public and private sectors including schools, shops, workplaces, and recreational venues have largely remained open. Hand-washing is highly encouraged and wearing a mask is required in public transportation and medical settings. The current survey indicates that the mental health impact of COVID-19 has been less prominent in Taiwan, a country where the pandemic was well-contained. However, the findings that approximately 10% of the respondents worried about financial troubles and job loss clearly evinces that the pandemic is more than a health and/or mental health crisis alone; the socio-economic impact may be prolonged and is expected to escalate if the pandemic persists. Lessons learned from the SARS epidemic in 2003 have taught us that the mental health impact of a devastating infectious disease may not be prominent during the outbreak, and that an ensuing post-epidemic economic downturn may lead to a surge in suicide rates.⁸ Taiwan has set a model of how a democratic state can handle a

devastating pandemic, and this success has been the bedrock of the population's mental wellbeing. Expanding efforts to improve economic security and to achieve a rapid governmental socio-economic response are crucial to mitigating the future impact of the pandemic on mental health.

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Declaration of competing interest

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