Low prevalence rates of common mental disorders in Japan: does it still hold true?

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Commentary on: Ishikawa H, Kawakami N, Kessler RC, the World Mental Health Japan Survey Collaborators (2015). Lifetime and 12-month prevalence, severity and unmet need for treatment of common mental disorders in Japan: results from the final dataset of World Mental Health Japan Survey. *Epidemiology and Psychiatric Sciences*, doi:10.1017/S2045796015000566

Mental disorders are the leading causes of disability worldwide, and there has been growing interests in the regional variation and unmet need for treatment for mental disorders, recently. Doctor Ishikawa and her colleagues provides information about the lifetime and 12-month prevalence, severity and treatment of mental disorders, including anxiety and mood disorders, in Japan (Ishikawa et al. 2015), by presenting final results from data collected in Japan in 2000 through the World Mental Health (WMH) Survey (Kessler et al. 2006) conducted by the World Health Organization, herein this issue of Epidemiology and Psychiatric Sciences. As the authors state in the manuscript, a recent systematic review and meta-analysis on common mental disorders has showed that especially high-income Asian countries have lower prevalence rates than the other regions of the world. For any common mental disorders, the prevalence of the lifetime/ 12-month prevalence was 21.4 and 11.5% in highincome Asian countries and those in high-income English-speaking countries at 39.7 and 19.0%, respectively (Steel et al. 2014). The article by Ishikawa et al. showed the prevalence of common mental disorders in Japan at the lifetime/12-month prevalence of 20.3/ 7.6%, respectively. With regard to types of common mental disorders, the prevalence of anxiety disorders in Japan was 8.1 and 4.9% for lifetime and 12 months,

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and that of mood disorders was 6.1 and 2.2%, respectively. These figures are similar to those in the other Asian countries. The results from Ishikawa *et al.*'s study have successfully provided additional findings in Japan to those from the previous epidemiological studies on the prevalence of mental disorders.

However, one may raise a following: Are there any plausible reasons for the gap of prevalence rates between regions and cultures, especially for Japan? This has been thoroughly considered in the Ishikawa et al.'s article. First, regrettably, the Japanese version of the WMH-CIDI (Sakai et al. 2003), the screening tool employed in the study has not been fully validated. If this is the case in the other non-Englishspeaking Asian countries as well, it may lead to plausible underestimation of the prevalence of mental disorders. Second, Japan has the highest number of psychiatric beds in the world. Although the most common mental disease is schizophrenia and dementia among admitted patients in Japan, patients with mood or anxiety disorders may also admit to hospitals more frequently than those in the other countries. This may have led to plausible small prevalence rates due to selection bias in the findings in Japan. Future studies should overcome these issues, to explore regional and cultural differences in terms of the prevalence of mental disorders.

For those with mental disorders, especially with severe symptoms, multiple diagnosis or severe functional impairment, effective treatment should be provided regardless of regions, cultures and even sociodemographic factors of sufferers. Ishikawa et al.'s article demonstrates that one of five respondents with any mental disorders had received some kind of treatment for the disorder in the last 12 months in Japan. Focusing on those with mental disorders with severe symptoms, only 37% of the respondents had received medical care. However, the care was taken among those with mild and subthreshold symptoms at 16 and 3%, respectively. Taking account of higher prevalence rate of those with mild (3%) and

subthreshold symptoms (92%) than those with severe (1%) in the community samples, we cannot help saying that healthcare resources for mental health in Japan are not most effectively used, currently. Previous findings from the WMH survey in the other countries have a similar conclusion both in developed and less-developed countries (Demyttenaere *et al.* 2004), so an issue of allocation of treatment resources for mental disorders seem to be worldwide. As the study has stated, careful consideration needs to be given for reallocation of resources to those with severe symptoms, although some mild cases, especially those at risk for progressing to more serious disorders, should not be ignored.

Last, epidemiological studies should be replicated with a reasonable time span, because the prevalence of mental disorders might be subject to changes in various aspects of environments. In 2011, the Great East Japan earthquake hit Japan, which has brought about huge amount of burden to community health due to physical as well as mental disorders. Although the suicide ratio decreased during the first 2 years after the disaster in affected regions in comparison with that in the pre-disaster period, around 20% of those surveyed had probable post-traumatic stress disorder (PTSD) (Ohto et al. 2015). Ishikawa et al.'s paper shows a 12-month prevalence rate of PTSD at 0.7% in 2002-2006 among Japanese community samples. The disaster is reported also to have played an important role on paradigm shifts in people's thoughts and attitudes on everyday life even in regions not affected by the disaster directly in Japan, all of which may lead to changes in prevalence rates of common mental disorders.

Apart from the disorder, lifestyle changes especially in young people in Japan in the last 10 years, such as indulging the virtual world of the internet and video games and withdrawal from social situations, might lead to changes in prevalence rates of common mental disorders. An increase in the number of hikikomori, a Japanese culture-bound syndrome of social withdrawal, has been a prominent public mental health concern since around 2000 (Watts, 2002). Those with hikikomori in their young days may affect their mental health when grown-up. Hikikomori has been observed in various other countries according to an international joint study using data from psychiatrists' responses to vignettes (Kato et al. 2011), thus this may affect countries other than Japan. Ishikawa et al.'s article mentioned that the authors had been working on the WMH-Japan 2nd survey, which is a successor of the survey presented in the article. We look forward to findings from comparisons of results of WMH-2nd with those of 1st survey to exploring changes of mental health in the last 10 years.

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