also help to address potential safety issues of online interventions—ie, how to deal with suicidality or other crisis situations.

The results might have larger implications beyond multiple sclerosis because they are likely to apply to patients with other chronic disorders and comorbid depression. A potential next step is to adjust the programme to specific needs of patients with a disabling medical disorder such as multiple sclerosis. It remains to be seen whether these results are also applicable to patients with more severe forms depression. Online CBT is probably best used in stepped-care models of depression treatment. In these models, interaction with a psychotherapist and pharmacotherapy can be added in case iCBT as a first step of treatment does not elicit a sufficient treatment response.

Christian Otte
Charité Universitätsmedizin Berlin, Klinik für Psychiatrie und Psychotherapie, Campus Benjamin Franklin Hindenburgdamm 30, Berlin, 12203, Germany
christian.otte@charite.de

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The relationship between depression and violent crime

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The association between depression and violence has been fairly under-studied, especially in comparison with schizophrenia, and this has led to inconsistent results.[1] In *The Lancet Psychiatry*, Seena Fazel and colleagues[2] present the results of two separate studies in Sweden that examine the association between depression and violent offences.

The first is a total population study that compared patients with depression with general population controls matched individually by age and sex. Patients with depression were identified from the Swedish National Patient Register as having an outpatient diagnosis of depression in secondary or tertiary care. The data for conviction of violent offences were taken from the National Crime Register. The mean follow-up length was roughly 3 years. After adjustment for family income and immigrant status, the odds ratio of violent crime was 3·0 in comparison with the general population.

The second is a cohort study of twins who had participated in twin studies in which they had answered a self-report depression questionnaire. The data for convictions were again taken from the National Crime Register. The mean follow-up length was about 5 years. The hazard ratio of violent crime for a one-point increase in the questionnaire was 1·09, which would translate into a hazard ratio of 2·4 for a 2 SD difference.

Despite the many admirable characteristics of the Swedish registries used in these studies, registry-based studies cannot avoid many ambiguities. The authors, however, tackle these weaknesses through ingenious study designs and several sensitivity analyses. In the first study, they also took unaffected siblings of the cases as controls and still noted an elevated odds ratio of 1·5. This means that the association between depression and violence is partly due to, but beyond, early environmental and genetic factors shared by siblings. They were also able to examine the effect of comorbid substance use or personality disorders, previous crimes, types of violent crimes committed, or the interval between depression diagnosis and offence

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but identified few differences. The second study corroborated the first study. There are, however, other factors that were not addressed in these studies, such as the influence of adversities and other unmeasured psychosocial factors, effects of treatments, or the problem of non-treatment-seeking people with depression. It must be noted, however, that adjustment for covariates in epidemiological studies presents difficulties with interpretation, because different studies adjust for different variables, possibly under the influence of nominal statistical significance. These so-called adjusted indexes of association are hard to compare and combine.

In interpretation of the findings of this study, it is important to place these relative measures in context with corresponding figures for other mental disorders. Fortunately, the same authors have undertaken similarly designed studies for schizophrenia,[3] bipolar disorder,[4] traumatic brain injury, and epilepsy.[5] The adjusted odds ratio of patients versus the general population was 7·4 for schizophrenia, 5·8 for bipolar disorder, 3·3 for traumatic brain injury, and 1·5 for epilepsy (all statistically significant).

The relative measures of association also have to be evaluated in the absolute measures. The incidence of violent crime in the cases with depression was 3·7% (men) and 0·5% (women) during the mean follow-up of 3 years compared with 10·7% (men) and 2·7% (women) for schizophrenia within 5 years of first diagnosis. In patients with bipolar disorder the incidence was 9·5%, in patients with traumatic brain injury was 8·8%, and in patients with epilepsy was 4·2%.

How can we make informed and judicious use of these research findings at the individual and societal level? In the Discussion, the authors contrast the inconsistent recommendations of current clinical guidelines for depression regarding risk assessment, and emphasise the need for clinicians to identify high risk groups. At the individual level, it is important to note that risk assessment for rare events is bound to have high false positive rates.[6] Even if we had a screening assessment that had a sensitivity and specificity of 80% each, if the event rate is 10%, the positive predictive value is only around 30%. In other words, seven of ten so-called positive or high risk cases would not have the event. At the societal level, we must pay due caution to the stigma of violence in mental health. As the authors suggest, investigation of pharmacological or psychosocial interventions to reduce violence among high-risk groups would be most welcome.

Toshi A Furukawa
Departments of Health Promotion and Human Behavior and of Clinical Epidemiology, Kyoto University Graduate School of Medicine/School of Public Health, Kyoto 606-8501, Japan
furukawa@kuhp.kyoto-u.ac.jp

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