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DECREASING SEASONALITY IN SUICIDE: A MARKER OF MORE WIDESPREAD TREATMENT OF DEPRESSION?

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The seasonal variation of suicide corresponds to the annual fluctuation of some indices of central serotonergic metabolism indicating significantly lower brain serotonergic activity in spring and summer. Low central serotonin metabolism is a strong biological correlate of some pathological behaviours, like depression, impulsivity and violent suicidal acts.

Based on early findings suggesting that suicide seasonality might be the consequence of the seasonal incidence of depression-related suicides, we found that decreasing suicide seasonality might be a good marker of lowering rate of depressive suicides in the population. We recently analysed the relationship between increasing antidepressant utilization and national suicide rate of Hungary between 1998-2006, with particular regard to seasonal patterns and gender differences. Time trend analysis had been applied to investigate the correlation between trend of antidepressant prescription and both of suicide rates and seasonality index. During the 9 years of the study period there was a significant correlation between steadily increasing antidepressant prescription and continuous decline in total national suicide rate as well both in females and males, but this relationship was 8-fold stronger in males. Increasing antidepressant utilization was associated with significantly decreased seasonality of suicides only among males. As national suicide rates are affected by many factors the isolation of the result of better treatment of depression in declining suicide rates is not easy. Our results suggest that decreasing suicide seasonality could be a good marker of more widespread treatment of depression resulting in lowering rate of depression-related suicides in the population particularly among males.