

Antidepressant Sales and the Risk for Alcohol-Related and Non-Alcohol-Related Suicide in Finland—Individual-Level Population Study

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A marked decline in suicide rates has co-occurred with increased antidepressant sales in several countries but the causal connection between the trends remains debated. Most previous studies have focused on overall suicide rates and neglected differential effects in population subgroups. Our objective was to investigate whether increasing antidepressant sales have reduced alcohol- and non-alcohol-related suicide risk across population subgroups. We assessed suicide risk in 1995–2007 according to regional antidepressant sales using Finnish individual-level population register data (n=950,158). Fixed-effects Poisson regression models controlled for regional and temporal trends that may influence suicide risk irrespective of antidepressant sales. Regional per-capita antidepressant sales and prevalence of antidepressant users were unrelated to male suicide, whereas higher proportion of antidepressant users receiving minimally adequate treatment reduced non-alcohol-related male suicide risk. This effect only occurred among men with high education, high income, and employment, men without partner, and not owning their home. Antidepressant sales were unrelated to female suicide. The fall in suicide rates in Finland seems to be independent of the overall rise in antidepressant sales. However, rise in the proportion of antidepressant users receiving minimally adequate treatment may have prevented non-alcohol-related suicides among men.

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