

RAPID COMMUNICATIONS

An international perspective on depressed mood and gender differences: the case of Korea

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Depression is known to strike women more than men: the prevalence of depression is one to five times greater in women than men. This gender gap can be explained by genetic, neuro-hormonal, psychobiological factors and social conditions too. Women are more likely to experience financial strains, child care difficulties and role overload in managing work and family responsibilities.

The study “Depressed mood and gender differences in Korea” was aimed at examining the extent to which socio-economic factors have an impact on depression and how depressed mood varies by gender. It has been employed a large data set from the Korea National Health and Nutrition Examination Survey (KNHANES) – 2008 data. 6,751 individuals, aged from 19 to 75 years old and living in the 16 Korean Regions, have been included in the sample analyzed; 43% were males and 57% females.

The methodology selected – instrumental variables probit regression – takes into account the possible endogeneity likely to arise in this context. In fact, depression could be caused by some factors related to variables as health or employment, so that, for example, people suffering from poor health or unemployed may be affected by depression with a higher probability than healthy or employed people. However, the opposite can be true as well: depression might lead people not to take care of themselves or to lose their job.

In the models estimated, the dependent variable is binary and represents the circumstance that people declare to have experienced depression (yes = 1; no = 0).

The average income for workers and the education level (college and high school) were used as instruments to explain workforce participation; results of blood analysis (anemia, level of cholesterol, level of glucose), blood pressure and smoking addiction

accounted instead as indicators of good/bad health. Other regressors considered were related to age, marital status and number of family components.

A significant correlation between depression and gender was found: the estimated probability for women to experience depression was of 37.2%.

Women are more affected by depression, although marital status can act as a protective factor, together with the number of components of family. Female workforce participation is inversely correlated with depression too: this variable can be influenced by the average income for workers, (if the family income is low, it could be necessary to obtain another source of income for the family, so women might decide to enter the workforce). High school and college education are inversely related with the probability to enter the workforce, while elementary education is not: this circumstance could explain the lower average income for women in the workforce.

There is an inverse effect of good health on the probability to report depression. Living in a metropolitan area has an inverse effect on depression, that would seem more likely to arise, instead, in rural contexts. This result is not in line with previous literature, even if recent studies have shown that quality of life may be higher in urban areas and that it might be more difficult to recover from depression in rural areas, especially for elderly women. Although urban life in Korea can be very stressful due to the work condition (hierarchical society and poor working condition for non-regular workers) and high living costs, at the same time there are more resources to explore in urban areas. In addition, some studies have outlined how chronic medical conditions are more prevalent in rural areas, and this circumstance does affect quality of life.

Overall the study confirms the main results of the literature and outlines that depression is significantly associated with socio-economic conditions. Moreover, the analysis gives information about the extent of depression in the population considered.

The methodology selected can be employed in similar analyses, related to other countries.

Measuring the economic impact of depression might allow to estimate which would be the effect of counseling and support programs against depressive symptoms directed especially to women. The positive consequences of such programs could be evaluated both in terms of health outcomes (higher quality of life) and economic benefits, such as increased productivity and diminished consumption of drugs and antidepressants.

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