

## **Abstract**

### **Objective**

Depression is reported to be associated with increased mortality, but underlying mechanisms are uncertain. Associations between anxiety and mortality are also uncertain. In a large population study, we investigated associations between anxiety, depression and mortality over a 3-6 year period.

### **Method**

We utilized a unique link between an epidemiological cohort study and a comprehensive national mortality database. Baseline information on mental and physical health was collected in the population based health study (N=61,349) of Nord-Trøndelag County in Norway (the HUNT-2 study) of adults aged 20 years and over. Anxiety and depressive symptoms were ascertained using the Hospital Anxiety and Depression Scale (HADS). Potential confounding/mediating factors included somatic symptoms/conditions, health-related behaviour, and socio-economic factors.

### **Results**

Case-level depression was a risk-factor for mortality. The association between anxiety symptoms and mortality was U-shaped. Anxiety comorbid with depression was associated with lower mortality compared to depression alone. Associations between depression and mortality were partly but not entirely explained by somatic conditions and physical impairment, but not by smoking, obesity, cholesterol level or blood-pressure.

### **Conclusions**

Depression predicted general mortality, also after adjustment for multiple confounding factors. Associations between anxiety symptoms and mortality were U-shaped. Lower mortality was found in comorbid anxiety and depression than in depression alone.