Article: 0732

Topic: EPW28 - e-Poster Walk Session 28: Epidemiology and Social Psychiatry

The Comorbidity of Neurological Disorders in a Population

S. Anwar¹, D. Cawthorpe¹

¹Department of Community Health Sciences and Psychiatry, University of Calgary Faculty of Medicine,

Calgary, Canada

Aim: The comorbidity of neurological disorders and physical (biomedical/somatic) disorders was examined. Diagnosed ICD disorders (independent variable) were grouped into 17 categories based on ICD 9 codes 001-319 and 360-999. Neurological disorders (dependent variable) were classified as ICD-9 codes 320-359.

Materials and Methods:

We used direct physician billing data for the city of Calgary, Alberta from 1994-2009 for treatment of any presenting concern in the Calgary health zone (n = 763449). The counts of individuals with and without other disorders were tallied and grouped on the basis of the presence or absence of any neurological disorder. Odds ratios (OR) and 95% confidence intervals of the association were calculated and compared.

Results:

Diagnosed disorders were ranked by OR with the ICD categories: Symptoms, signs, and ill-defined conditions (OR 7.42), musculoskeletal system and connective tissue (OR 4.22), and mental disorders (OR 3.81) were the highest respectively. Thirteen categories had OR above 2.00.

Conclusions:

Neurological disorders have a strong relationship with a range of disorders, which indicates the need for a more detailed analysis of the temporal relationship between these disorders, in order to illuminate the etiology and sequelae of neurological and other disorders.

Key Words: Neurological comorbidity, epidemiology