Social inequalities and the common mental disorders
A systematic review of the evidence

Abstract Background Of two large-scale government-commissioned studies of common mental disorders in the UK, one found occupational social class to be the strongest marker of risk while the other showed no clear relationship. This study reviews the published evidence on the links between conventional markers of social position and the common mental disorders in developed countries. Methods Inclusion criteria covered general population based studies with broad social class variation; samples of 3,000 or more adults of working age; identification of mental illness by validated instruments; social position identified by explicit standard markers; fieldwork undertaken since 1980; published output on key areas of interest. Incompatible study methods and concepts made statistical pooling of results invalid. Results Of nine studies, eight provide evidence of an association between one or more markers of less privileged social position and higher prevalence of common mental disorders. For some individual indicators in particular studies, no clear trend was evident, but no study showed a contrary trend for any indicator. The more consistent associations were with unemployment, less education and low income or material standard of living. Occupational social class was the least consistent marker. Conclusions Common mental disorders are significantly more frequent in socially disadvantaged populations. More precise indicators of education, employment and material circumstances are better markers of increased rates than occupational social class.

Key words common mental disorders – neurosis – population surveys – prevalence – social inequalities

Introduction

Social inequalities are established features of the distribution of physical disease and disability in the UK and many other developed countries [1], and efforts to reduce these inequalities are a stated government priority [2].

Severe ‘psychotic’ mental illnesses are clearly distributed unequally by social position [3] but, although they are often highly disabling to sufferers, they are relatively rare. The majority of the burden of mental illness in the community arises from the less severe but more numerous ‘neurotic’ conditions, dominated by anxiety, depression or a combination of both, now called the ‘common mental disorders’. For these disorders, the links with social position in the general population have been less clear: for example, of two recent large-scale government-commissioned studies covering mental health in the UK, one found occupational social class to be the strongest risk factor while the other showed no association [4, 5]. Similarly, in a review of studies internationally at the end of the 1980s, Dohrenwend [6] reported that findings were inconsistent.

As the common mental disorders contribute substantially to all morbidity, clarifying the socio-economic distribution of these disorders is an important step in providing an evidence base for efforts to reduce inequalities. This study, therefore, aimed to provide a systematic review of published evidence on the links between the range of conventional markers of social position and the common mental disorders in the general population in developed countries. Because of the greater problem of publication bias from small studies,
and the presence of multiple, poorly defined variables, the review was limited to population studies of at least 3,000 subjects.

It is clear that understanding the social importance of these common mental disorders requires examination of more precise markers of social inequality than social status, traditionally indicated in the UK by occupation. Defining and measuring common mental disorders in populations is not easy. However, since 1980 there have been substantial developments in taxonomy and questionnaire techniques, tried and tested against clinical examination, standardised for repeated use, and able to identify defined syndromes, though problems remain [7]. This review, therefore, included large-scale population studies conducted since 1980, and concentrated on associations with education, income, material circumstances and employment, as well as occupational social status. Parallel studies present a quantitative analysis of associations with inequality markers in the British National Psychiatric Survey of 1993, with additional data on limiting and disabling common mental disorders (see Melzer et al. ‘Social position and the common mental disorders with disability: estimates from the National Psychiatric Survey of Great Britain’ in this journal, pp. 238), and a review of current evidence on ethnic differentials in the British population [8, 9].

Subjects and methods

Table 1 shows the criteria used to identify studies for inclusion in the review. The search strategy for this poorly defined and ill-standardised field was necessarily broad. MESH heading searches were of very limited use. For example, a Medline search using ‘mental disorders’ and ‘prevalence’ yielded 16,627 citations in March 2001, far too many to process. Using ‘neurotic disorders’ and ‘prevalence’ yielded 154 papers; ‘neurotic disorders’ and ‘incidence’ 150. In combination, these two yielded 162 separate papers, which, after screening, revealed 22 studies for checking. However, only one of these studies fulfilled our inclusion criteria.

Further searches used a wide range of search-terms in Embase and Medline international databases to explore medical, psychiatric, sociological and other journals, followed up published references, contacted known researchers in the field, and eventually contacted those discovered to be directly involved in large-scale studies. This resulted in a database of almost 1,000 references of published work broadly related to, or relevant to, inequalities in mental health. (Copies of this are available to future researchers from the corresponding author.)

Published work relating to identified large-scale population studies, including informal reports from research units, government departments and other agencies where relevant, was reviewed by two independent researchers in respect of their methods and their findings regarding socio-economic status differentials in the prevalence of the common mental disorders.

Because of the diversity of populations, instruments, analytical methods and presentation of results, no meta-analysis was possible. Indeed, there was so little consistency and standardisation of measures that detailed comparison and collective consideration were barely possible. We were, therefore, limited to examining differential prevalences, with odds ratios wherever possible.

Results

Studies identified

Nine major studies were identified which fulfilled our inclusion criteria. The studies are identified and their chief characteristics described in Table 2. Four of the studies are from the UK. The annual Health Survey of England (HSE) [5] has included mental health screening measures (the General Health Questionnaire – GHQ-12) most years since 1993, and data are available relating to 1993, 1995 and 1998. The first National Psychiatric Morbidity Survey of 1993 [4, 10], using the Revised Clinical Interview Schedule (CIS-R), will soon be supplemented with detailed data from the second survey of 2000/2001; early data confirm the findings of the 1993 survey [11]. The Health and Life-style Survey of 1984/1985 also did a 7-year follow-up in 1991/1992, both using the GHQ-30 [12]. The British Household Panel Survey (BHPS) of 1991, using GHQ-12, followed respondents up 1 year later [13]. The instruments used record psychological symptoms recently experienced, and identify recognised disorders.

In the USA, the Epidemiologic Catchment Area Program of 1980 to 1983 [14, 15] used the Diagnostic Interview Schedule (DIS), designed to produce DSM-III diagnostic categories. Though it had representative samples of the five chosen areas, it did not represent the US population as a whole, so was followed by the National Comorbidity Study in 1990 to 1992 [16, 17] using a development of the DIS, the Composite International Diagnostic Interview (CIDI), producing DSM-IV and ICD-10 categories. The Edmonton Survey of Psychiatric Disorders [18] also used the DIS in 1983 to 1986. The two most recent surveys, the Netherlands Mental Health Survey and Incidence Study (NEMESIS) of 1996 [19] and the Australian National Survey of 1997 [20], both used the CIDI.

It can be seen that there was considerable diversity in the instruments used. Even the same instrument could be applied in different ways; for example, the HSE, using the GHQ-12, applied a cut-off score of 4 to represent a ‘positive’ response, whereas the BHPS used a cut-off of 3. This necessarily produces different results. Case-identification was, thus, approached in many different ways,