Primary care as the middle ground for psychiatric epidemiology

The application of epidemiological methods to the study of mental disorder is well established (Dohrenwend & Dohrenwend, 1982). The early focus of attention was understandably directed at institutional populations, where the statistics of time, place and person could be readily collected. Before long it became apparent that these data suffered from contamination by the many nosocomial factors bearing on admission to hospital (Norris, 1959). Latterly there has been a shift of interest to extra-mural studies, many of which are directed at attempts to identify psychiatric illness in the general population. While demographic information may render such samples more representative, these investigations have still to overcome the awkward problems posed by the definition of morbidity. Moreover, despite the development of many sophisticated techniques designed to measure psychopathology, much of the resulting material bears more upon the reliability of the methods used than the validity of the findings (Bartko & Carpenter, 1976).

Pari passu, a growing number of enquiries have concentrated on conspicuous psychiatric illness at the level of primary care. The contours of this large segment of morbidity were first delineated in the United Kingdom (Shepherd et al. 1966) and its significance was underlined in 1973 by a World Health Organization European Working Group (World Health Organization, 1973). A recent detailed review of the subject contains close to 600 articles published between 1977 and 1985, most of them originating from Europe and North America, but with a significant minority from the developing world (Wilkinson, 1985). The purpose of the present commentary is to re-assess the current evidence on mental disorder in primary care settings and to outline the rationale for siting the middle ground for epidemiological studies in psychiatry at the level of primary care.

The first reason for adopting such a perspective emerges from the findings of health service research on the extent of morbidity vis-à-vis the distribution of patient care (Kalton, 1968). Fig. 1 illustrates the relationship of the mass of morbidity to the three main sources of morbidity statistics in the British National Health Service. Clearly, the bulk of disease comes within the orbit of general practitioner services and major illnesses comprise a relatively small proportion of morbidity. That this is particularly true of psychiatric illness has been demonstrated by a number of studies worldwide which have repeatedly shown that psychiatric illness is among the commoner causes of consultation in general practice. Trends in primary care in the United Kingdom show that diseases of the respiratory system, circulatory system, and mental disorders are the most prominent reasons for consulting general practitioners, accounting for 15.4%, 11.2% and 9.6% respectively of total consultations in 1980 (Balarajan et al. 1983).

The figures reported by Shepherd et al. (1966) on the prevalence and distribution of psychiatric illness in general practice yielded a total prevalence rate of 140 per 1000 persons at risk and an inception rate of 52 per 1000 at risk for all types of mental disorder combined. Provisional estimates from the United States indicate that at least 15% of the US population is affected by mental disorders in one year (Regier et al. 1978), and studies from other countries have yielded comparable findings. Both British and American studies demonstrate that about half of this morbidity is chronic, with a duration of over one year (Shepherd et al. 1966; Regier et al. 1985). However, only a relatively small proportion of the mentally ill who consult general practitioners reach the attention of psychiatrists (Table 1).

A second important advantage deriving from the primary care perspective is that it helps resolve the much-vexed definition of a psychiatric 'case' (Wing et al. 1981). For operational purposes this

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becomes an individual whose symptoms, behaviour, distress or discomfort leads to a medical consultation at which a psychiatric diagnosis is made by a qualified physician. The importance of this confirmatory process is implicit in Kräupl Taylor’s (1980) description of the attributes of a patient – a person who ‘must be abnormal by the standards of a population and/or the norms of an individual, and must be associated with at least one of three criteria: (a) therapeutic concern for himself experienced by a person, (b) such concern for him experienced by his social environment, and (c) medical concern for him.’

Kräupl Taylor’s criteria (a) and (b) may be met without the patient seeking medical help, but the literature on psychiatric ‘caseness’ has tended to neglect consideration of ‘medical concern’. ‘Medical concern’ may not, of course, be synonymous with institutional concern, primarily because so little mental disorder comes to the attention of the hospital doctor, but, in addition, for the reason that all too often psychiatric specialists endorse the sentiment expressed by one of their number on this topic: ‘in possibly as many as 40% to 50% of all patients consulting a general practitioner for any reason whatsoever no organic causes for their symptoms can be found. This raises the question as to whether all these patients should be regarded as psychiatric cases and therefore treated by a psychiatrist. The answer is probably “No”’ (Nijlam, 1974). Understandably, the whole notion of a psychiatric ‘case’ based on the preoccupations of hospital psychiatry and constructed along the single axis of psychiatric symptomatology has been challenged for epidemiological purposes (Williams et al. 1980).

Thirdly, in circumstances of free-access medical care the primary care population can be taken as representative of the general population, thus rendering studies at this level valuable for epidemiological purposes (Kalton, 1968). The statistical justification for this view has been discussed by Shepherd et al. (1966).

A reliable and valid classification of mental disorders is of critical importance for epidemiological

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**Table 1. One-year-period prevalence of psychiatric morbidity median estimates (adapted from Goldberg & Huxley, 1980)**

<table>
<thead>
<tr>
<th>Morbidity in random community samples</th>
<th>Total psychiatric morbidity, primary care</th>
<th>Conspicuous psychiatric morbidity</th>
<th>Total psychiatric in-patients only</th>
</tr>
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<tbody>
<tr>
<td>250*</td>
<td>230*</td>
<td>140*</td>
<td>17*</td>
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<td></td>
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<td>6*</td>
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* Per 1000 at risk per year.
enquiry. From the vantage-point of the middle ground it is necessary to appreciate that ‘the majority of psychiatric disorders presenting in primary care (or identified in community surveys) fall within a single broad diagnostic category – depression with or without associated anxiety’ (Clare, 1982). Unfortunately, it appears that general practitioners themselves are unable to classify their clinical data effectively. Statistical analysis of longitudinal records of anxiety and depression diagnosed by general practitioners in the Second National Morbidity Survey suggests that there is wide disagreement among them (Dunn, 1985), and some of the reasons for this disagreement – even when using classifications developed for primary care – have been examined by Jenkins et al. (1985). Not unexpectedly, the difficulties arise with particular force at the ‘minor’ end of the spectrum of psychiatric morbidity, particularly where the distinction between illness, distress (Brown et al. 1985) and what Findlay-Jones (1983) calls ‘disgust with life in general’ remains unresolved.

If, to date, the classification schemes have been unsatisfactory, this is in some measure because most diagnostic classification systems have been developed from the study of hospital patients suffering from ‘major’ affective illnesses. Current systems of classification fail to do justice to the wide range of affective disorders. The International Classification of Diseases, for instance, contains no fewer than 19 categories of depression, including not only some items in the rag-bag of section XVI (symptoms and other ill-defined conditions) but also the ‘V codes (factors influencing health status and contact with health services) (Shepherd, 1976). The latter group needs particular attention because, as Munk-Jørgensen (1986) has shown, social impairment plays a key part in case-identification at the level of primary care. All this strongly reinforces the conclusion that instruments developed on hospital populations are inadequate for such studies, and that there remains a need for a multi-axial system of classification of psychiatric disorders in primary care.

This view is underlined by an estimate of the proportion of depressed patients who come to the attention of a psychiatrist as less than 3% of the general population and no more than 1.8% of all depressed people (Watts, 1966). In consequence, psychiatrists become familiar with no more than a narrow band of the spectrum of affective disorders and one which differs from the great majority of cases in respect of the severity of presentation. The empirical consequences of this limitation are exemplified by a recent study of depression in general practice (Sireling et al. 1985), in which ‘case thresholds and diagnosis’ were examined in three samples of depressives: those recognized to be depressed by general practitioners and treated either with a course of antidepressants or ‘other’ treatment, and those missed by the general practitioner. The authors summarized their results as follows: ‘The majority of patients qualified as psychiatric cases on the Present State Examination (PSE) Index of Definition, the Bedford College Criteria, and the Research Diagnostic Criteria. Most patients satisfied diagnostic criteria for depression, or (fewer) anxiety. The disorders were relatively mild and often borderline on all three systems. Depressives given other treatment most often failed to meet diagnostic criteria. About half the antidepressant treated patients received RDC diagnoses of major depression. Among the other treatment sample only one-fifth met these criteria, and half had non-depressive diagnoses. Most cases of depression treated by GPs satisfy criteria for psychiatric disorder but tend to be relatively mild and borderline in quality.’ Drawing on their own rather different preliminary findings, Blacker & Clare (1986) have pointed out the bias of this investigation towards patients at the severe end of the depression spectrum, emphasizing weaknesses in sampling as well as in the use of the chosen measures of morbidity.

A further obstacle to a rational nosology of mental disorder in primary care is the widespread precept in general practice that, contrary to classical medical teaching, treatment takes precedence over diagnosis (Marinker, 1967). Recent large-scale data from the National Ambulatory Medical Care Survey in the US (Jencks, 1985), for example, show that the majority of psychotropic drugs and ‘psychotherapy/therapeutic listening’ provided to adults in office-based primary care are given in visits during which no diagnosis of mental disorder is recorded. The same data also indicate that physicians treating mentally ill patients appear to be providing a different ‘product’ from that of psychiatrists, spending less time with patients, but using a wider range of diagnostic and therapeutic services during each office visit (Schurman et al. 1985).

The issues of case-definition and classification also become enmeshed in the assessment of outcome

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for patients suffering from mental disorders. There are differing theoretical emphases and practical implications, depending on whether the focus is on primary care or community. On the one hand, Mann et al. (1981) studied the twelve-month outcome of patients with neurotic illness in general practice, using a tri-axial assessment with symptoms, personality and social state being rated independently. Half the cases identified initially were no longer deemed to be ill a year later. Only two factors were significantly associated with the psychiatric state after one year: first, the initial estimate of the severity of the psychiatric morbidity, obtained by means of the Clinical Interview Schedule, a standardized clinical psychiatric inventory designed for use in general practice and community surveys (Goldberg et al. 1970); and, secondly, a rating of the quality of social life at the time of follow-up. Social measures also predicted a pattern of illness characterized by a rapid recovery after the initial assessment. Patients who reported continuous psychiatric morbidity during the year were older, physically ill and very likely to have received psychotropic drugs, which were in turn associated with initial assessments of abnormality of personality, older age, and a diagnosis of depression.

On the other hand, Tennant et al. (1981) studied the short-term outcome of neurotic disorders in the community and their relation to clinical factors and to ‘neutralizing’ life-events. Their principal dependent variable was psychiatric disorder, measured by the Present State Examination (Wing et al. 1974). Half the cases identified initially were found to have remitted one month later. Tennant et al. (1974) concluded: ‘While there is no doubt that minor affective disorders occur relatively frequently in the community a large proportion are related to life-events, both in their onset and their remission. The course of these disorders may be quite brief and most presumably will not require treatment. It is interesting to note that those subjects with disorders which remitted were somewhat less likely to have used medical services or been prescribed psychotropic drugs; perhaps they were aware that their disorder had an understandable cause, would be short lived and would not require, or benefit from, treatment. Such conditions might better be regarded as normal distress responses.’ The latter results may usefully be interpreted in relation to the observations which highlight the position of primary care at the centre of the universe of health services and, by inference, the realm of therapy.

The evidence indicates that the evaluation of therapeutic interventions in the management of mental disorders in primary care requires multi-axial assessment. Patients presenting with psychiatric disorders at this level frequently have concurrent physical illness and social problems, but the effectiveness of psychotropic drugs and psychosocial interventions is not yet well established in this setting (Wilkinson, 1985). Probably for that reason, the top priority for investigations on mental health in primary care has been identified as a need for studies on the effectiveness of treatment measures (Wilkinson & Williams, 1985). In the meantime, a question mark hangs over the vast array of results from clinical trials obtained so far predominantly from hospital-based samples, which can not be applied to the primary care population.

Clinicians, policymakers, and both hospital- and community-based research workers have been slow to grasp the substance of these findings. A prominent British social psychiatrist (Bennett, 1973) has asserted that three psychiatrists are needed for a population of 60000 people, in order to care for about 1000 patients during the course of one year. He went on to comment, as an afterthought: ‘There will also be about 24 family doctors in the area. These doctors, however, cannot give psychiatrists much help, for in our Health Service family doctors are already seeing the bulk of the patients with socio-economic problems’. Such views are clearly outdated. Today, in the clamour of the stampede toward ‘community care’, there is evidence of the growth of a new style of service (Strathdee & Williams, 1984) which comprises general practitioner/psychiatrist attachments at the level of primary care and acknowledges the importance of the middle ground in the investigation and management of mental disorder.

The time is ripe for a reorientation and a new perspective on the epidemiology of mental disorder, one in which the identification and detection of psychiatric illness at the level of primary care is of central concern. The Report to the House of Commons of the Parliamentary Social Services Committee (1985) makes the point explicitly: ‘Community care depends to a large extent on the
continuing capacity of GP’s to provide primary medical care to mentally disabled people.’ In the study of mental disorder the middle ground is vital as a priority for research as well as for the promotion of efficient and effective services.

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REFERENCES


Kalton, G. (1968). The contribution of research in General Practice to the study of morbidity. Journal of the Royal College of General Practitioners 15, 81–95.


