Primary care psychiatry: the case for action

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SUMMARY. Since the introduction of the National Health Service a number of epidemiological enquiries have established the importance of mental disorders in the field of primary care. Examples are provided from the work of the General Practice Research Unit at the Institute of Psychiatry in London. The results furnish a rational basis for collaborative action between research workers, general practitioners and policy makers.

Introduction

THE value of epidemiology in the study of illnesses other than infectious diseases was first recognized by Sir James Mackenzie, a general practitioner.[1] Shortly afterwards, in 1921, a prominent British psychiatrist, Hubert Bond, commented on the potential role of the primary care physician (the general practitioner) in the epidemiological study of mental disorder:

> 'It is my strong conviction that the general practitioner should, under suitable arrangements, be of the greatest possible service to the cause of psychological medicine ... Were he encouraged to be systematic in his observations and to adopt some method of recording them, they would be of inestimable value in collecting valuable data for that which in our work might well be called "the research magnificent", in other words, a knowledge of the prolegomena and earliest stages of mental disorder'.[2]

Despite this call for 'research magnificent', a term borrowed from an H G Wells novel, it was some time before such data collection began.[3] During the inter-war period early epidemiological studies of mental disorder focussed on functional psychoses and mental subnormality, with little attention paid to the role of general practice.[4] The second world war, however, gave impetus to the subject, exposing the dimensions of psychiatric morbidity in both the general and the military populations. The published proceedings of the meetings organized by the Millbank Memorial Fund during the immediate post-war decade demonstrate how in the United States of America these war-time findings acted as a spur to bring mental disorder into the area of public health.

In Britain, following the introduction of the National Health Service, almost all of the population was registered with a family doctor. It was therefore possible to utilize the records of general practitioners as a means of obtaining data on the non-institutional dimensions of mental ill-health.

The concept of psychiatric morbidity

In 1955 the national morbidity survey was set up, in Britain, based on general practitioner records.[5] For this survey it was necessary to modify the indices of morbidity, and the statistics sub-committee of the Registrar General's advisory committee on medical nomenclature and statistics produced a report on the measurement of morbidity for this purpose, which sidestepped the issue of case definition:

> 'The term "case" of sickness is not defined because it is impracticable to give a definition which would be appropriate to all diseases. The general intention is that it should cover the whole course of one disease in one person as far as that course is relevant to the particular enquiry concerned'.[6]

The sub-committee favoured the use of spells of sickness, prevalence rates and consultation rates as more appropriate indices of morbidity, all of which featured in the structure of the first national morbidity survey. Yet although this survey took account of mental disorder, the resulting data proved to be inadequate, largely because case detection by practitioners was irregular and the diagnoses were unstandardized.

In the light of these deficiencies a more sophisticated survey focussing on psychiatric illness in general practice was required. The results of this study,[7] carried out in the early 1960s, revealed a high incidence of hitherto unacknowledged mental illness in the community, and also indicated the importance of primary care as the middle ground for psychiatric epidemiology.[8] The General Practice Research Unit was therefore established at the Institute of Psychiatry in London and for almost 30 years concentrated on a series of epidemiological studies and health services research in the field of primary care.[9] Two issues of continuing significance are raised by this work: the research methods employed and the clinical findings arising from this research.

This epidemiological method differed from a community case detection approach. According to Kräupl Taylor[10] the concept of psychiatric morbidity is dependent on one or more of three criteria: an individual's subjective distress associated with symptoms; behaviour arousing social concern in others; and medical help seeking by the patient. Fulfilling the medical criteria for psychiatric morbidity has traditionally been associated with contact with mental health workers at specialized institutions. In these psychiatric hospitals, anti-social behaviour accounts for admission in a substantial proportion of patients, many of whom are acutely ill. By extending the definition of contact with medical staff to include general practitioners, it becomes theoretically possible for the physician to screen for mental illness. By this process, individuals whose symptoms, behaviour, distress or discomfort lead to a medical consultation at which a psychiatric diagnosis is made by a medically qualified participant observer would be identified. Levels of conspicuous morbidity in the community could therefore be estimated.

The difference between this approach and that of the population investigators was highlighted in the course of two recent meetings. At a European symposium on social psychiatry the traditional position was set out:

> 'An epidemiological survey should not be done unless the clinical syndromes have been listed beforehand, and defined properly as to their criteria for inclusion and exclusion. An assessment of "caseness" on the assembled data is inadequate. Second, the next logical step is to steer the process of deciding in such a way that it cannot be directed by aspects of illness behaviour which are not consciously accounted for. The obvious answer is a computer programme.
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> Third, it is perhaps wisest at present to screen populations

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only for disease entities with a circumscribed clinical picture and course, and for which circumscribed treatment programmes have been developed or are being tested. To include what Wing called the "non-specific or lesser psychiatric syndromes" (such as worrying or muscular tension) might result in turning away psychiatric services from their real task with the major syndromes, and prevent social and welfare services from developing their own and less expensive forms of care.'[11]

In the second symposium, only two contributors made direct reference to primary care in the problem of definition in psychiatric community surveys.[12] One stated the following:

'There are two ways in which the question of prevalence can be approached. One is the way of the clinician starting from the base of knowledge he has assembled in dealing with the patients he sees in hospital. These patients are, in effect, defined for him by referral agencies over which he has little or no control. He looks at the characteristics of these patients, specifies them by laying down some relatively objective criteria, and then applies the same criteria in the community at large. Another approach is to start at the other end of the problem and to travel in the opposite direction; to seek in the community those who are distressed and to discover what it is that leads some of these people to become psychiatric patients and others not. Most patients still come to the psychiatrist by way of the general practitioners, so first we need to ask what it is that brings psychologically distressed people to their general practitioners.'[13]

The other contributor acknowledged the case for involving the general practitioner, only to dismiss it:

'Most of the neurotically ill do not seek medical advice. The point can be reinforced with the Canberra data. It was found that of those with a PSE [present state examination] index of definition of five or more (threshold or definite case), 9% had consulted a psychiatrist in the last month and 41% had seen their general practitioner. The corresponding figures for those with specific symptoms (index of definition of four) were 5% and 37%, and for lower values of the index definition 0% and 25%. Clearly, psychiatrist contacts cannot provide an adequate picture of neurosis in the community. Contacts with the general practitioner are certainly higher among "cases" but many will not be presenting psychiatrically nor be recognized by their general practitioners as emotionally disturbed'.[14]

Case detection in general practice

Such findings, it might be argued, point not to the disregard of the information obtained from general practice so much as the need to improve the general practitioner's capacity for case identification. To meet this objective the General Practice Research Unit undertook three projects. First, the design and standardization of a number of measuring instruments, including the general health questionnaire,[15] the clinical interview schedule,[16] and the social problems schedule[17] were investigated. Secondly, 'illness behaviour' was researched, so as to identify those individuals who do and those who do not make regular use of medical services. Murray and Corney studied two groups of individuals with comparable psychosocial problems. Their research demonstrated that differences in general practice attendance could be accounted for by personality and attitude variables; the degree of concern over bodily function; favourable or unfavourable attitudes to drugs; and the presence or absence of a lay network of medically knowledgeable people.[18] Thirdly, research was undertaken into the more precise measurement of illness episodes using health diaries.[19] Interesting clinical findings have emerged from these pieces of research.

Several studies have confirmed the original observation that affective disorders constitute a large proportion of mental illness presenting to the general practitioner.[7] These affective disorders may be broadly described as depression, anxiety or a combination of the two, with or without physical illness or social problems. These conditions may exhibit many features, including depressive mood, anxiety, fatigue, irritability, poor concentration and a variety of somatic complaints.

While something is known about the aetiology of the minor affective disorders in terms of genetics, stress factors and lack of social support, it is rarely possible to ascertain precisely the cause of a specific episode in the individual case. It is, therefore, not possible at present to construct a system of classification of affective disorders based on causal factors. Nonetheless, categories of these disorders are valuable for the purposes of description, communication and treatment and they may be made taking into account the extent and severity of the symptoms, their social context and extent, their consequences, their relationship to concurrent physical illness, and the patient's coping abilities.

Observer variation in diagnosis and classification

In diagnosis and classification, an important variable to be taken into account is that of observer variation. A piece of research to investigate diagnostic practice among psychiatrists,[20] showed that observer variation derived partly from perceived differences of the phenomena under observation; partly from differences in the interpretation of those phenomena; and partly from inadequacies of the nosological schemata applied to the observations.

To examine the phenomenon of observer variation in general practice, a similar study was undertaken, based on the presentation of a series of videotapes and case vignettes to a sample of 27 experienced practitioners.[21] The participants were instructed in the use of the *International classification of diseases* and the *International classification of health problems in primary care*, an adaptation of the former for primary care physicians. They were also invited to use their own preferred systems of classification. Specific areas of reference were employed, including psychological, physical, social, personality, family history, previous history, illness behaviour and management factors.

There appeared to be little agreement between responses using the two international classifications. However an examination of diagnoses based on participants' own systems of classification showed that more than three quarters of the participants acknowledged the importance of the most frequently cited areas of reference on each of the videotapes and case vignettes. Further, a closer assessment of the diagnoses based on personal classification systems revealed a discernible pattern in that general practitioners tended to use an idiosyncratic but recognizable multidimensional framework, incorporating several reference areas within their diagnostic formulations. A relatively small proportion of general practitioners used only a single domain to describe a case; two thirds or more of participants used two or more domains for each case; and a substantial number employed three or even four reference areas. A detailed assessment of the factors which the participants included in their classification terminology indicated that they made use of psychological, physical, social and personality domains and that, contrary to expectation, only once did the diagnosis incorporate the notion of management.

The observers could agree to some extent on observations, inferences and prediction of outcome and it seems, therefore, that the difficulties of diagnosis lie more with the classificatory schemata which they are expected to use. Further, the manner in which the participants tended to incorporate several reference areas into their diagnostic conclusions resulted in multidimensional formulations to which neither the *International classification of diseases* nor the *International classification of health problems in primary care* nor *DSM III (Diagnostic and statistical manual of the American Psychiatric Association)* lend themselves adequately since they have been developed primarily as hospital based diagnostic codes. The significance of these findings extends beyond the narrow confines of nosology, for without an agreed system of nomenclature and classification there can be no effective communication to underpin collaborative research between investigators.

Predicting the outcome of psychiatric illness

Any system of classification must also consider the question of the outcome of an illness, one which Kraepelin showed to be a central issue in categorizing the functional psychoses.[22] The natural history of the non-psychotic disorders that predominate in general practice remains obscure. Duncan-Jones and colleagues have suggested that in theory there are two ways of deriving the relevant information by direct investigation.[23] The first method is to interview a random sample of the general population once, and take a detailed psychiatric history covering a defined period of time. This is unlikely to provide accurate data because of subjects' memory lapses and retrospective bias. The second method is to select a random sample of the population and assess their psychiatric health at frequent intervals over a period of time: this longitudinal approach is of greater value but is not practicable.

Duncan-Jones' suggested solution to this problem is to develop a mathematical model, more specifically a stochastic or probability process model. This could be used in conjunction with longitudinal data from community samples to estimate inception rates of psychiatric illness and the duration of episodes. In most analyses of minor psychiatric symptoms it is assumed that subjects move from a 'healthy' state to an 'unhealthy' state as a result of exposure to various provoking factors. Health and illness are seen as discrete and distinguishable states. By contrast, Duncan-Jones' model assumes that each individual has a stable and characteristic level of symptoms, which may be high or low, and that his or her levels of symptoms fluctuate around this in response to changing conditions. The understanding of psychiatric symptoms therefore requires a knowledge of both the individual's characteristic level of symptoms and the factors which will cause this level of symptoms to fluctuate. However, the results of the large scale study based on this approach appear remote from clinical practice.

The potential value of data collected from both large and small scale studies in general practice deserves consideration. The largest 'macro' studies to date are those provided by the British national morbidity surveys. The difficulties raised by such surveys have been analysed by Dunn and Smeeton[24] with reference to the second national morbidity survey, undertaken jointly by the Royal College of General Practitioners, the Office of Population Censuses and Surveys and the Department of Health and Social Security. This survey was designed to yield information on illness episodes and consultation patterns in a representative sample of general practices over a period of up to six years (1970–76). Sixty practices (115 general practitioners) took part between 1970 and 1971, but only 22 contributed data for the full survey period, yielding complete six-year records for approximately 60 000 individuals.

Details of psychiatric problems were provided for 42 000 individuals. The data file contained records of the number of episodes of psychiatric disorders for each of the six consecutive years. For each episode of psychiatric illness there was at least one corresponding consultation with the general practitioner. The file also recorded the number of consultations at which a psychiatric diagnosis was made. If a patient received a diagnosis of a particular disorder at any time during the six years, a single record was compiled.

As Dunn and Smeeton observed, inter-practice variation was so great that 'one is inclined to conclude that the records reveal more about the general practitioners than about their patients'. The reporting of a prevalence rate of depression almost twice that of the first survey indicates the validity of their comment. The most that could be concluded was that females experience twice as many episodes of psychiatric illness as males; the same sex differences emerge from stochastic modelling of anxiety and depression; women and middle-aged people are at increased risk of episodes of mental illness; 'proneness' to depressive episodes, examined by means of poisson distribution (assuming equality of proneness) and a 'flexible proneness' model (the negative binomial distribution), was not equally distributed; inter-practice variation can be diminished by standardizing the criteria for diagnosis, achieved most effectively by carrying out longitudinal studies of individual practices.

Longitudinal studies of psychiatric illness in general practice

One of the major findings in the study by Jenkins and colleagues was the difficulty experienced by the general practitioners in predicting the prognosis of the psychiatric disorders under consideration. This reflects the lack of adequate information about the natural history of the disorders presenting to them. Longitudinal studies over substantial periods of time are still rare in general practice but the General Practice Research Unit conducted several such inquiries in which it was found that approximately three-quarters of new psychiatric illnesses appear to recover within one year, personality and social factors playing a crucial part in determining outcome.[25] By contrast, when a psychiatric illness lasts for over five years the chances of recovery within the next 12 months fall to about one in 13. As an heuristic hypothesis, it has been suggested that there are two broad groups of neurotic disorder encountered in general practice: one of chronic conditions occurring among a relatively unchanging section of the population, and another group of short term reactions characterizing a continually changing population, and with a good overall prognosis.

The meticulous record-keeping of one general practitioner, Dr John Fry, has made it possible to carry out a follow-up study of 20 years on his patient population (Skuse D, Dunn G. A 20 year follow-up study of psychiatry in a general practice population. Manuscript in preparation). Psychiatric diagnoses given to 1530 patients were tabulated and analysed, together with prescription data, referral patterns and physical status. The results show that some three-quarters of the women and one-half of the men had been seen in the practice on at least one occasion during these two decades for a problem diagnosed by the general practitioner as wholly or largely psychiatric in nature. More women than men suffered from depression and this depression was often of a relatively chronic nature. Approximately 70% of women attended the general practice at some time during the follow-up period with an episode of depression, and just over 40% of these women were suffering from an anxiety or phobic state. The figures for the men were 32% and 41% respectively. Over the 20 years only 84 out of the 1530 patients were referred to a psychiatric outpatient clinic and only 47 patients were ad-

mitted to hospital. This study further confirms the extent to which minor psychiatric morbidity is managed almost entirely by the general practitioner alone.

Conclusion

The importance of primary care psychiatry is now universally acknowledged and is being actively developed in many countries. With regard to the future, the results of the work to date carry implications for all three groups of professionals involved: epidemiologists, general practitioners, and psychiatrists.

For epidemiologists it has become necessary to recognize primary care as the middle ground for research into non-institutional mental disorder, if only because in appropriate conditions of medical care the prevalence rates of psychiatric illness seen in general practice reflect those in the general population.[26] In consequence, case identification by general practitioners need no longer be regarded as incidental to those obtained by epidemiologists' elaborate, indirect methods of mensuration. There is now a strong case for a convergence between the interests and activities of both groups of investigators.

For psychiatrists it is apparent that they must broaden their concerns if they are to participate in the development of their discipline in its public health perspective. In the process, the current emphasis on the 're-medicalization' of psychiatry may be seen to lead not simply to an awareness of biological mechanisms but also to the neglected concepts of social medicine.

Finally, for general practitioners a more active form of collaboration is becoming imperative. Morrell has commented on the distaste of primary care physicians for epidemiology and their need to overcome this if they are to realize their research potential.[27] Nowhere is the need greater than in the sphere of mental disorder. The 'research magnificent' may have come of age, but it is unlikely to reach maturity without incorporating Sir James Mackenzie's thesis that 'the opportunities for the general practitioner are essential for the investigation of disease and the prognosis of medicine'.[28]

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