Clinical significance of psychiatric disorder in the general hospital

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Study of the epidemiology and treatment of psychiatric disorders in general medical settings has only recently began to take full advantage of the methodologies that have been extensively used in primary care. It is unfortunate that recent increasing evidence of the scope for psychiatric interventions, of the clinical rate, of consultation-liaison psychiatry (Mayou & Huyse, 1991) and of the current importance of the general hospitals as a pathway to specialist psychiatric care (Gater & Goldberg, 1991) has been overshadowed by professional and political concentration on community care. Local and national policies rarely make more than a token mention of services for general hospital attenders.

Although prevalences of the principal types of psychiatric disorder seen in general hospitals have been well described, there remain many uncertainties about their course, associations with physical illness and clinical significance. These issues deserve much greater attention; it is probable that much of the psychological distress could be prevented or treated with direct benefits for patients and their families, as well as improved compliance with medical care and physical outcome.

This editorial reviews recent advances in the understanding of the epidemiology of psychiatric disorder amongst general hospital in-patients, out-patients, and emergency department attenders, and then considers the clinical implications of how to provide more effective care to large numbers of patients who might be expected to benefit. It concludes that, although there have been few fundamental discoveries or innovations, there is an accumulating body of knowledge about clinical problems and needs and about the effectiveness of psychological interventions.

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METHODOLOGY

In reviewing current evidence, it is essential to be aware of considerable practical problems and methodological difficulties:

1) It is very difficult to draw clear general conclusions from evidence derived from selected medical populations seen in widely different medical settings and health care systems. Many of the apparent differences between published reports are attributable to the methods of patient recruitment, for example consultation-liaison reports continue to be markedly biased towards in-patients;

2) Standard psychiatric classifications and diagnostic criteria devised in specialist psychiatric settings are even less applicable in general hospitals than in primary care (Cooper, 1990; Von Korff, 1992). Particular difficulties relate to «organic» mood and anxiety disorders which may have physical or psychological causes, and especially to the disparate category of somatoform disorders;

3) It is necessary to distinguish between independent concurrent psychiatric disorder and that which is related to physical illness. Reported prevalences of the psychiatric disorder in chronic illness are usually greater than that of general population, but not markedly so;

4) Psychiatric disorder, as defined by standard criteria, is not the only psychological aspect of medical illness that is important to the patient, the general clinician or psychiatrist. Illness also has effects on quality of life and on behaviour which are determined by psychological and social factors as well as by physical impairment. Psychiatric research fails to meet the clinical needs of patients (or of their physicians and surgeons) if it does not take account of these wider consequences and of the need to develop psychological interventions directed to improving quality of life.

EPIDEMIOLOGY

Recent studies have been concerned with the prevalence of psychiatric disorder in: 1) particular medical settings; 2) general populations; 3) samples of patients with specific types of physical disorders.

Medical settings The many recent reports of medical in-patient units have added little new information. Other hospital areas continue to attract little attention; we know rather little of emergency department attenders, apart from those who attempt suicide; there have been very few studies of out-patient clinics, even though these represent the large majority of general hospital attenders. The importance of further research is illustrated by Van Hemert's report that amongst consecutive attenders at a Dutch medical clinic, the prevalence of psychiatric disorders was 15% for patients with a medical explanation of their presenting symptoms, 45% for those in whom there was an ill-explained medical aetiology and 38% for those whose were medically unexplained (Van Hemert *et al.*,1993). It is probable that a sizeable minority of such patients, especially those with multiple or recurrent symptoms suffer long-term disability.

General population. Many general population studies of the epidemiology of psychiatric disorder give disappointingly or little information about physical status. However, the Los Angeles centre of the ECA programme (Wells *et al.*,1988) found a prevalence of psychiatric problems in preceding six months of 24.7%, and of life-time psychiatric disorder 42.2% amongst patients with eight chronic medical conditions as compared with 17.5% and 33% respectively for people who were medically fit. The Medical Outcomes Study of a large population of attenders at physicians' offices reported markedly worse functional status and well-being amongst patients with chronic physical conditions (Stewart *et al.*,1989). The authors also showed (as have several other studies) the clinical significance of psychological symptoms which are sub-threshold for standard psychiatric diagnostic criteria as correlates of functional status and uses of services.

Specific physical disorders. Cancer continues to be more studied than any other medical condition (Holland and Rowland, 1989), but there are increasingly substantial bodies of knowledge about a range of acute and chronic illnesses and their treatment. Newer studies are more likely to be based on more representative samples and on the use of standard quantitative measures. They enable some conclusions about predictors of psychiatric complications and of effects on quality of life, psychological and social variables, but the role of psychological variables as determinants of physical outcome remains uncertain.

TYPES OF PSYCHIATRIC PROBLEMS

Despite the caveats, it is, in 1994, possible to go significantly beyond the conclusions of our 1986 review (Mayou & Hawton, 1986).

Organic psychiatric syndromes. Although very frequent amongst in-patients, there has been little recent general hospital research, with the exception of the accumulating evidence on the course, determinants, and clinical significance of delirium among the elderly (Cooper, 1987; Koponen & Riekkinen, 1993; Schor *et al.*,1992).

There have also been some significant change in the classification of the *secondary* or *symptomatic* mood, personality and delusional and other conditions which may be directly attributable to biological processes. DSMIV has tackled this issue more usefully and fundamentally than ICD-10, which retains a confusing terminology and use of symptoms than aetiology as classificatory principles (Lewis, 1994; Spitzer *et al.*,1992; Fogel, 1990). Although the theoretical issues have been clarified, there has been relatively little progress understanding the nature of the possible associations. It remains difficult to make clinical individual diagnoses of the symptomatic syndromes. There has been particular interest in puerperal disorders (Martin *et al.*,1989) and depression after stroke (Starkstein and Robinson, 1993), but it is still difficult to draw definite conclusions. However, even when biological factors contribute to the aetiology of mood disorder, it is apparent that other generally accepted psychological and social vulnerability factors for depression are also significant.

Emotional distress. It is unfortunate that preoccupation with arbitrary diagnostic categories has meant that research has focused upon major depression (and to a lesser extent hypochondriasis and somatization disorder) but has largely ignored anxiety and adjustment disorders. It is often more appropriate to consider to use a global measure of emotional distress.

Despite a burgeoning useful literature using increasingly sophisticated assessment measures for the wide range of physical problems, there have been no fundamental advances in understanding. It is apparent that distribution curve of the severity of emotional distress is shifted to the right in the physically ill as compared with the general population. In acute illnesses, this means that as many as 30 or 40% of patients with acute severe (Holland & Rowland, 1989) or threatening conditions (Iles and Gath, 1993) are diagnosable as suffering from psychiatric disorder. In the absence of evidence of previous psychological problems or of major social difficulties, most patients haven excellent long-term psychological outcome following even the most unpleasant of physical illness. In chronic illness, the rates of psychiatric disorder are only moderately greater than in the general population, even for conditions as severe as spinal cord injury (Fuhrer *et al.*, 1993).

It is becoming increasingly possible to identify illnesses and treatments which are particularly associated with psychiatric problems and patients who are individually vulnerable. In addition to possible direct biological mechanisms, the main determinants of the prevalence of psychiatric disorder (and of sub-threshold distress) are:

1) the severity, threat and disability of the illness;
2) the nature of the treatment and its demands on the patient;
3) the patient's own psychological vulnerability;
4) social problems and circumstances.

Increasing clinical experience with the use of psychotropic medication and with cognitive behavioural and other specific psychological interventions is encouraging but there remains a need for many more evaluative studies. In particular, clinical experience would suggest that anti-depressants are very considerably under-used in medical patients, and that moderate depression may be just as susceptible to anti-depressant medication in the medical outpatient clinic as it is in primary care (Paykel *et al.*, 1988; Paykel & Priest, 1992).

Alcohol and other substance abuse. These disorders remain conspicuous and are increasingly documented. It is disappointing that there is little evidence of greatly improved recognition or management in routine practice. There remains a need to introduce proven methods of advice about drinking and the access to specialist care, especially in the emergency department, and for in-patients or out-patients in areas where drinking problems are very common, gastroenterology clinics and wards.

Sleep disorders. Poor sleep and sleep disorders continue to attract increasing medical attention, both because of the clinical significance of the symptoms and because of the opportunities for intervention.

Functional somatic symptoms are often associated with anxiety and depression, and less often with somatoform disorders. They are very frequent amongst out-patient attenders and may result in persistent morbidity and use of medical resources. The small proportion of patients with multiple functional symptoms are particularly heavy utilizers of all forms of medical care (Fink, 1992). It is unfortunate that there is still no agreement about terminology. The term «somatization» is widely used, but its aetiological connotation of transformation of psychological distress into physical symptoms seems inappropriate for the wide range of medically unexplained non-specific symptoms seen in primary care and in all secondary medical settings. There are increasing signs that these disorders are attracting greatly more clinical and research attention (Mayou *et al.*, 1995; Mayou, 1991). It is arguable that the management of functional somatic symptoms is now the main priority for consultation liaison psychiatry.

There is a gradual realization that previous controversies about alternative physical and psychological explanations for these symptoms have been unfruitful and naive. It is much more useful to see aetiology in terms of an interaction between physical and psychological and behavioural factors. This approach emphasizes the importance of the patient's perception of minor pathology or physiological processes, processes of *attribution* or *cognitive interpretation*, and the role of doctors and others in perpetuating symptoms and disability. This aetiological model is applicable to the whole range of symptoms, whether they seem to be strongly associated with psychiatric disorder or whether organic conditions are also present. The model leads to conclusions about the role of behavioural and cognitive behavioural interventions (Sharpe *et al.*, 1992). At the same time, it is apparent that the psychotropic drugs (especially anti-depressants) can also be effective when there are specific indications.

Attempted suicide and suicide Increasing awareness that suicide is a leading cause of mortality, especially in younger age groups, has focused a new attention upon prevention. Consultation-liaison psychiatrists have continued to be concerned by the

numbers of attempted suicide patients attending Emergency Departments. There have been no substantial advances in management within the general hospital, and the clinical priority is to apply what we already know for the better provision of specialist services (Hawton & Catalan, 1987).

Factitious disorder. Although factitious disorder is no better understood now than when the term was coined, awareness of its considerable prevalence has been greatly increased. It should be considered as a differential diagnosis of obscure and unusual symptoms (Sutherland & Rodin, 1990).

EFFECTS OF ILLNESS ON QUALITY OF LIFE

Psychiatrists have been critical of physicians for neglecting the significance of psychiatric disorder. However, they themselves can be similarly criticized for neglecting psychologically determined problems which cannot be categorized as psychiatric disorder. These consequences may be of greater significance than psychiatric disorder and may well respond to psychological and social interventions. For example, following diagnosis and surgery for cancer, concerns about sexual problems and body image are more common and may be more disabling than psychiatric disorder (Holland & Rowland, 1989).

New psychiatrists often find behavioural difficulty as great problem as over psychiatric disorder. In a recent study of three out-patient clinics, we have shown that the physicians and surgeons rate about a fifth of their regular attenders as being difficult to manage for other than strictly physical reasons (Sharpe *et al.*,1994). Three commonest types of difficulty were medically unexplained symptoms, co-existing social problems and severe untreatable illness. Some of these difficult patients have psychiatric disorder, but not all. They were very different from the extreme sub-group «hateful» or «heartsink» patients who have been described in primary care. We believe that common sense interventions, such as a review of management aims, together with improved access to psychosocial care, can improve both the quality and cost-effectiveness of hospital out-patient services.

CURRENT PATTERN OF CARE

It remains true, as Mayou & Hawton (1986) concluded, that psychiatric disorder is very common in general hospital settings, and although frequently transient, large numbers of patients suffer persistent symptoms and associated disability. Unfortunately, much of this disorder continues to be unrecognized by general hospital physicians and surgeons and by primary care practitioners and even if recognized, it is not treated. Very little is referred to liaison psychiatry or other psychiatric services (Wallen *et al.*,1987). Even so, the general hospital is a major pathway to specialist psychiatric services, especially for patients presenting to emergency departments with attempted suicide or overt psychiatric disorder (Gater & Goldberg, 1991).

Although rates of direct referral from general hospital doctors to psychiatric services are low, patients undergoing specialist medical care do high rates of psychiatric care. In a case register study of a British health district, we showed that there were substantially raised rates of usage of specialist psychiatric care in the period before, and especially in the period after, a general hospital discharge (Mayou *et al.*,1991). There were marked differences between diagnostic categories, and rates were especially high for patients with non-specific symptom diagnoses.

We can conclude that, although rates of psychiatric care are elevated amongst those with physical illness and physical symptoms, they are very low compared with the prevalence of persistent and disabling psychological and behavioural problems. Even when psychiatric referrals are made, few patients receive an expert assessment by those especially skilled in the problems of the medically ill, and management is rarely co-ordinated with continuing medical care. In particular, psychiatrists are reluctant to accept responsibility for the treatment of patients with functional symptoms and behavioural problem.

CLINICAL IMPLICATIONS

Consultation liaison psychiatry has been seen as the answer. However, even the best resourced services can see only small proportions of patients, and it is unrealistic to expect liaison psychiatry to be more than part of the answer. We must therefore ask what are the other ways in which medical services can meet the needs of patients and their families, a question which is analogous to that posed by provision of psychiatric care in the primary care setting. There can be little alternative for using psyc-

hiatric services not as the main providers of psychological care, but as a means of supporting hospital clinical teams and primary care teams in providing comprehensive care. This means:

1) *good routine psychological care* for all patients provided by hospital and primary care doctors and their colleagues. This means that appropriate advice for everyone and together with more specific programmes for those involved and those undergoing unpleasant medical procedures (Ludwick-Rosenthal & Neufeld, 1988), and those with major or chronic conditions.

2) *identification of patients with particular* difficulties and who might benefit from extra care in the general hospital or primary care. This must depend on clinical acumen of doctors, nurses, and other general hospital staff. General practice research suggests that the ways in which recognition can be increased even within the context of the busiest clinic (Goldberg, 1990). Screening questionnaires have been widely advocated but have not proved successful in routine practice (Goldberg, 1992). They are narrowly conceived in terms of mood, cognitive state or quality of life, and alert the clinician to a possible problem without any guidance for what might follow (Meakin, 1992).

Once identified as having extra problems, individual treatment plans must be formulated. Frequently, this can the responsibility of the primary care practitioner or the specialist physician on his team. Hospital services responsible for chronic medical problems, for example diabetes or chronic renal failure, are more likely to have the opportunity and skills to undertake psychological and social interventions than are physicians working in more acute circumstances and surgeons.

3) *referral of a small* proportion of patients who posed more difficult problems of diagnosis and management for assessment and treatment by specialist psychiatric and psychological services using standard and proven psychiatric interventions. The success of this approach which combines both better routine and selective specialist care will require greater skills and commitment by general hospital physicians and surgeons and by psychiatric services. It also requires the effective use of multidisciplinary expertise of the whole of the general hospital clinical team doctors, nurses, physiotherapists and other disciplines. of holistic care. In particular, it is likely to require a greater number of specialist nurses who have training and supervision in both physical and psychological methods of care of the model described by Maguire and his colleagues (Hopwood & Maguire, 1992). This involves systematic training of all general hospital staff in the recognition and general management of psychological problems, the appointment of specialist nurses with training in psychological assessment and management and the availability of a psychiatric consultation service. There is encouraging evidence that such a service can be both cost-effective and improve patient outcome without making overwhelming demands on psychiatric resources.

CONCLUSION

The growth in psychiatric research into the psychological problems of general hospital patients, which has been associated with the development of the special interest of consultation liaison psychiatry, has resulted in much greater knowledge of the nature of clinical problems and of their clinical significance and of the treatment. There is encouraging evidence that specific interventions can be effective, even though the attempts to evaluate consultation liaison services have been very disappointing (Goldberg, 1992).

We are now in a position to define priorities and to put forward a well-reasoned case for the role of improved routine care and better specialist services. There remains a need for high quality research, using the methodologies now expected in other areas of psychiatric research, and directed to the effectiveness of treatments and ways of delivering them in a cost-effective manner. It is essential that such evaluative research accompanies the development of new services.

Psychological care within general hospitals is often seen as having a much lower priority than the care of major mental illness, when, in fact, both are important priorities for medicine as a whole, both in developed and in developing countries. Psychological care in the general hospital and in general medical services is likely to affect very large numbers of people, but any increase in resource costs may well be substantially offset by savings in the more efficient use of other medical resources and in the reduction of disability.

REFERENCES

Cooper B. (1987). Psychiatric disorders among elderly patients admitted to hospital medical wards. *Journal of the Royal Society of Medicine* 80, 13-16.

Cooper J.E. (1990). The classification of mental disorders for use in general medical settings. In *Psychological Disorders in General Medical Settings* (ed. N. Sartorius., D. Goldberg, G. de Girolamo, J. Costa e Silva, Y. Lecrubier and U.Wittchen), pp. 49-59. Hogrefer and Huber Publishers: Kirkland (WA).

Fink P. (1992). Surgery and medical treatment in persistent somatizing patients. *Journal of Psychosomatic Research* 36, 439-447.

Fogel B.S. (1990). Major depression versus organic mood disorder: A questionnable distinction. *Journal Clinical Psychiatry* 51, 53-56.

Fuhrer M.J., Rintala D.H., Hart K.A., Clearman R. & Young M.E. (1993). Depressive symptomatology in persons with spinal cord injury who reside in the community. *Archives of Physical and Medical Rehabilitation* 74, 255-260.

Gater R. & Goldberg D. (1991). Pathways to psychiatric care in South Manchester. *British Journal of Psychiatry* 159, 90-96.

Goldberg D. (1990). Reasons for misdiagnosis. In *Psychological Disorders in General Medical Settings*
(ed. N.Sartorius., D.Goldberg, G. de Girolamo, J. Costa e Silva, Y. Lecrubier and U.Wittchen), pp. 139-145. Hogrefer and Huber Publishers: Kirkland (WA).

Goldberg D. (1992). The treatment of mental disorders in general medicine settings. *General Hospital Psychiatry* 14, 83-85.

Hawton K.E. & Catalan J.P. (1987). *Attempted Suicide: a Practical Guide to its Nature and Management*, 2nd edn. Oxford University Press: Oxford.

Holland J.C. & Rowland J.H. (1989). *Handbook of Psychooncology. Psychological Care of the Patient with Cancer.* Oxford University Press: New York.

Hopwood P. & Maguire P. (1992). Priorities in the psychological care of cancer patients. *International Review of Psychiatry* 4, 35-44.

Iles S. & Gath D. (1993). Psychiatric outcome of termination of pregnancy for foetal abnormality. *Psychological Medicine* 23, 407-413.

Koponen H.J. & Riekkinen P.J. (1993). A prospective study of delirium in elderly patients admitted to a psychiatric hospital. *Psychological Medicine* 23, 103-109.

Lewis S. (1994). ICD-10: a neuropsychiatrist's nightmare? *British Journal of Psychiatry* 164, 157-158.

Ludwick-Rosenthal R. & Neufeld R.W.J. (1988). Stress management during noxious medical procedures: an evaluative review of outcome studies. *Psychological Bulletin* 104, 326-342.

Martin C.J., Brown G.W., Goldberg D.P. & Brockington I.F. (1989). Psycho-social stress and puerperal depression. *Journal of Affective Disorders* 16, 283-293.

Mayou R.A. (1991). Patients' fears of illness, chest pain and palpitations. In *Medical Symptoms not Explained by Organic Disease* (ed. F.Creed, R.A.Mayou and A.Hopkins). Royal College of Psychiatrists: London.

Mayou R.A. & Hawton K.E. (1986). Psychiatric disorder in the general hospital. *British Journal of Psychiatry* 149, 172-190.

Mayou R.A. & Huyse, F. (1991). European workgroup for consultation liaison psychiatry. Consultation liaison psychiatry in Western Europe. *General Hospital Psychiatry* 13, 188-208.

Mayou R.A., Seagroatt V. & Goldacre M. (1991). Use of psychiatric services by patients in a general hospital. *British Medical Journal* 303, 1029-1032.

Mayou R.A., Bass C. & Sharpe, M. (in press). *Treatment of Functional Somatic Symptoms.* Oxford University Press: Oxford.,

Meakin C.J. (1992). Screening for depressiion in the medically ill. The future of paper and pencil tests. *British Journal of Psychiatry* 160, 212-216.

Paykel E.S. & Priest R.G. (1992). Recognition and management of depression in general practice: consensus statement. *British Medical Journal* 305, 1198-1202.

Paykel E.S., Freeling P. & Hollyman J.A. (1988). Are tricyclic antidepressants useful for mild depression? A placebo controlled trial. *Pharmacopsychiatry* 21, 15-18.

Schor J.D., Levkoff S.E., Lipsitz L.A., Reilly C.H., Cleary P.D., Rowe J.W. & Evans D.A. (1992). Risk factors for delirium in hospitalized elderly. *Journal American Medical Association* 267, 827-831.

Sharpe M., Peveler R. & Mayou R.A. (1992). Invited review. The psychological treatment of patients with functional somatic symptoms: a practical guide. *Journal of Psychosomatic Research* 36, 515-529.

Sharpe M., Mayou R.A., Seagroatt V., Surawy C., Warwick H., Bulstrode C., Dawber R. & Lane D. (1994). Why do doctors find some patients difficult to help? *Quarterly Journal Medicine* 87, 187-193.

Spitzer R., First M.B., Williams J.B.W., Kendler K., Pincus H.A. & Tucker G. (1992). Now is the time to retire the term «organic mental disorders». *American Journal of Psychiatry* 149:2, 240-244.

Starkstein S.E. & Robinson, R.G. (1993). *Depression in Neurologic Disease.* The John Hopkins University Press: Baltimore.

Stewart A.L., Greenfield S., Wells K., Rogers W.H, Berry S.D., McGlynn E.A. & Ware J.E. (1989). Functional status and well-being of patients with chronic conditions. *Journal American Medical Association* 262, 907-913.

Sutherland A.J. & Rodin, G.M. (1990). Factitious disorders in a general hospital setting: clinical features and a review of the literature. *Psychosomatics* 31, 392-414.

Van Hemert A.M., Hengeveld M.W., Bolk J.H., Rooijmans H.G. & Vandenbrouche J.P (1993). Psychiatric disorders in relation to medical illness among patients of a general medical out-patient clinic. *Psychological Medicine* 23, 167-173.

von Korff M. (1992). Case definitions in primary care: the need for clinical epidemiology. *General Hospital Psychiatry* 14, 293-295.

Wallen J., Pincus H.A., Goldman H.H. & Marcus S.E. (1987). Psychiatric consultations in short-term general hospitals. *Archive of General Psychiatry* 44, 163-168.

Wells K.B., Golding J.M. & Burnam, M.A. (1988). Psychiatric disorder in a sample of the general population with and without chronic medical conditions. *American Journal of Psychiatry* 145, 976-981.