Presidential Address

THE FUTURE OF PSYCHIATRY:
THE NEED TO RETURN TO THE FIELD OF MEDICINE

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Respected chairpersons and members of the Indian Psychiatric Society,

I became a member of the Indian Psychiatric Society in 1969, the same year as I completed my post graduate training in psychiatry. A few months later I had the memorable experience of attending the society's annual conference and presenting a paper. Since then, IPS has always given me a sense of belonging, a sense of comraderie with fellow psychiatrists in every nook and corner of this country and opportunity to share concepts and concerns with them. I have had the opportunity to take up many responsibilities in this organisation and to me each of those occasions was a milestone in the growth of my emotional attachment to the IPS. As I assume the office of the President of our society, I consider it as the beginning of yet another phase in this ever growing relationship and I thank my fellow members for making it possible.

In any serious relationship, there comes periods of special significance when the parties involved should pause and not only relive the pleasant memories of the past, but also look at the future and consider what lies ahead. The same way, I would like to take this moment of special significance for me in my relationship with IPS, to consider what I believe, is a direction which holds a lot of promise for the growth of psychiatry in this country.

Fifty years ago when the Indian Psychiatric Society came into existence, the face of psychiatry, not only in India, but anywhere else in the world as well, was very different from what it is today. Psychiatry then, was mostly mental hospital centred. A group of physicians, who called themselves alienists, cared for patients suffering from various neuro-psychiatric disorders in asylums which were far away from general hospitals and population centres. Thus began the isolation of psychiatry from the rest of the active medical profession. The stranglehold of psychoanalysis on psychiatric theory and practice further intensified this isolation. The psychiatrist was looked upon as someone who used jargon which nobody else understood, propounded theories which could not be verified and carried out treatment which did not seem to make much of a difference to the patient, except that he also started using the same jargon as his therapist. One of the most tragic results of this intellectual and geographical isolation was that it aggravated the stigma of mental illness. It also made not only the rest of the world, but psychiatrists themselves forget that they were primarily physicians. Other physicians and even some among our own ranks, wondered whether psychiatry is relevant to the rest of medicine (Meyer, 1993). The medical student's exposure to psychiatry consisted of a two week posting in a mental hospital where he saw only the often naked and hungry chronic psychotic patients who did not seem to be amenable to any form of treatment. That exposure was so traumatic for many students that they decided to have nothing more to do with psychiatry during the rest of their professional lives.

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It looked as if, when the rest of medicine was making rapid progress in diagnostic and treatment aspects, psychiatry would be left behind and the alienist would be further alienated. Fortunately several developments which occurred in the last three or four decades of this century brought psychiatry out of its autistic withdrawal. These developments included establishment of general hospital psychiatry units (GHPUs), availability of potent psychopharmacological agents, introduction of brief but highly effective psychological methods of treatment, development of criteria based diagnoses, structured interview schedules and the conduction of epidemiological and natural history studies using these criteria and schedules.

The liberation of psychiatry from the confines of traditional mental hospitals and establishment of GHPUs, I believe, has been the most important step in the reintegration of psychiatry with the rest of medicine. This benefited the patient in many ways — by providing easy access to treatment facilities which are located in the community itself, removing the stigma associated with admission to a mental hospital, avoiding the damaging effect of long term institutionalization, promoting easy integration with the community on discharge from the hospital, mobilising rehabilitation measures in the early phase of illness itself and getting the patient's family involved in his care. Yet we are still not in a position to say that the establishment of GHPUs alone would achieve the integration of psychiatry with the rest of medicine. Even today many of our GHPUs remain as places where only patients with schizophrenia and affective disorders are treated purely with drugs and ECT — the same way as they would have been treated in a mental hospital, except for the absence of locked doors and overcrowding. But the nature of psychiatric problems seen in GHPUs and the type of help sought from us by our non-psychiatrist colleagues call for different approaches in diagnosis and management, and methods of communicating these to the patients, their families and the referring doctors. What is needed is the development of active consultation-liason services.

Prevalence of psychiatric problems in general hospital patients

Surveys conducted both in India and other countries have shown a high prevalence of psychiatric problems in patients admitted in general hospitals. At least one fourth of these patients suffer from psychiatric disorders or psychological factors which result in medically unnecessary complications in their treatment, leading to poor quality of life, poor compliance with treatment regimen, increased long term morbidity and mortality (Saravay, 1996). Medically unexplained symptoms are seen in a large number of inpatients (30-60%) and out patients (25 to 30%). These result in persistent distress, disability and excessive use of resources. Only about 1/3 of these patients get referred to psychiatrists.

Prevalence of psychiatric problems in specific patient groups in general hospitals

Prevalence of depressive disorder alone in the medically ill is found to be 10 to 20% (Meakin, 1992). Prevalence of depression in those with breast cancer is around 24% (Herringen & Zivkov, 1996). 18% of individuals who have road traffic accidents show acute distress characterised by anxiety or depression and frightening memories. 12 months later 25% of the subjects show evidence of depression, anxiety, PTSD and travel phobia (Mayou et al., 1993). Even when the accident result only in minor physical injury and therefore require little medical attention, the occurrence of PTSD had a high possibility (Di Gallo & Parry-Jones, 1996). Children and adolescents involved in accidents show a high degree of psychological disturbance soon after the accident and 17% develop PTSD on long term follow up (Di Gallo et al., 1997). PTSD and major depression are
seen in 34.6% of patients who underwent amputation while phantom phenomena are seen in 88% (Mall et al., 1997). Drug abuse or dependence are seen in 12% of chronic pain patients (Kouyanou et al., 1997). Maternity blues occur in 30 to 70% of women within 10 days of delivery, while post-partum depression is seen in about 20%. A post-partum psychosis (mostly bipolar affective disorder) is seen in 1-2/1000 births (Pritchard & Harris, 1996). Psychiatric disorders are common even among children seen in primary care (20%). Depression, anxiety and conduct disorders are the commonest problems seen among them (Gureje et al., 1994). In patients presenting with chronic abdominal pain, 68% are found to have psychiatric symptoms while 52% of them have a definite psychiatric disorder-dysthymia, anxiety disorders and somatoform disorders. 16% of these patients have both psychiatric and physical disorder which demonstrate the need for simultaneous care by different clinical specialities (Kachhwaha et al., 1994). Many admitted after attempted suicide also require such combined care from surgeons, general physicians, nephrologists, pulmonologists, psychiatrists and others.

The introduction of technologically complex methods like renal transplantation have made it necessary to pay attention to the psychological states of both the recipients (Kuruvilla et al., 1975) and donors (Kuruvilla et al., 1979).

Psychiatric illnesses may interfere with the rehabilitation of patients suffering from various physical disorders. Verma & Gautam (1993) reported the prevalence of psychiatric disorders in leprosy patients to be 76%. The prevalence rate was higher in the non-rehabilitated group than in the rehabilitated group. A high prevalence of depression has been noticed in patients who had mutilating forms of surgery, like laryngectomy for carcinoma larynx, compared to those who had radiation therapy. Depression was related to social and geographical isolation, poor social support and poor communication skill. Need for psychiatric input was felt strongly in the rehabilitation of these patients (Byrne et al., 1994). 62% of the patients who underwent amputation 6 to 24 months earlier, were found to have psychiatric problems. Persistent phantom phenomenon was more in the psychiatrically ill. Both these interfere with rehabilitation process and so the patients required psychiatric help (Trivedi et al., 1997).

The unmet challenge

The problems seen by a psychiatrist who is called upon to see a patient admitted in a general hospital clinical units could be any one of the following:
(i) Somatic presentation of underlying psychiatric disorder, (ii) Psychological reaction to a physical disorder, (iii) Psychiatric complications of a physical illness, (iv) Abnormal behaviour resulting in physical problems, (v) Psychosomatic disorders, (vi) Chance coincidence of psychiatric and physical illness.

Thus the psychiatrist working in GHPUs is called upon to identify and treat not only major mental illnesses but also a large number of minor psychiatric and behavioural disorders. He has to be skilled to recognise the presence of psychiatric illness in the presence of physical illness and develop methods of treatment which will improve the former, without worsening the latter. However, many psychiatrists are preoccupied with major mental illnesses and community services alone (Kessel, 1996) and reject the opportunities for new roles and responsibilities especially in the care of non-psychotic disorders. As Wessley (1996) pointed out, a retreat from the care of those with non-psychotic disorders has been accompanied by an abdication of interest in a very large proportion of psychiatric disorders which could exclude psychiatry itself from medicine.

One of the factors which dissuade some psychiatrists from getting involved in the care of psychiatric problems seen in the physically
ill, is the difficulty in diagnosis, since it requires modification in some of our conventional approaches. For example, the diagnosis of a depressive disorder in a physically ill person on the basis of biological symptoms may be misleading because the physical illness itself may be the cause of these symptoms. The diagnosis in such cases has to rely on other features of depression. For example, in the detection of postnatal depression, one has to use an instrument like the Edinburgh Post Natal Depression Scale, so that loss of weight, loss of appetite and loss of libido which could be part of the normal post-partum phenomena do not confound the diagnosis.

The treatment of psychiatric disorders seen in general hospitals, also pose challenges to our treatment methods—both pharmacological and psychological. While most pharmacological agents used in the treatment of psychiatric problems in other settings are useful in treating patients in general hospitals also, the dosage requirements of the physically ill could be vastly different—often much smaller. They are also particularly susceptible to the side effects of psychotropic drugs. The concomitant use of various other medicines for the treatment of their physical illnesses increase the risk of drug interaction and demand extreme co-operation and communication between the primary physician and the psychiatrist.

Yet another requirement for the C-L psychiatrist is to be adept at the use of short and effective psychological methods of treatment. We are often very vocal in our criticism of our non-psychiatrist colleagues for their failure to recognize the psychiatric disorders in their patients and their reluctance to refer such patients to us. The non-psychiatrist physician however, often wonders why he should send his patient to the psychiatrist, if all what the patient gets is a prescription for alprazolam or fluoxetine, which the referring physician himself could have given. In other words, the recognition of psychiatry as a useful medical specialty will happen only if we are able to render some specialised kind of service for the patients referred to us. It is in this context that our awareness about the role of psychosocial issues in the causation of many disorders and our ability to use psychological methods of treatment became useful. The development of behavioural medicine as a sub speciality and the growth of behavioural and cognitive therapies with well-proven efficacy are the most significant developments which have occurred in this area.

Contributions of behavioural medicine

Current developments in behavioural medicine have given us aetiological concepts which can be verified, as well as treatment methods the efficacy of which can be measured. With regard to our understanding of the aetiology of many disorders, behavioural medicine has been particularly involved in the area of psychoneuroimmunology. Chronic stressors are found to be associated with long-term hypothalamic pituitary adrenocortical (HPAC) activity and prolonged immune suppression. This in turn is found to be influenced by psychological variables such as intrusive ideation and hostility (Petrie et al., 1995; Christensen et al., 1996). Depression is found to result in immuno-suppression, possibly mediated through cortisol and neurotransmitters like serotonin (Maes et al., 1995). Those with major depression especially with a positive family history, have been found to have lower natural killer (NK) cell activity and higher proliferative response to mitogens, thereby indicating a biological vulnerability for NK cell activity decrement (Bauer et al., 1995). Social support is found to have a positive effect on immunity (Uchino et al., 1996). Psychological factors are found to influence indices of HIV progression, such as CD4 cells. HIV infected persons who experience less severe life adversity and less severe depression show less decline in the immune system (Eliner, 1995). High degree of hopelessness and depression are found to be correlated with a higher incidence of cancer and cancer-related mortality (Everson et al., 1996). Psychological factors such as stress, anger and
hostility are found to be related to coronary heart disease, possibly through enhanced sympa-tho-adrenal activity (Myrtek, 1995). These and similar findings have given a scientific basis for the GHPU psychiatrists understanding of the relationship between psychological factors and physical disorders.

The contribution of behavioural medicine in the treatment of various non-psychotic disorders and psychological problems seen in the physically ill, have been mostly through cognitive behaviour therapy (CBT). In the treatment of cancer, cognitive and behavioural techniques are found to be useful in reducing (i) reactions like nausea and vomiting, secondary to chemotherapy or radiation therapy, (ii) emotional distress like anxiety and depression, and (iii) in improving quality of life (Devine & Westlake, 1995; Baskar, 1997). Behavioural techniques aimed at modification of life style through reduction of weight, dietary sodium and alcohol intake and increased physical activity were helpful in the control of mild hypertension (Elmer et al., 1995). CBT was helpful in post-myocardial infarction patients, who were depressed and had low social support, to reduce reinfarction and mortality rates (Gellman et al., 1998). The experience of chronic pain is found to be related to attentional processes and reinforcement factors from the environment. CBT is found to be able to modify these cognitive and behavioural factors and improve the patient's ability to cope with the pain.

CBT based coping interventions are also found to be helpful in decreasing depression, intrusive experiences, grief reaction and demoralisation in AIDS patients (Folkman and Chesney, 1995). Blood Glucose Awareness Training aimed at enabling insulin dependent diabetes mellites patients to recognise fluctuations in their blood glucose levels, make use of behavioural and cognitive techniques (Cox et al., 1995). CBT is also found to be useful in the area of prevention, by modifying behaviours which predispose to the development of illnesses, altering life styles and promoting coping skills. These techniques have been effective in controlling the use of alcohol and nicotine and promoting weight loss in obese patients (Brownell and Cohen, 1995). Behavioural strategies like assertive training has been found to have a role in the prevention of the spread of HIV infection (Ford et al., 1996).

Noncompliance with medical advice is a problem encountered by all branches of clinical medicine and the C-L psychiatrist can be of help in this area. Detailed analysis of noncompliant behaviour often helps in designing strategies like contingency contracting to reduce this problem.

In spite of the fact that there are many psychosocial methods of treatment with proven efficacy for the use of psychotic and non-psychotic conditions, there is a general tendency among psychiatrists not to take the trouble to acquire these skills and relegate psychotherapy to non-medical therapists and function only as supervisors. This is unfortunate because we cannot supervise what we do not understand or in which we have only limited experience. Also there are many conditions where the patient needs both psychological and pharmacological treatment and it is advantageous if both are given by the same therapist. Simultaneous attention to the psychological and the physical aspects of an illness is a unique capacity of psychiatry and it gives the patient a superior kind of psychiatric care (Pardes, 1996).

Care of the physical diseases in psychiatric patients

Greater integration with the rest of medicine is not only required at the level of psychiatrist rendering help in the treatment of the psychological problems of the medically ill patients, but it also implies the sharpening of our own skills in the diagnosis and treatment of common physical disorders in our patients. This becomes particularly valuable in the case of those patients who are seen in centres where only psychiatric patients are taken care of. The
prevalence of physical disorders in psychiatric patients is found to be higher than in the general population. This is so, both in patients who are admitted in hospitals as well as those who remain in the community. 46% of patients admitted to mental hospitals had unrecognised physical disorder and 80% of them required treatment. 4% had precancerous conditions (Hall et al., 1981). Lima and Pai (1987) reported that 38% of patients with schizophrenia and 53% of those with neurotic disorders had physical disorders—the common ones being diabetes, hypertension, obesity, asthma, seizures and orthopaedic injuries. In the elderly (Bhogale & Sudarshan, 1993) and longstay patients (Kuruvilla, 1973) the prevalence of physical illness are even higher. Persons with psychiatric illnesses are also found to have other risk factors like smoking, alcohol use and obesity (Kendrick, 1996).

Patients with coexisting physical and psychiatric illnesses have a poorer outcome in their psychiatric disorder than those who have only a psychiatric disorder. Physical illness is as important a poor prognostic factor as severity of psychiatric illness and lack of social support. Thus there is a great need for increased concern in this area (Kisley and Goldberg, 1997). Even in developed countries, very little attention is paid to the physical problems of psychiatric patients. A physical examination is performed only on 13% of inpatients and 8% of outpatients (McIntyre and Romano, 1977). The psychiatrist often does not use and therefore allows his medical skills to deteriorate over the years. The patient with a serious psychiatric illness may receive treatment which improves his psychological state, but will continue to suffer because of the poorly treated diabetes, hypertension etc. The quality of care for non-psychiatric disorders in the psychiatric patients should be as high as that for any patient without a psychiatric problem. A psychiatrist with strong medical skills will not only be able to care for the common physical ailments of his patients, but also function as co-ordinator of the services given by other clinical specialists when the patient's condition demands such consultations. In many ways the psychiatrist may even be at specially advantageous position to do this care for physical problems, because out of the twenty most frequent symptoms for which patients visit their family physicians six are primarily or significantly caused by stress, behavioural mal-adjustments or psychiatric disorder. 41% of all the services ordered or provided by primary care physicians are counselling for weight reduction, smoking cessation and steps to prevent HIV transmission (Ostergard & Schmittling, 1994).

Impact on research

Reintegration with the rest of medicine will also make it necessary for us to maintain greater rigour in the evaluation of our diagnostic and treatment methods, which in turn may give us better understanding about the aetiology of psychiatric disorders. By adopting methods of evaluation which are acceptable to the general community of scientific medicine, we will be able to show that our concepts are based on objective evidence and not matters of individual opinion or introspection.

Implications for training

If we have to achieve the goal of producing psychiatrists, who are capable of treating not only psychotic disorders, but also nonpsychotic conditions, and can take care of not only the mind, but also the body of their patients, our training programmes need to be significantly modified. Many training programmes in this country are still mental hospital based and the trainees often are unprepared to deal with the ordinary psychiatric problems seen in the general hospitals or in private practice. This can be remedied only by having at least a year of mandatory training in a GHPU. It is not enough if he merely spends one year in a GHPU, but he must learn to manage psychiatric problems seen in the physically ill and be trained in the use of both
The future of psychiatry: the need to return to the field of medicine

psychological as well as somatic methods of treatment. If he has to become effective in communicating with his other medical colleagues and also become capable of being able to handle common physical disorders, at least three months each of training in general medicine and neurology, will be necessary. It is a pity that in many of our training centres, the emphasis on these areas are getting gradually watered down and in some centres they have even been eliminated from the examination system.

The psychiatrist’s re-emergence as a physician also will make him more effective in communicating and interacting with the undergraduate medical students, whose basic orientation is “physical”. Unless we are able to communicate with him in an idiom which he comprehends, all our efforts to train the basic doctor capable of giving comprehensive care—which includes detection and treatment of both physical and psychological disorders—to his patients will be futile.

The psychiatrist’s presence in the general hospital and availability for on-site evaluation, also facilitates giving a psychiatric orientation to other specialists and their trainees. The doctor-patient relationship is something which gets overlooked with advances in medical technology. A psychiatrist often can bring this to the attention of other physicians and show them, how to focus on people and how they can be understood.

Need to know our limitations

Harris (1997) in a skit recently published in the Bulletin of the Royal college of Psychiatrists, described an enduring personality change, not attributable to brain damage or disease, occurring in psychiatrists. The main characteristics of this problem are: a) a reluctance to use the terms “psychiatry” and “mental illness” believing these to be degrading to the patients and a willingness to abandon them in favour of “mental health”. Doctor with this disorder often ape solicitors or prostitutes and refer to their patients as “clients” ; b) an overwhelming and absorbing interest in the possibility of holding office, sitting at the top table and advising ministry ; c) the adoption of a strange language, using indiscriminately and sometimes randomly, words like ‘empower’, ‘enable’ ‘mental’ ‘distress’, ‘user’, ‘resource’, ‘community’, ‘issues’, ‘rights’. Only fellow sufferers understand them fully; d) symptoms worsen with age and are inversely proportional to the day to day contact with patients.

Associated features of this disorder include: (i) frequent attendance at professional meetings ; (ii) close contact with professional agencies and policy makers ; (iii) too deeply involved with non-medical voluntary agencies ; (IV) blunting of interest in the mentally ill and the psychiatric profession.

I am afraid many of us fulfil these criteria and they are symptomatic of a return of our alienation from the field of active medical work.

More than thirty years ago, Henry Miller, the famous neurologist, admonished us psychiatrists, for our tendency to exhibit expertise in areas where we have none, instead of concentrating our energies on acquiring better skills in the diagnosis and treatment of psychiatric disorders which come to us for treatment. He pointed out how other branches of medicine have made great progress by restricting themselves and advised us to do the same. I am afraid, however, that the penchant to make public utterances about how to alleviate poverty, how to prevent a third world war and how to reduce global warming, has not yet left us.

This tendency to make authoritative statements on topics outside our professional competence, get reinforced because of the attention the public and the media give to them though, I suspect nobody takes us seriously on such issues. Of course, like any good citizen, the psychiatrist also should be interested in larger national and international issues, but we need to frequently remind ourselves that we are
basically medical men, whose expertise lies in the diagnosis and treatment of certain psychiatric disorders. Such a self awareness will prove to be beneficial for our patients and the future of our profession.

CONCLUSION

We can rightly be proud of the significant progress psychiatry has made in the last three decades. We need not allow any sense of inadequacy keep us away from our colleagues in other branches of medicine. With criteria based diagnostic systems, the reliability of psychiatric diagnoses has become equivalent to the reliability of diagnoses in general medicine (Faraone & Tsuang, 1994). Efficacy of treatment for selected psychiatric conditions is comparable or superior to the efficacy of treatment for general medical illnesses (Davis et al., 1993). Thus, as psychiatry approaches the year 2000, it has vastly changed from the psychiatry of the 1960s. A greater focus on diagnosis, more robust attempts to apply research to practice and increased availability of effective treatment methods, have all led to a more sophisticated discipline. We will be able to pass on to our patients the benefits of this progress in psychiatry, only by reintegrating psychiatry with other branches of medicine. Psychiatrists as medical specialists are more similar, rather than being different from other physicians and should participate in the integrated delivery of medical care.

REFERENCES

Baskaran, S.A. (1997) Behavioural management of patients with cancer. Thesis submitted to NIMHANS, Bangalore.

Bauer, S., Gauer, G.J., Luz, C., Silveira, R.O., Nardi, N.B. & Von Muhlen, C.A. (1995) Evaluation of immune parameters in depressed patients. Life Sciences, 57, 565-674.

Bhogale, G.S. & Sudarshan, C.Y. (1993) Geriatric patients attending a general hospital psychiatry clinic. Indian Journal of Psychiatry, 35, 203-205.

Brownell, K.D. & Cohen, L.R. (1995) Adherence to dietary regimens: components of effective interventions. Behavioural Medicine, 20, 155-164.

Byrne, A., Walsh, M., Farely, M. & O'Driscoll, K. (1993) Depression following laryngectomy. British Journal of Psychiatry, 163, 173-176.

Christensen, A.J., Edwards, D.L., Wiebe, J.S., Benotsch, E.G., McKeelvey, L., Andrews, M. & Lubaroff, D.M. (1996) Effect of self-disclosure on natural killer cell activity: moderating effect of cynical hostility. Psychosomatic Medicine, 58, 150-155.

Cox, D., Gonder-Frederick, L., Polonsky, W., Schlundt, D., Julian, D. & Clarke, W. (1995) A multicentre evaluation of blood glucose awareness training II. Diabetes Care, 18, 523-528.

Davis, J.M., Wang, Z. & Janicak, P.G. (1993) A quantitative analysis of drug trials for the treatment of affective disorders. Psychopharmacology Bulletin, 29, 175-181.

Devine, E.C. & Westlake, S.K. (1995) The effects of psychoeducational care provided to adults with cancer: metaanalysis of 116 studies. Oncology Nurses Forum, 22, 1369-1381.

DiGallo, A. & Parry-Jones, W.L.I. (1996) Psychological sequelae of road traffic accidents: an inadequately addressed problems. British Journal of Psychiatry, 169, 405-407.

DiGallo, A., Barton, J. & Parry-Jones, W.L.I. (1997) Road traffic accidents: early psychological consequences in children and adolescents. British Journal of Psychiatry, 170, 358-362.

Eller, L.S. (1995) Effects of two cognitive-behavioural interventions on immunity and symptoms in persons with HIV. Annals of Behavioural Medicine, 17, 339-348.

Elmer, P.J., Grimm, R., Laing, B., Grandits, G., Svendsen, K., Van Heel, N., Betz, E., Raines, J., Link, M., Stamler, J. & Neaton, J. (1995) Lifestyle intervention: results of the treatment of mild hypertension study. Preventive Medicine, 24,
Everson, S.A., Goldberg, D.E., Kaplan, S.A., Cohen, R.D., Pukkala, E., Tuomilehto, J. & Salonen, J.T. (1996) Hopelessness and the risk of mortality and incidence of myocardial infarction and cancer. Psychosomatic Medicine, 58, 113-121.

Faraone, S.V. & Tusang, M.T. (1994) Measuring diagnostic accuracy in the absence of a gold standard. American Journal of Psychiatry, 151, 650-657.

Folkman, S. & Chesney, M. (1995) Coping with HIV infection in chronic diseases. (Eds.) Stein, M., Bauman, A. & Mahwah, N.J., Lawrence. M. Associates, 115-134.

Ford, K., Wirwan, D.N., Fajans, P., Meliawan, P., Mac Donald, K. & Thorpe, L. (1996) Behavioural intervention for the reduction of sexually transmitted disease/HIV transmission among female commercial sex workers and clients, in Bali, Indonesia AIDS, 10, 213-222.

Gureje, O., Omigbodun, O.O., Gater, R., Acha, R.A., Ikkuesan, B.A. & Moris, J. (1994) Psychiatric disorders in paediatric primary care clinic. British Journal of Psychiatry, 165, 527-529.

Hall, R.C.W., Gardner, E.R., Popkin, K.K., Lecann, A.F., & Stickney, S.K. (1981) Unrecognised physical illness prompting psychiatric admission. American Journal of Psychiatry, 138, 529-535.

Harris, V. (1997) Skit. Psychiatric Bulletin, 21, 512-513.

Van Heeringen, K. & Zivkov, M. (1996) Pharmacological treatment of depression in cancer patients. British Journal of Psychiatry, 169, 440-443.

Kachhwaha, S.S., Chadda, V.S., Singhal, A.K. & Bhardwaj, P. (1994) Psychiatric morbidity in patients with chronic abdominal pain. Indian Journal of Psychiatry, 36, 170-172.

Kendrick, T. (1996) Cardiovascular and respiratory risk factors and symptoms among general practice patients with long-term mental illness. British Journal of Psychiatry, 169, 733-739.

Kessel, N. (1998) Should we buy liaison psychiatry? Journal of Royal Society of Medicine, 69, 482-487.

Kisley, S.R. & Goldberg, D.P. (1997) The effect of physical ill health on the course of psychiatric disorder: in general practice. British Journal of Psychiatry, 170, 536-540.

Kouyanou, K., Pither, C.E. & Wessley, S. (1997) Medication misuse, abuse and dependence in chronic pain patients. Journal of Psychosomatic Research, 43, 497-504.

Kuruvilla, K. (1973) Physical illness in long-stay psychiatric patients. Indian Journal of Psychiatry, 15, 383-385.

Kuruvilla, K., Rao, M. & Johny, K.V. (1975) Psychiatric aspects of renal transplantation: some observations on recipients. Indian Journal of Psychiatry, 17, 26-32.

Kuruvilla, K., Pandey, A.P. & Shastry, J.C.M. (1979) Psychiatric aspects of renal transplantation: observations on donors. Indian Journal of Psychiatry. 21, 155-158.

Lima, B.R. & Pai, S. (1987) Concurrent medical and psychiatric disorders among schizophrenic and neurotic outpatients. Community Mental Health Journal, 23, 30-39.

Mc Intyre, J.S. & Romano, J. (1977) Is there a stethoscope in the house (and is it used)? Archives of General Psychiatry, 34, 1147-1151.

Maes, M., Smith, K. & Scharpe, S. (1995) The monocyte-T-Lymphocyte hypothesis of major depression. Psychoneuroendocrinology, 20, 111-116.

Mall, C.P., Trivedi, J.K., Mishra, U.S., Sharma, V.P., Dalal, P.K., Katiyar, M., Srivastava, S. & Sinha, P.K. (1997) Psychiatric sequelae of amputation-I-Immediate effects. Indian Journal of Psychiatry, 39, 313-317.

Mayou, R., Bryant, B. & Duthie, R. (1993) Psychiatric consequences of road traffic accidents. British Medical Journal, 307, 647-651.

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

Meyer, R.E. (1993) The economics of survival for academic psychiatry. Academic Psychiatry, 17, 149-160.
Myrtek, M. (1995) Type A behaviour pattern, personality factors, disease and physiological reactivity, a meta-analytic update. *Personality and Individual Differences*, 18, 491-502.

Ostergard, D.J. & Schmittling, G. (1994) Profile of family physicians in the United States, in family medicine. *Principles and Practice* (Ed.) Taylor, B., New York: Springer-Verlag. 1040-1048

Pardes, H.P. (1996) A changing psychiatry for the future. *American Journal of Psychiatry*, 153, 1383-1387

Petrie, K.J., Booth, R.J., Pennebaker, J.W., Dawson, K.P. & Thomas, M.G. (1995) Disclosure of trauma and immune response to a hepatitis B vaccination programme. *Journal of Consulting and Clinical Psychology*, 63, 787-792.

Pritchard, D.B. & Harris, B. (1996) Aspects of perinatal psychiatric illness. *British Journal of Psychiatry*, 169, 555-562

Saravay, S.M. (1996) Psychiatric interventions in the medically ill. *Psychiatric Clinics of North America*, 19, 467-480

Trivedi, J.K., Mall, C.P., Mishra, U.S., Sharma, V.P., Dalal, P.K., Katiyar, M., Srivastava, S. & Sinha, P.K. (1997) Psychiatric sequelae of amputation il-long term effects. *Indian Journal of Psychiatry*, 39, 318-323

Uchino, B.N., Cacioppo, J.T. & Kiecolt-Glaser, J.K. (1996) The relationship between social support and physiological processes, a review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin*, 119, 488-531

Verma, K.K. & Gautam, S. (1994) Effect of rehabilitation on the prevalence of psychiatric morbidity among leprosy patients. *Indian Journal of Psychiatry*, 36, 183-186.

Wessley, S. (1996) The rise of counselling and the return of alienism. *British Medical Journal*, 313, 158-160.