

The neglected role of stress in illness

Murad Moosa Khan

Department of Psychiatry, Aga Khan University, Karachi.

It has been more than fifty years since the brilliant Canadian researcher, Dr. Hans Selye, defined 'stress' in a medical sense.¹ Research over this period of time has shown beyond doubt that stress can be an important factor both in the aetiology as well as prognosis of many medical illnesses. Disorders such as high blood pressure, heart disease, bronchial asthma, irritable bowel, peptic ulcer, tension headaches, migraine, backache, insomnia, anxiety, depression and many other conditions may be the result of the individual's inability to cope with the stress in his life adequately.² Despite this, medical science in general and the medical body of Pakistan in particular, chooses to ignore stress as an important contributory factor in their patients' illnesses.

Stress related disorders have replaced infectious diseases as the major health afflictions of the 21st century. Yet the response of medical science has been to develop more sophisticated tests and more expensive medicines. Scant regard is paid to helping patients develop stress relieving techniques. In Pakistan the problem is further complicated by the fact that majority of people have their own belief systems regarding health and illness as demanding intravenous drips for 'weakness' and 'TV X-ray' (CAT/MRI Scan) for headaches being two examples. It is not unusual to come across prescriptions that are a polypharmacy of an analgesic, a tranquiliser, an antidepressant and a vitamin compound.³ These are in addition to the medicines for the primary disorder.

Research has shown that emotional and psychological distress (which may be caused by excessive stress) may be the early manifestation of many physical diseases or may itself cause the disease. For example, the stress of bereavement and the depression that may follow it have been associated with measurable reductions in the efficiency of the immune mechanisms, and with increased vulnerability to infectious disease, cancers and acute cardiac failure.⁴ Depressive illness has been shown to be a common early manifestation of the development of cancer, presenting well before more specific physical symptoms in many cases.⁵ It has also been shown to precede acute myocardial infarction at a much more than chance level of frequency.⁶ Thus emotional and psychological changes cannot be ignored in any consideration of general health status, nor can they be

ignored in the analysis of risk factors in individual cases.

The goal of medicine should be to understand the patients as persons, to establish the circumstances that precipitated their illness - the underlying conflicts, hostilities, griefs, losses - in other words to treat the patients as a "whole". The modern physician should and must know as much about emotions and thoughts as about disease symptoms and drugs. In today's world this holistic approach would appear to hold more promise of cure than anything that medicine has given us to date. Unfortunately what we see around us in Pakistan today are distressed patients, unethical medical practices, unnecessary investigations, prolonged hospitalizations and inappropriate and potentially damaging treatments followed by exorbitant fees.⁷

In general it can be said that the current practice of medicine in Pakistan relies too heavily on the medical model of illness, whereby a patient is seen to have a complaint which needs certain investigations followed by treatment, which in most cases are drugs. Doctors in Pakistan - whether they are general practitioners or specialists - hardly ever bother to enquire about the psychosocial factors in their patient's histories. It is comforting and less time consuming for the doctor to stay within the confines of the medical model, for that is how we have been made to think. After all, one only diagnoses what one thinks about - and hardly any of our doctors think of factors other than the physical ones.

Skills and knowledge about dealing with psychosocial factors and stress management techniques are seldom taught in our medical colleges. Yet a large number of patients - perhaps as many as forty percent in our country presenting to the general practitioners and to the various specialists' clinic do not fit into this medical model.⁸ People appear to be becoming more and more dissatisfied with medical care they receive despite the advancement in the field of medical science. Hence the large number of people who visit homeopaths and hakims in our country.⁹ In the West more and more people are turning to practitioners of 'alternative medicine' for relief of symptoms which orthodox medicine has failed to alleviate.¹⁰

Stress research studies have emphasized the importance of maintaining homeostasis or a balance between different aspects of our lives.¹¹ Any disruption of this homeostasis can cause the breakdown of the organism

whereby one can develop a stress related disorder depending on the 'weak link' in the structure of the organism. According to this view of health and disease there are not merely individual interactions between pathogens and human beings but they also involve the entire spectrum of other relationships - including those with one's spouse, employer, children, neighbours, one's medical or spiritual advisor as well as the community at large.

Too much emphasis has been directed towards specific pathogens and specific disease models, and not enough towards the patient and how he or she developed the particular disease. Only when we shift our focus from diseased parts to the whole being can we learn more about what activates the stress reaction in the organism and why stress affects different people in different ways.

The concept of health has to be one which integrates the question of body, mind and spirit. This holistic approach aims at enhancing our total well being, in part through self-awareness. By learning to gauge our own innate energy, potential weaknesses and strengths, we can all benefit from this approach. In the final analysis each of us is responsible for his or her own health and well being. This is particularly true for Pakistan where the great majority of doctors are unaware of the role of stress in various physical and psychological illnesses. Health is too important an issue to be left in the hands of physicians only!

Mental health and behavioural science disciplines can also provide some of the knowledge and skills necessary to reverse this process. It is therefore important to ensure that these are incorporated in the medical curriculum and training of all doctors. Few medical colleges in Pakistan include behavioral sciences and mental health at undergraduate level. While the teaching of psychiatry is a PMDC requirement, a certifying examination in psychiatry

is not mandatory.¹² Therefore few students take the subject seriously, with the result that generations of Pakistani physicians go through medical schools with little or no exposure to mental health issues.

Just as wars cannot be avoided by developing more sophisticated weapons, so disease can never be completely eradicated merely by improvements in pharmacology, immunotherapy, or any other purely medical means. Physicians should and must become more knowledgeable about the role of stress in their patients' lives, their stress level and about effective stress coping techniques.

References

1. Selye H. The general adaptation syndrome and the diseases of adaptation. *South Med J* 1951; 113: 315-23.
2. Selye H. *Stress in Health and Disease*. Boston: Butterworth, 1976.
3. Siddiqi S, Hamid S, Rafique G, Chaudhry SA, Ali N, Shahab S et al. Prescription practices of public and private health care providers in Attock District of Pakistan. *Int J Health Plann Manage*. 2002; 17:23-40.
4. Bleiker EM, van der Ploeg HM. Psychosocial factors in the etiology of breast cancer: review of a popular link. *Patient Educ Couns*. 1999;37:201-14.
5. Selye H. Correlating stress and cancer. *Am J Proctol Gastroenterol Colon Rectal Surg*. 1979; 30:18-20.
6. Kamarck TW, Schwartz JE, Shiffman S, Muldoon MF, Sutton-Tyrrell K, Janicki DL. Psychosocial stress and cardiovascular risk: what is the role of daily experience? *J Pers* 2005;73:1749-74.
7. Islam A. Health sector reform in Pakistan: future directions. *J Pak Med Assoc* 2002;52:174-82.
8. Husain N, Chaudhry I, Afsar S, Creed F. Psychological distress among patients attending a general medical outpatient clinic in Pakistan. *Gen Hosp Psychiatry* 2004;26:277-81.
9. Shaikh BT, Hatcher J. Complementary and Alternative Medicine in Pakistan: Prospects and Limitations. *Evid Based Complement Alternat Med* 2005; 2:139-42.
10. Artus M, Croft P, Lewis M. The use of CAM and conventional treatment among primary care consultants with chronic musculoskeletal pain. *BMC Fam Pract* 2007; 8:26.
11. Selye H. Homeostasis and heterostasis. *Perspect Biol Med* 1973;16:441-5.
12. Naeem F, Ayub M. Psychiatric training in Pakistan. *Med Educ Online* [serial online] 2004;9:19. Available from <http://www.med-ed-online.org>