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Psychology of Health and Well-Being:

Some Emerging Perspectives

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ABSTRACT

Recent years have evinced growing concern about the psychological factors that improve and impair the health status of a person. This has led to the emergence of health psychology which is practically an interdisciplinary venture involving mind-body interaction. This paper tries to offer an overview of the salient developments in this area by critically examining the concepts and research evidence. The key aspects of Ayurveda are also described contemporary health scenario in the Indian context is presented. In view of the emerging emphases in the field a comprehensive model of health consisting of three components, i.e., restoration, maintenance and promotion is presented. Finally research issues demanding attention are identified.

KEY WORDS: Ayurveda, Biomedical model, Coping, Doshas, Health, Life style intervention, Social Support, Stress, Well being.

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The field of health psychology emerged in the context of realization that biological mechanisms alone are insufficient to maintain and promote health and well being. To alleviate the physical pain, one has to examine the attitudes, expectations, beliefs and emotional support which the patient has, not just his or her response to the drug treatment. The patients are not mere passive recipients of certain treatment regimen, they should be considered as equal partners acting jointly in achieving the common goal of (better) health. These issues were not attended to by scientific psychology. Clinical psychologists were confined to the study of classification of mental illnesses, etiology, diagnosis and treatment of the afflicted patients. However, their role remained subsidiary to those of the psychiatrists. The domain of health was dominated by mind-body dualism. The clinical psychologists, who were traditionally concerned with

health related issues, were largely ill equipped to understand the psychological aspects of physical health problems. Health psychology grew with the realization and research evidence that psychological knowledge can make important contribution in the wide range of health-related domains. It got recognition only in 1970s and the first journal in this area was started in 1982. Since then it has been one of the most rapidly growing fields of psychology.

Development of Health Psychology

In the last two decades, psychological factors have come to be identified as the major causes of a wide range of diseases and disabilities. For example, Type A Personality is considered a major risk factor in the coronary heart disease (CHD). Prolonged psychological stress is found to be responsible for hypertension, peptic ulcer and many other diseases. Also, psychological factors have been found important in the recovery from the physical ailments. The role of psychologists is now well recognized in the treatment of organic diseases. Patient compliance, doctor-patient communication, attitude change, self-care, etc., are some of the potential areas to which health psychologists are making important contributions. Health psychology is now encompassing the strategies for health promotion and making preventive health measures more effective.

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Interestingly the idea that psychological state influences the health of a person has a long history in the Indian thought systems. The ancient Vedic texts proposed an essential unity of the mind and the body and delineated theories and practices to deal with a large number of health related problems. For instance the Atharvaveda and the Yajurveda, provide ample descriptions of a variety of mental disorders, and their remedial measures (see Mondal, 1996). In Ayurveda (the science of life), psychological treatment was integral to the entire treatment process. In modern times too India had taken an early initiative to promote social science research in the field of health. The Bhore Committee Report (1946) that formed the basis of India's health policies clearly recognized the role of social and economic factors in the development of health services, particularly in promoting traditional practices and community participation to ensure primary health care. It is an irony that, in spite of rich heritage, India's health care system is primarily based on Western medicine which treats a person just as a body, ignoring his or her feelings, beliefs and cultural background.

Concepts of Health and Well Being

The most acceptable definition of health is given by the WHO (1978): *Health is the state of complete physical, mental, social and spiritual well-being, and not merely an absence of disease or infirmity.* It is a significant departure from the medical model. It is a definition of positive health and goes beyond the mere absence of a disease: the focus being on maintaining good health, rather than on the treatment of different diseases. This also makes health a multidimensional concept having four dimensions i.e. physical, mental, social, and spiritual. The spiritual dimension of health was added much later in the WHO definition. The WHO's revised view recognizes the various levels of human existence. A human being is not merely a physical body. We are also located in the social and moral space and consider spiritual living too as a genuine part of our existence. This view of health is more inclusive and non-body centered. It goes well with the notion of human existence in terms of five sheaths (*koshas*). A related aspect is the emphasis on balance (*sama*) or equilibrium. Health is like a dynamic field in which different elements operate in communion and harmony.

Health thus refers to proper functioning of the body and the mind, as well as, the capacity to participate in social activities, performing the roles and abiding by the moral

principles. It takes into consideration the nutritional status, immunity from diseases, and better quality of social and family life. The concern is not with cure i.e., treating and preventing organic malfunctioning, but with healing the person, i.e., regenerating a sense of well-being and fitness to deal with one's life conditions.

In the backdrop of the expanded definition of health the terms health and well-being are often used interchangeably. Well-being comprises people's evaluations, both affective and cognitive of their lives (Diener & Suh, 1997). It is an outcome of a complex array of biological, socio-cultural, psychological, economic and spiritual factors. Analyzing the discourse on health Nandy (2000) calls for attending to the plurality of the notion of health and emphasizes on the need to bring to our psychological inquiry "*something of the sagacity, insights and cumulative wisdom of the people with whom we live*" (p.111). The conceptualization of the state of well-being is closer to the concept of mental health and happiness, life satisfaction and actualization of one's full potential. Verma and Verma (1989) have defined *general well-being* as the subjective feeling of contentment, happiness, satisfaction with life's experiences and of one's role in the world of work, sense of achievement, utility, belongingness, and no distress, dissatisfaction or worry, etc.

The text of Taittiriya Upnishada has elaborated that happiness; joy and well-being are the moments when there is an unobstructed manifestation of *ananda* (bliss) which is our original or true nature. It is the opaqueness of our mental faculties that obstructs the manifestation and experience of *ananda*. The principle that is responsible for opaqueness, inertia, dullness, darkness, depression, etc. is called *tamas.* The principle that is responsible for brightness, illumination, transparency, etc. is called *sattva*. Greater is the transparency of the mental faculties, i.e., *sattva*, greater is the experience of *ananda* (see Kiran Kumar, 2002). Thus an ideal state of human functioning and constitutes health and well-being as a state of mind (somewhat equivalent to the concept of subjective well-being) which is peaceful, quiet, serene, and free from the conflicts and desires. Accordingly a healthy person is of an auto locus person (*Swastha*) who flourishes on the recognition of life force derived from the material reality (*Panch Mahabhutas*) and, therefore, offers remedies for being healthy by opening a dialogue with its environment and recognition of order and cohesion (*Dharma*) in the entire life world (*Sristi*). The nutrition (*ahar*), world of leisure (*vihar*) and thoughts (*vichar*) need to be synchronized in

proper order. Health and well-being are both personal as well as social. The desire for the well being of everyone (*Kamaye duhkhtaptanam praninamartinshanam*) has been a core Indian concern that has panhuman relevance. Undoubtedly such a conceptualization of health and well-being is significant in its own right (Sharma & Misra, in press).

The Biomedical Model

The biomedical model has managed to attain world-wide acceptance and has been adopted as an official health care programme by almost all countries. It considers disease as a form of biological malfunctioning; some kind of biochemical imbalance or neuro physiological disturbance. In this, the body is held as a machine that can be analyzed in terms of parts, i.e., a system of synchronized organs. A disease is seen as impaired functioning of a biological mechanism and the doctor's role is to intervene, either physically or chemically, the malfunctioning of the specific body part. The model is based on the assumption of mind-body dualism in which psychological and social processes are considered independent of the disease process. Though the emotional state of the patient is considered important, it is kept outside the purview of medical treatment. The biomedical model of health care has not fulfilled the expectations it aroused. Adherence to this model has helped in reducing mortality by controlling prevalence of contagious diseases. The human life span is increasing all over the world though the actual contribution of biomedicine towards this success is debated. Improved economic status, social hygiene and health consciousness have also made significant difference in this scenario. Moreover, though mortality is going down, an increasingly large population continues to suffer from various chronic and degenerative diseases.

The biomedical model has serious limitations in terms of its adequacy for health practices. The model treats a patient as an organism, a biological entity. The proponents of this model were more interested in the disease than the patient. Thus, when the curative aspect is taken up, the emphasis is on the nature of diseases, its various symptoms and on the ways to remove them. In this process, the patient is only a recipient of certain medication, and no cognizance is taken of the psychological state of the patient. Biomedical practices envisage no role for the patient and his or her support group in the process of diagnosis and in deciding about the course of treatment. The interest in the

patient as a person is only incidental. The model breaks down when it comes to the preventive health care, where there are no cooperative-captive patients; where people are under no compulsion to comply with the prescribed health procedures. People may even pay no heed when they are told about the adverse health consequences of some of their habits, like smoking. There may be differences in phenomenological meanings of illness and health. In brief, unless people are willing to cooperate, no preventive health care is possible, or can be sustained.

Stress and Health Paradigm

In today's world where stress has become a very common experience, it is one of the most used and abused terms in the public discourse. A large number of symptoms in medical diagnoses are attributed to stress. Today stress management has become a booming enterprise. The focus in this endeavor is both on environmental factors, called stressors, and on internal factors, the mental state of strain. As Lazarus (1985) has noted appraisal of the stressors is critical in stress experience. His three-stage model of appraisal: *primary appraisal, secondary appraisal* and *reappraisal* , suggests that coping efforts are primarily contingent on the mode of appraisals. To respond to any situation, first, it is to be interpreted as a potential threat, danger, challenge or impertinent. Second, one needs to evaluate the response choices. Of course, such evaluation will depend on the perception of the event itself.

When people fail to handle their stress experiences the mental and physical health problems start surfacing. People utilize different types of coping strategies. The two broad categories of coping are: *Problem focused* and *emotion focused*. While the former attends to the nature of the problem and its solution, the latter deals with engaging the self. Coping often depends on the availability of resources and perception of control. Researchers distinguish between primary and secondary control (Misra, 1994; Rothbaum, Weisz & Snyder, 1982). While primary control refers to person's control over the environmental factors, secondary control aims to bring changes in one's own self and involves the degree to which the person adapts to the environmental stresses. When the environmental stresses persist people experience burn out. It may, however, be remembered that there are certain stresses that are positive in terms of their consequences. These are called U stresses.

There is increasing evidence that grief, depression, and other negative feelings are linked with the increased risk of organic (like cancer) and infectious (like cold) diseases. For example, recent bereavement has been linked with the increased risk of a number of diseases, such as CHD, tuberculosis, allergies and peptic ulcers (Clegg, 1988). Stress related negative emotions tend to suppress body's immune system over an extended time, rendering the person vulnerable to a host of diseases. The immune system protects the body from the invading microorganisms - bacteria, virus, fungi and parasites. These are called antigens. The immune system of the body, rather than being a centralized system, operates through a blood circulatory process throughout the body and gets activated wherever antigens are encountered. Called lymphocytes, there are special types of white blood cells, medically called as T-cells, B-cells and NK (natural killer)-cells. These blood cells multiply, differentiate and mature in bone marrow, thymus, lymph nodes, and spleen and in other body parts. The lymphocytes produce their own antigens to mobilize a direct attack to kill the invading foreign microorganisms in the blood stream. Glasser (1976) pointed out that the immune system must be extraordinarily efficient in destroying the invading bacteria and viruses on an ongoing basis to keep us healthy. Even when they temporarily give in, they always keep the fight going on. It is only when the body's immune system is destroyed by a virus called Human Immuno-deficiency Virus (HIV) that people become highly vulnerable to all kinds of infections.

In recent years, a new field of *pyschoneuroimmunology* has emerged to examine the mediating role of psychological factors in immune deficiency (Valliant & Mukamal, 2001). The effect of stress on the body's immune functioning is, however, mediated by a number of factors, including nature and severity of stressors. Schleifer and associates (1989; 1993) concluded that depression was associated with immunodepression, primarily among older and hospitalized patients. Also, a mild physical stress experienced in the recent past was sufficient enough to enhance immunity against the adverse effects of the present stress experience.

Stressful Life Events

Be it a failure in an examination or an interview, or the death of someone near and dear, all of us experience such tragic events in our lives and usually cope with them successfully. Of course, this is not true with everyone every time. It is now well

established that the mortality rate is much higher among widows and widowers than among married persons of the same age. The pioneering work of Selye (1976) has suggested that stressful events lead to health impairing physiological changes and illness. People fall ill because of some kind of pressure their lives go through. Following Selye's work, stress was defined in medical science as a specific physiological condition, the *general adaptation syndrome.* This syndrome or physiological change is caused by a person's own adaptive response to the stresses experienced. This means that although the syndrome itself is specific (specific changes in bodily systems) the condition of stress it results in a generalized state of the person (Radley, 1994).

Since stress works through the central nervous system the relationship of a stressor to the internal state depends on the meaning of that event for the person. Also, stress engenders changes to which a person must adapt. As change happens to be an essential aspect of life, it is hard to conceive of a state of stress which is qualitatively different from any other state of being alive. The experienced stress thus affects general health status by lowering immunity, rather than causing a specific disease. However, there are significant individual differences in responses to stress.

Holmes and Rahe (1967) developed a measure of overall stress due to life events. They tried to establish linkages between the level of stress and strain (physical, psychosomatic and mental illness). A measure of negative events was found to be a better predictor of strain than just a change measure (Agrawal & Naidu, 1988). One of the reasons for the lack of a linear relationship between life stressors and illness could be person's own appraisal orientation (Lazarus, 1985). Attention is also paid to the study of daily hassles (irritants) which seem to have cumulative effect. Daily hassles are stable, repetitive, low intensity problems encountered in daily life. Noise, environmental pollution, job dissatisfaction, crowded neighborhood are few examples of such daily hassles. It has bee observed that people scoring high on life events and daily hassles were more prone to falling ill in the near future. In the Indian context, Thakar and Misra (1999) have reported negative relationship between daily hassles and well-being among working women.

Ayurveda: An Indigenous Model of Health and Well Being

Ayurveda offers a different perspective on life and health in which wholeness, integration, freedom, connectivity, creativity and enjoyment are prominent. Etymologically the word Ayurveda is concerned with prolonged healthy life. Consistent with its thesis of the identity of mind and body it posits that any disturbance, physical or mental, manifests itself both in the somatic and in the psychic spheres, through the intermediary process of the vitiation of the "humors". Ayurvedic therapy aims at correcting the *doshas* or the imbalances and derangements of the bodily humors (namely *vata* or bodily air, *pitta* or bile, and *kapha* or phlegm) and restoring equilibrium. As Fields (2001) has articulated *healing involves restoration of balanced states of being within the organism-that is, at the level of the doshas or constituent principles of the mind/body complex, and between organism and environment.* It does so by coordinating all of the material, mental, and spiritual resources of the whole person, recognizing that the essence of these potencies are manifestations of cosmic forces.

Ayurveda is a principal architect of the Indian concepts of person and the body (Kakar, 1982). As a paradigm it shows how body, mind and spirit interactions can be predicted, balanced, and improved upon to enable people to live gracefully and harmoniously. For Ayurveda, spirit and matter, soul and body, although different, are not alien, insofar as they can be brought together in a healthy relationship with consequences that are mutually beneficial. In Ayurveda, balance or equilibrium (*sama)* is synonymous with health. Also, the maintenance of equilibrium is health and, conversely, the disturbance of the equilibrium of tissue elements characterizes the state of disease.

The principal word for health in Sanskrit, *swastha*, means 'established in oneself' or "self abiding". It is nothing but establishment in one's own essential nature. Incidentally Patanjali also considers this state as the goal of Yoga. This seems to be appropriate for the holistic view of the human being as a unity incorporating psychophysical as well as spiritual dimensions. Material or bodily and spiritual both kinds of concerns deserve our attention.

While delineating health Ayurveda emphasizes on one's relationship with the environment, seasons, and events within which one is situated. Depending on the incongruence/congruence between the person and the environment anything can become health/disease promoting. Thus, this view is decentred and non-dispositional in an

important way. Ritu Satmya, for example, is the principle of adaptation that states that food should be according to the season (rainy, winter, and hot).

The normal functioning of a person, according to Charaka includes the following criteria ; alleviation of pain, normal voice, normal complexion, increased strength, appetite, proper digestion , and nourishment of body, proper elimination of waste, proper sexual functioning, sufficient sleep at the proper time, absence of dreams indicating morbidity, happy awakening, and unimpaired mind, intellect, and sense organs (Charaka Samhita, 3: 8.89).

Also, body is considered to be an instrument in achieving higher goals and a person must look after it properly for the sake of these goals. The terms *Sharir* and *Deha* used for body indicate that it breaks and is a container or envelope, respectively. It has many connotations in various traditions. Ayurveda views body as the ground of well being at material as well as spiritual levels. Zimmerman (1987) considers Ayurveda as an ecological theory and views body as a place and its condition depends on the factors like climate, season, diet and custom. The therapeutic intervention is therefore two fold i.e., rendering the environment appropriate to the needs of the person and rendering patient's diet and regimen appropriate to the ecological conditions. Ayurvedic health care concentrates on all the three i.e., body, mind and Self (*sarira*, *manas*, *atman*).

A Comprehensive Model of Health and Well-being

In view of the preceding discussion, it is now possible to present a comprehensive model to incorporate the various facets of health and well-being and to present the various psychological conditions which are linked with health, as causes, concomitants and consequences. As shown schematically in Fig. 1 health comprises of the three main domains i.e.: *restoration, maintenance* and *growth* of life processes. *Restoration* is essentially the illness domain where the primary focus is on bringing the person back from the state of illness (incongruity / disjunction) to the state of health or reestablishing the congruence and conjunction. Here health practically implies the process of recovery from the disease. Thus, it involves curative and healing interventions that can free the patient from the bodily suffering and pain. Patients, health practitioners, caregivers, and hospitals are immediately concerned with this domain. Disability rehabilitation also falls within it.

The second domain of health is that of *maintenance*, which until recently has been unattended by the masses. The major concern of this domain is to engage in the activities to maintain good health and protect one self from diseases and disabilities. Health is not static or fixed. It's a dynamic process and one' present health status never guarantees that it will remain the same in future. People who primarily belong to this domain are agents of their health. They have to be motivated to act proactively to enhance their immunity or power of resistance to diseases, resilience, physical and mental vitality and active participation in family and communal lives. In other words, this domain involves the personal as well as social or relational space. On the one hand the person has to perform exercise, yoga, work, and take proper diet, on the other he or she has to be active in continuing and nourishing the social relations with family, coworkers and environment.

The third domain of health is growth centered. It can be referred to as psycho-spiritual health. The person evolves and goes beyond the isolated and limited self. In this domain health is seen from a much wider perspective in which it encompasses the total existence (physical, social and spiritual) of a person. The awareness or consciousness of a person is to be established in both the physical as well as moral or ethical spaces. The person strives to achieve a level of functioning that ensures effective personal functioning to further harmony with others. The blossoming of inherent potential takes place and with energy, creativity and efficiency the person maintains equilibrium. The journey with restoration from disease (*vyadhi)* moves toward the state of self realization, equanimity and calmness leading to bliss often conceptualized in terms of *Samadhi.*

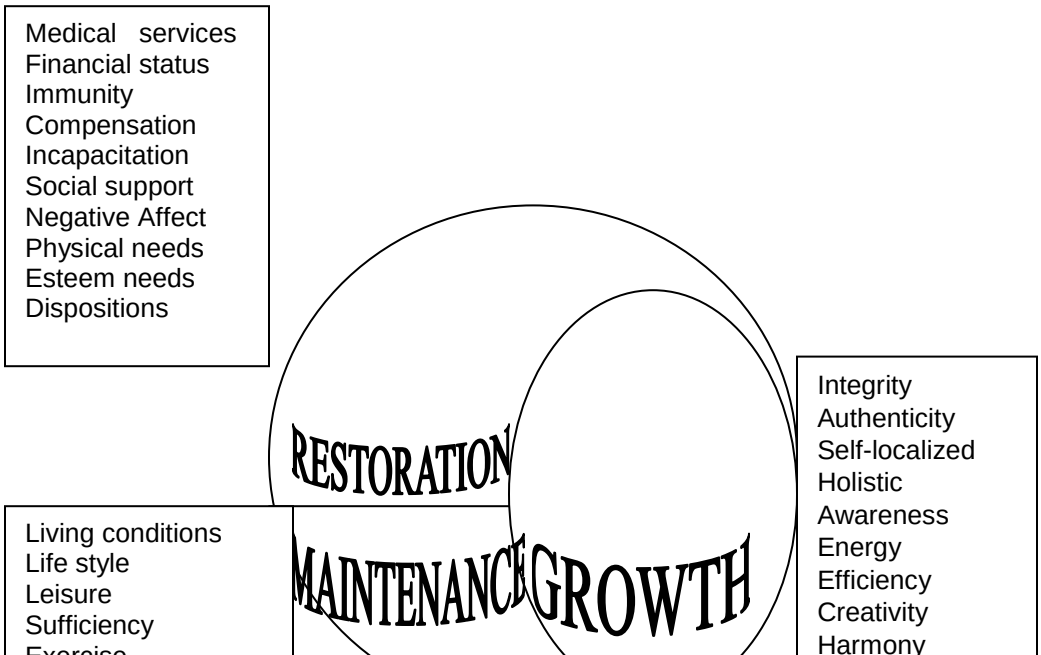

Fig.1. Domains of health: Restoration, Maintenance and Growth.

It should be clear by now that there is a great deal of overlap and permeability in the three domains of health, though these are hierarchically organized. The salience of these domains in one's life space keeps on shifting (shrinking or expanding). The relative space occupied by the growth domain would determine the quality of health one has. Second, the antecedents and consequents are linearly arrayed in the case of restorative health, where the main interest is in identifying the factors which cause the disease and lead to recovery.

In the case of *maintenance* domain, the causality is bi-directional. In that, emotions, beliefs, expectations play a balancing role, and are both - the causes and the consequences. In the growth domain, an individual can create and control these psychological factors, so as to deploy them for performing efficiently. Third, the interaction of mind, body and self is a crucial condition in all the three domains. However, whereas in the restoration domain the emphasis is more on the mental states affecting the body condition; in the maintenance domain it is the harmonious relation between the two which is of prime importance; in the growth domain, the focus is on psychological factors and a harmonious relation among mind-body-soul (Self).

Psychological Factors Shaping Health and Well Being

Psychological research in the area of health has gradually accumulated to provide overwhelming evidence to argue that the mental states do affect the physical health in substantial degree. Some of the main trends are as follows.

Personal Dispositions, Health and Well being It has been found that the experience of control and positive attitude are important in the success of surgery. Also, recovery of the surgical patients has been reported to be contingent on patient's emotional state prior to the surgery (see Cohen & Lazarus, 1979). Janis (1958) found a curvilinear relationship between anticipatory fear and post-operative recovery. Type A behaviour pattern is found to significantly contribute to the occurrence of coronary heart disease (CHD) (Glass, 1976).

A similar search for a cancer prone personality has not been as successful. There is some evidence that those who develop cancer are unable to express positive feelings, make an extensive use of repression and use ego defense less frequently (Bahnson, 1981). Longer survival rate among cancer patients was associated with more frequent expression of hostility and other negative feelings (Derogatis, Abeloff & Melisoratos, 1979; Pennebaker, 1990). A different personality pattern, known as Type C personality is identified to be cancer prone. Type C people are basically nice guys who never show anger and other negative reactions in public. They are helping, cooperative, smiling type, never hurting others but at the same time never expressing their true feelings. These are lonely people, even shy of seeking help when need be. Derogatis et al. (1979) discovered that Type C people have four times higher risk of cancer than the others. Along similar lines, Suzanne Kobasa proposed a new personality factor -called hardiness, to differentiate people who do and who do not get sick under prolonged stress (Kobasa, 1979). Hardiness includes three characteristics: (1) *personal control* (2) *commitment* and (3) *challenge*. Hardy people are better able to deal with stressors and are less likely to fall sick. It was found that highly stressful executives who fall sick scored low on hardiness scale. However, because of the correlational nature of most of these studies it is not yet ruled out that it is illness which could be shaping hardiness.

Cognitive and Attitudinal Factors in Recovery People construe a stressful life event in their own idiosyncratic ways. Some people are more negative in their subjective construction of an event, view the situation as uncontrollable, and feel helpless and

hopeless. Abramson, Seligman and Teasdale (1978) postulated a pessimistic explanatory style, characterized by internal (self), stable and global explanations of the negative events. The pessimistic explanatory style and depression have been found to be positively related. In a 35-year longitudinal study, Peterson, Seligman and Valliant (1988) found that pessimistic explanatory style was not linked with poor health at the age of 25, but significantly predicted poor health above the age of 45 years. One explanation was that at a young age people have physical resources to absorb negativity, but these get depleted as their age advances. A prospective study of CHD and optimism found that "a more optimistic explanatory style, or viewing the glass as half full, lowers the risk of CHD in older men" (Kubzansky, Sparrow, Vokonas, & Kawachi, 2001) and discussed other research showing a link "between pessimism, hopelessness, and risk of heart disease" (Kubzansky et al., 2001). Agrawal and Dalal (1993) found that beliefs in the doctrine of karma and God, which give rise to hope, facilitated recovery from myocardial infarction.

Positive orientation is another important cognition that has wide implications for recovery from any disease. Studies (Scheier & Carver, 1985; Scheier, Weintraub & Carver, 1986) have shown that optimism (generalized expectancy of good outcomes) is associated with problem-focused coping, seeking social support, seeing the positive side of the illness and acceptance of uncontrollable outcomes. Taylor (1983) observed that positive comparison was often used by cancer patients for self-enhancement in the event of an accident or illness. The patients who compared themselves with those who were in worse conditions recovered earlier. In a study by Agrawal, Dalal, Agrawal and Agrawal (1995) positive life orientation emerged as an important predictor of medical, as well as, of psychological recovery of myocardial patients.

Health Beliefs and Affective Reactions A wide variety of reactions are observed when people are told about the diagnosis of a chronic illness. Quite often the initial reaction is that of denial or disbelief which averts the onset of any emotional crisis. Denial also gives some time to adjust to the impinging reality. Other typical reactions are of high anxiety and emotional disturbance and clouded thinking. On the other hand, there are people who accept the diagnosis rather stoically. Chronic illness is something people have to live with and have to make long- term alterations in their life style. There could be wide fluctuations in the mood of patients with changes in their

physical condition and nature of disability. Pain and discomfort are other factors influencing the affective state. Many of these affective reactions may be transitory or of diffused kind, whereas, other reactions are specific to the appraisal of the symptoms.

Studies have shown the linkages between affective reactions to an undesirable life condition, and causal and control related beliefs. Weiner (1985) found that in the case of giving help, lack of effort on the part of the help seeker aroused anger, whereas physical disability led to aroused feeling of pity. Dalal and Tripathi (1987) in a study of help seeking behaviour found the linkages between control beliefs (situation controllable or uncontrollable) and affective reactions, stable and reversible. Some attribution-affect linkages found in their two experimental studies were uncontrollable-sympathy, controllable-anger and dislike.

The onset of a chronic illness and subsequent hospitalization result in more frequent arousal of the feelings of anxiety, depression, suppressed anger and helplessness (Westbrook & Viney, 1982). In an Indian study by Agrawal and Dalal (in press), the dominant affective reactions found in the hospitalized patients were helplessness, depression and metaphysical rationalization.Also, the female patients showed greater degree of anger and anxiety, whereas male patients more often showed disengagement and rationalization. It was also noted that anger was the least frequent reaction. Studying cancer patients Kohli (1995) found that anger response was very low. They showed greater degree of acceptance and rationalization in terms of the theory of Karma, where people look for justification in their own wrong-doings in the previous births. Higher attribution to metaphysical factors probably explains why Indian patients display low anger reaction.

It seems that the feeling which is more often expressed as a result of loss of control is that of helplessness. People show acute helplessness when they feel loss of control in a tragic situation. Abramson et al. (1978) posited that the affective reaction depends on the causal attributions they make. If the cause is perceived as being permanent rather than temporary, then the feeling of helplessness will be long lasting. If the cause is perceived as influencing many situations rather than just one, then the feeling of helplessness is likely to generalize to other situations. Finally, if the cause is perceived as being internal rather than external, the person is likely to suffer a loss of self-esteem. As Wortman and Brehm (1975) argued, whether a person would experience anger or

helplessness depends on his or her causal attributions.

Health Impairing Behaviours and Life Style Changes These factors operate in four ways: health enhancing, health impairing, health protective and illness management. Diet, exercise and meditation are health enhancing behaviours; tobacco chewing, alcoholism will come under health impairing behaviours. The examples of health protective behaviours are immunization, maintaining hygiene and pollution-free environment, whereas illness management refers to taking initiatives to recover from an impending illness. Here we may focus more on the behaviours which have adverse consequences for health; directly or indirectly they become causative factors in the onset of a disease.

Much of the Western literature in dealing with health impairing behaviours has focused on smoking, obesity and to a lesser extent on alcoholism. What people eat and how much they weigh are considered behavioural processes which in concert with genetic and metabolic characteristics shape the health of a person (Baum & Posluszny, 1999). An unhealthy diet appears to directly enhance the risk of a disease, as low level of nutrition may contribute to pathophysiology of disease, as tobacco chewing, smoking, drug use and alcohol consumption may have direct effects on bodily systems and impair their efficiency. In low income countries like India under and mal nutrition become a major risk factor.

Consumption of tobacco in different forms is pervasive all over the world. Once tobacco use becomes a habit it is highly resistant to change. The primary active ingredient in tobacco is nicotine, which has stimulant properties that increases SNS arousal, alertness and reduces appetite. Smoking and other forms of tobacco use are major contributors to heart diseases, hypertension, stroke, cancer and other diseases. Passive exposure to tobacco smoke is also problematic and has similar effects as that of smoking. Consumption of tobacco in different forms is very common in India ad has been fund to be significantly associated with cancer.

Alcoholism, drugs and other narcotics are no lesser evil and are much more rampant than smoking. However, media and research exhibit more concern with smoking behaviour. In the case of alcoholism it is suggested in many studies that it is not alcohol consumption per say which affect health but the pattern of drinking behaviour, rather its abuse.

Moderate level of drinking is considered to be good for health in many Western studies. Alcohol consumption becomes a health hazard when it is used as a mechanism for stress alleviation. Its association with social and moral aspects of behaviour often poses serious health problem at individual and family levels.

Stress is supposed to affect diet and weight in many ways. People who are under stress or in negative mood state are often seen eating more. They seek, what is called 'comfort foods' or foods that make them feel better. The growing craze for fast and junk food , and synthetic drinks is becoming a serious health problem for the teenagers.

Whereas obesity and weight gain is a problem for a section of the society, a much larger section of the society which is below poverty line suffers from malnutrition which adversely affects health and life expectancy, and increases mortality rate. It retards physical growth, leads to functional impairment, disability and diminished productivity and reduces resistance to disease. The problem of malnutrition is a resultant of unavailability of food, low purchasing power of the people and population growth. In poverty conditions, these are the women who are often more malnourished. Studies have shown that in India diets of girl children and women are inadequate due to discriminatory practices. Women are discriminated in terms of both quantity and quality of the food available to them.

Coping with Chronic Diseases

The question of interest here is 'What do people go through while facing a disease which is of a chronic nature?' Research shows that the kind of psychological responses people make and the stages they go through depend on many factors. One is the nature of the disease itself. The onset of the disease could be sudden, as in the case of heart attack, or gradual, in which case the patients get sufficient time to deal with the disease. The disease could be life threatening, as cancer, or may go through in acute-chronic cycle, as in asthma. It could be a physically disabling disease, requiring a lot of changes in one's life routine, like arthritis, or just demanding more care, like diabetes. Some diseases take a heavy toll on one's financial, social and psychological resources, some others are just a nuisance for the person. Again the severity of the disease, their social background, support system and individual dispositions play a crucial role in determining the stages

the patients go through in the process of coping with a chronic disease (Dalal, 2001).

In a large number of cases, the initial reaction to the diagnosis of chronic disease is that of shock and disbelief. People try to actively seek disconfirming evidence. It takes time to reconcile with the idea that they are suffering from a disease with which they have to live with for a long period of time, may be for the rest of their lives. They swing between hope and despair. The realization that their disease is of chronic nature may result in extreme mood swings from depression to hostility. At a later stage, with psychological acceptance of chronic disease, people tend to seek more information about the disease, about the remedial and palliative aspects and its possible implications for their lives. They explore about their own role in containing and preventing the aftereffects and integrating the disease within their own lives. People in their endeavor to live with the disease go through the cycles of stability, improvement, remission, relapse and renewed efforts.

It has been found that patients' own beliefs about their health and treatment regulate their health behavior to a far greater extent than the doctors' beliefs or what the objective medical data suggest (Williams & Calson, 1996)). The research focusing on health beliefs shares some common understanding about the human nature. They are summarized as follows.

1. People are generally actively involved in understanding the meaning of their illness. This understanding is essential to prepare and appropriately respond to any health crisis.

2. People differ widely in the way they subjectively construct the experience of illness. Their beliefs about the illness and life in general provide the basic inputs for these subjective constructions.

3. The subjective constructions and representations of illness in terms of their meaning, causes and control influence their recovery (or adjustment) significantly, at times more significantly than the real nature of the disease.

4. People are motivated to make efforts to recover from the crisis situation. In fact, it is assumed that the efforts to recover begin with the onset of the chronic disease itself.

5. People are not only motivated but also possess a self-curing mechanism. In the crisis situation, this mechanism gets activated and people on very rare occasions need institutional support to deal with the psychological crisis. People not only recover or

successfully adjust but also learn to be more resourceful in facing a similar crisis in future.

6. People can be helped and trained to cope with the adversities by bringing appropriate changes in their own beliefs and attitudes.

Social Support

The notion of social support includes both social embeddedness and emotional support that informs the people suffering from diseases that they are valued and cared about (Cobb, 1976). Social support, either elicited or provided spontaneously, goes a long way in determining how people deal with the life challenges and threats. Supportive interactions and the presence of supportive relationships in people's lives have been shown to play a major role in emotional well-being and physical health. Mother Teresa said it best: "Being unwanted is the worst disease that any human being can ever experience" (as quoted in Muggeridge, 1997, p.17). Although supportive ties may create dilemmas for both the providers as well as the recipients of social support, belongingness to a reliable support system of kin and friends often reduces the risk of disease and enhances the recovery from mental and physical illness (Uchino, Uno, & Holt-Lunstad, 1999).

Family as a support system has been specifically analyzed by S. Sharma (1999). There are two major mechanisms that explain how social support reduces the negative impact of stress on health and well being i.e., *direct - effects hypothesis* and *buffering- effect hypothesis*. Moreover, the efficacy of social support is likely to be dependent on (i) who is providing the support, (ii) what kind of support is provided, (iii) to whom is the support provided, (iv) for what problem is the support provided, and (v) when and for how long is the support provided. Such issues are partly reflected in a recent study by Miltiades (2002) where the effect on the psychological well-being of India-based parents was examined whose adult children had migrated to the United States of America. It was seen that the availability of alternative support systems (the extended family support, the hired help) did not alleviate the feelings of 'loss', depression and loneliness in such parents. Thus, the appropriateness of a special kind of support seems to be dependent on

the match between the type of support and the nature of problem encountered at a point in the life course, and also who is the provider of that support.

Promoting Health and Well-being

It has been argued that the Indian systems focus on advanced stages of development and states of well-being and the Western systems provide details of psychopathology and early development. Integrating these two perspectives may enable us with a 'full spectrum' model of health which traces etiology, causes and treatment of illness (recovery) to maintenance of good health through various stages of growth and enlightenment.

The growth model focuses on realization of human potential for transcendent experiences and cultivation of wisdom that touches the higher levels of consciousness. In some way the person works at the transpersonal level by recognizing continuity and interconnectedness of the living beings. The emphasis here is on higher order needs of the extended or inclusive self which are more encompassing. The pain and suffering of such a person has no bounds as they are not personal. Such kind of enlightenment seeks the common ground and gazes at the issues for all beings (*prani)* and for everyone (*sarva*). Sharing and expanding the sense of self demands not only creativity but also a discipline of a very high order. The journey from fragmentation to integration or from self to Self is very challenging but certainly capable of bringing unparallel joy and bliss. The vision celebrates the idea that "I am everywhere and everyone is in me". The differentiation is crossed in favor of integration. The person becomes more inward-looking, keen about transcending the vagaries of physical environment and bodily (physical) concerns and focusing more and more on Self-growth. Wellness then becomes a virtue (Conrad, 1994). In fact this aspect of health is a major contribution of Indian positive psychology.

It may be noted that the self-transformation mentioned here is not merely an inward journey in which the person tries to escape from the reality. That does not characterize growth and evolution. Developing a reality orientation too is an integral part of that transformation. Such a person will have a more comprehensive appreciation of reality. He or she will be able to have a broader picture of reality. Such an informed view may help

avoiding the trivialities that engage common people who limit their efforts and confine to short term gains. A focus on growth inherently involves future orientation and going beyond the given. Such people display great resilience in the face of loss and trauma. Resilient people often display ability to maintain a stable equilibrium. They are found to respond to bereavement with lesser degree of grief (Bonanno, 2004).

Growth also involves vitality, thriving and a positive attitude. The positive moods and feelings are not merely indicators of health rather than they contribute to it (Fredickson, 2001). Increasingly many studies show the effects of optimism and hope towards a person's well being and health. A growth orientation requires change in the life style with a space for activities like meditation, yoga and looking within. In today's stressful and tension ridden life these efforts contribute to peace, happiness and well being of the people. The self of contemporary man is saturated (Gergen, 2001), i.e., stuffed with too much information and opportunities. It is populated by myriad of things of all kinds-good, bad, trivial and meaningful. The market and media complicate the situation by drawing attention to the apparent achievements and attractions that disturb the equilibrium. It is, therefore important to bring self regulation and self control in a relational world to the centre stage.

Some Emerging Issues for Research

As an emerging field of study in India, health psychology is still in its infancy. In recent times, research in three developments significantly contributed to the growth of health psychology in India. The first is research in the area of yoga that has established close linkages between the mind and the body. A body of research (e.g. Swami Ram, Ballentine & Ajay, 1976) refers to relaxation and other mind control techniques to alleviate physical suffering. Second is, stress research. The deleterious effects of stress on health have been systematically examined in a number of studies. The research in this field has grown beyond the traditional stress models and the role of cultural and personality factors in moderating the adverse health-related effects of stress have been a major research preoccupation (see Misra, 1999; Pestonjee, 2002; Sharma, 1988). Third is, systematic exploration into the healing traditions of India. The traditional healers have

developed many psychological techniques to alleviate suffering of the patients afflicted by various diseases (Kakar, 1982). Renewed interest in Ayurveda, the Indian system of medicine, which intricately interweaves both medicinal and healing aspects of treatment, has brought forth the potential role of psychological factors .

As health psychology is growing a symbiotic relationship between the mind and the body is taking the centre-stage. Healthy behavior is now viewed in terms of challenges and opportunities. A dynamic view of health that acknowledges the implications of a new holistic paradigm has enlarged the scope of its domain. For instance spirituality and religion are now considered important factors in causing the disease, as well as in healing. In the western behavioural science spirituality is now ready to take the centre stage (Sloan & Bagiella, 2001). A special issue of the *American Psychologist* on 'Spirituality, Religion and Health' published in January. 2003, is a clear evidence of the increased interest and research activities in this area. It is a genuine frontier of research, one in which psychologists have both much to contribute and much to learn (Miller & Thoresen, 2003). This is a radical departure from the secular and non-spiritual orientation of mainstream Western psychology.

There is greater interest now in exploring the possible role that psychologists can play in improving the health status and recovery from illness or injury. Some important research in the area of health psychology has been reviewed by Dalal (2001) .The most recent review of Indian research is by Sharma and Misra (in press). There are other attempts to review the growth of health psychology in India (Chandaram & Pellizzan, 2003; Misra & Varma, 1999; Singh, Yadav & Sharma, 2005). As a hybrid psychological science of health, this new discipline is multidisciplinary, multi-method and applied in nature. It aims at improving the quality of health and well-being. It practically touches almost all aspects of human life.

The study of health and well-being, however, is still an emerging area in psychology and in spite of all promises and possibilities the discipline has yet to mature as an independent enterprise in India. We have not been able to build on rich healing traditions and holistic curative practices. With the failure of Western medicine in managing morbidity, there are intense efforts worldwide for the search of alternative health care systems and India has much to offer in this respect. In this context some of the important themes of research in which potential of research, theory building and applied work exists are briefly indicated.

Stress Research Stress is still one of the most popular research topics in India. An overview of the body of existing literature suggests that research in this area had primarily followed the stress-strain (mental health) models and have tried to find efficient coping strategies in different demographic groups. The emphasis was on the measurement of life stresses, coping strategies and well-being, and to establish linkages among them. The focus is now gradually shifting to the perception and experience of stress, long-term consequences of stress, personal control, coping strategies and their consequences for health. The Indian techniques of meditation and relaxation have much to contribute to stress alleviation programmes. Indian psychologists have yet to outgrow the narrow disciplinary boundaries and the limitations of their professional training to focus on the 'real' issues.

The research in this domain needs to focus on the positive consequences of experiencing stress and its potential for personal growth, resilience and enrichment. Also, the role of worldview is rarely taken into account. Seeking pleasure and avoiding pain is important but the possible image of a world totally free of pain and misery is something that has been rejected in the Indian thought. The image of world has been more realistic by recognizing its limitations and the goals of pleasure have been moderated accordingly. To be happy in a world which is in flux one needs to bring changes within also when caught in stress and illness. Perhaps the happiness and well being despite the adversity is possible only with a different kind of reality perspective that has space for pain and misery too. This does not mean to view life pessimistically. Instead it creates a realistic vision that has positive contribution to the quality of life.

Healing Practices The traditional healing systems in India still constitute an uncharted area of research. The pioneering work of Kakar (1982), Neki, (1973), Joshi (1988, 2000), etc. have laid a good foundation for this stream of work to build on. We still need to know how traditional healing works, how culture, mind and body transact as a complex system, not only to heal the person but also to facilitate personal and social well being and happiness. Indian texts have rich source material to understand suffering and healing as psychological states. Many of them are in practice. However, the Indian researchers have been less innovative and somewhat reluctant to address substantive issues. For instance, spirituality is one such issue which has not been attended to. The rich array of concepts, theories and practices available in the Indian tradition have remained

unexplored. Yoga uses body to transcend it. Yoga as a therapeutic involves physical practice as well as a way of cultivation of consciousness. It treats liberation as healing. Tnantra, mantra and music are also used for therapeutic practices. The Indian perspective does not dichotomize the material and spiritual. As Crawford (1989) maintains "for ayurveda, spirit and matter, soul and body, although different, are not alien, insofar as they can be brought in a healing relationship with consequences that are mutually beneficial". The researchers, however, have not attended to the issues that emanate from this kind of indigenous view. The Tibbia, Siddha and other traditions of medicine too have also not been examined adequately to examine their contributions to health and well being. Interestingly these traditions seek remedies within the self and immediate environment and therefore are more accessible. However, owing to negligence and aversion they are becoming obscure. In recent years some impetus has been given to them but systematic efforts are very few (see Kapur & Mukundan, 2002 for children's health). As yet, there are not many studies to understand the underlying mechanisms and integrating them within the contemporary scientific research.

Efficacy of Psychological Interventions Studying the efficacy of psychological interventions is another promising area of research in which there are many possibilities. Health psychologists need to work in unison with health practitioners of both traditional and medical variety. Such intervention studies are the need of the hour. A call for the 'Health For All by 2000' and its aftermath have brought many shifts in the research agenda in the field of social sciences, in general, and health psychology, in particular. One, the impressive achievements in the health sector has brought down the mortality significantly but at the same time increased the instances of morbidity. Though we know a good deal about the causes and cases of mortality, psychosocial and cultural dimensions of morbidity conditions are not much researched into. This area needs much attention by the social scientists.

Enhancing the Health Status There is a realization among the researchers, practitioners and policy makers in the health sector that health status has complex linkages with poverty, deprivation, population growth and education. No direct relationship between poverty and health was found in several studies. This calls for a

more interdisciplinary approach in research to find ways to improve health status of the people. Health research needs to come out of the narrow disciplinary groves and has to accept the more challenging task of helping people improve their physical and mental health. Research in this area has to be futuristic, i.e., to assess the health requirements of the burgeoning population and the role of technology in providing health care. Community oriented health services are going to be a major research area for the social scientists in the years to come. The health policies and planning has to involve people, voluntary organizations, activists and social scientists, not just medical professionals. Encouraging community participation and linking health with the wider developmental issues has to get reflected in the research agenda. To this end health communication is going to play a key role. We need research in this area.

Mapping the Meaning of Health and Illness In this context it may be mentioned here that the meaning of health and illness are culturally derived. How do people understand that they are sick? What do they do to recover ad stay healthy? What happens when people have to live with a long-term illness? How do the prevailing cultural beliefs about how to stay well affect people in their everyday activities? These questions are of prime importance when we want to understand health behaviour of people. Patient-centered care is emerging as a key concept in modern medicine also. This makes a stronger case for employing social constructivist approach (Gergen, 2001) in health research. From this position illness is a process of an ongoing interaction between culture and people. From this perspective medical view is just one among many constructions. There are other promises of developing people-centred health care programmes. Accordingly, a health practitioner or a healer has to be something more than an expert in the field but has to be sensitive to the way people construe health and illness. Research in this area is sadly lacking. Finally, as Nandy (2000) has succinctly put it, "*The concept of health does not emerge only from textbooks, it is also scattered all around us in various disguises and is waiting to be discovered by us. We must have the intellectual modesty and alertness to pick up these concepts to enrich and pluralize our idea of health"* (p.111). We need to attend to the cultural and sub cultural variations in the notions of health, illness and well being.

Rethinking Well-being Well being is one of the cherished goals of humanity. It refers to the state of optimal psychological functioning and experience and defines the idea of "good life". As has been mentioned earlier well being or subjective well being (SWB) is people's chief concern in life. SWB is defined in many ways. While liberation (moksha) from suffering was considered the sumum bonum of life by the ancient Indians Amartya Sen (1999) notes that freedom is a more rational goal for development than gross national product. He found that in cultures where relative freedom has expanded both quality of life and economic growth have taken place. In large part, the past research in psychology concerned itself with psychopathology. It is under the positive psychology movement that attention is now being paid to well being and the issues of empathy, love, wisdom, gratitude, resilience and authenticity etc. (see Snyder & Lopez, 2002). It is found that material security and luxury alone are not sufficient for experiencing well being as many poor countries score high on the measure of happiness. In fact, viewing

well being in terms of pleasure or happiness is one perspective only. There is another perspective that emphasizes on actualization of human potential or one's true nature. The former presents the *hedonic* view while the latter reflects *eudaimonic* view (Ryan & Deci, 2001). The relationship of personal wellness and collective well-being also needs to be investigated. The social well being as a positive state associated with optimal functioning within one's social network and community (Keyes, 1988) incorporates social integration, social contribution, social coherence, social actualization, and social acceptance. The relationship of well being with a host of variables such as self esteem, emotion, physical health, social class, wealth, attachment and relatedness are being investigated. In Indian thought two kinds of pleasures are described one is mere pleasure (*Preyas*) the other is those pleasures which are good or desirable (*Shreyas*). Recently attention is being paid to happiness. Seligman's (2002) *Authentic Happiness* and the idea of signature strengths – the personal traits associated with various virtues are interesting proposals (see Peterson & Seligman, 2001). On the whole the domain of well-being requires serious research attention.

Culture and Health Health psychology also needs to attend the cultural complexity of the contemporary world. The Western perspective as universal is problematic. As Lewis-Fernandez and Klineman (1994) have pointed out understanding of health and pathology in the West has been bound to three culture bound ideologies namely self is egocentric, mind-body dualism and culture as epiphenomenon. The cross-cultural, cultural psychological work and anthropological work have shown convincingly that these assumptions do not hold true in many Asian, Latin, and African cultures. People do hold interdependent, relational and encompassing notions of self (Mascolo, Misra & Raspardi, 2004) which go beyond the self contained and autonomous conceptualization of self. The body mind continuity and interrelationship is also widely accepted and people consider and experience human suffering in an integrated somatopsychological mode: as simultaneous mind and body distress. They do not classify psychopathology as organic disorders which are experienced as psychological distress and psychological problems which are somatized (Lewis-Fernandez & Klineman, 1994). Also, the meanings and practices are often culturally specific and they play important role in shaping the experiences of distress and well being. In this context it is important to note that culture is not a static category or phenomenon. It is dynamic in nature and operates as a process. In

a world where several cultures are clashing and synthesizing at the same time health practices and beliefs are also subject to change and reconfiguration. The processes of globalization, migration and communication revolution are restructuring the world of experience. This scenario is posing new challenges and giving opportunities for health psychologists. It is through innovative research, teaching and training that the emerging issues in the area of health psychology can be scientifically dealt with.

References

Abramson, L.Y., Seligman, M.E.P., & Teasdale, J. (1978). Learned helplessness in humans : Critique and reformulation. *Journal of Abnormal Psychology, 87,* 49-74

Agarwal, M., & Dalal, A.K. (1993). Beliefs about the world and recovery from myocardial infarction. *Journal of Social Psychology, 133,* 385-394.

Agarwal, M., Dalal, A.K. (1994). Patients in Indian hospitals: environmental stresses and affective reactions. *Indian Journal of Social Work, 55,* 41-46.

Agarwal, M., Dalal, A.K. ; Agarwal, D.K. , & Agarwal, D.K. (1994). Positive life orientation and recovery from myocardial infraction. *Social Science and Medicine , 38,* 152-160.

Agarwal,M.,& Naidu,R.K.(1988).Impact of desirable and undesirable life events on health.*Journal of Personality and clinical studies,4,53-62*

Bahnson, C.B. (1981). Stress and cancer: The state of the art. *Psychometrics, 22,* 207-220

Baum, A.,& Posluszny, D. M.(1999). Health psychology: Mapping biobehavioral contributions to health and illness. *Annual Review of Psychology, 50,* 137-163.

Bonanno, G.A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist, 59,* 20-28.

Chandarana, P.& ellizzari, J.R. (2003). Health psychology: Suth Asian perspectives. In Kazarian Shahe & David R. Evans (2003). *Handbook of cultural health psychology* (pp.411-444) . San Diego: academic Press.

Cohen F., & Lazarus, R.S. (1979). Coping with the stresses of illness. In G.C. Stone, F. Cohen, & N.E. Adler (Eds.), *Health Psychology : A Handbook*. San Francisco : Jossey- Bass.

Conrad, P. (1994). Wellness as virtue: Morality and the pursuit of health. *Culture, Medicine and Psychiatry, 18*, 385-401.

Crawford, S, Cromwell (1989). Ayurveda: The science of long life in contemporary perspective. In Anees A. Sheikh & Katherina S. Sheikh (Eds.) *Eastern and western approaches to healing: Ancient wisdom and modern knowledge* (pp. 3-32). New York: John Wiley.

Dalal, A.K. (2001). Health psychology. In J. Pandey (Ed.), *Psychology in India revisited, Vol.1 (*pp. 356-411). New Delhi: Sage.

Dalal, A.K., & Tripathi, M. (1987). When the help is denied : A study of attribution linked affective reactions. *International Journal of Psychology, 22,* 1-15.

Derogatis, L.R., Abeloff, M. & Melisaratos, N (1979). Psychological coping mechanisms and survival time in metastatic breast cancer. *Journal of American Medical Association, 242,* 1504-1508.

Derogatis, L.R., Abeloff, M., & Melasaratos, N. (1976). Psychological coping mechanisms and survival time in mentalistic breast cancer. *Journal of the American Medical Association, 242*, 1504 -1508.

Diener, E., & Suh, , E.M. (1997). Measurung quality of life: Economic, social and subjective indicators. *Social Indicators Research, 40,* 189-216.

Engel, G.L. (1977). The need for a new medical model : A challenge for biomedicine. *Science, 196,* 129-36.

Fields, G.P. (2001). Religious therapeutics: body and health in yoga, Ayurveda and tantra. New York: State University of New York.

Fredrickson, B.L. (2001). The role of positive emotions in positive psychology; The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218-226.

Gergen, K.G. (1988). The saturated self. New York: Basic Books

Glass, D.C. (1976). Behaviour patterns, stress and coronary disease. Hillsdale, NJ : Earlbaum.

Glasser, W. (1976). *Positive addiction.* New York: Harper & Row.

Holmes,T.H.,& Rahe,R.H.(1967). The social readjustment scale.*Journqlof Psychosomatic Research,*11,213-218.

Janis, I.L. (1958). *Psychological Stress.* New York : Wiley.

Joshi, P. C. (1988). Traditional medical system in the central Himalyas. *The Eastern Anthropologist, , 41*, 77-86.

Joshi, P. C. (2000). Relevance and utility of traditional medical systems (TMS) in the context of a Himalayan tribe. *Psychology and Developing Societies, 12*, 5-29.

Kakar, S. (1982). *Shamans, mystics and doctors*. New Delhi : Oxford University Press.

Kapur, Malvika & Mukundan, Healata (2002). Child care in ancient India from the perspectives of developmental psychology and pediatrics. New Delhi: Sri Sad guru Publications.

Keyes, C.L. (1988) . Social well-being. *Social psychology* Quarterly, 62, 121-140.

Kobasa, S.C. (1979). Stressful life events, personality, and health : An inquiry into hardiness. *Journal of Personality and Social Psychology, 37*, 1-11.

Kohli, N. (1995). *Coping with tragic life events : A study of cancer patients.* Unpublished doctoral dissertation, University of Allahabad., India

Kubzansky, L. D., Sparrow, D., Vokonas, P.,& Kawachi, I.(2001). Is the glass half empty or half full? A prospective study of optimism and coronary heart disease in the Normative Aging Study. *Psychosomatic Medicine, 63*, 910-916.

Kumar, K. (2002). An India conception of well-being. In J. Henry (Ed.), *European positive psychology proceedings*. Leicester, U.K.: British Psychological Society.

Lazarus, R.S. (1966). *Psychological stress and the coping process*. New York: McGraw Hill.

Lazarus, rs & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.

Liwis-Fernanddez , Roberto, & Klineman, Arthur (1994). Culture, personality and psychopathology. *Journal of Abnormal Psychology, 102*, 67-71.

Mascolo, M.F., Misra, G. & Rapisardi, C. (2004). Individual and relational conceptions of self in India and the United States. In M.F Mascolo, & , Jin Li (eds.) *culture and developing selves : beyond dichotomization*. (pp. 9-26). *New Directions for child and adolescent development No. 104.* San Francisco: Jossey –Bass.

Miller, W. R., & Thoresen, C. E.(2003). Spirituality, religion, and health *American Psychologist, 58,* 24-74. ([Special section].)

Miltiades, H. B. (2002). The social and psychological effect of an adult child's emigration on nonimmigrant Asian Indian elderly parents. *Journal of Cross Cultural Gerontology, 17,* 33-55.

Misra, G. (1994). Psychology of control: Cross-cultural considerations. *Journal of Indian Psychology, 17*, 22-39.

Misra, G. (Ed.). (1999). *Psychological perspectives on stress and health*. New Delhi: Concept.

Misra, G., & Varma, S. (1999). Introduction: Concerns in the study of stress and health. In G. Misra (Ed.), *Psychological perspectives on stress and health* (p. 25-38). New Delhi: Concept.

Mondal, P. (1996). Psychiatry in ancient India: Toward an alternative standpoint. *NIMHANS Journal, 14*(3), 166-199.

Muggeridge, M.(1997, September 9). In a 1968 BBC interview: "Being unwanted is the worst disease." *Daily Telegraph,* 17.

Nandy, A.(1988). *Science, hegemony and violence: A requiem for modernity.* New Delhi: Oxford University Press.

Nandy, A. (2000). Towards a new vision of health psychology. *Psychological Studies, 45,* 110-113.

Neki, J.S. (1973). Guriu-chela relationship: The possibility of a therapeutic paradigm. *American Journal of Orthopsychiatry, 43*, 755-766.

Pandey, J. (Ed.). (2004). *Psychology in India revisited, Vol.3*. New Delhi: Sage.

Pennebaker, J.W, (1990). Opening up: healing powers of confiding in others. New York:Morrow.

Peterson, C. & Seligman, M. (2001). Values in action inventory of strengths (VIA-IS) Manual . Department of Psychology, University of Pennsylvania

Peterson, C., Seligman, M.E.P., & Vaillant, G.E. (1988). Pessimistic explanatory style in a risk factor for physical illness : a thirty-five year longitudinal study. *Journal of Personality and Social Psychology, 55,* 23-27.

Radley, A. (1994). *Making sense of an illness*. London : Sage

Rothbaum, F., Weisz, J.R., & Snyder, S.S. (1982). Changing the world and changing the self : A two process model of perceived control. *Journal of Personality and Social Psychology, 42*, 5-37.

Ryan, R.M. & Deci, E.L. (2001). On happiness and human potentials : A review of research on hedonic and eudiamonic well-being. *Annual Review of Psychology, 52*, 141-166.

Scheier, M.F. & Carver, C.S. (1985). Optimism, coping and health : Assessment and implications of generalized outcome expectancies. *Health Psychology, 4*, 219-247.

Scheier, M.F., Weintraub, J.K. & Carver, C.S. (1986). Divergent strategies of optimists and pessimists. *Journal of Personality and Social Psychology, 51*, 1257-1264.

Schleifer, S.J., Eckholdt, H.M., Cohen, J., & Keller, S.E. (1993). Analysis of partial variance (APV) as a statistical approach to control day to day variation in immune assays. *Brain Behaviour Immunology, 7*, 243-252.

Schleifer, S.J., Keller, S.E., Bond, R.N., Cohen, J., & Stein, M. (1989). Major depressive disorder and immunity : role of age, sex, severity and hospitalization. *Arch. General Psychiatry, 46*, 81-87.

Seligman, M. (2002). *Authentic happiness*. New York: Free Press.

Selye, K. (1976). *The stress of life*. New York : McGraw-Hill.

Sen, Amartya (1999).*Development as freedom*. New York: Knopf.

Sharma, S. (1988). Stress and anxiety. In J. Pandey (Ed.), *Psychology in India: The state of the art, Vol.1* (pp. 191-247.). New Delhi: Sage.

Sharma S. (1999b). Social support, stress and psychological well-being. In G. Misra (Ed.), *Psychological perspectives on stress and health* (pp. 126-146). New Delhi: Concept.

Sharma, S. & Misra, G. (In press). *Health psychology: Progress and challenges*. Fifth survey of Psychological Research, New Delhi: ICSSR.

Singh, Rajbir, Yadava, Amrita & Sharma, N.R. (2005). *Health psychology*. New Delhi : Global Vision.

Sloan, R. P.,& Bagiella, E.(2001). Religion and health. *Health Psychology, 20*, 228.

Snyder, C. & Lopez, S. (1999). *Handbook of positive psychology*. New York: Oxford University Press.

Swami Rama, Ballentine, R., & Swami, A. (1976). *Yoga and psychotherapy*. Honesdale, PA: Himalayan Institute.

Taylor, S.E. (1983). Adjustment to threatening events. *American Psychologist*, 38, 1161-1173.

Thakar, G., & Misra, G. (1999). Job and well-being. The experience of employed women. In G. Misra (Ed.), *Psychological perspectives on stress and health* (pp. 211-237). New Delhi: Concept.

Uchino, B. N., Uno, D., & Holt-Lunstad, J.(1999). Social support, physiological processes, and health. *Current Directions in Psychological Science, 8,* 145-148.

Vaillant, G. E.,& Mukamal, K.(2001). Successful aging. *American Journal of Psychiatry, 158,* 839-847.

Weiner, B. (1985). "Spontaneous" causal thinking. *Psychological Bulletin, 97,* 74-84.

Westbrook, M.T., & Viney, L.L. (1982). Patterns of anxiety in the chronically ill. *British Journal of Medical Psychology, 55(1),* 87-95.

Williams, S.J. & Calson, M. (Eds.) (1996). *Modern medicine : Lay perspectives and experiences.* London: UCL Press.

Wortman, C.B., & Behm, J.W. (1975). Responses to uncontrollable outcomes : An integration of reactance theory and the learned helplessness model. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 8). New York : Academic Press.

Zimmerman, Francis (1987). *The jungle and the aroma of meats: An ecological theme in Hindu medicine.* Berkeley: university of California.