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Models of health and disease

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This paper describes and analyses six models of health and disease. These are: religious, biomedical, psychosomatic, humanistic, existential and transpersonal. Of these six models, only one was unequivocally reductionist: the biomedical. The others were all holistic. The religious, humanistic and transpersonal models could be considered as health models, the biomedical, psychosomatic and existential models as disease or illness models. The different models were assumed to depict different, but related, ways of representing health and disease. It is probable that different groups in society, including the different groups in the health service – doctors, nurses and patients – look at health and illness from partly different models. This is considered to have significant implications for the health service.

Health and illness are cardinal notions in biomedical science, behavioural science and social science. To facilitate the understanding of the notion of health and illness, researchers have constructed different theoretical models. Every model enables us to view health (or the absence of health) from a certain perspective. In some models, health is considered to be a sense of total well-being. Consider, for example, the WHO definition: 'Health is a state of full physical, psychic and social well-being and not the mere absence of disease'. In other models, health is considered to be a state of harmonic balance with one's surroundings (Capra, 1982; Dubos, 1980) and further models see health as the absence of disease (Engel, 1981), as an existential basis of security (May, Angel & Ellenberger, 1958; May, 1983; Yalom, 1980). Many further examples can be cited.

Some models are health centred, while others are disease centred. Some models are built more or less explicitly on a definite theory of knowledge, while others are of a more temporary nature. The latter have come about on an *ad hoc* basis, i.e. have been constructed for the purposes of contemporary research.

The purpose of this paper is to systematize existing knowledge of health and disease (illness) in a number of models. The six models I have chosen are placed on a historical dimension, i.e. according to the way they have developed in time in Western culture. Where possible, the models are seen from their theoretical foundations.

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The religious model

Primitive cultures, primitive people and ethnic groups

The religious model of health and disease is primarily a health model and one of the oldest. Both prehistoric man and primitive people of the present day and some ethnic groups have a view of health and disease coloured by magical–religious notions (Ackerknecht, 1982; Cohen, 1961; Eliade, 1964; Frazer, 1987; Kleinman, 1980; Krippner, 1979; Lévi-Strauss, 1967; Sobel, 1979; von Scharfetter, 1985). In the religion model, health is perceived as a 'correct way of living' and not just as a state of being free of disease. Moral aspects assume a more central significance than biological, psychological or social aspects.

When human beings live in harmony with nature, with other individuals and most of all with the spiritual reality (i.e. with God or the gods) or when the gods are in harmony with them, they are said, according to this model, to have health. Disease is considered as an imbalance in relation to the three dimensions – nature, the fellow being and the spiritual sphere – or as a form of disharmony with the cosmic order.

According to the religious model, disease means thus a violation of the harmonious living and the sick person initially seeks cures for the disease and, thereafter, its causes. The sick person looks for the ultimate cause; this contrasts with the Western biomedical model according to which the sick person contents herself/himself with the proximal causes – bacteria, virus changes in chromosomes, etc. It is further assumed that disease affects man as a whole even if it manifests itself in a particular place in the body – as a broken leg, sore throat, headache and so on. As a rule, the healing, i.e. the treatment, amounts to restoring the correct balance with nature, one's fellow beings and most of all the divine order (Sobel, 1979; Veith, 1981).

Among primitive peoples and ethnic groups the world over, the medicinal man (the shaman, priest, witch doctor, healer) has an important role to play. He (or she) is often both a religious leader, a political leader and a doctor (Eliade, 1964; Fabrega, 1971; Harner, 1980; Lévi-Strauss, 1967; Sobel, 1979). He/she is the one who diagnoses diseases, communicates with the spiritual world, carries out religious rites, administers medication and through all this restores the sick person to the correct level of harmony with his/her existence. In contrast to the reductionist view of knowledge of Western medical science, the outlook of the religious model is holistic. It implies, in my opinion, that man's health is considered to be something which is dependent on biological, psychological, social, cultural and spiritual factors.

The Jewish–Christian view

The Jewish–Christian view of health and disease which has greatly influenced Western civilization through history is represented by a health model and this model is holistic in character in similar fashion to other religious models in other parts of the world (for an overview, see Smith, 1958).

In the early texts of the Old Testament (OT), disease is considered to be punishment from God. This view latterly became replaced by the view of probation.

By this we mean that God does not deliver diseases, but uses them together with accidents and other forms of suffering to nurture and refine people. According to this way of looking at things, disease is something which exists outside people and is not developed from within (cf. Tamm, 1987).

The methods used to restore health, i.e. therapy, are as a rule of a spiritual nature – prayer, confession, exorcism of evil spirits, sacrifice, etc. – and can be compared with the religious methods described above. According to the religious models of the OT, one does not treat the individual symptoms of disease, or in fact the disease itself at all – as is the case with modern Western medicine – but attacks the root cause of the pain directly, i.e. one attacks the forces which are assumed to have precipitated the disease.

In the New Testament (NT) the body–mind unity is supplied by the notion of spirit. The body–mind–spirit entity is the New Testament's doctrine of man. According to this doctrine, health is as it is in OT, considered to be harmony with one's existence on all three dimensions.

Today the Jewish–Christian model's view occurs alongside of scientific medical thinking among *many* believing Jews and Christians. Even though the believers of today turn as a rule to doctors for assistance, they nevertheless seek divine explanations for their suffering. In other words, they seek the ultimate cause of their illness and primarily try to return to a correct relationship with God in order to restore a sense of harmony consistent with well-being.

The biomedical model

Traditional Greek medicine

The biomedical model has its roots in traditional Greek medicine which is intimately associated with Greek philosophy. Philosophical thinking in ancient Greece was abstract, systematic and governed by rationality and logic. The world conception fostered by the philosophers was mainly dualistic, i.e. one differentiated between spirit and matter, mind and body.

From these philosophical ideas Plato assumed that the mind resided in this transcendental world. The mind was assumed to be immortal and non-material. During a person's life, the mind was said to be united with the body, but could temporarily leave its bodily casing, for example during sleep, and leaves it permanently at the instance of death for subsequent incarnation in a new body.

On the material side, the philosophers were influenced by Aristotle, 'the father of logic', and the founder of scientific method. Influenced by him, they considered nature and human life from a scientific perspective. Occurrences and phenomena in the physical world were assumed to be related to each other in causal chains. Man was assumed to be like animals, but in contrast to animals, man could go beyond sense impressions and acquire generalized knowledge.

Greek medicine was strongly influenced by the contemporaneous schools of philosophy, above all by the ways of thinking of the natural sciences. Prior to the

father of medicine, Hippocrates (460–379 BC), medicine, religion and philosophy had been intertwined with each other.

The religious holistic view in ancient Greece was associated with Aselepius, the god of healing and his two daughters. Hygieia, the goddess of health in Greek mythology, was said to personify wisdom with the mission to teach people to live in the correct manner. Hygieia can be said to have represented the aspect of health which is today known as preventive medicine (Dubos, 1968, p. 55).

Hygieia's sister, the goddess Panakeia, is the mythological figure whose thinking can be said to have been the forerunner of today's biomedical reductionist view. Panakeia had a specialized knowledge of the healing capacities of different plants and thus vouched for therapy (cf. Dubos, 1968). Right up to the present day, the search for panacea, i.e. for universal cures, has been a dominant theme in modern biomedical science.

This religious holistic view of health, mentioned above, can be considered to be a transitional view between the pure religions and the scientific view of health. It was Hippocrates who disengaged medicine from metaphysical ties. In one of the hippocratic texts 'On the Sacred Disease' (Veith, 1981) he argues that diseases, including epilepsy which at the time was known as the 'sacred disease', have natural rather than supernatural causes. Hippocrates says further that the curing of diseases is the task and responsibility of the doctor, not gods, priests or other sacred figures. Nevertheless, he was at the same time a supporter of the religious ritual, by which sufferers were healed by spending the night in Asdepius' temple and having their dreams interpreted by the priests the following morning.

Hippocrates' view of diseases caused by natural factors was thus mainly scientific and objective, but nevertheless not as reductionist as the medical views of today. The treatment of diseases was based on the belief that man possesses strong powers of self-healing and that the main task of the doctor was to help find expression in these powers. When this initially proved to be of no assistance, other measures were taken such as medication and, finally, surgical intervention (Dubos, 1968, 1980).

The hippocratic view of disease which had been caused by biological factors continued to be developed in Western medicine. In addition, philosophical dualism, whereby mind was differentiated from body, continued to influence man's thinking and was given fresh impetus in the 17th century by the philosopher Descartes.

Cartesian dualism and the biomedical model

In 1637, Descartes published his famous treatise on scientific method. With this he gave sharper outlines to the old dualism of Greek philosophy which from that time to the present has permeated dualist thinking in both philosophy and science. According to Descartes, man consists of two separate entities – body and mind, which are linked to each other during life, but are qualitatively different.

In Descartes' view, the mind is a direct expression of God's nature in man and therefore one cannot study the mind scientifically. The body, on the other hand, can be considered as a machine which can be understood and studied scientifically through observing the arrangement of its constituent parts and how they function. A fit individual is, according to this view, like a well-functioning clock, in perfect

mechanical order, while a sick person can be likened to a broken clock (Dubos, 1965; Russell, 1961).

Irrespective of the philosophical limitations conveyed by such a dualistic view, it has shown itself to be scientifically fruitful. It has freed researchers from the apparently hopeless task of understanding man as a totality and enabled us to study separate aspects of the human organism.

This approach turned out to be very attractive for researchers. It came to be known in latter-day medicine as the biomedical model. It enabled us to build reductionist mechanical models of the human body and describe its functions in exact, quantifiable laboratory terms.

In the 17th century, the Englishman William Harvey (1578–1657) described blood circulation purely in mechanical terms. In the 18th century, the doctor of medicine Julien O de La Mettrie (1709–1751) published his seminal work *The Human Machine*. In this he argued that man is none other than the most organized form of all matter. In the 19th century, the German pathologist Rudolf Virchow (1821–1902) postulated that all diseases contained structural changes at the cell level. At about the same time, the chemist Louis Pasteur (1822–1895) developed his famous theory of bacteria.

The reductionistically orientated view of the human body has influenced medical science up to the present day. In the field of molecular biology, parts of the body and organs are seen as systems of molecules governed by chemical processes. In the field of brain research, the brain is considered to be a type of information-processing computer system which can learn, remember and take decisions. Even in the field of psychiatry, mentality is seen in mechanistic terms (cf. Dubos, 1968).

The biomedical model is a disease model. It is reductionistic in character. The model considers man in mechanical terms and disease is reduced to being a sort of spanner in the works. Such a view is based on the assumption that disease is a pathological or mechanical dysfunction within the individual. The task of the doctor is to control the pathology and repair the body. It can be achieved by taking medicine to get rid of the complaint or by mending the individual parts of the body (e.g. Powles, 1979).

In this model, disease is something affecting man from without – through bacteria, virus, etc. – and it is the task of the doctor to restore health. Health is defined by the model negatively, as the absence of disease.

The limitations of the biomedical model

The reductionistic nature of the biomedical model implies that it is limited by definition. As a rule, when it is applied to health and disease, it excludes psychological, social and ecological factors. These are considered to be caused by circumstances outside the biomedical model's control (cf. Seldin, 1977).

As a consequence, many phenomena are misunderstood. One example of this is pain, which has several complicated aspects: biological, psychological, phenomenological, social (Melzack & Wall, 1991). If we are to understand pain, we should take into account all its aspects – the pain threshold of the patient, his/her interpretation of pain, his/her mental attitude, belief system, emotional support from those nearest

to him/her and so on. The biomedical model is inadequate here. Within this model, pain is reduced to a warning signal and the body is said to react in self-defence in order to protect itself (cf. also Illich, 1976).

Despite the fact that Cartesian dualism has strongly influenced medicine and provided fertile territory for research, many people today believe that the biomedical model is stuck in a cul-de-sac. In order to understand health and disease, we have to realize that these are products of an ongoing and complicated interaction between body, mind, spirit and the surrounding environment (Capra, 1982; Carlson, 1975; Dubos, 1980; Kass, 1981). Many diseases can undoubtedly be treated and cured according to the biomedical model – for example, infectious diseases and diseases demanding surgical operation – but in the case of other diseases, most of all those related to life-style, researchers must find more interdisciplinarily orientated models of interpretation.

The psychosomatic model

The psychosomatic model of health and disease was first developed during the 1930s. Helen Flanders Dunbar, who during the 1930s and 1940s published a number of scientific papers (Dunbar, 1935, 1943, 1947), is considered to be the 'grand old lady' of psychosomatics. Her books started a series of intensive, almost explosive developments in the field of psychosomatic research.

According to the psychosomatic model, which in this paper is used as a collective term for different psychosomatic theories and viewpoints, there are no somatic diseases without emotional and/or social antecedents. On the other hand, no psychic diseases lack somatic symptoms. As Rene Dubos says: 'Whatever its precipitating cause and its manifestations, the very disease involves both the body and the mind, and these two aspects are so interrelated that they cannot be separated one from the other' (Dubos, 1968, p. 64).

According to the approach of the psychosomatic model, diseases are developed through a continual interplay between physical and mental factors which strengthen each other by means of a complex network of feedback loops. Recovery from disease is assumed to happen in similar fashion. Positive attitudes in combination with stress-reducing techniques are considered to have a strong influence on the body/mind system and help the individual regain the balance which is defined as health (Capra, 1982; Pelletier, 1977).

Holism versus reductionism in the psychosomatic model

The psychosomatic model has a total view of man. The model is neither unequivocally holistic nor reductionist since it builds on a series of different theories some of which are holistic, others reductionist.

Of the holistic theories certain structural and general system theories are relevant here. For example, the psychosomatic structural theory formulated by Totman in his book *Social Causes of Illness* (Totman, 1979).

Some general system theories which consist of the scientific exploration of 'wholes', where man is seen as a living system in permanent pursuit of a dynamic

balance, also have a place here. Examples of general system theories are the stress theory of Hans Selye (Selye, 1956), the general system theory applied to nursing of Putt (1978) and Neumann (1982) and Kielhofner's (1985) general system theory applied to occupational therapy.

Examples of reductionist theories in the field of psychosomatics are Cassel (1976), Engel (1981), Jenkins (1985), Lipowski (1984), Werner (1957) and Wittkower & Warner (1974).

Engel suggests, for example, that the term psychosomatic should never be used to specify causality and should solely be used to refer to the reciprocal connections between psychological, social and biological factors in health and disease (Engel, 1967, 1981). Jenkins (1985) has created a notional framework for psychosomatic medicine. It is known as the bio-psycho-social model. Wittkover & Warner (1984) contribute by developing the cultural dimension of the psychosomatic discipline.

Although contemporary researchers are in relative agreement, at least in theory, that psychosomatic disorders are multifaceted and that the health of the individual is dependent on a multitude of integrating factors, they have, as I see it, not succeeded in creating uniform psychosomatic theories. As a result, one talks in this model, alternatively and often misleadingly, in terms of holism and total view.

The psychosomatic model is primarily a model of disease. Disease is defined according to this model in at least two different ways. The term 'psychosomatic reactions' means on the one hand, manners of bodily reaction which occur in different organs as a consequence of emotion or other stressful situations, for example stomach upset, bronchial asthma and so on (Engel, 1981). On the other hand the term 'somato-psychic reactions' means psychologically imposed symptoms of somatic diseases, for example grief and anguish associated with cancer (cf. Cullberg, 1986, chapter 23).

According to the psychosomatic model, health care is not something that can be administered to individuals, but something which has to be practised by everyone himself/herself. In other words, man has to take on board responsibility for his own health – as an individual, as a member of a social group or community. This infers that he sometimes gets help from society's health authorities, for example doctors and other medical personnel. On other occasions, help comes from other quarters, for example from close friends, workmates, welfare officers, personnel consultants and so on (Bárány, 1987).

Since the psychosomatic model exists simultaneously on many organizational levels and acquires its knowledge from both the natural sciences and human sciences (psychology, sociology, anthropology, etc.), it has, in my opinion, certain difficulties in finding acceptance in medical science and in the practical administration of patients. Many people who complain about, for example, stress, worry and pain or exhibit diffuse somatic symptoms, seldom receive routine medical treatment or are legitimized as being sick.

The psychosomatic model can also be confronted with difficulties in research. This is chiefly because of the fact that the model is so all-embracing. There are too many factors to take into account and researchers consider that well-adapted methods of tackling the area as a whole are still not to hand (cf. Bárány, 1987).

The humanistic model

Humanistic psychology unfolded in the 1950s as a protest against two developments: the psychopathological orientation within psychoanalysis on the one hand and scientific-mechanistically based behaviourism on the other. The name initially associated with humanistic psychology is Abraham Maslow and the movement started by him became known as 'the third force' (Maslow, 1973). Today humanistic thought and humanistic theory include many approaches and rests upon writings of many persons, such as Allport (1955), Giorgiu (1970), Laing (1965), Mahrer (1978), Maslow (1966), etc.

The humanistic model of health is holistic. Man is seen as a whole, i.e. as a psychological and biological organism in interaction with its social environment. In contrast to the holistic religious model where the ultimate values and power are ascribed to God or the gods, man is seen in this model as the starting point of everything. According to the humanistic approach, man has a congenital nature which is basically 'neutral', i.e. neither good nor bad, and human beings are considered to live in worlds of their own construction (Asch, 1952; Mahrer, 1978; Maslow, 1962).

According to the humanistic model, health is not a condition but a process, which is ultimately synonymous with a wish, a desire or a force towards self-actualization. In Maslow's and Mahrer's view, a healthy person is a person who is striving to be actualized, and live an authentic life. By analogy, a sick person is a person whose internal relationships are disintegrative and whose inside is negative, twisted and sick (Mahrer, 1978; Maslow, 1962). Further, according to the humanistic view, a human being is intentional and has a choice, i.e. he or she has purpose, values and meaning, and creates his/her own experience of health and illness.

Towards a new paradigm?

The humanistic model can be thought of as a new paradigm in research and as a new basis of knowledge, in research methods and in a new terminology.

In contrast to academic research grounded in a positivist tradition and valuing empirical research, the humanistic model introduces a phenomenological tool. Scientists adopting this model no longer study objective and quantifiable facts but focus on the inner world of the individual person, on the contents of consciousness and on thought processes (Reason & Rowan, 1981).

So far as research methods are concerned, they are mainly qualitative. The methods used are action researched (Sandford, 1970), experiential research (Heron, 1981), personal construct research (Bannister, 1981) and the phenomenal interview (Massarik, 1981).

The humanistic model is health centred. According to this model, man is considered not as an object passively allowing himself to be diagnosed and looked after but as an individual who is fully capable of taking responsibility for his own health (cf. Henderson, 1978).

In the field of preventive medicine on the societal plane, we can see, for example, child care as based on the self-actualization needs of the mother (Carlson, 1975, p.

129). Other societal endeavours at promoting health, for example, leisure parks, service buildings, health farms and different cultural activities, can also be seen as expressions of the humanistic model (cf. Bloomfield & Kory, 1978; Travis, 1978).

Humanistic influences in medicine have given birth to innovations such as psychoprophylaxis in post- and antenatal care, more sensitive birth methods, attempts at engaging the will of the patient in the treatment process and so on (Siegel, 1986; Simonton & Matthews-Simonton, 1975; Strauth, 1978).

There are several researchers in the field of nursing science who associate themselves with the ways of thinking introduced in the model (Henderson, 1966; Eriksson, 1977; Leininger, 1981; Marriner, 1986). Patterson & Zderad (1976), the authors of *Humanistic Nursing*, see nursing in terms of a form of mutual self-realization which gradually occurs in the treatment process between patient and nurse. Mayerhoff (1971) adopts a similar standpoint.

The existential model

The existential model has had a series of distinguished adherents in the history of the Western world. One of these was Socrates, who in his writings brought man to existential clarity. Another was Augustine who explored the depths of the human mind with his deep psychological analyses. Pascal and Kirkegaard can also be considered as adherents of existentialism. However, existentialism in psychology has a far more recent history, emerging in the mid-1940s with the writings of Frankl (cf. 1964) and May (cf. 1983). At around the same time, existentialism was developed in philosophy by Sartre (1956) and in theology by Tillich (1952).

According to the existential model, one seeks an understanding of man in his concrete experience of reality, i.e. the basis of his own existence. The questions posed are questions of existence: What does it imply for a person to exist? What should he do with his life? Is there a basic structure of existence that helps man live a life free from false appraisals and from the constraints of intrinsic conventions? Is there any meaning of life?

In the existential model, as in the humanistic model, emphasis is placed on subjectivity. A central belief is that the human being must work out himself how he wishes to conduct his life. If he wishes to be fit, he can to some extent choose health. If he does not wish to be so, he can to some extent, consciously or subconsciously, choose illness (May, 1983).

The existential model challenges Cartesian dualism according to which the world is seen in a state of opposition. The existential model transcends dualism and considers man phenomenologically: penetrating his world of experience with the assistance of empathy, genuine listening, unconditional acceptance, intuition and so on (Barrett, 1954; May, 1983; Yalom, 1980).

According to such an approach, 'ill' and 'fit', 'normal' and 'abnormal' can, at least sometimes, be inadequate as signs of the world of experience of the individual. The sick person can experience existence differently to someone who is fit, but who is to say that the reality of the sick person is less 'correct' than that of the person deemed to be fit? It can even be the case that those who are sick can see structures and nuances in existence which are hidden to others (Fromm, 1978; May, 1983). The

task of the doctor or therapist does not become, according to this approach, as I see it, to 'cure', but to help patients attain a functioning life and a broader understanding of themselves.

Key themes of the existential model

We can summarize in four points how the model identifies the ultimate concerns determining a person's health and well-being:

1. One important existential concern pertains to the relation of the individual to death, and with that, his associated anguish. Death – as a reality or as a symbolic metaphor of, for example, separations – represents an existential border zone which incites anguish (Kierkegaard, 1976; Rank, 1929; Tillich, 1952).

Anguish, including mortal dread, can be existentially fruitful or pathologically inhibiting. In both cases it is a terribly painful experience. The fruitful anguish forcing the individual to overcome his affliction can be seen as a sign of health, while the pathological anguish can be seen as a sign of disease.

2. Another ultimate concern is freedom. By freedom in this context I mean the responsibility of the individual to structure his/her own world and his/her own destiny. According to the existential model, there is no readily constructed universe, but our existence is said to lack a solid basis. The positive aspects of freedom are: the capacity to structure existence in a meaningful way, to be able to choose among different ways of spending one's life, to assume responsibility for one's existence (including health) and so on. The negative aspects are: that human beings choose their suffering and diseases, that they are confronted with groundlessness in their existence and are possibly engulfed by mental illness as a result (May, 1983; Sartre, 1956, chapter 10).

3. The third ultimate concern determining the human's health, above all perhaps their illness, is existential isolation. An individual whose relation to himself, to others and to the world has been broken, is said to experience depersonalization, isolation and alienation, i.e. a form of illness. The existential isolation is a very unpleasant psychic state which can only be endured for a limited time. An individual who experiences existential isolation can positively work her/himself through it in order that s/he may then relate to her/himself and others on a deeper plane and attain a higher degree of health. On the negative side, such a state can lead to pathology (Fromm-Reichman & Moreno, 1965; May, 1983; Sullivan, 1953).

4. The fourth concern is man's relation to meaninglessness. Viktor Frankl (1964, 1973, 1984), the founder of the third Vienna school, is one of several researchers who have made an important contribution to the issue under debate. According to Frankl, many people currently suffer from existential meaninglessness, which in accentuated form can lead to 'noogenic neurosis'. The concept 'noogenic', which comes from the Greek word 'nous', i.e. reason, wisdom, implies in this context a serious clash between life's ineluctable 'why' questions and the incapability of reason to find solutions to these. People who have found a meaning to their life can, according to Frankl, be said to have health. Those who experience deep existential meaninglessness are, according to Frankl, in an existential vacuum – in a state of emptiness and anguish – which in its turn creates different degrees of illness.

The holistic aspects of the model

The existential model is said to be holistic. The holistic perspective implies that the individual is attempted to be understood in all his/her existential dimensions. He or she is a being-in-the-world and does not exist as a separate self. The existential model, as a holistic model, stands thus for the unity of the individual-in-the-world (Hall & Lindzey, 1978; May, 1983).

The existential model bears a close resemblance to the humanistic model. But in contrast to the humanistic model which is a health model, the existential model is principally an illness model. Philosophers and researchers working from the premises of the model are deeply involved in such aspects of human existence as suffering, guilt, despair, depression, anguish and nihilism. Health is considered as an authentic existence, something which is achieved when the individual works her/himself through the 'givens' of existence, i.e. his/her ultimate concerns, and the conscious and unconscious fears and motives spawned by each (Hall & Lindzey, 1978; May, 1983).

The transpersonal model

The transpersonal model is a further development of humanistic and existential models and an integration of these models with theories of consciousness and with Eastern religion. This model has its foundations in transpersonal psychology as developed in the USA in the mid-1960s and is known as 'the fourth force' (Sutich, 1969).

Those adopting the premises of the transpersonal model work and research in a number of disciplines: medicine, psychology, philosophy, anthropology, theology and so on. They are united by their common interest in transcendental experiences, i.e. experiences transcending the individual plane, dualism, and time and space. Some of the leading figures in transpersonal psychology are Ken Wilber (1975, 1981, 1991), Abraham Maslow (1966), Allan Watts (1961) and Robert Ornstein (1973).

The transpersonal model is primarily a health model. According to this model, the individual is considered to have health in the sense of well-being when s/he exceeds the dualism s/he is used to perceiving in existence and reaches a stage of uniform consciousness. It is the consciousness and experience of dualism which, according to this model, is assumed to create our human suffering and our diseases.

According to Wilber (1981, 1991) every man and woman who cares to evolve and transform his or her consciousness can arrive at higher and superconscious levels. In these transformations the self has to accept the 'death' of its present level, differentiate from that level and thus transcend into the next, higher level of consciousness.

Insight and mindfulness are, according to the transpersonal model, the primary healthy factors. The unhealthy mental factors are among others, agitation and worry, which create a state of anxiety, the central feature of most mental disorders (Hall & Lindzey, 1978, chapter 10; Wilber, 1981).

The method to reach altered stages of consciousness is meditation. Successful and complete meditation moves, according to Wilber (1978), first into the psychic realm

of intuition, then into the subtle realms of oneness, light and bliss, and through several other stages finally into the ultimate realm of absolute dissolution of the separate-self sense in any form. This is what I call absolute health.

Holism in this model

The transpersonal model is holistic. Man's consciousness resembles a self-regulating system which functions simultaneously on several levels. The levels are hierarchically ordered and seem to develop from each other. Such a process is said to take place in every individual and is also believed to have occurred throughout the long history of the human race (Wilber, 1987, 1991; Neuman, 1973).

The transpersonal model is not solely a development of the humanistic and the existential models, but also of the religious model. But in contrast to the view of the traditional religious model where health and disease are in the lap of the gods and demons, i.e. attributable to supernatural forces outside the individual, it is the supernatural in this model which is pre-eminent, i.e. it is something which is a part of man's own consciousness.

Meditation is as mentioned before the method the individual uses to 'make his or her way in the world' or, to put it more accurately, let oneself be led to cosmic consciousness. Through different meditative techniques, the meditator successively and gradually assumes his consciousness, becomes infused with psychic energy and develops powers of self-healing.

There is currently a great deal of research into meditation and diseases. Findings are consistently positive (Green, Green & Walters, 1970; Otis, 1974; Pelletier, 1977; Sternbach, 1986). Meditation techniques have even been put to use in cancer research with favourable results. The patients who meditate are said to feel significantly better, acquire self-healing powers through different meditation techniques and sometimes even declare themselves to be healed with the assistance of these techniques (Simonton & Matthews-Simonton, 1975; Kübler-Ross, 1987; Siegel, 1986).

Conclusions

The models set out above can, at first sight, appear to be like Babel's tower where people speak different languages and are thereby unable to understand one another. However, this is not the case. These models (there are undoubtedly several – for example, sociological, ecological and so on) can be seen as different ways in which health and disease are represented.

It is my view that the different models represent varying, but in themselves related individual and societal approaches to health and disease. The way in which a particular individual or group of individuals represents health and disease at a given opportunity should vary according to the individual's age, outlook on life, and current state of health.

It implies that a number of the approaches of the models described above can exist in the consciousness of the individual, either side by side or assembled in a hierarchically ordered system. On certain occasions, some aspects of a number of

different models are brought to the fore and form a conscious representation, while other parts 'sink down in the consciousness' and form a type of 'tacit knowledge' (cf. Polany, 1969).

It is probably the case that different groups of individuals – doctors, nurses, patients etc. – represent health and disease partly from different models. Likewise, it is probable that fit people have a different representation of health and disease than those who are sick, the young a different representation from the old, and so on.

Of the six models outlined, the religious, humanistic and transpersonal models focus mainly on health, while the others, the biomedical, psychosomatic and existential, focus on disease or illness. Models of health say relatively little about illness and models of disease have difficulty in defining health. Perhaps it is the case that researchers have found it easier to work with isolated ideal concepts – health and illness respectively – than to describe and explain the multifaceted reality where the two processes are in constant overlap with each other.

Two consistent themes described in these models are holism and reductionism. Holism, the popular definition of which is that 'the whole is more than the sum of its constituent parts' was to some extent popular during the 1920s when the idea was coined by Jan Smuts, but fell out of favour just as quickly. Today, the idea of 'holism' is going through something of a renaissance. Many are critical of the reductionistic approach and its limitations. Holism and the total view are now virtually considered to constitute the gospel truth.

The question is whether it is worth rejecting one approach at the cost of the other. Both holism and reductionism – taken to their limits – are sterile. Both lead us down a cul-de-sac. It is more worthwhile either to use the reductionistic and holistic approaches alternately or work them into a synchronized system. The latter case, i.e. the synchronized system, has been used in several general system theories (von Bertalanffy, 1968; Bateson, 1980 and so on).

It would be interesting if continued research were to be undertaken to investigate how different groups of people (for example, doctors, nurses, priests, physiotherapists, occupational therapists, patients, students) represent health and disease and see whether their representations differ from each other. Differences in the different groups' ways of representing the phenomena of health and disease can be considered to have implications for the health care service in general and for patient care in particular. It would also be interesting to ascertain whether the different occupational groups within the health service have themselves given any consideration to which models of health or disease they work within.

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