

Holistic Concepts in Psychiatry

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Holistic medicine treats the whole human being. It rejects the Cartesian-inspired, mind-body dualism, and rather sees the person organized at various levels from the cellular out to his entire society, much like the "Bulls eye" representation of Dr. Aldwyn Stokes, an unashamed Myerian and a great name in Canadian Psychiatry. In this scheme, things can go wrong at various levels, and-affect the whole person's ability to function.

Psychiatry has always prided itself in treating the whole person rather than focusing on a symptom or a diagnosis for which there is a specific, rigid treatment regime. However, with our roots and associations in the medical profession, we have a too obvious tendency to let a certain diagnosis lead us straightaway to a therapeutic formula. Thus we have practitioners who automatically place all schizophrenics on haldol, all manic-depressives on lithium, all alcoholics on antabuse and librium, and all obsessionals on anafranil.

The holistic practitioner is skeptical of modern medical orthodoxy. He recalls how Medicine was wrong in the humoral theory of disease, wrong in the therapeutic value of bleeding, and more recently, wrong in the use of thalidomide, wrong in the condemnation of vitamin E for vascular disease, wrong in its theories on eggs, butter, cholesterol levels and heart disease, and possibly wrong in its condemnation of

megavitamin therapy for schizophrenia. He is wary of the toxicity and side effects of the drugs used by modern medicine.

Rather than adopting an approach that is purely iconoclastic, the holistic practitioner operates on the basis of four fundamental axioms:

1. Mental and physical health are completely interrelated.
2. Prevention is preferable to treatment.
3. Simple and safe treatment is preferable to costly and complicated.
4. Naturally-occurring nutrients are generally less toxic than synthetic compounds.

Early Holistic Concepts

The principles of holistic medicine have been with us for some time now. The practice of Yoga leads to physical, mental, and spiritual health. The books by Adelle Davis on nutrition and health were written years ago. Schools of meditation such as Transcendental Meditation have proven success in various psychosomatic diseases, in alcohol, and drug abuse, and in emotional stability. Alcoholics Anonymous embraces some holistic concepts of self-help and group support, although faltering badly in the nutritional area.

Recent Impact

Alvin Toffler's book, **Future Shock** demonstrated how significant life changes can cause a variety of diseases. Cooper's **Aerobics** showed the link between exercise

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and cardiovascular fitness. Friedman and Rosenman pointed out that the coronary-prone individual has a particular kind of competitive personality they labeled "Type A." Biofeedback techniques have been developed for a wide variety of disorders. Hypnotherapy and Behavior Therapy have a new respectability. Self-help books such as, **I'm OK—You're OK, Your Erroneous Zones, Born to Win** flood the bookstores. Exercise, mental health, and philosophy become intertwined in Sheehan's book, **Running and Being**, and Kostrubala's, **The Joy of Running** advocates the activity as specific for mental health. The Orthomolecular treatment of schizophrenia has crystallized into a foundation, a journal, and a dedicated cadre of practitioners and enthusiastic patients. Linus Pauling's scientific prestige gave new respect for simple ascorbic acid for the treatment of a wide variety of disorders from colds to cancer.

Obviously, something is happening out there!

I shall discuss some of these methods of treatment later. At this point, we must ask ourselves whether these approaches are mere fads, whether they really work, and if they do, how do they work?

The Evolution of Man and Modern Life

It is said that our basic anatomy and physiology are much like that of primitive man. We are one of the few animals dependent on an external source for vitamin C, for example, and that is as true for the Bushman of the Kalahari as it is for the Eskimo of the high Arctic, for modern urban inhabitants as it was for a cliff-dweller 5,000 years B.C. Man reacts to stress in roughly the following way:

(We are indebted to the great physiologists, Walter Cannon and Hans Selye for these concepts). Perception of stress causes a general alarm reaction with an outpouring of adrenalin (associated with fear) and noradrenalin (associated with rage) from the adrenal medulla; this causes the familiar readiness of the muscles, vascular system and nerves for explosive physical activity; the three Ps, fright, flight or fight. The flight or fight burn off this adrenal outpouring, and solve the problem simultaneously. Once safety is attained, primitive man rests.

Modern living has largely removed or prohibited the two F's of vigorous physical activity: "the flight or" fight. The stresses go on, unresolved, the adrenal medulla becomes exhausted, the adrenal cortex takes over, and ultimately, diseases of maladaptation arise. It can be safely stated that we do not yet understand why one person develops peptic ulcer and another hypertension, but unresolved stress seems to be at the root of it. Various attacks on this pathogenesis have been tried. The transactional groupies advocate direct problem-solving behavior, the athletes reintroduce the ingredient of vigorous muscular exertion, and the meditators emphasize the rest technique as an anti-stress measure.

Primitive man, in his daily life, used his muscles more, ate his food fresher, had less pollution with which to cope, did not smoke tobacco except as a ritual, discovered alcohol late in his existence, and died of injuries or infections rather than the diseases of civilization. The diet of modern man is grown in sterile soil, chemically fertilized, picked green, trucked long distances, stored too long, and saturated with preservatives.

We face new and different hazards in modern life, yet our coping, biological mechanisms remain unchanged for millenia. For example, the typical 50-year-old North American man has one chance in seven that he'll have a myocardial infarction before he reaches 60, and that is just one of the hazards which can knock him off.

There are holistic techniques which assist in coping with the stresses of modern life. Since the mind and body are truly inseparable, \ make no apologies if some of these do not fit the mold of strictly psychiatric. The techniques can be divided into Nutrition, Drugs, Play, and Special Techniques.

Nutrition

In the typical modern diet, good things such as vitamins and fiber are refined out, and bad things such as insecticides and chemical preservatives are put in.

A high-fiber diet not only provides protection against cancer and polyps of the colon,

it offers some prophylaxis against gall bladder disease, and most significantly, reduces the incidence of cardiovascular disease (Bricklin, July, 1978), possibly by decreasing the absorption of low-density lipoproteins, "sticky cholesterol" or "unfriendly fat" (Cleave, 1975).

Vitamin E has been proven to fulfill the expectations of the Drs. Shute 20 years ago. Its value in protection against peripheral arterial disease is undisputed, and its action generally seems to be to stop platelets from clumping (Steiner, 1978). What is not so well known about it is its antihistamine effect, its antioxidant effect through its ability to trap free radicals (Dormandy, 1978), and the protection it offers from the toxicity of ozone pollution (Mustafa, 1975). The implications are that you can drive through dense traffic to the pizza parlor, eat a diet loaded with nitrites, and emerge unscathed so long as you have enough vitamin E in your system.

It was Linus Pauling who drew the world's attention to the myriad benefits of vitamin C. For over a century we've known that 50 mg per day will prevent scurvy. But in much higher doses, we have an antihistamine effect, a barrier against lead pollution; a protector against carcinogens in the gut, an antiviral effect through the stimulation of Interferon, an ability to promote wound healing, a protection against heart attacks, and an ability to lower the level of circulating sticky cholesterol and triglycerides (Feltman, May, 1978). It also helps the physiology adapt to heat stress (Strydom, 1976). All this from one vitamin!

Folic acid, or folate, is found in green vegetables, liver, and brewer's yeast. Alcohol depletes it rather rapidly. As well as being a necessity for pregnant women, it is essential to preserve mental alertness in the elderly (Gottlieb, 1977).

Zinc is found in seafood, especially shellfish, and in a number of vegetable products. However, it is almost depleted from the soils of North America. Insufficient zinc is one cause of acne and other skin disorders and falling hair in women (Michaelson, 1970). It is used up metabolizing alcohol in the body. It is essential for a healthy prostate

gland (Bush, 1978), and may also protect against lead and cadmium pollution (Papaioannou et al., 1978).

People who drink hard water have fewer heart attacks and arteriosclerosis than those in soft-water areas. It probably is the magnesium ion which is also found in grains, peas, beans, fruits, and nuts (Anderson, 1975).

Calcium is found in various foods and dairy products. In the latter, its absorption and utilization depends on the relative concentration compared with phosphorus, and the presence of vitamin D. Calcium supplements have been effective in arresting bone demineralization, especially in postmenopausal women (Gottlieb, 1978).

Ten ml daily of unsaturated vegetable oils can significantly reduce the sticky cholesterol, triglycerides, and high blood pressure (Vergroesen, 1977). Lecithin, a soybean product, does the same (Childs, 1977). There is a chromium compound in brewer's yeast and whole wheat called Glucose Tolerance Factor. It improves carbohydrate tolerance, reduces cholesterol and triglycerides, and decreases the sexual impotence experienced by male diabetics (Tuman, 1978).

Selenium, found naturally in brewer's yeast, helps in the absorption of vitamin E; is an antioxidant and antipollutant (Sham-berger, 1976), and women who are deficient in selenium have a higher risk of developing breast cancer (Schrauzer, 1978).

Garlic will prevent or help dissolve blood clots (Feltman, 1978).

Women taking estrogens, either postmenopausally or in the form of oral contraceptives, often develop a deficiency in vitamin B6, pyridoxine. This is found naturally in sunflower seeds, wheat germ, chicken and salmon, but it is destroyed by canning or freezing. A B6 deficiency causes tiredness, irritability, anxiety, and depression; supplements have been effective in treating these symptoms (Banki, 1978).

High doses of B6 have been used in the treatment of autistic children (Rimland, 1978).

Dr. Feingold recommends a diet

completely devoid of any food additives or preservatives for hyperactive children (Feingold, 1975).

Yudkin and others implicate refined carbohydrates for waves of depression caused by functional hypoglycemia, and recommend more complex carbohydrates in the diet. Raw foods do decrease the insulin requirements of diabetics (Yudkin, 1973; and Cheraskin, 1977).

These are some of the nutritional factors implicated in the maintenance of good physical and mental health.

Drugs

Certain nutritional factors are used in massive doses to promote a healing effect. An example already mentioned is the many uses of vitamin C, the tendency of vitamin E to decrease the coagulability of the blood, zinc therapy for acne and prostatism, folic acid for senility, and pyridoxine for autistic children.

Vitamin B-12 has been used as an antipsychotic agent and also to treat anxiety and depression (Newbold, 1972).

L-Tryptophan, an essential amino acid, has been used as a sedative, to enhance the effect of antidepressants, and together with niacinamide and pyridoxine, in the treatment of Obsessive-Compulsive Neurosis (Yaryura-Tobias, 1977).

The use of high doses of niacinamide, together with other members of the B-family plus vitamin C and sometimes E was initiated almost 20 years ago by Hoffer and Osmond in the treatment of schizophrenia. They called it "Megavitamin Therapy," later it was labeled "Orthomolecular Therapy" by Pauling. The theoretical biochemical rationale for this approach has been elucidated by Gilka (1978). An analysis of criticisms of this technique and Hoffer's reply is available from the Canadian Schizophrenia Foundation (Hoffer and Osmond, 1976).

Drugs can have their negative side as well. We know too well about somnolence, incoordination, extra-pyramidal reactions, and cardiac complications from our psychiatric drugs.

Mellaril caused a significant difficulty in the sexual functioning of 60 percent of male patients

on it (Kotin, 1976).

Barbiturates rob the body of calcium.

Diazepam causes confusion in the elderly, mental torpor without insight, and can increase the craving for alcohol.

Estrogens cause a deficiency in zinc, folate, vitamins B6, B12, and C. They also double the risk of ovarian cancer, and cause a six-fold increase in breast cancer.

Antacids disturb calcium and phosphorus metabolism.

Simple aspirin washes vitamin C out of your body, and the folate as well (Roe, 1978).

And, of the drugs in common use, we are well aware of the effects of acute alcoholic intoxication, plus the long-term hazards such as alcoholic gastritis and hepatic cirrhosis.

Cigarette smoking increases the risk of lung cancer, bronchiectasis, cardiovascular disease, peripheral vascular disease, peptic ulcer, bladder cancer, irritable bowel, and wrinkled skin. Smoking has to be one of the most stupid things we do.

To mention other intoxicants, it is established now that "Speed" kills, cannabis smoke addles the brain, psychedelics can provoke psychotic reactions, and may be associated with genetic defects.

A good drug, then, promotes health or healing, and is non-toxic. A bad drug may have a therapeutic effect in one area, but may destroy essential metabolic processes in another.

Play

It struck me some years ago that physically healthy^ highly trained athletes almost never consult me for psychiatric problems, and when they do, a gentle nudge in brief therapy is all that is necessary to get them moving into emotional balance. Is psychological health a by-product of their fitness, their life style, their self-discipline, or their self-respect? I don't know. I suspect a combination of the above is operative.

Paul Dudley White, the famous cardiologist, said that golf is a perfect example of how to ruin a good walk. I suspect that what

he meant was that a Type-A personality as described by Friedman and Rosenman, invariably adopts the same competitive, tense, proving, doubting, love-hate relationship to a game as he does to his business and his family life. Then that slice into the sand-trap on the 17th hole becomes one more ego-deflating, frustrating annoyance. A Type-A person can play golf, but he'd be well advised to use old golf balls, be prepared to lose a few in the rough, enjoy the scenery, and refuse to keep score.

There has been a renewed emphasis recently on non-competitive play (McCullagh, 1978), with the claim that the psychological rewards are superior to those of competitive play. Recreation, then, can lead to sailing, hiking, skating, swimming, skiing, cycling, running (where all who finish a run are winners), frisbee-tossing, and such phenomena as cooperative tennis and group orienteering.

Dr. Kenneth Cooper, in his book, **Aerobics**, jolted the world into a realization that fitness involved a conditioning of the cardiovascular system, and was not a by-product of the big muscles of a weight lifter. After much solid research, his message emerged clearly and simply: Get your pulse rate to 75 percent of your maximum for your age, keep it there for seven minutes, and you start to get a fitness effect. The maximum for one's age is roughly 220 minus the age. If you don't peak quite so high, you still have to get mildly out of breath, but keep it up for a longer period. Cooper assigned "aerobic points" for various activities, e.g., 3 points for running a mile in 11 minutes, 5 points for swimming 500 meters in 12 minutes. You can be quite fit achieving 37 points per week.

Repetitive, continuous movement such as brisk walking, running, cross-country skiing, cycling, swimming, etc. seem preferable to activities where there are sharp bursts of physical exertion such as tennis or weight lifting.

Dr. Tom Bassler is a California pathologist and distance runner. He recently showed a seminar of runners a microscopic slide of the coronary artery of a sprinter, a man who could run two miles in nine minutes, who

ate junk food, and who died of myocardial infarction while in his 30's. There was fibrin and clotted blood in the lumen, as well as a thick layer of fat on the arterial wall. The muscle cells in the artery wall were blurred by vacuoles and fatty deposits. "I could tell he was not a distance runner when I saw his heart," said Bassler. He next showed a similar slide of the coronary artery of a six-year-old boy who died suddenly in an accident. The artery was clear, the muscle cells well-defined, there were no fatty deposits. Then he showed another, practically indistinguishable from that of the boy. "That was from a distance runner, 106 years old," he commented laconically. "Gallstone got him." The man had apparently holed up after an attack of jaundice, believing death was imminent, and it was—from a pneumonia secondary to acute cholecystitis. But his coronaries were as healthy as those of a six-year-old boy!

Tom Bassler has expounded a hypothesis: that no runner, whatever age or sex, who trains up to and can finish a marathon run (42 km) in whatever time (the officials allow up to 8 hours), will die of arteriosclerotic heart disease in the next seven years. Thus far, no one has been able to prove him wrong. "But I'm a pathologist," he says, "and I study dead runners, so something could get you." That something would likely be heat stroke in a distance runner. "If you get into that, and if you run through the symptoms because you're foolhardy or disoriented," says Bassler, "you're usually dead before you hit the pavement."

Others have seen the Marathon as a supreme challenge but not necessarily a benefit to health. It can be a drain on the body's reserves. Even the well-trained runner usually hits a "wall" at 32 km where his glycogen deposits are all used up, and his body must try to convert fat and protein into massive amounts of glucose through rather inefficient metabolic pathways. Cooper is not a marathon fan, and advocates a two-hour run at the most as being healthy without exhaustion.

Even the elderly, if they get fit and keep up some form of aerobic activity (average 25 km/week running) avoid both physical and

Mental deterioration (Pollock, 1978; and Hartung, 1977).

Dr. George Sheehan (1977) has written, "For every runner who tours the world running marathons, there are thousands who run to hear the leaves and listen to rain and look to the day when it all is suddenly as easy as a bird in flight. For them, sport is not a test, but a therapy, not a trial, but a reward, not a question, but an answer."

By adding the component of physical exertion to the physiological response to stress, we normalize the body's chemistry, and discover a new axiom: any stress, linked to physical exertion, which does not kill or injure you will make you stronger.

Yet physical fitness can be overdone, pushed too fast and too far, and a corollary must be added: if you push Mother Nature too violently, she'll push you right back and hurt you. The injury could be anything from a blister to a ruptured Achilles tendon, from a cold to a coronary occlusion. The motto must be "easy and progressive, and listen to what your body is telling you."

The games we play may be vital to our health and survival.

Special Techniques

How many physicians will refer a patient to Alcoholics Anonymous, or help him or her find a sponsor to take him to a meeting? How many physicians will refer a patient for a stress-cardiogram, followed by a consultation with a physical fitness instructor? Yet these are common and available holistic techniques which could prove of immense physical and psychological benefit.

Dr. Thaddeus Kostrubala, a psychiatrist in San Diego, described running as therapy for the emotionally disordered in his book **The joy of Running**. He found running relieved tension (it put the "Flight" back into the CNS-adrenal response to stress), it also gave the patient increased confidence and insight. Some bound-up neurotics and schizophrenics became verbally productive after getting a half-hour into a long; slow distance run. He now has two "certified Running Therapists." There might be something in this worth examining. Running has been

demonstrated more effective than psychotherapy in treating neurotic depression (Griest, 1978).

I have recommended exercise as adjunctive therapy to a number of my patients, and have also gone running personally with three who were in therapy with me at the time. These were all young adult, neurotic men, lacking in self-confidence. Two of them stopped smoking, lost weight, gained in confidence, and kept up a more active life style for at least one year's follow-up. The third, a severe obsessional, found that running relieved tension and broke up his obsessional ruminations, but only temporarily. He is still in treatment.

Sex therapy is simple, effective, and takes advantage of natural libidinal drives and the affectionate bonding between man and woman. Exploring "hang-ups" with each partner openly, assigning areas of responsibility for getting and giving pleasure, removing "performance anxiety" and assigning sexual "homework" have resulted in a gratifying percentage of cures without the necessity of reverting to more complicated psychotherapeutic exploration.

Biofeedback looks very promising. If one can find a measurable physiological change which is associated with the disorder in question, and if one can demonstrate the rise and fall of this variable to the patient, then he can be taught to augment or reduce this using behavioral techniques (usually relaxation training). The disadvantages would seem to be the cost and awkwardness of the electronic machinery involved, and the annoying fact that, although some things such as skin temperature, heart rate, muscle tension, and EEC rhythm can be readily plotted for the patient, some internal things such as gastric acidity and intestinal spasm are very difficult to measure repeatedly and conveniently for the patient. There is, however, a growing cadre of people, usually clinical psychologists, with skill and experience in these techniques.

Hypnotherapy embodies some elements of biofeedback, without resort to the complicated apparatus. Those who do hypnosis learn to feel comfortable with it as a technique, and find it useful. It helps the mind heal the body. It can be used for

hypnotic exploration and uncovering, in much the same way Freud used free association. It can be used with suggestion to reduce symptoms, enhance self-esteem and guide the patient to a more adaptive response to stress. Techniques of auto-suggestion can be taught, which reinforce the hypnotherapy's impact. Obviously, Wolpe's work in Reciprocal Inhibition Therapy embodied both suggestion and biofeedback techniques, without, again, resorting to complicated apparatus.

Meditation is a simple technique, and can be taught to a patient in ten minutes. It has proven merit in tension reduction, and the alleviation of a wide range of symptoms from high blood pressure to neurosis. Various schools exist, from Yoga to Zen, from Autogenic Training to Transcendental Meditation. Benson has clarified these in **The Relaxation Response**, available in paperback. In essence, if you sit quietly with your eyes shut, and let your mind think relaxing thoughts or just simply drift, after 8-10 minutes your brain will go into an alpha rhythm (12 cps) rather than the usual, waking beta (18 cps), you will be more suggestible, and you will come out of it relaxed and refreshed. The link between this and auto-suggestion is obvious, and I've made this to good advantage with a number of my patients. Hypnosis, meditation, and constructive fantasy have been used to promote healing of various diseases, even to malignant tumor growth (Bricklin, 1977). If this can be proven to work, it will be a powerful adjunct in all of medicine, and give added impetus to the "whole" approach.

I also use a technique I call "Constructive Worry," largely plagiarized from the authors of books on Transactional Analysis. Destructive worry is what we all do too much of, about problems which we cannot solve or problems which won't ever arise. It's sitting in an airplane seat, buckled in, and worrying that the plane might crash. Logically, one sees that the worry can in no way influence the pilot to fly more carefully. The time to worry is when you buy your ticket. The steps in Constructive Worry are: What is the problem? Who owns the problem? If it's at least partly mine, what are the options

available to me? Force a decision to select one of these options. When must I reexamine the problem? It takes ten minutes per problem, and leaves your mind free for fun the rest of the day.

These are some of the special techniques which psychiatry can borrow from holistic medicine. They are simple, safe, free of major side effects, and natural. They are easily learned by most patients. We would do well to incorporate them into our therapeutic armamentarium.

Every physician knows the frustration and futility of trying to impose treatment on a passive patient. On the whole, it does not work. The holistic approach demands that the patient do something for himself, that he be an active participant in the therapy, and that he adopt a lifestyle along the principles of preventive medicine. The physician is expert advisor, the patient actively responsible for his own welfare. This leads to the most gratifying therapeutic results.

Conclusion

The ancient Chinese had five classes of physicians. The lowest was the Veterinarian, the animal doctor. Next was the Acupuncturist, who relieved symptoms. Then came the Surgeon, who had the skill to perform operations. Next up the hierarchy was the Herbalist-Nutritionist, wise in the use of diet and drugs to promote healing. But the highest honours went to the Philosopher-Sage, the physician who could deal with the totality of man's physical, mental, social, and spiritual disorders.

We could not do much better than to aspire to this lofty ideal of our treatment approach to the problems of living.

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